



2017–2019

# GRADUATE STUDIES BULLETIN



**FAIRLEIGH  
DICKINSON  
UNIVERSITY**

**FLORHAM CAMPUS** • Madison, New Jersey

**METROPOLITAN CAMPUS** • Teaneck, New Jersey

# FAIRLEIGH DICKINSON UNIVERSITY

## Graduate Programs

### DOCTORAL PROGRAMS

	FLOR	METR	O-C
Doctor of Nursing Practice (D.N.P.)/Tracks in Clinical Leadership and Organizational Leadership*		■	
Doctor of Pharmacy (Pharm.D.)	■		
Ph.D. in Clinical Psychology		■	
Psy.D. in School Psychology		■	
Postdoctoral M.S. in Clinical Psychopharmacology (Online Only)			1

### MASTER'S PROGRAMS

#### Master of Administrative Science (M.A.S.) ♦

	■	■	1,2
--	---	---	-----

#### Master of Arts (M.A.)

Clinical Mental Health Counseling/LPC and SAC options	■		
Communication	■		
Creative Writing and Literature for Educators	■		3
Criminal Justice		■	
Education for Certified Teachers**	■	■	
• Bilingual/Bicultural Education Specialist		■	
• Dual Literacy/Reading and Multisensory Reading Specialist			2
• English as a Second Language Specialist Certification		■	
• Instructional Technology Specialist	■	■	2
• Literacy/Reading Specialist			2
• Professional Studies Concentration	■	■	2
• Teacher of Students with Disabilities Certification	■	■	2
Educational Leadership/Post-Master's Principal Certification/Supervisor Certification**		■	2
Learning Disabilities/Certification as Teacher of Students with Disabilities (K-12) or Learning Disabilities Teacher Consultant**	■		
Mathematical Foundations			1,2
Psychology	■	■	
• Forensic Psychology		■	
• General/Theoretical		■	
• Industrial/Organizational/Concentration in Organizational Behavior	■		3
• Postbaccalaureate Respecialization Program ♦		■	
• School Psychology/Certification Available		■	
Student Services Administration/Specializations in Admissions and Financial Aid Administration, Institutional Risks Administration, Intercollegiate Sports Administration, On-Campus Student Administration ♦	■	■	1,2
Teaching English as a Second/Foreign Language (TESL/TEFL) TESL/TEFL Specialist Certification		■	

#### Master of Arts in Teaching (M.A.T.)\*\*

Elementary Education/Certification Grades K-6	■	■	
Elementary Education/Teacher of Students with Disabilities (Dual Certification)	■	■	
English as a Second Language/Certification Grades K-12	■	■	
Middle School Endorsement	■	■	
Preschool to Grade 3/Certification P-3	■	■	2
Secondary Education/Certification Grades K-12 in Art, Biological Sciences, Chemistry, Earth Science, English, Mathematics, Physical Science, Physics, Social Studies	■	■	

#### Master of Business Administration (M.B.A.)

• Accounting ●	■	■	2
• Business Administration ●	■	■	
• Finance ●	■	■	
• International Business ●		■	
• Management ●	■	■	
• Marketing ●	■	■	
• Pharmaceutical Management Studies ●	■		
• Saturday M.B.A. (blended online/in-class format)	■		

#### M.B.A. for Executives

General Management ▲	■		
Health Sector Management Specialization ▲	■		

#### Master of Fine Arts (M.F.A.)

Creative Writing/Concentrations in Creative Nonfiction, Fiction, Literary Translation, Poetry, Writing for Young Adults and Children's Literature	■		2,3
---	---	--	-----

#### Master of Health Science (M.H.S.)

Tracks in Clinical Research Administration, Gateway to Professional Studies, Health Informatics, Regulatory Science	■		
---	---	--	--

#### Master of Public Administration (M.P.A.) ♦

Specializations in Bilingual Administration, Global Transportation Management, Health Services Administration, International Relations and Diplomacy, Nursing Management, Public Management, Sustainability	■	■	2
---	---	---	---

#### Master of Sports Administration (M.S.A.)

Specializations in Coaching Theory and Strategies, Sports Administration	■	■	1,2
--	---	---	-----

#### Master of Science (M.S.)

Accounting	■	■	2
Biology	■	■	
• Business ♦	■	■	
• Chemistry/Pharmaceutical Sciences	■		
• Education	■		
• Psychology/Counseling	■		
Chemistry/Concentrations in Informatics (METR only), Pharmaceutical Chemistry	■	■	
Computer Engineering		■	
Computer Science ♦	■	■	
Cosmetic Science		■	
Cybersecurity and Information Assurance		■	
Digital Marketing (Online Only)		■	
Electronic Commerce		■	
Homeland Security/Concentrations in Emergency Management, Leadership, Terrorism and Security Studies ♦	■	■	1,2
Hospitality Management Studies ♦	■	■	2
Management Information Systems		■	
Medical Technology ★		■	
Service Innovation and Leadership ♦	■	■	1,2
Supply Chain Management	■	■	
Taxation	■		

#### Master of Science in Electrical Engineering (M.S.E.E.)

Concentrations in Digital Signal Processing and Communications, Computers, Devices and Systems	■	■	1
--	---	---	---

#### Master of Science in Nursing (M.S.N.)\*

Adult-Gerontology Nurse Practitioner (with specializations in Administration, Education and Forensics), Family Nurse Practitioner, Family Psychiatric/Mental Health Nurse Practitioner, Nursing Administration, Nursing Education, Nursing Information Systems	■	■	1,2
--	---	---	-----

FLOR = Florham Campus, Madison, NJ

METR = Metropolitan Campus, Teaneck, NJ

O-C = Off Campus/Offered in addition to the campus location(s) noted

- 1 Includes an online option
- 2 Classes offered at select off-campus location(s)
- 3 Low-residency

\* Applicants to the D.N.P. and all M.S.N. programs must complete the NCLEX examination and must currently hold a U.S. nursing license. All M.S.N. programs are offered on a part-time basis with the exception of the Adult Nurse Practitioner Program in Education and Family Nurse Practitioner Program, which have fall semester start dates only. F-1 and J-1 students may only apply for the Adult Gerontology Nurse Practitioner in Education or Family Nurse Practitioner programs.

\*\* Admission to this program is not usually granted to international students due to New Jersey certification policies.

● Individuals already holding an M.B.A. degree from an accredited college or university may pursue a post-M.B.A. graduate certificate in these and other select areas. Certificate programs are not available to F-1 and J-1 visa students.

▲ This Executive-level program, tailored to specific groups of experienced professionals, is offered on Saturdays at Hamilton Park Hotel and Conference Center in Florham Park, NJ, located adjacent to the Florham Campus.

★ Applicant must be registered as Medical Technologist by the American Society of Clinical Pathologists (ASCP).

♦ The Postbaccalaureate Respecialization Program in Psychology, the M.A. in Student Services Administration and M.S. in Service Innovation and Leadership are offered part-time only. The M.S. in Biology (with a concentration in Business), M.S. in Computer Science, Master of Administrative Science (M.A.S.), Master of Public Administration (M.P.A.), M.S. in Homeland Security and M.S. in Hospitality Management programs are offered full-time at the Metropolitan Campus and part-time at the Florham Campus.

# Graduate Studies Bulletin 2017–2019

---

## Bulletin of Fairleigh Dickinson University

Volume LX      September 2017      No. 1

*Published at*

**Fairleigh Dickinson University**

1000 River Road

Teaneck, New Jersey 07666-1914

---

### Locations

**Florham Campus (Madison, NJ)**

**Metropolitan Campus (Teaneck, NJ)**

**Vancouver Campus (British Columbia, Canada)**

**Wroxton College (Wroxton, England)**

All fees, tuition and charges are subject to change at any time at the discretion of the Board of Trustees.

The University reserves the right to change, without prior notice, the contents of its Bulletins and to modify its academic calendar and programs of instructional academic and disciplinary requirements, policies and procedures, rules and regulations; its tuition, fees and charges; and the terms of financial aid. Changes shall be effective upon publication or when the University otherwise determines, and such changes may apply to prospective students and to those who already are enrolled at the University.

The University reserves the right to deny admission and matriculation to any applicant who, in the judgment of the University, is not qualified, may not benefit from the University's educational programs or whose presence or conduct may impact negatively on its program(s). Students applying for admission to the University agree to abide by all the rules and regulations now or hereafter promulgated by the University. Any student failing to comply with such rules and regulations is subject to their application being rejected, offer of acceptance being rescinded, enrollment being cancelled or other appropriate disciplinary actions. Submission of false information, in this application or otherwise, is deemed a violation of University rules and regulations.

Fairleigh Dickinson University is committed to providing equal opportunity to all qualified persons and does not discriminate on the basis of race, religion, color, creed, ancestry or national origin, handicap/disability, age, gender, sexual orientation, marital status, pregnancy status or veteran status with regard to recruitment, admission or matriculation.

### The Student Right-to-Know and Campus Security Act

The Student Right-to-Know and Campus Security Act was signed into law in 1990 and amended with the Higher Education Technical Amendment of 1991. The first disclosure date for graduation/completion rates required by the Student Right-to-Know and Campus Security Act was July 1, 1995. In compliance with this act, Fairleigh Dickinson University makes this information available to current and prospective students through the Office of Enrollment Management.

### Campus Postal Addresses and Telephone Numbers

#### Florham Campus

285 Madison Avenue

Madison, NJ 07940-1099

Phone: 973-443-8500

#### Metropolitan Campus

1000 River Road

Teaneck, NJ 07666-1914

Phone: 201-692-2000

### University Website

[fdi.edu](http://fdi.edu)

### Graduate Admissions & Financial Aid Offices

#### Office Hours and Locations

##### Florham Campus\*

*Graduate Admissions*

Rothman Building

Phone: 973-443-8905

*Financial Aid*

Hennessy Hall, Courtyard

Phone: 973-443-8700

##### Metropolitan Campus\*

*Graduate Admissions & Financial Aid*

Kron Building

Graduate Admissions: 201-692-2554

Financial Aid: 201-692-2363

*\* Office hours are Mondays-Fridays, 9 a.m. to 5 p.m. Extended office hours available during peak registrations periods. Call for schedules. For best service, students are advised to schedule appointments in advance.*

### Interested in applying?

#### Domestic Students

Apply online at [fdi.edu/apply](http://fdi.edu/apply) or request a paper application from:

##### Office of Graduate Admissions

Fairleigh Dickinson University

1000 River Road • T-KB1-01

Teaneck, NJ 07666-1914

Email: [grad@fdi.edu](mailto:grad@fdi.edu)

#### International Students

Apply online at [fdi.edu/apply](http://fdi.edu/apply) or request a paper application from:

##### Office of International Admissions

Fairleigh Dickinson University

1000 River Road • T-KB1-01

Teaneck, NJ 07666-1914 USA

Telephone: 1-201-692-2205

Facsimile: 201-692-2560

Email: [global@fdi.edu](mailto:global@fdi.edu)



**FAIRLEIGH  
DICKINSON  
UNIVERSITY**

# Table of Contents

## Academic and University Information

<b>Graduate Programs of Study Chart</b> .....	<b>Inside Front Cover</b>
<b>Academic Calendar</b> .....	<b>4</b>
<b>Nontraditional Academic Calendar</b> .....	<b>5</b>
<b>The University</b> .....	<b>6</b>
Mission Statement 6, University Vision 6, Value Statement 6, General Information 6, Brief History 6, Impact 7, Campuses 8, Accreditation 9	
<b>The Colleges</b> .....	<b>11</b>
Maxwell Becton College of Arts and Sciences.....	11
Silberman College of Business.....	12
Anthony J. Petrocelli College of Continuing Studies.....	13
University College: Arts • Sciences • Professional Studies....	13
<b>Admissions; Financial Aid and Scholarships; Registration, Tuition and Billing Information</b> .....	<b>15</b>
Admissions.....	15
Financial Aid and Scholarships.....	17
Registration, Tuition and Billing Information.....	20
<b>Student Life</b> .....	<b>23</b>
<b>Academic Support and Research</b> .....	<b>29</b>
<b>Academic Regulations</b> .....	<b>33</b>

## Academic Programs

<b>Graduate Programs</b> .....	<b>37</b>
<b>Accounting (M.B.A.)</b> .....	<b>62</b>
<b>Accounting (M.S.)</b> .....	<b>69</b>
<b>Administrative Science (M.A.S.)</b> .....	<b>38</b>
Administrative Science Certificate.....	38
Career Development Certificate.....	38
Computer Security and Forensic Administration Certificate.....	38
Correctional Administration and Leadership Certificate.....	39
Diplomacy and International Relations Certificate.....	39
Displaced Persons Administration Certificate.....	39
Emergency Management Administration Certificate.....	39
European Studies and Administration Certificate.....	39
First-responder Administration Certificate.....	39
Global Emergency Medical Services Administration Certificate.....	39
Global Health and Human Services Administration Certificate.....	39
Global Leadership and Administration Certificate.....	40
Global Security and Terrorism Studies Certificate.....	40
Global Technology Administration Certificate.....	40
Government and Administration Certificate.....	40
Homeland Security Administration Certificate.....	40
Human Resource Administration Certificate.....	40
Information Literacies and Learning Environments Certificate.....	40
Intelligence-led Policing Certificate.....	40
Latin American Studies Certificate.....	41
Law and Public Safety Administration Certificate.....	41
Leadership Theory and Practice Certificate.....	41
Legal Environment Administration Certificate.....	41
Nonprofit Organization Development Certificate.....	41
Public and Nonprofit Leadership Postgraduate Certificate.....	42
Public Relations Administration Certificate.....	41
School Security and Safety Administration Certificate.....	41
<b>Biology (M.S.)</b> .....	<b>53</b>
<i>Florham Campus</i> .....	<b>53</b>
Chemistry/Pharmaceutical Sciences Concentration.....	54
Education Concentration.....	54
Finance Concentration.....	54
Management Concentration.....	54
Marketing Concentration.....	54
Psychology/Counseling Concentration.....	54
<i>Metropolitan Campus</i> .....	<b>56</b>
Business Concentration.....	57
<b>Business</b> .....	<b>60</b>
<b>Master of Business Administration (M.B.A.)</b> .....	<b>61</b>
Accounting (M.B.A.).....	62
Business Administration (M.B.A.).....	62
Finance (M.B.A.).....	63
International Business (M.B.A.).....	63

Management (M.B.A.).....	63
Marketing (M.B.A.).....	64
Pharmaceutical Management Studies (M.B.A.).....	64
Post-M.B.A. Graduate Certificates.....	65
Saturday M.B.A.....	66
<b>Master of Business Administration (M.B.A.) — Management for Executives</b> .....	<b>67</b>
General Management Specialization.....	68
Health Sector Management Specialization.....	68
<b>Master of Science (M.S.)</b> .....	<b>69</b>
Accounting (M.S.).....	69
Digital Marketing (M.S.).....	70
Supply Chain Management (M.S.).....	70
Taxation (M.S.).....	71
<b>Chemistry (M.S.)</b> .....	<b>84</b>
<i>Florham Campus</i> .....	<b>85</b>
Pharmaceutical Chemistry Concentration.....	85
<i>Metropolitan Campus</i> .....	<b>88</b>
Informatics Concentration.....	88
Pharmaceutical Chemistry Concentration.....	88
<b>Clinical Mental Health Counseling (M.A.)</b> .....	<b>90</b>
<b>Clinical Psychology (Ph.D.)</b> .....	<b>208</b>
<b>Clinical Psychopharmacology (Postdoctoral M.S.)</b> .....	<b>212</b>
<b>Communication (M.A.)</b> .....	<b>93</b>
<b>Computer Engineering (M.S.)</b> .....	<b>95</b>
Telecommunications and Networking Certificate.....	96
<b>Computer Science (M.S.)</b> .....	<b>96</b>
Advanced Computer Programming Certificate.....	97
Computer Security Certificate.....	97
Database Administration Certificate.....	97
Internet Programming Certificate.....	98
Telecommunications and Networking Certificate.....	98
<b>Cosmetic Science (M.S.)</b> .....	<b>104</b>
<b>Creative Writing (M.F.A.)</b> .....	<b>106</b>
Craft Module.....	107
Creative Nonfiction Concentration.....	106
Fiction Concentration.....	106
Literary Translation Concentration.....	106
Poetry Concentration.....	106
Thesis Module.....	107
Writing for Young Adults and Children's Literature Concentration.....	106
<b>Creative Writing and Literature for Educators (M.A.)</b> .....	<b>108</b>
<b>Criminal Justice (M.A.)</b> .....	<b>111</b>
<b>Cybersecurity and Information Assurance (M.S.)</b> .....	<b>113</b>
Network Security Administration Concentration.....	114
Secure Software Development Concentration.....	114
<b>Digital Marketing (M.S.)</b> .....	<b>70</b>
<b>Education</b> .....	<b>115</b>
<b>Education for Certified Teachers (M.A.)</b> .....	<b>115</b>
Bilingual/Bicultural Education (BBE) Specialist Certificate Program.....	116
Dual Program in Literacy/Reading and Multisensory Reading.....	118
English as a Second Language (ESL) Specialist Certification.....	117
Instructional Technology Specialist Certificate (ITC) Program.....	117
Literacy/Reading Specialist (LRS) Certification.....	117
Professional Studies Concentration (PROST).....	118
Teacher of Students with Disabilities (TSD) Certification (Nondegree Program).....	120, 123
<b>Educational Leadership (M.A.)</b> .....	<b>121</b>
Post-master's Principal Certification Program.....	121
Principal/Supervisor Certification.....	121
<b>Learning Disabilities (M.A.)</b> .....	<b>122</b>
Dyslexia Specialist.....	124
Learning Disabilities Teacher Consultant Certification.....	123, 124
Teacher of Students with Disabilities Certification (Nondegree Program).....	120, 123
<b>Mathematical Foundations (M.A.)</b> .....	<b>125</b>

# Table of Contents

<b>Teaching (M.A.T.).....</b>	<b>126</b>	Nursing Education Nonclinical Track.....	172
Elementary Education Certification.....	127	Nursing Information Systems Nonclinical Track.....	172
English as a Second Language Certification.....	128	<b>Nursing Practice (D.N.P.).....</b>	<b>178</b>
Middle School Endorsement.....	129	Accelerated D.N.P. Programs.....	180
New Jersey Teacher Certification.....	126	Post-Baccalaureate Nursing to D.N.P.....	180
Secondary Education Certification: Art, Biological Sciences, Chemistry, Earth Science, English, Mathematics, Physical Science, Physics and Social Studies.....	127	Post-master's D.N.P.....	181
Teacher of Students with Disabilities Certification.....	129	Pre-Baccalaureate Nursing to D.N.P. with Gerontology Focus.....	180
Teaching English As A Second Language Certification.....	128	Bridge Program to the D.N.P.....	179
<b>Teaching English as a Second/Foreign   Language (TESL/TEFL) (M.A.).....</b>	<b>129</b>	Clinical Leadership Track.....	179
TESL/TEFL Specialist Certification Program.....	130	Organizational Leadership Track.....	179
<b>Education for Certified Teachers (M.A.).....</b>	<b>115</b>	<b>Pharmacy (Pharm.D.).....</b>	<b>183</b>
<b>Educational Leadership (M.A.).....</b>	<b>121</b>	<b>Psychology.....</b>	<b>203</b>
<b>Electrical Engineering (M.S.E.E.).....</b>	<b>144</b>	<i>Florham Campus</i> .....	204
Computers Specialization.....	144	<b>Industrial/Organizational Psychology (M.A.).....</b>	<b>204</b>
Devices and Systems Specialization.....	144	Organizational Behavior Concentration (Low-residence Program).....	205
Digital Signal Processing and Communications Specialization.....	144	Organizational Leadership Certificate.....	205
Telecommunications and Networking Certificate.....	144	<i>Metropolitan Campus</i> .....	207
<b>Electronic Commerce (M.S.).....</b>	<b>147</b>	Postbaccalaureate Respecialization Program in Psychology.....	207
E-commerce Certificate.....	148	<b>Clinical Psychology (Ph.D.).....</b>	<b>208</b>
<b>English for Professional Success.....</b>	<b>149</b>	<b>Clinical Psychopharmacology   (Postdoctoral M.S.).....</b>	<b>212</b>
<b>Executive Programs</b>		<b>Forensic Psychology (M.A.).....</b>	<b>213</b>
Management (M.B.A.) for Executives — General Management Specialization.....	68	<b>General/Theoretical Psychology (M.A.).....</b>	<b>216</b>
Management (M.B.A.) for Executives — Health Sector Management Specialization.....	68	<b>School Psychology (Psy.D.).....</b>	<b>217</b>
<b>Finance (M.B.A.).....</b>	<b>63</b>	<b>School Psychology (M.A.).....</b>	<b>222</b>
<b>Forensic Psychology (M.A.).....</b>	<b>213</b>	School Psychology Certification.....	222
<b>General/Theoretical Psychology (M.A.).....</b>	<b>216</b>	<b>Public Administration (M.P.A.).....</b>	<b>224</b>
<b>Health Science (M.H.S.).....</b>	<b>150</b>	Bilingual Administration Specialization.....	224
Clinical Research Administration Track.....	152	Global Transportation Management Specialization.....	224
Gateway to Professional Studies Track.....	151	Health Services Administration Specialization.....	224
Health Informatics Track.....	153	International Relations and Diplomacy Specialization.....	225
Regulatory Science Track.....	151	Nursing Management Specialization.....	225
<b>Homeland Security (M.S.).....</b>	<b>157</b>	Public Management Certificate.....	224
Emergency Management Certificate.....	158	Public Management Specialization.....	225
Emergency Management Concentration.....	158	Sustainability Specialization.....	225
Leadership Certificate.....	159	Transportation Management Certificate.....	224
Leadership Concentration.....	158	<b>School Psychology (Psy.D.).....</b>	<b>217</b>
Terrorism and Security Studies Certificate.....	159	School Psychology (Advanced Psy.D.).....	219
Terrorism and Security Studies Concentration.....	158	School Psychology (Five-year Psy.D.).....	217
<b>Hospitality Management Studies (M.S.).....</b>	<b>161</b>	<b>School Psychology (M.A.).....</b>	<b>222</b>
Prerequisite Program for Non-hospitality Majors.....	162	<b>Service Innovation and Leadership (M.S.).....</b>	<b>231</b>
<b>Industrial/Organizational Psychology (M.A.).....</b>	<b>204</b>	<b>Sports Administration (M.S.A.).....</b>	<b>233</b>
<b>International Business (M.B.A.).....</b>	<b>63</b>	Coaching Theory and Strategies Certificate.....	234
<b>Learning Disabilities (M.A.).....</b>	<b>122</b>	Coaching Theory and Strategies Specialization.....	234
<b>Management (M.B.A.).....</b>	<b>63</b>	Sports Administration Certificate.....	234
<b>Management (M.B.A.) for Executives</b>		Sports Administration Specialization.....	234
— General Management Specialization.....	68	<b>Student Services Administration (M.A.).....</b>	<b>237</b>
— Health Sector Management Specialization.....	68	Admissions and Financial Aid Administration Certificate.....	237
<b>Management Information Systems (M.S.).....</b>	<b>165</b>	Admissions and Financial Aid Administration Specialization.....	237
Management Information Systems Certificate.....	166	Institutional Risks Administration Certificate.....	237
<b>Marketing (M.B.A.).....</b>	<b>64</b>	Institutional Risks Administration Specialization.....	237
<b>Mathematical Foundations (M.A.).....</b>	<b>125</b>	Intercollegiate Sports Administration Certificate.....	237
<b>Medical Technology (M.S.).....</b>	<b>167</b>	Intercollegiate Sports Administration Specialization.....	237
<b>Nursing (M.S.N.).....</b>	<b>169</b>	On-campus Student Administration Certificate.....	237
Accelerated D.N.P. Programs.....	173, 180	On-campus Student Administration Specialization.....	237
Adult Gerontology Nurse Practitioner Clinical Track.....	169	<b>Supply Chain Management (M.S.).....</b>	<b>70</b>
Adult Gerontology Nurse Practitioner — Education or Administration Focus Clinical Track.....	170	<b>Taxation (M.S.).....</b>	<b>71</b>
Adult Gerontology Nurse Practitioner — Forensic Focus Clinical Track.....	170	<b>Teaching (M.A.T.).....</b>	<b>126</b>
Adult Gerontology Nurse Practitioner Post-Master's Certificate.....	172	<b>Teaching English as a Second/Foreign   Language (TESL/TEFL) (M.A.).....</b>	<b>129</b>
Family Nurse Practitioner Clinical Track.....	170	<b>Overseas Studies.....</b>	<b>240</b>
Family Nurse Practitioner Post-Master's Certificate.....	173	Vancouver Campus 241, Wroxtton College 240	
Family Psychiatric/Mental Health Nurse Practitioner Clinical Track.....	171	<b>Faculty and Administration.....</b>	<b>244</b>
Family Psychiatric/Mental Health Nurse Practitioner Post-Master's Certificate.....	173	Faculty 244, Administration 256	
Nursing Administration Nonclinical Track.....	171	<b>Maps.....</b>	<b>262</b>
		Florham Campus 262, Metropolitan Campus 264	
		<b>Index.....</b>	<b>266</b>

# Academic Calendar 2017–2019\*

## Fall Semester 2017

Registration/Academic	
Counseling and Advising	August 14–25
Classes Begin, 8 a.m. (Mon.)	August 28
Labor Day Holiday (Mon.)	September 4
Last Day for New Registrations and Final Drop/Add Changes (Mon.)	September 11
Midterm Progress Reporting Opens (Mon.)	October 2
Fall Recess (Mon.–Tue.)	October 16–17
Midterm Progress Reporting Closes (Tue.)	October 24
Last Day for Student Withdrawal from Classes (Fri.)	November 3
Priority Registration for Spring Semester 2018	November 6–21
Thanksgiving Recess Begins, 11 p.m. (Tue.)	November 21
Classes Resume, 8 a.m. (Mon.)	November 27
Last Day of Classes, Fall Semester (Mon.)	December 11
Reading/Snow Makeup Days (Tue.–Wed.)	December 12–13
Final Examinations (Thu.–Wed.)	December 14–20
Grades due no later than 5 p.m. on the third day after exam is administered.	
Semester Ends, 11 p.m. (Wed.)	December 20

## Winter Session 2018

New Year's Holiday (Mon.)	January 1
Classes (Mon.–Thu.)	January 2–19
New Year's Holiday Makeup Day (Fri.)	January 5
Martin Luther King Jr. Day Holiday (Mon.)	January 15
Martin Luther King Jr. Day Holiday Makeup Day (Fri.)	January 19

## Spring Semester 2018

Registration/Academic	
Counseling and Advising	January 2–19
Classes Begin, 8 a.m. (Mon.)	January 22
Last Day for New Registrations and Final Drop/Add Changes (Mon.)	February 5
Midterm Progress Reporting Opens (Mon.)	February 26
Spring Recess	March 12–17
Online Registration for Summer 2018 Sessions Opens (Thu.)	March 15
Classes Resume, 8 a.m. (Mon.)	March 19
Midterm Progress Reporting Closes (Sat.)	March 24
Last Day for Student Withdrawal from Classes (Fri.)	April 6
Priority Registration for Fall Semester 2018	April 9–20
Last Day of Classes, Spring Semester (Sat.)	May 5
Final Examinations (Mon.–Sat.)	May 7–12
Grades due no later than 5 p.m. on the third day after exam is administered.	
Semester Ends, 11 p.m. (Sat.)	May 12
University Commencement (Tue.)	May 15

## Summer Sessions 2018

<b>Summer Session I 2018</b>	
Classes Begin, 8 a.m. (Mon.)	May 21
Memorial Day Holiday (Mon.)	May 28
Memorial Day Holiday Makeup Day (Fri.)	June 1
Classes End, 11 p.m. (Sat.)	June 30
<b>Summer Session II 2018</b>	
Classes Begin, 8 a.m. (Mon.)	June 11
Independence Day Holiday (Wed.)	July 4
Independence Day Holiday Makeup Day (Fri.)	July 6
Classes End, 11 p.m. (Sat.)	July 21
<b>Summer Session III 2018</b>	
Classes Begin, 8 a.m. (Mon.)	July 2
Independence Day Holiday (Wed.)	July 4
Independence Day Holiday Makeup Day (Fri.)	July 6
Classes End, 11 p.m. (Sat.)	August 11

## Fall Semester 2018

Registration/Academic	
Counseling and Advising	August 13–24
Classes Begin, 8 a.m. (Mon.)	August 27
Labor Day Holiday (Mon.)	September 3
Last Day for New Registrations and Final Drop/Add Changes (Mon.)	September 10
Midterm Progress Reporting Opens (Mon.)	October 1
Fall Recess (Mon.–Tue.)	October 15–16
Midterm Progress Reporting Closes (Tue.)	October 23
Last Day for Student Withdrawal from Classes (Fri.)	November 2
Priority Registration for Spring Semester 2019	November 5–20
Thanksgiving Recess Begins 11 p.m. (Tue.)	November 20
Classes Resume, 8 a.m. (Mon.)	November 26
Last Day of Classes, Fall Semester (Mon.)	December 10
Reading/Snow Makeup Days (Tue. and Wed.)	December 11–12
Final Examinations (Thu.–Wed.)	December 13–19
Grades due no later than 5 p.m. on the third day after exam is administered.	
Semester Ends, 11 p.m. (Wed.)	December 19

## Winter Session 2019

Classes (Mon.–Thu.)	January 7–25
Martin Luther King Jr. Day Holiday (Mon.)	January 21
Martin Luther King Jr. Day Holiday Makeup Day (Fri.)	January 25

## Spring Session 2019

Registration/Academic	
Counseling and Advising	January 2–25
Classes Begin, 8 a.m. (Mon.)	January 28
Last Day for New Registrations and Final Drop/Add Changes (Mon.)	February 11
Midterm Progress Reporting Opens (Mon.)	March 4
Spring Recess	March 18–23
Online Registration for Summer 2019 Sessions Open (Fri.)	March 15
Classes Resume, 8 a.m. (Mon.)	March 25
Midterm Progress Reporting Closes (Sat.)	March 30
Last Day for Student Withdrawal from Classes (Fri.)	April 12
Priority Registration for Fall Semester 2019	April 15–26
Last Day of Classes, Spring Semester (Sat.)	May 11
Final Examinations (Mon.–Sat.)	May 13–18
Grades due no later than 5 p.m. on the third day after exam is administered.	
Semester Ends, 11 p.m. (Sat.)	May 18
University Commencement (Tue.)	May 21

## Summer Sessions 2019

<b>Summer Session I 2019</b>	
Memorial Day Holiday (Mon.)	May 27
Classes Begin, 8 a.m. (Tue.)	May 28
Memorial Day Holiday Makeup Day (Fri.)	May 31
Independence Day Holiday (Thu.)	July 4
Independence Day Holiday Makeup Day (Fri.)	July 5
Classes End, 11 p.m. (Sat.)	July 6
<b>Summer Session II 2019</b>	
Classes Begin, 8 a.m. (Mon.)	June 17
Independence Day Holiday (Thu.)	July 4
Independence Day Holiday Makeup Day (Fri.)	July 5
Classes End, 11 p.m. (Sat.)	July 27
<b>Summer Session III 2019</b>	
Classes Begin, 8 a.m. (Mon.)	July 8
Classes End, 11 p.m. (Sat.)	August 17

## Major Religious Holy Days

The University respects the observance of major religious holy days by members of the campus community. Officers of administration and of instruction responsible for scheduling required academic activities or essential services are expected to avoid conflict with such holy days as much as possible.

\*Weekend, off-campus and some Anthony J. Petrocelli College of Continuing Studies courses and certain special programs may follow a different schedule.

# Nontraditional Academic Calendar 2017-2019

Online classes and classes that do not meet on the Metropolitan Campus or Florham Campus may not follow the holiday and academic break periods shown below. The instructor will clarify the class meeting schedule for each course, consistent with the FDU Credit Hour Definition.

## Fall 2017 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) September 18-22  
September 24

Last Day for New Registrations and Final Drop/Add Changes (Wed.) October 4

Fall Recess (Mon.-Tue.) October 16-17

Midterm Progress Reporting Opens (Mon.) October 23

Priority Registration for Spring Semester 2018 November 6-21

Midterm Progress Reporting Closes (Fri.) November 10

Last Day for Student Withdrawal from Classes (Fri.) November 17

Thanksgiving Recess Begins, 11 p.m. (Tue.) November 21

Classes Resume, 8 a.m. (Mon.) November 27

Last Day of Classes, Fall Semester Ends 11 p.m. (Sat.) December 16

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Spring 2018 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) January 2-5  
January 7

Martin Luther King Jr. Day Holiday (Mon.) January 15

Last Day for New Registrations and Final Drop/Add Changes (Wed.) January 17

Martin Luther King Jr. Day Holiday Makeup Day (Fri.) January 19

Midterm Progress Reporting Opens (Mon.) February 12

Midterm Progress Reporting Closes (Fri.) March 2

Last Day for Student Withdrawal from Classes (Fri.) March 9

Spring Recess March 12-16

Online Registration for Summer 2018 Sessions Opens (Thu.) March 15

Classes Resume, 8 a.m. (Mon.) March 19

Last Day of Classes, Spring Semester Ends 11 p.m. (Sat.) March 31

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Summer I 2018 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) April 2-6  
April 8

Priority Registration for Fall Semester 2018 April 9-20

Last Day for New Registrations and Final Drop/Add Changes (Wed.) April 18

University Commencement (Tue.) May 15

Memorial Day Holiday (Mon.) May 28

Memorial Day Holiday Makeup Day (Fri.) June 1

Last Day for Student Withdrawal from Classes (Fri.) June 8

Last Day of Classes, Summer I Semester Ends 11 p.m. (Sat.) June 30

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Summer II 2018 —

Registration/Academic Counseling and Advising Independence Day Holiday (Wed.) July 3, July 5-6  
July 4  
July 8

Classes Begin, 8 a.m. (Sun.) July 8

Last Day for New Registrations and Final Drop/Add Changes (Wed.) July 18

Last Day for Student Withdrawal from Classes (Fri.) August 24

Labor Day Holiday (Mon.) September 3

Last Day of Classes, Summer II Semester Ends 11 p.m. (Sat.) September 15

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Fall 2018 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) September 17-21  
September 25

Last Day for New Registrations and Final Drop/Add Changes (Wed.) October 3

Fall Recess (Mon.-Tue.) October 15-16

Midterm Progress Reporting Opens (Mon.) October 22

Priority Registration for Spring Semester 2018 November 5-20

Midterm Progress Reporting Closes (Fri.) November 9

Last Day for Student Withdrawal from Classes (Fri.) November 16

Thanksgiving Recess Begins, 11 p.m. (Tue.) November 20

Classes Resume, 8 a.m. (Mon.) November 26

Last Day of Classes, Fall Semester Ends 11 p.m. (Sat.) December 15

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Spring 2019 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) January 2-4,  
January 7-11  
January 13

Last Day for New Registrations and Final Drop/Add Changes (Wed.) January 16

Martin Luther King Jr. Day Holiday (Mon.) January 21

Martin Luther King Jr. Day Holiday Makeup Day (Fri.) January 25

Midterm Progress Reporting Opens (Mon.) February 18

Midterm Progress Reporting Closes (Fri.) March 8

Last Day for Student Withdrawal from Classes (Fri.) March 15

Online Registration for Summer 2019 Sessions Opens (Fri.) March 15

Spring Recess March 18-23

Classes Resume, 8 a.m. (Mon.) March 25

Last Day of Classes, Spring Semester Ends 11 p.m. (Sat.) April 6

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Summer I 2019 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) April 8-12  
April 14

Priority Registration for Fall Semester 2019 April 15-26

Last Day for New Registrations and Final Drop/Add Changes (Wed.) April 24

University Commencement (Tue.) May 21

Memorial Day Holiday (Mon.) May 27

Memorial Day Holiday Makeup Day (Fri.) May 31

Last Day for Student Withdrawal from Classes (Fri.) June 14

Independence Day Holiday (Thu.) July 4

Independence Day Holiday Makeup Day (Fri.) July 5

Last Day of Classes, Summer I Semester Ends 11 p.m. (Sat.) July 6

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## Summer II 2019 —

Registration/Academic Counseling and Advising Classes Begin, 8 a.m. (Sun.) July 8-12  
July 14

Last Day for New Registrations and Final Drop/Add Changes (Wed.) July 24

Last Day for Student Withdrawal from Classes (Fri.) August 30

Labor Day Holiday (Mon.) September 2

Last Day of Classes, Summer II Semester Ends 11 p.m. (Sat.) September 21

Final examinations for all face-to-face classes are held during the last class meeting. Grades for face-to-face classes are due no later than 5 p.m. on the third day after exam is administered. Grades for online classes are due no later than third day after semester ends.

## The University

### FDU Mission Statement

Fairleigh Dickinson University is a center of academic excellence dedicated to the preparation of world citizens through global education. The University strives to provide students with the multidisciplinary, intercultural and ethical understandings necessary to participate, lead and prosper in the global marketplace of ideas, commerce and culture.

### University Vision

Fairleigh Dickinson University strives to be a leading institution of higher education dedicated to empowering its faculty and staff to provide innovative programming, respond with integrity and agility to emerging challenges, cultivate student success and prepare graduates to fulfill their potential, transform their lives and become competent and responsible citizens of the world.

### Value Statement

As a community of learners, Fairleigh Dickinson University is committed to an educational environment that fosters growth and development, social justice, understanding among people and enrichment for all who study and work at the University.

### FDU Cares

#### Community

We have an educational community that is diverse and demonstrates creativity, enthusiasm and responsibility.

#### Advantage

We strive to provide the values of education and the opportunity for personal growth and enrichment.

#### Respect

We care about one another and ourselves and are committed to treating all people with civility and consideration.

#### Ethics

We believe everyone's rights and freedoms should be respected and that we must act with integrity and accountability.

#### Support

We endeavor to provide an environment for success based on cooperation, communication and caring.

### General Information

Fairleigh Dickinson University, New Jersey's largest private university, is a non-sectarian, coeducational institution offering programs on the undergraduate, graduate and professional levels.

Founded as a small junior college in 1942, the University now maintains two major campuses in northern New Jersey — the Metropolitan Campus in Teaneck, and the Florham Campus in Madison, a campus in England and a campus in Canada.

The Metropolitan Campus offers a wide range of programs and degrees from the associate to the Ph.D. Its University College: Arts • Sciences • Professional Studies includes the depth and breadth of the liberal arts faculty, the focus and strength of the engineering programs, the variety and importance of the health professions, the quality of the clinical psychology doctoral program and the presence of the largest number of professional accredited programs on any FDU campus. The campus serves as the home of the ELS Language Center. The Campus is home to 18 Division I sports.

On the grounds of the former estate of Florence Vanderbilt and Hamilton Twombly, the Florham Campus is a selective, primarily residential campus with a strong honors program, offering a broad variety of strong undergraduate and graduate programs in business, the arts, the physical sciences and social and behavioral sciences. Florham is home to FDU's School of Pharmacy and Health Sciences, the Daniel and Martina Lewis Center for Healthcare Innovation and Technology, the Rothman Institute for Innovation and Entrepreneurship, the internationally distributed *The Literary Review* and the oft-cited survey research group, PublicMind™. The campus is also host to 19 Division III sports teams, from baseball to tennis.

Recognizing that the student profile on most U.S. campuses is changing dramatically, the University's Anthony J. Petrocelli College of Continuing Studies provides an enhanced focus on the adult learner, addresses the special educational needs of nontraditional students and continues to position FDU as a leader in providing learning opportunities with a strong

academic foundation for students of all ages.

The Silberman College of Business is accredited by AACSB International - The Association to Advance Collegiate Schools of Business. The College offers undergraduate and graduate programs in business administration at the Florham Campus, Metropolitan Campus and Vancouver Campus.

### Brief History

1942 — A two-year college is founded in Rutherford by Dr. Peter Sammartino and his wife, Sylvia (Sally). One hundred and fifty-three students are enrolled.

1948 — In response to the need for higher education in northern New Jersey, Fairleigh Dickinson College expands its programs into a four-year curriculum.

1948 — First accreditation is achieved from the regional accrediting agency, the Middle States Association of Colleges and Schools.

1954 — The first graduate-level program is offered — a master's degree in business administration — still one of the University's most popular programs.

1954 — A second campus is acquired: formerly Bergen Junior College, in Teaneck, New Jersey.

1956 — By action of the New Jersey State Board of Education, Fairleigh Dickinson College becomes Fairleigh Dickinson University.

1956 — The College of Dental Medicine admits its first students.

1957 — *The Literary Review* is founded as an international journal of contemporary writing.

1958 — A third campus is created in Madison, New Jersey, on the former estate of Florence Vanderbilt Twombly.

1964 — Edward Williams College, a two-year college offering associate's degrees, with highly personalized instruction and guidance, begins classes on the Hackensack side of the Teaneck Campus.

1965 — The University opens its first overseas campus, Wroxton College in England.

1967 — The founding president, Dr. Peter Sammartino, retires after 24 years of service and is appointed chancellor and president emeritus. Dr. J. Osborn Fuller is appointed president.



1967 — The FDU Press is established and will print more than 1,500 scholarly books.

1970 — The College of Dental Medicine moves to a new multimillion-dollar facility on the Hackensack side of the Teaneck Campus.

1970 — The innovative and popular Saturday College of Edward Williams College opens, offering the opportunity to earn an associate's degree by taking courses on Friday evenings and Saturdays.

1972 — Fairleigh Dickinson University dedicates its second overseas campus, the West Indies Laboratory at St. Croix, U.S. Virgin Islands.

1974 — Dr. Jerome M. Pollack becomes the third president of the University.

1982 — The first students are admitted to a program for the Ph.D. in clinical psychology.

1983 — Walter T. Savage is appointed acting president.

1984 — Dr. Robert H. Donaldson becomes the fourth president of the University.

1987 — The Rothman Center, the University's major, state-of-the-art athletic and recreation facility on the Hackensack side of the Teaneck Campus, officially opens.

1989 — With the creation of the Rothman Institute of Entrepreneurship at Madison, Fairleigh Dickinson becomes the first university in the nation to build a facility dedicated to entrepreneurial education.

1990 — The College of Dental Medicine graduates its last class. Dr. Francis J. Mertz is appointed to an interim term as president of the University. Because of significant damage to the West Indies Laboratory by Hurricane Hugo, the facility is closed.

1992 — As part of the implementation of a strategic planning process, a new University College: Arts • Sciences • Professional Studies is created at Teaneck, and Madison develops honors track programs in all disciplines. Dr. Francis J. Mertz is appointed president of the University.

1993 — FDU's Board of Trustees approves a facilities master plan that allows for the implementation of three major construction projects by fall 1995. The board also votes that the University merge its operations on the Rutherford Campus with those of Teaneck and Madison beginning with the 1994–95 academic year.

1994 — Dickinson Hall reopens at Teaneck.

1995 — The Roberta Chiaviello Ferguson and Thomas G. Ferguson Recreation Center opens at Madison.

1998 — The Martin F. Stadler, Patrick J. Zenner, Hoffmann-La Roche Inc. Academic Building opens at Madison. New College of General and Continuing Studies is formed to address the special educational needs of nontraditional students, including adult learners.

1999 — Dr. J. Michael Adams is appointed president. The Park Avenue Residence Hall opens at Madison.

2000 — The University modifies its mission, placing a greater emphasis on “the preparation of world citizens through global education.”

2001 — The University's survey research group, PublicMind™, makes the first of hundreds of press releases based on measurements of public opinion.

2002 — Missions of the New Jersey campuses are indicated by new identities: Florham Campus (Madison) and the Metropolitan Campus (Teaneck). FDU creates its United Nations Pathways Lecture Series and earns designation as a nongovernmental organization (NGO) associated with the U.N. Department of Public Information.

2003 — The residence halls, Northpointe and Rutherford Hall, open at the Metropolitan Campus and Florham Campus, respectively.

2004 — Chaîne House opens at the Florham Campus. The International School of Hospitality and Tourism Management and the national headquarters of Confrérie de las Chaîne des Rôtisseurs, the world's premier gourmet society, are located in the building.

2005 — New College of General and Continuing Studies is renamed Anthony J. Petrocelli College of Continuing Studies.

2006 — Lee Gildart and Oswald Haase School of Computer Sciences and Engineering is named to honor science mentors of alumnus, space-farer and entrepreneur Gregory Olsen, whose gift is the largest in FDU's history.

2007 — The University opens an overseas campus, Vancouver Campus, in British Columbia, Canada.

2009 — Fairleigh Dickinson is approved for “Special Consultative Status” as a nongovernmental organization with the U.N. Economic and Social Council (ECOSOC). FDU is the first university in the world to earn this rank. FDU grants its first doctor of nursing practice degree.

2010 — Vancouver Campus graduates its first class. In recognition of the generosity of John Giovatto and in memory of his brother, Frank, the Metropolitan Campus dedicates the Frank Giovatto Library.

2011 — The University's largest capital campaign, FDU NOW, beats its target of \$50 million by almost \$9 million.

2012 — Sheldon Drucker is appointed to an interim term as president of the University. The School of Pharmacy and Health Sciences opens. It is New Jersey's first pharmacy school associated with a private university and only the second in the state. The John and Joan Monninger Center for Learning and Research opens at the Florham Campus.

2013 — Sheldon Drucker is appointed president of the University.

2014 — The Board of Trustees approves a five-year strategic plan that includes initiatives to improve the value and affordability of an FDU degree, expand key programs and focus on new areas of growth and innovation.

2015 — FDU dedicates the Daniel and Martina Lewis Center for Healthcare Innovation and Technology at the School of Pharmacy and Health Sciences.

2016 — University Provost and Senior Vice President for Academic Affairs Christopher A. Capuano becomes the University's eighth president on July 1, 2016.

2017 — Fairleigh Dickinson University celebrates its 75th Anniversary.

## Impact

Fairleigh Dickinson University has had a widespread impact upon northern New Jersey. Approximately 70 percent of its more than 100,000 alumni have remained in New Jersey, and many work in the area's industries. Companies such as Alcatel-Lucent; AT&T Corp.; BD; Bestfoods; Honeywell Inc.; International Business Machines Corporation; Johnson & Johnson; Merck & Co., Inc.; Novartis Pharmaceuticals Corp.; Prudential Insurance Company of America; Telcordia Technologies, Inc.; and Wyeth employ large numbers of FDU alumni.

The University sponsors a wide variety of educational opportunities, many in cooperation with local school districts, local businesses and even military installations, bringing University expertise to a large number of citizens.

# The University

## Campuses

Fairleigh Dickinson has two campus locations in northern New Jersey and overseas campuses in England and Canada. Maps of the two U.S.-based campuses are included at the back of this *Graduate Studies Bulletin*.

### Florham Campus

Madison, New Jersey

#### Location

The Florham Campus is located at the outskirts of Morristown on Route 124, near the intersection of Interstate 287, about 35 miles west of New York City. The campus is flanked by Drew University and the College of Saint Elizabeth, and its neighbors include the headquarters of several Fortune-500 companies. It is convenient to the Convent Station and Madison, NJ Transit railroad stations, the bus line and Morristown airport. It is approximately a 40-minute drive from Newark Liberty International Airport.

#### Description

This campus, situated on a beautifully landscaped park of 178 acres, became known as “Florham” when it was created as an estate for Florence Vanderbilt Twombly and her husband, Hamilton, by Frederick Law Olmsted (who also designed the grounds of New York City’s fabled Central Park) in 1897.

The Florham Campus serves a large residential undergraduate population, attracting students from across the country and abroad. During evenings and weekends, however, graduate and adult students are drawn to the campus’s convenient and flexible degree programs. Studies are offered through the Maxwell Becton College of Arts and Sciences, the Silberman College of Business, the Anthony J. Petrocelli College of Continuing Studies and University College: Arts • Sciences • Professional Studies. In addition to campus-based studies, the Silberman College hosts its executive M.B.A. and leadership development programs at the Wyndham Hamilton Park Hotel and Conference Center, which is located adjacent to the campus’s grounds. In addition, FDU’s School of Pharmacy and Health Sciences is located just down the road in a state-of-the-art facility one mile from campus.

Some of the campus’s Georgian-style buildings are more than a century old, and have been adapted to meet the educational

mission of the University. The 100-room Hennessy Hall (Mansion) features classrooms, offices, conference-style meeting rooms and a large ballroom (Lenfell Hall). The estate’s former Orangerie is part of the John and Joan Monninger Center for Learning and Research (library).

The campus includes both older and recent constructions featuring Georgian architecture, such as the Science Building, the Roberta Chiaviello Ferguson and Thomas G. Ferguson Recreation Center (with an indoor swimming pool, gymnasium, fully equipped physical fitness center and racquetball courts) and the Martin F. Stadler, Patrick J. Zenner, Hoffmann-La Roche Inc. Academic Building that houses 20 classrooms, student lounges and a dining facility for commuter and part-time students as well as the traditional undergraduate population.

Other major campus facilities include a science complex, a theater, a center for entrepreneurship and innovation, residence hall complexes and a refurbished Student Center.

### Metropolitan Campus

Teaneck, New Jersey

#### Location

The Metropolitan Campus is located in the heart of the dynamic New York/New Jersey corridor, just minutes from Manhattan. The campus is directly accessible from Route 4, six miles from the George Washington Bridge, and stretches along the east and west banks of the Hackensack River. It features ample parking for commuters, as well as public transit stops right on campus. It is within a half-hour drive of Newark Liberty International Airport.

#### Description

The Metropolitan Campus features a university atmosphere with an international perspective. Its location as a bedroom community of New York City helps it to attract nearly equal numbers of undergraduates, adult learners and full- and part-time graduate students from throughout the country and the world. Minority and international students comprise nearly a third of the campus population, providing a decidedly cosmopolitan perspective to the campus. The campus offers ready access to the amenities and resources of a major city-center, and the security and collegiality of a mid-sized college campus.

Studies are offered through the Silberman College of Business, University College: Arts • Sciences • Professional Studies and the Anthony J. Petrocelli College of Continuing Studies.

Carving the 88-acre campus into two distinctive areas is the Hackensack River. The Metropolitan Campus is comprised of 55 buildings spanning the communities of Teaneck and Hackensack, New Jersey. The campus architecture is primarily contemporary, although some of the campus’s quaint older buildings housing departments and specialty areas reflect the area’s Dutch Colonial heritage.

Robison Hall, the Frank Giovatto Library, Alumni Hall and the Muscarelle Center for Building Construction Studies are set along the river’s east edge, while Dickinson Hall and the George and Phyllis Rothman Center (a 5,000-seat athletic and recreation facility) are located along the river’s west side. Other major facilities include a renovated Fitness Center (with a student lounge), the Student Union Building, University Hall and several residential complexes. Limited graduate housing is available in the campus’s newest residence hall, Northpointe (2003). Both Teaneck and Hackensack feature easy access to restaurants and shops, and plentiful on-campus parking is available.

### Wroxton College

Wroxton Near Banbury, Oxfordshire, England

Wroxton College is the British campus of the University, situated in the ancestral home of Lord North at Wroxton Abbey in Oxfordshire. It is centrally located in England, lying near Banbury, between Oxford and Stratford-upon-Avon. The latter is, of course, the birthplace of William Shakespeare and a regular destination of Wroxton students attending productions of the Royal Shakespeare Company.

London is just 75 miles away from the campus, and while there are several scheduled College excursions to the city, there also is regular train service from Banbury.

Originally constructed as an Augustinian priory in 1215, Wroxton Abbey has accommodated several British monarchs and statespeople such as Theodore Roosevelt. It now houses the College’s classrooms and seminar rooms, the library, fully modernized student-lodging facilities and computer laboratories.

Wroxton College is a unique experience both culturally and academically for students seeking to extend their horizons. Students have come to Wroxton from more than 250 American colleges and universities to participate in an academic program offered by a resident British faculty and visiting British scholars.

In the fall and spring semesters, undergraduate courses are offered in English theater and drama, literature, fine arts, social sciences, education and international business. There is also ample opportunity for independent study. The academic offerings are supplemented by an extensive program of tours to various historic sites, artistic and cultural centers and places of political and commercial significance. The Master of Science in Hospitality management studies is also offered at Wroxton see page 240.

Admissions inquiries should be addressed to the Wroxton College/ Study-abroad Office, 285 Madison Avenue, Madison, New Jersey 07940, (973) 443-8086 or 1 (800) 338-8803.

## Vancouver Campus

Vancouver, British Columbia, Canada

As a leading innovator in global education, Fairleigh Dickinson University consistently seeks new ways to offer its unique learning opportunities to students worldwide. The University's newest campus and second international location is situated in Vancouver, British Columbia, Canada. Students at the Vancouver Campus have the unique opportunity to earn an undergraduate degree from an American university while studying in Canada.

The campus officially opened in fall 2007 in a newly renovated, state-of-the-art facility in the city's historic and cosmopolitan Yaletown section. Located in western Canada near the U.S. border, Vancouver is one of the world's most scenic and multicultural cities. Consistently rated one of the world's most livable cities, Vancouver is surrounded by stunning natural beauty, including mountains, the Pacific Ocean, a rainforest, parks and beaches. Warmed by Pacific Ocean currents and protected by a range of mountains, Vancouver enjoys mild temperatures year-round.

Vancouver Campus serves primarily international students from around the world. Three undergraduate degree programs are currently available on campus:

the B.S. in business administration with a concentration in international business and optional minors in entrepreneurship, finance, marketing or information technology; the B.S. in information technology with a minor in business administration and optional concentrations in network and systems administration and web-development technology; and the B.A. in individualized studies with specializations in applied technology and business, applied technology and communications, business and communications, disaster and emergency management, health and human services, global security studies, hospitality and tourism management, international relations, leadership administration, security and terrorism studies and sports administration studies. All programs use the same curricula offered for these degrees at FDU's New Jersey campuses, and all offer U.S. degrees approved by the State of New Jersey's Commission on Higher Education. Classes follow a trimester calendar that enables students to complete their degrees in less than three years by attending classes year-round.

The first graduate degree program for Vancouver Campus, the Master of Administrative Science (M.A.S.), was approved on April 27, 2011, and classes began in the summer of 2011. Specializations offered within the M.A.S. program include: computer security and forensic administration, emergency management administration, global health and human services administration, global leadership and administration, global technology administration and human resources administration.

The second graduate degree program for the Vancouver Campus, the Master of Science in hospitality management studies, was approved in December 2014, and classes began in the summer of 2015.

In addition to its degree programs, Vancouver Campus's pre-University program is available to students who need additional support in developing their English language skills before starting their degree studies.

Fairleigh Dickinson University received approval on May 8, 2006, from the British Columbia Ministry of Advanced Education to offer degree programs and operate as a university in British Columbia. FDU was the first non-Canadian institution to gain approval under the new, more stringent standards adopted by British Columbia in 2003.

Admissions inquiries should be directed to the Office of Admissions, Vancouver Campus, at (604) 682-8112 or 1-877-338-8002 (in North America) or by email at [vancouver-admissions@fdu.edu](mailto:vancouver-admissions@fdu.edu).

## Accreditation

Fairleigh Dickinson University is accredited by the Middle States Commission on Higher Education\* and licensed by the State of New Jersey, Office of the Secretary of Higher Education.

In addition to the accreditation held by all programs for academic purposes, specialized curricula have applied for and been granted approval by the following recognized professional agencies: accountancy — New Jersey State Board of Public Accountants; business, Silberman College of Business — AACSB International - The Association to Advance Collegiate Schools of Business; chemistry — American Chemical Society (this accreditation applies only to the Bachelor of Science program offered by Maxwell Becton College of Arts and Sciences at the Florham Campus, Madison, New Jersey); civil engineering — Engineering Accreditation Commission of ABET\*\* (EAC/ABET); civil engineering technology — Engineering Technology Accreditation Commission of ABET\*\* (ETAC/ABET); clinical mental health counseling — Council for Accreditation of Counseling and Related Educational Programs (CACREP); clinical psychology (Doctor of Philosophy Program) — American Psychological Association; computer science — Computing Accreditation Commission of ABET\*\* (CAC/ABET) (this accreditation applies only to the Bachelor of Science in computer science program offered by University College: Arts • Sciences • Professional Studies at the Metropolitan Campus, Teaneck, New Jersey); construction engineering technology — Engineering Technology Accreditation Commission of ABET\* (ETAC/ABET); education — initial accreditation with Council for the Accreditation of Educator Preparation (CAEP) and New Jersey State Department of Education; electrical engineering — Engineering Accreditation Commission of ABET\*\* (EAC/ABET); electrical engineering technology — Engineering Technology Accreditation Commission of ABET\*\*

\*3624 Market Street, Philadelphia, Pa. 19104-2680

\*\*ABET, <http://www.abet.org>

# The University

---

(ETAC/ABET); hotel and restaurant management — Accreditation Commission for Programs in Hospitality Administration (ACPHA) (this accreditation applies only to the Bachelor of Science program); mechanical engineering technology — Engineering Technology Accreditation Commission of ABET\* (ETAC/ABET); pharmacy — Accreditation Council for Pharmacy Education\*\*; physical therapist assistant — Committee on Accreditation in Physical Therapy Education; radiography — Joint Review Committee on Education in Radiologic Technology; nursing — New Jersey State Board of Nursing and the Commission on Collegiate Nursing Education (CCNE); school psychology — National Association of School Psychologists (NASP); Silberman College of Business — AACSB International – The Association to Advance Collegiate Schools of Business; inclusion on approved lists of the American Medical Association and the American Dental Association (Medicine, Dentistry) by virtue of the accreditation by the Middle States Commission on Higher Education.

## Official University Photography

Fairleigh Dickinson University reserves the right to photograph members of the University community, including but not limited to, its students and faculty, in situations appropriate to the image of an academic institution, and to publish likenesses in Fairleigh Dickinson University publications, websites, videos or other recruitment or promotional materials. However, the University will, to the extent feasible, honor requests of constituents who do not wish their images photographed or published.

---

\*ABET, <http://www.abet.org>

\*\*Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60605; phone: (312) 664-8575; fax (312) 664-4652; website: [www.acpe-accredit.org](http://www.acpe-accredit.org)

## The Colleges

Fairleigh Dickinson University is comprised of four colleges: Maxwell Becton College of Arts and Sciences, Silberman College of Business, the Anthony J. Petrocelli College of Continuing Studies and University College: Arts • Sciences • Professional Studies.

More than 50 graduate degree programs are offered by the colleges. The colleges' degree programs and their faculty and staff are listed on this and the following pages. The admissions and academic requirements and detailed descriptions of each program are listed in alphabetical order within the Program section of this *Graduate Studies Bulletin* pages 38–243.

### Maxwell Becton College of Arts and Sciences

Florham Campus, Madison, New Jersey

Geoffrey S. Weinman, Dean

The Maxwell Becton College of Arts and Sciences deepens students' understanding of their chosen fields, while teaching them to communicate and reason clearly and effectively. The College is committed to helping students advance their careers or continue studies for higher degrees.

#### Programs

- Biology (M.S.)
- Chemistry (M.S.)
- Clinical Mental Health Counseling (M.A.)
- Communication (M.A.)
- Creative Writing (M.F.A.)
- Creative Writing and Literature for Educators (M.A.)
- Education for Certified Teachers (M.A.)\*
- Educational Leadership (M.A.)\*\*
- Health Science (M.H.S.)
- Pharmacy (Pharm.D.)
- Psychology
  - Industrial/Organizational Psychology (M.A.)
- Teaching (M.A.T.)\*\*\*

Graduate courses in mathematics are available to students in the M.A.T. program and to qualified undergraduates with the permission of the department.

#### Faculty & Staff

##### Administration

G.S. Weinman, Dean

J. Lehr, Associate Dean

E. Feeley, Associate Dean of Student Services

\*While the Master of Arts in education for certified teachers (see pages 115–120) is awarded through FDU's University College: Arts • Sciences • Professional Studies on the Metropolitan Campus, Teaneck, New Jersey, nearly all courses required in fulfillment of the degree are offered at the Florham Campus, Madison, New Jersey.

\*\*Master of Arts in educational leadership (see pages 121–122).

\*\*\*Master of Arts in Teaching (see pages 126–129).

#### Department of Biological and Allied Health Sciences

J. Salierno, Chair; J. Agugliaro, M. El-Sherbeini, S.R. Hardie, P. Melloy, E. Myers-Arnold, C. O'Connor Fitzpatrick, B. Olechnowski, H. Parzer

#### Department of Chemistry and Pharmaceutical Science

A. Teslja, Chair; G. Anderle, M. Avaltroni, S. Bashkova, M. Elshaer, J. Ma, E. Salaski

#### Department of Communication Studies

G. Radford, Chair; C. Caldiero, K. Dunsmore, C. Foster, K. Haspel, S. Latson, J. Lehr

#### Department of Literature, Language, Writing and Philosophy

O. Makridis, Chair; R. Steinke, Director; M.F.A. in Creative Writing; P. Bazán-Figueras, S. Belen-Ramos, P. Benson, M. Boyd, R. Chace, L. Corces, D. Daniel, K. Douglas, A. Fader, N. Ghosh, G. Pastorino, A. Patrick, F. Pinto, B. Rabinowitz, E. Reid, K. Sammond, G. Weinman, R. Young

#### Department of Mathematics, Computer Science and Physics

L. Khreisat, Chair; B. Knorr, R. Mayans, J. Namazi, P. Penrice, D. Richton, K. Sharma, G. Singh, N. Sinha, M. Slaby, Y. Teper, R. Wagner

#### Department of Psychology and Counseling

A. Tasso, Chair; D. Brown, D. Calcagnetti, R. Griffo, K. Shirley, V. Viglione, D. Wentworth

#### School of Pharmacy and Health Sciences

M.J. Avaltroni, Dean; A. Rivkin, Assistant Dean for Faculty; B. Rossi, Assistant Dean for Experiential Education; C. Sandifer, Assistant Dean for Student Affairs and Programmatic Effectiveness; A. Carbone, S. Cherian, A. Dushenkov, N. East, N. Elk, S. Falbaum, P. Giordano, Y. Guo, J. Han, O. Iwuchukwu, P. Jungsuwadee, J. Kalabalik, D.P. Kim, C. Lam, T. Lawson, M. Leibfried, S. Li, R. Mahato, A.E. Özdener, S. Patel, A. Pennoyer, L. Rozaklis, B. Roy, M. Slugocki, J. Sullivan, G. Vaidean, S. Vansal, L. Westrich

# The Colleges

---

## Silberman College of Business

Florham Campus, Madison, New Jersey; Metropolitan Campus, Teaneck, New Jersey; and Vancouver Campus, British Columbia, Canada

Andrew J. Rosman, Dean

The Silberman College of Business is accredited by AACSB International - The Association to Advance Collegiate Schools of Business. AACSB is the premier business school accrediting body.

Silberman College is a tricampus college of the University, offering graduate programs at the Florham Campus, Madison, New Jersey, and on the Metropolitan Campus, Teaneck, New Jersey. Its major goal at the graduate level is to develop the analytical ability and perspective of the graduate student in order to contribute to success as a responsible executive.

The College, a community of committed educators, administrators and staff, has as its mission to instill in its students a superior level of business-management competence by offering distinctive programs that blend academic excellence and practical business knowledge with a global multicultural orientation.

The College aims to achieve recognition as a leading provider of high-quality, innovative education in business administration and as a leader in the enhancement of the practice of business management through the applied research and professional activities of the faculty.

The College achieves its mission through:

- Curricula that are directed to the educational growth of students and are responsive to the needs of the business community,
- Teaching excellence in all programs,
- Research capabilities that advance the practice of business management and
- Close ties with the business community served by the College.

The College includes several institutes to support graduate business education. The Rothman Institute of Innovation and Entrepreneurship provides students with cross-disciplinary opportunities to explore the meaning and process of capitalism and free enterprise in the nation's economy.

## Major Programs of Study

- Master of Business Administration (M.B.A.) Specializations
  - Accounting
  - Business Administration
  - Finance
  - International Business Management
  - Marketing
  - Pharmaceutical Management Studies (Florham Campus only)
- Master of Business Administration (M.B.A.) — Management for Executives
  - General Management
  - Health Sector Management
- Master of Science (M.S.) — Accounting
- Master of Science (M.S.) — Digital Marketing (online only)
- Master of Science (M.S.) — Supply Chain Management
- Master of Science (M.S.) — Taxation (Florham Campus only)

In addition to the above programs, the College offers a post-M.B.A. graduate certificate. Students with an M.B.A. may receive certification in a second major upon completion of an additional 12 required and elective credits for that major.

## Faculty & Staff

### Administration

A.J. Rosman, Dean  
J.G. Almeida, Associate Dean for Graduate Programs  
J. Shurdom, Assistant Dean for Undergraduate Programs and Student Services  
P. Caliguari, Director, Executive Programs  
R. West, Director, Tax Program

### Department of Accounting, Taxation and Law

R. West, Chair; F. Brunetti, D. Buzinkai, M. Calderisi, D. Collier, Z. Fried, A.J. Rosman, H. Rozen, J. Schiff, A. Schultzer, J. Skarbnik, Y. Yan

### Department of Economics, Finance and International Business

K. Denning, Chair; P. Anastasopoulos, K. Betz, E. Cowan, E. Djimopoulos, F. Englander, J. Kiernan, R. Kjetsaa, C. Ng, S. Tuluca, B. Zwick

### Department of Marketing, Information Systems and Decision Sciences

Z. Wang, Chair; G. Bronson, R. Chandrashekar, Y. Demotta, B. Ertimur, A. Fask, J. Hsu, E. Huser, M. Kieff, Y. Kim, L. Qin, J. Reid, M. Sedaghat, L. Tadj, X. Tan, K.P. Yoon

### Department of Management and Entrepreneurship

G. Jones, Chair; J.G. Almeida, S. Bear, S. Behson, D. Celentano, G. Cleaves, K. Fairfield, G. Farias, T. Hansbrough, J. Harmon, O. Nwachukwu, D. Scotti, G. Sollars, E. Swartz, J.D. Wischnevsky

### Rothman Institute of Innovation and Entrepreneurship

T. Pakay, Executive Director

## Anthony J. Petrocelli College of Continuing Studies

Florham Campus, Madison, New Jersey;  
Metropolitan Campus, Teaneck, New  
Jersey; Vancouver Campus, British  
Columbia, Canada; and Wroxton College,  
Oxfordshire, England

Lisa R. Braverman, Dean

The Anthony J. Petrocelli College of Continuing Studies, formerly known as New College of General and Continuing Studies, offers adult learners a convenient and flexible program for their special educational needs.

Recognizing that the student profile on most U.S. campuses is changing dramatically, the University's Petrocelli College was introduced to provide a unified approach and enhanced focus on the adult learner and to continue to position FDU as a leader in providing learning opportunities in a strong academic foundation for students of all ages.

The College features programs integral to the University's commitment to serve "lifelong learners." These include seven graduate degree programs and postbaccalaureate education and nondegree programs, with many credit, noncredit and certification options. In addition, Petrocelli College features precollege programs and two- and four-year undergraduate degree offerings for adults. For the financial planning certificate program and the paralegal studies program go to <http://view2.fdu.edu/academics/continuing-education/financial-planning/certificate-program-financial-planning/> and <http://view2.fdu.edu/academics/continuing-education/paralegal-studies/>, respectively.

In conjunction with the other colleges, Petrocelli College also is heavily involved with distance-learning initiatives, summer and winter-session programming and the support and development of credit certificate programs.

While based on the Metropolitan Campus, the College offers programs on both New Jersey campuses, at more than 25 offsite locations throughout the state of New Jersey, at Vancouver Campus, British Columbia, Canada, and at Wroxton College, Oxfordshire, England. Courses are offered in formats, at times and in locations convenient for adult learners.

### Programs

- Administrative Science (M.A.S.)
- Homeland Security (M.S.)
- Hospitality Management Studies (M.S.)
- Public Administration (M.P.A.)\*
- Service Innovation and Leadership (M.S.)
- Sports Administration (M.S.A.)
- Student Services Administration (M.A.)

### Faculty & Staff

#### Administration

L.R. Braverman, Dean

T. Swanzy, Associate Dean

D. Fredericks, Associate Dean for Continuing Education

F. Alonso, Director, *Puerta al Futuro* Program and Latino Promise Program

E.J. Lee, Director, *MiraeRo* (Korean Studies) Program

S. Liu, Director, *Cheng Gong* (Chinese Studies) Program

W. Roberts, Director, Public Administration Institute

J. Steiner, Associate Director, Online Programs

J.H. Behnke, Director of Web, Instructional Technology and Online Learning

L.S. Nienstedt, Associate Director, School of Administrative Science

D.L. Ganley, Senior Coordinator for Off-campus Credit Programs

J. Sahni, Coordinator of Online Programs

J. Tormey, Director, International School of Hospitality and Tourism Management

L. Winters, Director of Interdisciplinary Studies Program

#### Faculty

C. Acosta, A. Adrignolo, F. Alonso, W. Antoine, M. Barto, T. Beam, J. Buenahora, C. Bygrave, M. Collado, J. Devine, E. Doherty, L. Elfers-Mabli, A.K. Garg, I. Gersh, D. Hoover, F. Karger, J.C. Kim, E. Kovacs, L. Kurland, P. Laubsch, E.J. Lee, T. Llalire, S. Liu, R. Lubisco, P. MacIntyre, S. McCloud, R. Medaska, F. Oliver, E. Oliveros, M. Oujo, C. Ozurumba, F. Parra, A. Ritz, W. Roberts, J. Rodriguez, W. Schuber, R. Selig, T. Swanzy, W. Toms, K. Tripodi, L. Ultan, L. Winters

\*To be offered by the School of Public and Global Affairs.

## University College: Arts • Sciences • Professional Studies

Metropolitan Campus, Teaneck,  
New Jersey, and Vancouver Campus,  
British Columbia, Canada

Vicki L. Cohen, Interim Dean

University College: Arts • Sciences • Professional Studies, is committed to educating students for the world.

University College emphasizes professionally accredited and career-oriented programs that prepare future leaders to work effectively in a global environment, regardless of profession. Its wide array of programs is strongly grounded in the liberal arts, recognizing that professionals in all fields require a multidisciplinary and multicultural perspective to be successful. The college also stresses experiential and field-based learning through internships, student-directed research, cooperative education and community service that supplement academic instruction, enhance career-related experiences and develop students' social and moral identities as productive citizens.

The mission of University College is facilitated by its location in northern New Jersey's Bergen County and proximity and ease of access to New York City. Courses and curricula incorporate the unique commercial, scientific and cultural resources of the metropolitan area to create a learning laboratory of exceptional diversity and richness. The resources of this vital cosmopolitan area contribute to all aspects of University College activity and, at the same time, the College maintains a suburban campus atmosphere.

University College offers a wide range of undergraduate and master's degree programs in such areas as psychology, criminal justice, education, the natural sciences, nursing, engineering and technology, computer science, media and communication and the humanities. Many of its schools offer accelerated and combined undergraduate/graduate degree programs as well as special areas of concentration and minors.

University College is organized into schools to be more responsive to student needs. Specifically, there are nine schools within the college:

- The School of Art and Media Studies covers the disciplines of communication, fine arts and multimedia studies.

# The Colleges

---

- The Lee Gildart and Oswald Haase School of Computer Sciences and Engineering covers the disciplines of civil engineering, computer engineering, electrical engineering, mechanical engineering, computer science, cybersecurity and information assurance, electronic commerce, engineering technology, information technology, management information systems and mathematics. Accredited undergraduate programs are offered in electrical engineering, electrical engineering technology, civil engineering technology, computer science, construction engineering technology and mechanical engineering technology.
- The School of Criminal Justice, Political Science and International Studies covers the disciplines of criminal justice, criminology, private security, political science and international studies. Programs at the undergraduate and graduate level are offered.
- The Peter Sammartino School of Education offers accredited programs for teacher certification in elementary and secondary education, education for certified Teachers, educational leadership, English as a second language, teaching English as a second/foreign language, teacher of students with disabilities and learning disabilities consultant.
- The School of the Humanities covers the disciplines of English, philosophy, humanities, foreign languages and interdisciplinary studies.
- The School of Natural Sciences houses the disciplines of biology, biochemistry and chemistry.
- The Henry P. Becton School of Nursing and Allied Health includes the disciplines of nursing and allied health including a Doctor of Nursing Practice (D.N.P.). Accredited programs are offered in nursing, medical technology and radiography.
- The School of Psychology houses the discipline of psychology, including an accredited Ph.D. program in clinical psychology and a Psy.D. program in school psychology.

## Programs

- Biology (M.S.)
- Chemistry (M.S.)
- Computer Engineering (M.S.)
- Computer Science (M.S.)
- Cosmetic Science (M.S.)
- Criminal Justice (M.A.)
- Cybersecurity and Information Assurance (M.S.)
- Education for Certified Teachers (M.A.) (Reading Specialist Certification)

- Educational Leadership (M.A.) (Principal/Supervisor Certification)
- Electrical Engineering (M.S.E.E.)
- Electronic Commerce (M.S.)
- Learning Disabilities (M.A.)  
Teacher of Students with Disabilities/  
Learning Disabilities Teacher  
Consultant Certification
- Management Information Systems (M.S.)
- Mathematical Foundations (M.A.)
- Medical Technology (M.S.)
- Nursing (M.S.N.)
- Nursing Practice (D.N.P.)
- Psychology
  - Clinical Psychology (Ph.D.)
  - Clinical Psychopharmacology (Post-doctoral M.S.)
  - Forensic Psychology (M.A.)
  - General/Theoretical Psychology (M.A.)
  - School Psychology (Psy.D.)
  - School Psychology (M.A.)
- Teaching (M.A.T.)  
Teacher Certification  
Preschool to Grade 3; Elementary  
Education/K-6; Secondary Education  
Content Area/K-12 (Art, Biological  
Sciences, Chemistry, Earth Science,  
English, Mathematics, Physical  
Science, Social Studies, World  
Languages)
- Teaching English as a Second/Foreign  
Language (TESL/TEFL) (M.A.)

In addition to the above programs, the College offers a postbaccalaureate respecialization program in psychology certificate. Programs in Language, Culture and Professional Advancement (PLCPA) offers courses in English for Specific Purposes (ESP) for international students and any interested domestic students. These courses are called English for Professional Success (EPS). The College also offers several postbaccalaureate certificate programs training teachers for the Orton-Gillingham approach to reading instruction.

## Faculty & Staff

### Administration

V.L. Cohen, Interim Dean  
J. Boyd, Associate Dean

### School of Art and Media Studies

K. Buzzard, Director; Y. Aronson, B. Battistoli, T. LoPonte, M. Roberts, Z. Sun

### Lee Gildart and Oswald Haase School of Computer Sciences and Engineering

A. Tan, Director; H. Silver, Deputy Director; V. Zwass, Deputy Director; S. Abdelazim, V. Alizadeh, M. Azarderakhsh,

W. Byrne, A. Casti, Z. Chen, M. Farag, S. Huddy, V. Janarthanan, F. Jnaid, Y. Kim, E. Kose, B. Lefkowitz, G. Levine, M. Lewis, Z. Mao, K. Mondal, W. Phillips, A.R. Rao, G. Reinish, O. Rudniy, Y. Tang, H. Zhao

### School of Criminal Justice, Political Science and International Studies

S. Raphaelides, Director; P. Reynolds, Assistant Director; L. Chowdhury, T. Daftary-Kapur, E. Garcia, J. Kenny, K. Kattelman, B. Ojo, E. Panuccio, R. Vodde

### Peter Sammartino School of Education

M. Singer, Interim Director; K. Ado, D. Aronoff, M. Farrell, N. Hansen, K. Joshi, C. Karpinski, B. Meadows, L. Meskin, T. Montani, L. Ray, R. Westbrook

### School of the Humanities

J. Boyd, Director; J. Gifford, F. Ingledew, C. Rasmussen, J. Scorza, C. Shanafelt, T. Stavola, A. Velásquez, J. Wagner

### School of Natural Sciences

J. Dougherty, Co-director; M. McClary, Co-director; A. Benzecry, G. Dorata, I.R. Isquith, I. Kumar, M. Leonida, R. Lo Pinto, A. Murphy, G. Nandikotkur, N. Philips, J. Stout, A. Wallace, M.P. Warunek

### Henry P. Becton School of Nursing and Allied Health

M. Guttman, Director; S. Colon Cabassa, Associate Director for Undergraduate Programs; M. Rossignol, Associate Director for Florham Programs; M. Rubin, Associate Director for Allied Health; B. Yu, Associate Director for Graduate Program; M. Vargas, Coordinator, D.N.P. Program; J. Couper, H. Egbuonu, N. Edwards-Hammond, C. Garzone-Johnson, E. Graulich, C. Jasko, M. Molloy, T. Moore, S. Palmer, J. Regan-Livingston, A. Sanzari, P. Ukaigwe

### School of Psychology

R. Dumont, Director; S. Armeli, C. Bergstein, C.A. Capuano, J. Cleveland, A. Eisen, B. Freer, D. Green, M. Guiney, J. Kaufman, J. Lachenmeyer, K. Loeb, E. McGlinchey, R. McGrath, C. Overup, D. Pogge, R. Prentky, L. Tiersky, K. Viesel, J. Zibulsky

### Department of Physical Education

C. Liggett, Coordinator

### Programs in Language, Culture and Professional Advancement

M. Mohamad, Director, University College: Arts • Sciences • Professional Studies, Metropolitan Campus and Vancouver Campus



# Admissions; Financial Aid and Scholarships; Registration, Tuition and Billing Information

## Admissions

### General Information

Students seeking to register for classes or to enroll in any graduate degree or certificate program offered at Fairleigh Dickinson University must formally apply for admission.

An applicant seeking a graduate degree or certificate may enroll as a matriculated or nonmatriculated student. An applicant who is not seeking a graduate degree or certificate may enroll in classes for credit as a nondegree student, or as a visiting student or auditor. Applications should be sent to the Graduate Admissions Office at the campus (Florham Campus, Madison, New Jersey; Metropolitan Campus, Teaneck, New Jersey) the student plans to attend. Candidates may apply for admission to one campus only. For information about the School of Pharmacy and Health Sciences go to [www.fdu.edu/pharmacy](http://www.fdu.edu/pharmacy).

The University reserves the right to deny admission to any applicant who, in the judgment of the Admissions Committee, may not benefit from Fairleigh Dickinson University's educational programs or whose presence or conduct may impact negatively on its program(s). The University also reserves the right to refuse enrollment in or admittance to any course to any admitted student who engages in conduct deemed by the University, in its sole discretion, as interfering with the learning experience or safety of any person in the University community.

Applications are processed on a rolling basis with the exception of the Ph.D. program in clinical psychology, which has a December 15 deadline; the Psy.D. program in school psychology, which has a March 1 deadline; the M.A. program in school psychology, which has a March 15 deadline; and the M.A. in forensic psychology, which has a May 15 deadline. These programs are offered only at the Metropolitan Campus.

Students are encouraged to apply as early as possible to allow time to complete the application process prior to the start of classes. The requirements for matriculation vary with each program. However, all candidates for matriculation must submit a Graduate Application Form, a non-refundable application fee and official transcripts from all previously attended colleges and universities verifying comple-

tion of a bachelor's degree at an accredited institution of higher learning. Graduate entrance examinations, including the Graduate Record Examinations (GRE), Graduate Management Admission Test (GMAT), Miller Analogies Test (MAT) and National Teacher Examination (PRAXIS) and letters of recommendation are required for admission to some graduate programs. Personal interviews are not generally required but may be requested as part of the admissions process. Students must check the specific admissions requirements for the program in which they are interested.

Applicants who wish to enroll as nonmatriculating or nondegree students may register for classes on the basis of unofficial documents with the approval of a graduate faculty adviser.

A satisfactory score on the Test of English as a Second Language (TOEFL) is required of those applicants whose native language is not English and who have not completed their baccalaureate degree at an English-language college or university.

### Degree- and Certificate-Seeking Students

#### Matriculated Students (In a Degree or Certificate Program)

An applicant for admission to a graduate degree or certificate program may be accepted as a matriculated student if the applicant's admission file is complete, including all required documents, and if the student is recognized as meeting all requirements for admission to the program. (Note: Requirements for admission to a certificate program might be different from those required for admission to a degree program.)

In certain cases, with the approval of a graduate faculty adviser, a matriculated student may be permitted to enroll in graduate classes prior to the receipt of official documents or completion of specific prerequisite course work. Or, a matriculated student with academic deficiencies may be admitted on probation. Students matriculating in this manner may have a specific time or credit limit imposed upon their acceptance and subsequent reregistration.

Only matriculated graduate students enrolled in a degree program or in programs leading to state certification are eligible to apply for financial aid.

#### Nonmatriculated Students (Intending to Matriculate in a Degree or Certificate Program)

An applicant for admission to a graduate degree or certificate program may, at the discretion of the department or school, be accepted as a nonmatriculated student if the applicant's admission file is incomplete, lacking required documents, but contains documents affirming completion of a bachelor's degree and the signature of an authorized graduate adviser. A nonmatriculated student enrolling in graduate classes is permitted a 9-credit maximum.

A nonmatriculated student is reviewed for matriculation when all required documents are received by the Office of Academic Records.

**A nonmatriculated student is not eligible to apply for financial aid.**

### Nondegree- and Noncertificate-Seeking Students

#### Students Enrolled in Classes for Credit

A student who does not intend to enroll in a graduate degree or certificate program may, at the discretion of the department or school, register for individual graduate classes for credit and is admitted with a 9-credit maximum on the basis of documents affirming completion of a bachelor's degree and the signature of an authorized graduate adviser. A nondegree or noncertificate student enrolled in classes for credit may utilize those credits to fulfill requirements for a degree or certificate program if he/she applies and is accepted as a matriculated student.

**A nondegree/noncertificate student is not eligible to apply for financial aid.**

# Admissions

---

## Visiting Students (Matriculated at Another College or University and Enrolling in Classes for Credit)

A visiting graduate student is admitted on the basis of a Certificate of Eligibility Form signed by an authorized adviser at the college or university where he/she is matriculated.

A visiting student is not eligible to apply for financial aid at Fairleigh Dickinson University. However, he/she may be eligible to apply for financial aid through his/her home university by utilizing a consortium agreement.

## Auditor (Students Enrolled in Credit Classes Who Do Not Receive Grades or Credits)

To audit a class, no academic documentation is required. The student must present an Audit Form, signed by the faculty member teaching the class, to the Office of Enrollment Services. If an audit student enrolls in classes offered through the Office of Continuing Education, he/she registers through the Office of Continuing Education and is eligible to receive a Certificate of Attendance upon completion of the program.

An auditor pays for 1 credit at the regular tuition charge and is not eligible to apply for financial aid. No grade is given for the course audited; therefore, it cannot be used as future credit. Special rates may apply for FDU graduates and senior citizens.

## Readmission for Graduate Study

Matriculated students who interrupt their studies for one or more semesters, without requesting a leave of absence in writing, must request reinstatement by submitting an Application for Readmission. (No application fee is required.) Readmitted students are governed by the *Graduate Studies Bulletin* issued for the academic year of reinstatement and are subject to the current admissions and curricular requirements for the program to which they are seeking readmission.

## Change of Program

A matriculated student who is currently enrolled in a graduate program at one college and wishes to change the program to

one that is offered in another college within the University must submit a new application and all required documents to the Graduate Admissions Office at the campus where the program is being offered.

## Transfer Credit

Graduate credits earned at another accredited institution may be accepted in transfer, in accordance with the curricular requirements of the degree program and the academic policies of the colleges. Generally, transfer credit will be considered for those courses completed within the last 5 years in which a grade of B or better has been earned. A maximum of 9 credits may be accepted in transfer.

Academic course waivers are available in some graduate degree programs, including the M.B.A., M.S. in computer science, M.S. in information systems and M.S. in electronic commerce. Graduate prerequisite course work may be waived for students who have completed relevant undergraduate course work, with appropriate grades, within the last five years.

Application for transfer or waiver credit is made through the academic school or department in conjunction with the Office of Enrollment Services. To request a transfer or waiver evaluation, the student must submit an official transcript and course description. A request for an official evaluation of transfer or waiver credit should be concurrent with the student's admission to the program. In some degree programs, students may be required to submit challenge exam scores to receive transfer or waiver credit.

## International Students

International students seeking admission to any graduate program at FDU may apply online at [fdu.edu/apply](http://fdu.edu/apply) and submit their official supporting documents to: Office of International Admissions  
1000 River Road, T-KB1-01  
Teaneck, NJ 07666  
Phone: 1-201-692-2205  
Fax: 1-201-692-2560  
Email: [global@fdu.edu](mailto:global@fdu.edu)

One original copy and one translated and notarized copy (if not in English) of all the student's academic credentials verifying completion of the equivalent to a baccalaureate degree program in the United States at an accredited institution of higher learning. The student's record must demonstrate a high standard of academic performance to receive favorable admissions action.

Letters of recommendation and graduate entrance exams including, but not limited to, the Graduate Record Examinations (GRE) or the Graduate Management Admission Test (GMAT) are required for admission to some graduate programs. Students may check the website at [fdu.edu/apply](http://fdu.edu/apply) for specific information regarding the admission requirements for specific academic programs.

International students whose native language is not English are required to submit the results of a test of English proficiency. Students from Antigua and Barbuda, Australia, the Bahamas, Barbados, Belize, Bermuda, Canada (excluding Quebec), Fiji, Grenada, Guyana, Ireland, Jamaica, Kiribati, Marshall Islands, Mauritania, Micronesia, New Zealand, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Solomon Islands, Trinidad and Tobago and United Kingdom do not need to submit test scores. A minimum score of 550 (paper-based), 213 (computer-based) or 79 (Internet-based) on the TOEFL (Test of English as a Foreign Language) or an overall band score of 6.0 or higher on the IELTS (International English Language System) or a 53 or higher on the Pearsons PTE-A is required. Students who are unable to meet the University's minimum English-proficiency requirement may apply for the intensive English program, offered by the ELS Language Center. The University offers conditional admission in selected majors to students who apply to the ELS Language Center.

Applications for admission for the fall semester should be filed no later than July 1. Spring-semester applications should be filed no later than December 1. International students enrolling on an F-1 student visa must meet all admission criteria to be accepted as full-time graduate students and must register for at least 9 credit hours each semester (excluding summer) to maintain student-visa status.

Following admission, the University may require that all international students be tested to determine if additional English language study is required. If test results indicate further study is needed, the language requirements may consist of one or more semesters of English for Professional Success (EPS) course work.

International students applying for an F-1 visa must give evidence of financial support for a period of one year.

The University requires that international students carry University insurance coverage for sickness and medical benefits.

## Financial Aid and Scholarships\*

Fairleigh Dickinson University administers a variety of academic and need-based funding from federal, state and University sources. Financial aid is available to qualified full-time and part-time matriculated students at Fairleigh Dickinson University. A graduate student is considered to be enrolled full time when registered for a minimum of 9 credits per semester. New and returning students are expected to file the Free Application for Federal Student Aid (FAFSA) no later than April 15. The FAFSA must be filed EVERY year.

Financial aid is awarded annually and is based on continued eligibility, enrollment status, availability of funds and maintenance of satisfactory academic progress. In addition, a student may not be in default and/or may not owe a refund on any Title IV and/or HEA loans or grants.

International students are not eligible for federal, state or University need-based financial aid. However, international students are eligible for athletic funding (as provided by the National Collegiate Athletic Association [NCAA] guidelines) as well as academic scholarships.

All available sources and types of academic and need-based funding are detailed throughout this section.

### University-funded Programs

#### University Provost's Scholarship Program for Graduate Study

All students admitted to a master's program beginning with the spring 2013 semester and who plan to register for a minimum of 6 credits may apply. Eligible candidates must have a minimum undergraduate grade point ratio of 3.00 (on a 4.00 scale) and standardized test scores acceptable for admission. The University Provost's Scholarship awards range from \$100.00 per credit to \$300.00 per credit and cannot be combined with other University scholarship or assistantship. Students enrolled in graduate study as part of a combined (bachelor's/master's) degree

program or enrolled in a master's program with a nonstandard tuition rate are not eligible. More information about the University Provost's Scholarship Program for Graduate Study, including the list of eligible master's programs and maintenance criteria for scholarship awards, can be found on the University Provost's Scholarship webpage [www.fdu.edu/provostscholarship](http://www.fdu.edu/provostscholarship) or for more information email [provostscholarship@fdu.edu](mailto:provostscholarship@fdu.edu).

#### Combined Degree Advantage Program Scholarship

Students admitted into the University's combined degree program are able to earn a bachelor's and a master's degree in five years.

Students in their fifth year who are in the graduate program are eligible for a Combined Degree Scholarship equal to 40 percent of tuition charges. However, students who receive other institutional assistance and those in discounted programs are not eligible.

#### University Fellowships

Fairleigh Dickinson University funds fellowships for full-tuition scholarships (up to 9 credits per semester). Fellowships are awarded by the academic department/school in which the student is studying or planning to study. All inquiries should be directed to the appropriate academic program administrator. The receipt of a fellowship supercedes other FDU funding and will result in the reevaluation of any existing financial aid award.

#### Teaching Fellowships

Students receive a fellowship of one-half tuition plus \$2,000 during the first and second years of the program and one-half tuition during the third year of the program. Some research and clinical practice have an additional stipend included, and various additional fellowships are available for students who meet certain conditions.

#### Graduate Administrative Assistant Fellowships

Recipients of graduate administrative assistant fellowships assist with the administration of programs within admissions, career management and other administrative

areas of the University for 720 hours per academic year (360 hours per semester). Stipend compensation is \$4,000.00 per academic year (\$2,000.00 per semester).

#### University-funded Grant Programs

##### Alumni Incentive Grant

Effective fall 2001, an alumnus/a of the University may be eligible for the Alumni Incentive Grant in the amount of \$100 per credit. The alumnus/a must be matriculated. The grant cannot be used in conjunction with any other University tuition discount and/or University aid program. Contact the Graduate Admissions Office for further details.

#### Privately Funded Scholarships

##### Johnson & Johnson Scholarship

The Johnson & Johnson Scholarship provides funding for doctoral candidates enrolled in the Ph.D. in clinical psychology program at the Metropolitan Campus, Teaneck, New Jersey, who demonstrate a commitment to enhancing health care in certain targeted counties of New Jersey. Inquiries should be made to the academic administrator of the clinical psychology program.

##### Sammartino Scholarship

The Peter Sammartino Endowment and the Sylvia Sammartino Endowment are scholarship funds which were created through the bequests left by the University's founder and first president, Peter Sammartino, and his spouse, Sylvia Sammartino. Scholarships are available to students enrolled in the Master of Arts in Teaching program in the Peter Sammartino School of Education. A demonstration of the desire to teach is one of the criteria. Scholarships up to one half of tuition are awarded.

##### Nurse Faculty Loan Program

The Henry P. Becton School of Nursing and Allied Health offers the Nurse Faculty Loan Program (NFLP). Students who have an interest in becoming nurse faculty after having finished the Master of Science in

\*Information within the Financial Aid and Scholarships section is subject to change. Students should contact the Office of Financial Aid for any revisions or additions.

# Financial Aid and Scholarships

---

Nursing program or the Doctor of Nursing Practice program may borrow for tuition and fees (less amounts received from other sources). Applicants should arrange for an interview with the project director, Prof. Teresa Moore, at [TCMoore@fdu.edu](mailto:TCMoore@fdu.edu).

## Federally Funded Programs

Financial aid from federal sources is available for eligible students from the Federal Direct Loan program. The Free Application for Federal Student Aid (FAFSA) must be filed by April 15 each year for consideration. Eligibility is based on enrollment and satisfactory progress toward completion of the degree program.

## Federal Veterans' Educational Assistance Programs

### Veterans' Education Benefits

Veterans' educational benefits may be available to students who have served in the U.S. Armed Forces. More information may be found at the Department of Veterans Affairs GI Bill® website: <http://www.gibill.va.gov/>.

### Post 9/11 GI Bill

The Post 9/11 GI Bill — also commonly known as Chapter 33 — is for individuals with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days. This benefit provides up to 36 months of educational benefits, generally payable for 15 years following release from active duty.

It is important to note that Fairleigh Dickinson University has agreed to participate in the Yellow Ribbon Program, that is a provision of the Post-9/11 Veterans Educational Assistance Act of 2008. Under this program, FDU has agreed to fund tuition expenses for eligible veterans that exceed the highest public in-state undergraduate tuition rate by matching a VA contribution of 50 percent with an FDU contribution for the same amount.

This program will provide the following benefits for eligible individuals:

- Tuition and fees paid directly to the school are not to exceed \$21,084.09. The cost of private university tuition and fees may be fully covered for those veterans eligible for the Yellow Ribbon Program.

- A monthly housing allowance based on the Basic Allowance for Housing for an E-5 with dependents at the location of the school.

- An annual books-and-supplies stipend of \$1,000.00 paid proportionately based on enrollment.

If students are enrolled exclusively in online training they will not receive the housing allowance. If students are on active duty, they will not receive the housing allowance.

### The GI Bill

As provided under Chapter 30 of the Montgomery GI Bill, students that entered the military after June 30, 1985, are eligible for educational benefits if they elected to reduce their monthly salary by \$100.00 for the first 12 months of active duty.

### VA Vocational Rehabilitation

The VA Vocational Rehabilitation Bill-Chapter 31 incurs the cost of tuition, fees and books. Eligible veterans must apply directly with the Department of Veteran's Affairs, 20 Washington Place, Second Floor, Newark, New Jersey 07102.

### Survivors' and Dependents' Educational Assistance Program (DEA – Chapter 35)

Dependents' Educational Assistance (DEA – Chapter 35) provides education and training opportunities to eligible dependents of certain veterans. The program offers up to 45 months of educational benefits. These benefits may be used for degree and certificate programs, apprenticeship and on-the-job training. A spouse may take a correspondence course. Remedial, deficiency and refresher courses may be approved under certain circumstances.

### Federal Tuition Assistance

Military Tuition Assistance is a benefit paid to eligible members of the Army, Navy, Marines, Air Force and Coast Guard. Congress has given each service the ability to pay up to \$250.00 per credit for the tuition expenses of its members. A member is eligible for up to \$4,000.00 a fiscal year in Federal Tuition Assistance benefits.

Each service has its own criteria for eligibility, obligated service, application process and restrictions. This money is usually paid directly to the institution by the individual services.

## Other Veterans' Affairs Educational Benefits

There are additional veterans' educational benefits available for the dependents and widows of veterans who died of service-related causes.

Individuals in the Selected Reserve (Chapter 106) and those who contributed to the Veterans Education Assistance Program (VEAP-Chapter 32) may also be eligible for VA educational benefits.

For additional information regarding veterans' educational benefits, please contact the State of New Jersey Department of Military and Veteran Affairs State Approving Agency, P.O. Box 340, Eggert Crossing Road, Trenton, New Jersey 08625 directly.

## Federal Loan Programs

### Federal Direct Unsubsidized Loan

Eligible students may borrow up to \$20,500.00 per year (\$33,000.00 for graduate health-profession students enrolled in a nine-month academic year and \$37,167.00 for graduate health-profession students enrolled in a 12-month academic year) from the Federal Direct Unsubsidized Loan program. Interest begins accruing at disbursement but may be capitalized and payments deferred until enrollment ceases (or drops below half-time). The interest rate is tied to financial markets and is determined each June for new loans made for the upcoming award year (July 1 to the following June 30). Each loan will have a fixed interest rate for the life of the loan and therefore students borrowing over multiple years may have loans at varying interest rates. There is a loan fee paid by borrowers at the time of disbursement, which, at the time of printing, is 1.069 percent (subject to change). The Direct Unsubsidized Loan has a six-month grace period following the last date of at least half-time attendance (graduation, withdrawal or reduction in enrollment) before repayment begins.

### Federal Direct Graduate PLUS Loan

Eligible students may borrow up to the cost of attendance less any amounts received from other sources from the Direct Graduate PLUS loan. Interest accrues at disbursement but may be capitalized while enrolled at least half-time. The interest rate is tied to financial markets and is deter-

# Financial Aid and Scholarships

mined each June for new loans made for the upcoming award year (July 1 to the following June 30). Each loan has a fixed interest rate for the life of the loan and therefore students borrowing over multiple years may have loans at varying interest rates. There is a loan fee paid by borrowers at the time of disbursement, which, at the time of printing, is 4.276 percent (subject to change). Eligibility for the Direct Graduate PLUS loan is based on a credit review.

## Important Information About Financial Aid

### Terms and Conditions of Financial Aid Awards

Students awarded financial aid from University, federal and/or state sources will receive a Financial Aid Award Notice.

Financial aid offers are based on full-time attendance (9 credits/semester for graduate students) and anticipated housing plans as reported on the FAFSA. Students must inform the Office of Financial Aid immediately, in writing, of any changes in enrollment or housing plans so that financial aid may be reevaluated accordingly.

Financial aid offers are conditional based on receipt of any requested information by the Office of Financial Aid. Financial aid applicants may be required to submit additional documentation, which may lead to revisions in the financial aid awards offered.

Award offers are contingent upon maintaining satisfactory academic progress toward completion of the degree program. Satisfactory academic progress reviews are performed at the conclusion of the spring semester. Failure to maintain satisfactory academic progress will result in the loss of financial aid funding. Detailed information about satisfactory academic progress may be found online at <http://view2.fdu.edu/admissions/graduate-admissions/graduate-financial-aid/graduate-satisfactory-academic-progress/>.

The University awards grants and scholarships from University operating funds and reserves the right to substitute funding received from private or endowed sources. In such an event, a revised Financial Aid Award Notice will be sent detailing the substitution.

Financial aid funding will be used toward balances owed to the University, including, but not exclusively, tuition,

room, board, medical insurance, fees, fines, etc. If students do not wish to have funding from federal sources used to pay “noneducational expenses” such as parking fines, they must notify the Office of Enrollment Services in writing.

Receipt of financial assistance from any sources may affect eligibility for financial aid as detailed on the award notification. The Office of Financial Aid must be informed of the receipt of additional awards not already noted.

Federal and state awards may be based on estimated funding levels. The Office of Financial Aid reserves the right to make adjustments as a result of changes in federal- and/or state-funding levels.

### Renewal of Financial Aid

A student must maintain the minimum requirements for the renewal of any scholarship funding (as was outlined previously and in the original scholarship notification letter).

Students who receive need-based financial aid from any source are eligible to apply for a renewal of this aid. To be eligible for a renewed need-based financial aid package, the student must:

1. File the FAFSA application no later than April 15 (including the correct **Federal School Code: 002607** for the Metropolitan Campus, Teaneck, New Jersey, and **004738** for the Florham Campus, Madison, New Jersey);
2. Respond to all requests for information/documentation by the Office of Financial Aid and meet eligibility requirements as determined by the U.S. Department of Education and the University; and
3. Maintain “Satisfactory Academic Progress” as mandated by the U.S. Department of Education.

### Satisfactory Academic Progress

Detailed information about Satisfactory Academic Progress may be found at <http://view2.fdu.edu/admissions/graduate-admissions/graduate-financial-aid/graduate-satisfactory-academic-progress/>.

## Tuition Payment Options

It is possible that the financial aid package may not cover all University expenses. The University does not guarantee the ability to meet a student’s full financial need. As a result, there may be an amount left between the federal family contribution, the amount of aid offered by the University and the total cost of education.

### Fairleigh Dickinson University Deferred Payment Plan

The deferred payment plan allows a student to make an initial 25 percent down payment on the total charge for the fall or spring semester. The balance is then paid in three monthly installments. A \$45 fee per term is assessed for this plan.

# Registration, Tuition and Billing Information

## Registration, Tuition and Billing Information

### Registration: Fall, Spring and Summer

New students are notified concerning registration procedures by the Admissions Office.

Continuing students receive advanced registration privileges. This advanced registration begins in April for summer and fall terms and mid-November for spring and winter terms.

All students should register through their home campus.

Students will not be permitted to register for courses unless all financial obligations to the University have been satisfied. Academic records also will be withheld until all financial obligations have been resolved.

### Tuition and Fees

All fees, tuition and charges are subject to change at any time at the discretion of the University's Board of Trustees.

Fees and charges are for the academic year 2017–2018 or for the specific service described, unless otherwise stated. New tuition and fees charges for 2018–2019 will be announced in the spring of 2018. Please check with the Office of Enrollment Services for current charges.

#### Graduate Program Tuition

Maxwell Becton College of Arts and Sciences

All Programs (per semester, per credit).....\$1,245.00

Silberman College of Business,

All Programs (per semester, per credit).....\$1,305.00

Anthony J. Petrocelli College of Continuing Studies

All Programs (per semester, per credit).....\$1,245.00

University College: Arts • Sciences • Professional Studies

Master's Level: Education, History, Political Science, International Studies, Natural Sciences, Psychology (per semester, per credit).....\$1,245.00

University College: Arts • Sciences • Professional Studies  
Master's Level: Allied Health,

Computer Science, Electronic Commerce, Engineering, Management Information Systems, Medical Technology, Nursing, Systems Science (per semester, per credit).....\$1,245.00

University College: Arts • Sciences •

Professional Studies

Doctoral Programs (per semester, per credit).....\$1,361.00

#### Per Semester Installment

M.B.A. in Management for

Executives\*.....\$40,570.00

M.B.A. in Health Sector

Management specialization\*.....\$40,570.00

#### Per Academic Year

Ph.D.in Clinical Psychology...\$40,398.00

Dissertation\*\* .....\$4,849.00

Internship Charge\*\* .....\$250.00

Dissertation Maintenance.....\$490.00

Psy.D.in School Psychology

(5-year Program).....\$40,398.00

Dissertation per credit.....\$1,361.00

Summer Internship

Charge\*\* .....\$250.00

Dissertation Maintenance.....\$490.00

Psy.D.in School Psychology

(3-year Program)

per credit.....\$1,361.00

Summer Internship

Charge\*\* .....\$250.00

Dissertation Maintenance.....\$490.00

Doctorate of Nursing Practice

per credit.....\$1,361.00

Program Fee.....\$225.00

Doctor of Pharmacy

Program.....\$38,700.00

Doctor of Pharmacy Dual Degree

Program (M.S./M.H.S./M.A.

Track).....\$44,010.00

Doctor of Pharmacy Dual Degree

Program (M.B.A./M.P.A.

Track).....\$43,320.00

E-learning Fee

(per year).....\$1,270.00

Student Services Fee

(per year).....\$325.00

#### Per Summer Session\*

Wroxton College..... Tuition per credit is based on the student's program of study

#### Fees per Academic Year

Matriculation maintenance:

Master's Program,

per semester.....\$135.00

Proficiency Exam.....\$255.00

Application Fee.....\$40.00

Graduation Fee

Master's Degree.....\$235.00

Doctoral Degree.....\$475.00

Technology Fee

Full-time.....\$888.00

Part-time.....\$414.00

Health and Major Medical (Mandatory)\*\*

International Students (Full-time and part-time)

Full year.....\$1,555.00

Spring semester only.....\$964.00

Domestic (Full-time only)

Full year.....\$1,555.00

Spring semester only.....\$964.00

Additionally, there are other fees assessed for specific student requests such as thesis binding. For information on these and other fees, contact the Office of Enrollment Services.

All graduate students in residence will be assessed fees according to fee schedules of undergraduate residential students.

### Tuition Reimbursed From Employers

Many corporations and business concerns provide tuition assistance to qualified employees. Students who are employed full time should inquire through their personnel department about their company's tuition-aid program.

\*Does not include airfare or technology fee.

\*\*Mandatory only for full-time students, can be waived for domestic students with documentation of alternative coverage. International students cannot waive the fee.

\*Total charges \$81,140.00 for 21-month M.B.A. in management for health and for executives health sector management specialization.

\*\*Per semester.

# Registration, Tuition and Billing Information

## Corporate Reimbursement Deferred Payment Plan

Students who receive corporate reimbursement may be eligible to defer their tuition payment until 45 days after the completion of the course. There is a 4 percent service charge for this accommodation.

## Credit Cards

The University has contracted with a third-party processor to provide this service, TouchNet. Students have the option to pay online.

Access information is available on the enrollment services website at <http://inside.fdu.edu> or directly on the student's WebAdvisor account.

The processor will charge a nonrefundable 2.75 percent convenience fee to the credit card user based on the amount of the payment for MasterCard, Visa, American Express and Discover. The convenience fee is for the use of the service and retained in full by the vendor not the University. Students may also pay by ACH (electronic check) with no fee assessed.

Students may access their account balance using the University's WebAdvisor system or if students need assistance with determining their student account balance, they may contact the Office of Enrollment Services by calling:

- 201-692-2213 for the Metropolitan Campus or
- 973-443-8600 for the Florham Campus.

## Terms of Payment

The payment deadline is established as August 15 for the fall semester and January 15 for the spring semester. By these dates, students must have paid their tuition, room and board and fees charges in full or have been enrolled into an approved payment plan. All students are expected to pay summer and winter sessions' charges on their day of registration or prior to the term's start date. Payments may be made by check made payable to Fairleigh Dickinson University and mailed to the Office of Enrollment Services on the student's home campus. Students may also pay in person on either of the two campus locations. Refer to "Credit Cards" for additional information on how to make a payment using a third-party service provider.

## Withdrawals/Refunds

Any alteration of a student's schedule must be made in writing, with the student's signature, to the Office of Enrollment Services. Forms to delete a course(s) or withdraw completely from the University are available in the Office of Enrollment Services. Only those alterations with an effective date **prior to the first day of the semester** will be accorded a 100 percent refund of tuition or a cancellation of 100 percent of the tuition due to the University.

### Payment Deadline

Please adhere to payment deadlines and policies established by the University for each semester. Failure to comply will result in late charges.

### Refund Schedule: Fall and Spring Semesters, 12-15 Weeks

Prior to first day of semester\*

*100% cancellation of tuition and course-associated fees.*

During first week of semester\*

*90% credit for tuition charges only.*

During second week of semester\*

*80% credit for tuition charges only.*

During third week of semester\*

*60% credit for tuition charges only.*

During fourth week of semester\*

*40% credit for tuition charges only.  
Grade of W recorded for course dropped.*

During fifth week of semester\*

*20% credit for tuition charges only.  
Grade of W recorded for course dropped.*

After fifth week of semester\*

**NO REFUND OF TUITION AND FEES.** Withdrawal grade based on University policy, recorded for deleted courses.

During final two weeks of semester

**WITHDRAWALS FOR THE TERM ARE NO LONGER ACCEPTED.**

\*Actual dates for fall and spring semesters are available upon request and posted in the enrollment services areas of each campus.

## Refund Schedule for Modular Courses

### Three-, Four- and Five-week Modules

Withdrawal prior to first day of

class\*..... 100%

Withdrawal during first week of

class\*..... 50%

Withdrawal thereafter\*

**NO REFUND DUE STUDENT.**

### Six-, Seven-, Eight-, Nine-, and 10-week Modules

Withdrawal prior to first day of

class\*..... 100%

Withdrawal during first week of

class\*..... 75%

Withdrawal during second week of

class..... 50%

Withdrawal thereafter\*

**NO REFUND DUE STUDENT.**

### Refund Schedule: Summer Six-, Nine- and 12-week Sessions

Prior to first day of session\* and 12-week session

*100% cancellation of tuition and course-associated fees.*

During first week of session\*

*75% credit of tuition only.*

During second week of session\*

*50% credit of tuition only.*

After second week of session\*

**NO REFUND DUE STUDENT.**

### Refund Schedule: Summer/Winter Three-week Sessions

Prior to and during the first and second days of session\*

*100% cancellation of tuition and course-associated fees.*

After the second day of session\*

**NO REFUND DUE STUDENT.**

The summer refund schedules do not apply to special or weekend programs. Refund schedules for these programs are available at the Office of Enrollment Services.

\*Actual dates for modular courses and summer and winter sessions are available upon request and posted in the enrollment services areas of each campus.

# Registration, Tuition and Billing Information

---

## Late Payment Charges

A Late Payment Charge will be collected at the time any payment (full or partial) is applied to an outstanding balance according to the following schedule: Late payment charge is indicated in italics under the length of time indicated.

### Payment Made in Period Fall Semester

August 18–October 5  
*2% of payment*

October 6–November 2  
*4% of payment*

November 3–November 30  
*6% of payment*

December 1–January 3  
*8% of payment*

January 4–January 31  
*10% of payment*

February 1 and thereafter  
*12% of payment*

### Spring Semester

January 18–February 28  
*2% of payment*

March 1–31  
*4% of payment*

April 1–30  
*6% of payment*

May 1–31  
*8% of payment*

June 1–30  
*10% of payment*

July 1 and thereafter  
*12% of payment*

## Summer Sessions

Summer payments are due at the time of registration. If payment is received after the end of the Summer Standard term, a 6% late fee will be applied to the payment made.

*However, if the student stops attending the University and the account is taken over by the collections department, a 12% penalty will be assessed to the unpaid balance.*

## Winter Session

Week 1–Week 3 of Session

*Students who pay their intersession charge after the third week of the term will be assessed a 6% late fee in the payment made. However, if the student stops attending the University and the account is taken over by the collections department, a 12% penalty will be assessed to the unpaid balance.*

## Collection Fee

By registering for a course or courses, the student has entered into a contractual agreement with Fairleigh Dickinson University and has a financial obligation to pay the expenses incurred. In the event the student fails to honor his/her financial obligation, the student will also be responsible to pay all collection costs associated with the University's attempt to collect the past-due balance; collection costs can include a third-party collection fee of 30 percent of the past-due balance. The University reserves the right to report unpaid account information to any credit bureau.

## Employee Educational Tuition Grants (ETG)

Employees or dependents of employees must apply for an Educational Tuition Grant (ETG) through the Office of University Human Resources prior to being registered. Upon approval, a voucher will be issued to the registrant to be presented along with the registration form at the Office of Enrollment Services/Registration. Employees are responsible for fees. The tuition credit will be applied to employee's/dependent's account 3–4 weeks into the term by the Financial Aid Office.



## Student Life

College is a total educational experience. Learning takes place both within and outside the classroom and contributes to the growth and development of all students.

The division of student affairs provides leadership for programs and activities that enhance and supplement classroom experiences and enrich the student-centered environment at FDU for all students.

This catalog provides a brief overview of services, policies, procedures and regulations. For more detailed information, please see the *Student Handbook* on FDU's website ([www.fdu.edu](http://www.fdu.edu)).

### Dean of Students

The dean of students provides administrative leadership, supervision and coordination for the division of student affairs. The division is committed to enhancing the quality of life for the students and provides for holistic student development. The division is the catalyst for creating and maintaining a campus climate that fosters intellectual, physical, spiritual, psychological, professional and social development of students and represents students' needs to the University administration and the faculty.

Campus ministry, residence life (not at the Metropolitan Campus), campus/student life, health services and student counseling and psychological services are encompassed in the student affairs division. The dean's office oversees student leaves of absence. The overall coordination of disciplinary matters, student government advisement, student affairs publications, the orientation of new students and commencement exercises are among the responsibilities of the Office of the Dean of Students.

The Dean of Students Office is available to respond to all aspects of the students' needs and should be used to mediate and resolve difficulties.

### Campus Life

#### Florham Campus

##### *Office of Campus Life*

The Office of Campus Life promotes student leadership opportunities and provides co-curricular experiences that encourage personal development and learning in a responsible, respectful and supportive community environment. The staff promotes a quality of life that responds to and supports the changing nature of students by empowering them to become leaders in a global-based society.

The Office of Campus Life is responsible for residential and housing services, student activities, Greek life, multicultural affairs, First Year Experience, community service and student clubs/organizations. The office is located in the Student Center.

The *Student Handbook*, which includes rules, regulations and helpful information necessary for campus life, is available on the FDU website ([www.fdu.edu](http://www.fdu.edu)).

##### *Residence Halls*

**Park Avenue:** This building has 312 beds in apartment-style suites of four. Each suite has two bedrooms, two bathrooms, a kitchen area and a common living room. The building is reserved for upperclass housing.

**Rutherford Hall:** Named after the University's first campus, this 293-bed residence hall opened in September 2003. Rutherford Hall houses upperclassmen in double bedrooms with a private bath. All rooms are climate controlled. Laundry, vending and trash facilities are located near the elevator on each floor. All floors have a common lounge.

**The Village:** The Village is composed of nine buildings and is used for upperclass housing. Each building consists of 10 six-person suites, a bathroom and three bedrooms. This area is coed by suites.

**Twombly Halls:** Florence and Hamilton Twombly Halls are traditional residence halls that provide double-room occupancy and a common hall bathroom facility. Both buildings primarily house first-year students. The Twomblies are coed by floors.

##### *Wellness*

Wellness at the University includes both student health services and student counseling and psychological services. In-house referrals between student health services and the counseling services help to ensure that students receive these comprehensive services in a confidential setting.

##### *Student Counseling and Psychological Services*

Student counseling and psychological services complements the academic experience of the student body by facilitating healthy personal, social and intellectual development of students. Life circumstances, skills deficits and/or mental health problems may at times interfere with a student's ability to successfully achieve important academic and life goals. The office's unique environment and role allows it to help students identify their problems, manage their emotions, learn new problem-solving skills and successfully meet the academic and social challenges of University life. This is accomplished by offering counseling, diagnostic evaluation, psychotherapy, advocacy and mental health referrals; developmental, preventative and remedial counseling to University students; consultation, educational and training services to the University community; and experiential workshops on essential life skills (i.e., assertiveness, stress management, sleep hygiene).

The student counseling and psychological services staff offers groups and workshops to the campus community on a variety of interest areas such as stress management, study skills, time management, drug abuse, etc.

Student counseling and psychological services also offers holistic approaches to stress management such as Pet Therapy. Students are provided opportunities to destress and experience living more fully in the moment with certified therapy dogs.

##### *Student Health Services*

For information on Student Health Services go to page 25.

# Student Life

---

## Metropolitan Campus

### Office of Student Life

The Office of Student Life at the Metropolitan Campus promotes student leadership opportunities and provides co-curricular experiences that encourage personal development and learning in a responsible, respectful and supportive community environment. The staff promotes a quality of life that responds to and supports the changing nature of students by empowering them to become leaders in a global-based society.

Some of the services that the Office of Student Life provides are management of the Student Union Building, supervision of more than 85 student organizations, leadership development, community service, Greek life, campus events and traditions, Student Union Building employment, Information Desk, Knight Club gaming area, Knight Owl concessions, Metro Lounge study area, student advocacy, Student Government Association fiscal operations and much more.

The Office of Student Life is located on the main level of the Student Union Building.

### Office of Residence Life

The Office of Residence Life strives to provide and sustain a safe, comfortable, secure and nurturing living-and-learning environment for students that is conducive to their personal growth, supports their academic pursuits, encourages and fosters a sense of community, civic responsibility and cultivates an appreciation of diversity.

The Office of Residence Life is responsible for the overall management, administration and program development of all University residential facilities with a capacity for approximately 1,000 residents. Living in the residence halls affords and encourages each resident the opportunity to participate in the shaping of their community.

*University Court:* This residence hall is comprised of 10 townhouse-style buildings. Each building has one to three same-gender sections on two floors of double-occupancy rooms with some single- and triple-occupancy rooms. There are shared bathrooms and a common area in each section. University Court is open to upperclassmen and graduate students. Special living options are located in this area: L.I.F.E. House (Living in a Free Environment), Global

Scholars' Hall and Honor's House. University Court is open to graduate and undergraduate students. Freshmen admitted to L.I.F.E. House, the Global Scholars or Honors Scholars programs may choose to reside in this area in designated buildings that may include building sections with same-gender floors.

*Lindens:* The Lindens are comprised of eight buildings with three co-ed floors of same-gender suites, each consisting of three double-occupancy rooms. Each suite has a shared bathroom and common area. Specific Linden buildings may be designated for upperclass and graduate students only. Academic year-round housing (August to May), when available, is provided in Linden 6 on a first-come, first-served basis. There are two kitchens in Linden 6. Building entry doors are staffed with a 24-hour hall security assistant when classes are in session. New freshmen are not eligible to request a single room.

*Northpointe:* A traditional corridor-style residence hall consisting of four coed floors housing approximately 290 residents in same-gender, double-occupancy rooms. Each bedroom has a private bathroom. A common lounge, laundry room and vending machines are located on each floor. A kitchenette is available on the third floor. ADA-compliant rooms are available. The Northpointe main entry door is staffed with a 24-hour hall security assistant when classes are in session.

All residence-hall rooms have cable television plus wired and wireless internet access.

Visit the residence life website at [www.fdu.edu/reslifemetro](http://www.fdu.edu/reslifemetro).

### Campus Ministry

The objective of the campus ministry program is threefold: to advocate for the spiritual wellness of the University community; to coordinate formal and informal religious services for a diverse student, faculty, staff and administrative community; and to provide the general coordination of all religious activities on campus including, but not limited to, the education of the University community about various religious heritages.

As members of the division of student affairs, the chaplains are available for consultation on all matters, incidental or serious. Working with his colleagues in the division, the chaplain facilitates students' continued wellness at the University.

### Student Counseling and Psychological Services

The Office of Student Counseling and Psychological Services (S-CAPS) complements the academic experience of the student body by facilitating healthy personal, social and intellectual development of student. Life circumstances, skills deficits and/or mental health problems may at times interfere with a student's ability to successfully achieve important academic and life goals. S-CAPS' unique environment and role allow it to help students identify their problems, manage their emotions, learn new problem-solving skills and successfully meet the academic and social challenges of University life. This is accomplished by offering:

No cost (included in/covered by students' general mandatory fees) psychological counseling and psychotherapy, diagnostic evaluation, advocacy and targeted mental health referrals. Developmental, preventative and remedial counseling is provided to University students; consultation, educational and training services to the University community (staff, faculty and administration); and experiential workshops on a wide variety of essential academic and life skills (e.g., assertiveness, stress management, sleep hygiene, public speaking, health relationships, organizational skills, mindfulness and meditation, test anxiety, loss and grief, substance abuse prevention/awareness, suicide awareness and prevention and "How to Refer Distressed Students").

The staff of student counseling and psychological services seeks to promote human welfare. Consistent with this principle, they believe that every person should be treated with dignity and respect. They value acceptance and appreciation for all differences among people including those of race, gender, sexual orientation, ethnicity, national origin, functional ability, socioeconomic status, age, religious affiliation and other characteristics that comprise identity. They also strive to provide respectful treatment to students of any background. The S-CAPS staff believes that valuing cultural diversity facilitates human growth and development and enhances the quality of life on campus and in the community. Therefore, they are committed to enhancing the awareness and understanding of cultural diversity, incorporating this philosophy into their professional activities and clinical services.

## Student Health Services

For information on Student Health Services see this page.

## Career Development Center

Career development provides comprehensive services, programs and activities designed for the University community.

Career advising is offered for students to explore their personal values, interests, abilities and career alternatives. Advisers are available to help evaluate students' activities, skills and past experiences and relate these to future employment. Assistance with résumé writing, interview skills and job-search strategies are provided to help students with their job search.

Students needing internships, part-time, full-time, summer or volunteer employment can use the career development job-search websites to access current job postings. Students and alumni can connect with employers through career fairs, employee-networking events, career-related workshops and on-campus recruiting.

## Dining Services

The dining service programs are designed to provide students, faculty, staff and guests with a wide array of nutritionally balanced and appealing menus. Several meal plans are available as well as a special commuter-program package. All dining hall meals include salad bars, soups of the day, entrée varieties, vegetable choices, beverages and desserts on an "all-you-can-eat" basis. Premium entrées as well as festive holiday meals are presented several times a year. Each campus has a main dining hall and other convenient snack bar locations.

Dining hall continuous hours of operation are:

*Monday–Thursday\**

7:30 a.m.–9:30 p.m.

*Friday\**

7:30 a.m.–7:30 p.m.

*Saturday and Sunday\**

11:30 a.m.–7:30 p.m.

Snack bar locations/hours of operation are posted. Sick trays and take-out lunches are available upon request.

*\*Hours subject to change at discretion of University.*

## International Student Services

The Office of International Student Services serves the international community at the Metropolitan Campus and the Florham Campus. The department offers a wide array of programs and services to more than 1,000 international students from approximately 90 countries. Orientation programs are presented to facilitate the adjustment of international students to the American system of education and to offer insight into the cultural life of the United States. Cultural and social programs are offered for students to experience the surrounding New York/New Jersey metropolitan area.

Through immigration services, the department helps students maintain their status in compliance with immigration regulations and apply for the immigration benefits for which they are eligible. All international students are required to purchase the University Group Medical insurance.

## Student Health Services

The health services' goals include keeping students well, providing care when they are not well and empowering students to make informed decisions about their health. Nurse practitioners and professional nurses assist students with their health concerns.

As both a resource and health clinic, student health services provides students with information regarding available medical and health-related services. Programs on wellness and health are offered as part of the student learning experience. All students are welcome.

Requirements for health and immunization records may vary, depending on the academic program in which the student is enrolled and the age of the student. Personalized requirements and details are available at <http://view2.fdu.edu/metropolitan-campus/student-health-services/> and at <http://view2.fdu.edu/florham-campus/health-services/>.

The University requires each full-time F1 international graduate student and most domestic graduate students to carry a University-sponsored accident policy and sickness and major medical coverage. As accident benefits are mandatory, the premium is included in college fees. If a domestic student has private sickness and major medical coverage, the University-sponsored program may be waived. A copy

of the student's private insurance card then must be submitted to [www.firststudent.com](http://www.firststudent.com). International students must present relevant documentation to the International Student Services Office. The cost of the University-sponsored insurance is kept low to make basic health insurance available to all students.

The student health service on each campus is staffed with competent, experienced registered nurses and nurse practitioners. For major emergencies and surgery, the neighboring community hospitals are used. A student may, however, choose his or her own physician at any time, either in or out of the hospital as long as he or she is in network.

## Center for Psychological Services

The services provided by the Center for Psychological Services, located at the Metropolitan Campus, Teaneck, New Jersey, include psychological counseling, psychotherapy and psychodiagnostics. These services are available to the entire University community, including students, staff, faculty and their families, as well as to the general non-University community, regardless of residence. Services are provided by licensed psychologists and doctoral psychology students and are available on a sliding-scale fee basis.

Students can feel comfortable applying to the center as it functions on a purely confidential basis, and the center's records are not part of any University database. Also, for the student, fees may be reduced to a minimal level when indicated.

The center offers a full range of services for adolescents, children and adults. Services include individual, group and family therapy; marital and premarital therapy; and various specialized behavior-modification programs. Psychological assessment also is available, including vocational testing.

# Student Life

---

## Athletics

Athletics plays a key role in the educational experience at Fairleigh Dickinson University and serves as an important building block for development of school spirit among students, faculty, staff, alumni and friends of the University.

The varsity athletics program offers opportunities for all students, men and women, to enhance their physical skills at the highest competitive level and to improve personal attributes such as discipline, leadership, teamwork and sportsmanship. In recognition of geographic factors, the varsity programs are divided between the Metropolitan Campus (Division I) and the Florham Campus (Division III). The athletics program also offers intramural and recreational opportunities to meet the needs and interests of the diverse campus population by providing a variety of activities in a relaxed environment.

### Metropolitan Campus

The Metropolitan Campus offers competition on the prestigious and highly competitive National Collegiate Athletic Association (NCAA) Division I level. The Knights sponsor the following eight men's teams: baseball, basketball, cross country, golf, soccer, tennis and indoor and outdoor track and field. The following 11 varsity sports are sponsored for women: basketball, bowling, cross country, fencing, golf, soccer, softball, tennis, indoor and outdoor track and field and volleyball. The University's commitment to women's athletics is reflective in the addition of women's soccer and softball teams in the 2000–2001 academic year and women's bowling in 2002–2003. The addition of these new teams brings sports sponsorship to 18. Athletic scholarship assistance is offered in all sports to deserving student-athletes. Prospective student-athletes are encouraged to contact the athletics department for further information.

FDU is a member of the Northeast Conference (NEC) and has won the NEC Commissioner's Cup, emblematic of the overall success of the athletic program, on six occasions, which is more times than any other league school. In the fall of 2001, the men's soccer team returned to national prominence, advancing to the Elite Eight of the NCAA Division I Championships. The bowling team partici-

pated in the NCAA National Championships six times, winning the National Championships in 2006 and 2010. Winning the 2005 NEC Championship propelled the men's basketball team to the NCAA Tournament where they trailed eventual NCAA runner-up Illinois by one at halftime.

FDU's Metropolitan Campus also holds membership in the Eastern Collegiate Athletic Conference, the New Jersey Association for Intercollegiate Athletics of Women, the National Intercollegiate Women's Fencing Association, the Eastern Intercollegiate Bowling Conference and the Intercollegiate Amateur Athletic Association of America.

An important facet of the University's commitment to athletics is the George and Phyllis Rothman Center on the banks of the Hackensack River. The Rothman Center features facilities for the varsity teams as well as for intramural sports, personal fitness and cultural and social events. The center has the versatility to accommodate many different activities. Four basketball courts, three volleyball courts and two tennis courts, along with three racquetball courts, a weight room and a six-lane, 200-meter track, allow the University a wide variety of recreational activities.

The fitness center, a state-of-the-art facility, features basketball courts, cardiovascular equipment, circuit-training equipment and a commuter lounge. In the spring of 2004, a new softball field was opened, giving the Knights a home with lighting and seating for 500 on the Hackensack side of campus.

The intramural and recreation department offers activities for the entire campus community. Intramural football, softball, soccer, basketball, billiards and volleyball, along with recreation aerobics, are open for participation by all students, staff, faculty and administration.

Whether students are interested in recreation or intercollegiate competition, FDU is committed to providing them with opportunities to develop their bodies as the classroom develops their minds.

### Florham Campus

The University's Florham Campus holds membership in the NCAA (Division III), the Eastern Collegiate Athletic Conference, the Freedom Conference, the Middle Atlantic Conference and the Middle Atlantic Athletic Corporation. Men's varsity teams compete intercollegiately in baseball, basketball, cross country, football, golf, lacrosse, soccer, swimming, tennis and volleyball. Women athletes compete in basketball, cross country, field hockey, golf, lacrosse, soccer, softball, swimming, tennis and volleyball.

An important facet of the University's commitment to athletics is the Roberta Chiaviello Ferguson and Thomas G. Ferguson Recreation Center, an 82,000-square-foot complex which contains three full-size basketball courts; a performance court which seats 3,000; a suspended three-lane jogging track; weight-training, aerobic and dance facilities; a 25-yard competition swimming pool; two racquetball courts; and offices and locker rooms for student and intercollegiate use.

Robert T. Shields Field is the 4,000-seat home of Devils football, field hockey, men's and women's lacrosse and men's and women's soccer. It has a state-of-the-art scoreboard and press box atop the bleachers. The playing surface is field turf, which allows games to be played in any weather.

The athletic department sponsors intramural competition in volleyball, basketball, tennis, wrestling, softball, touch football, bowling, golf, cross country and swimming. Several recreation and fitness programs, such as aerobics, karate and dance, also are offered by the athletic department. A majority of students at the Florham Campus are actively involved in the intercollegiate and intramural programs that are offered.

## Family Educational Rights and Privacy Act (FERPA)

As a recipient of federal educational funds, Fairleigh Dickinson University is bound by the requirements of the Family Educational Rights and Privacy Act (FERPA). Subject to specified exceptions, the University is required to have a student's written consent before disclosing personally identifiable information from a student's educational records to third parties. An educational record is information directly related to a student, which is maintained by the University or any individual on behalf of the University, in any recorded form. Grades, evaluations, financial records and class-attendance and financial aid records are common examples of educational records.

FERPA gives students a right to review and copy their educational records and to challenge any educational record for being inaccurate or misleading. The University must provide a hearing to any student who wishes to challenge an educational record on either ground. If the University grants the student's challenge, then it must amend the record in question. If the University does not grant the student's challenge, it must nevertheless allow the student to append a statement to the disputed record. This right of review and challenge does not include the right to challenge grades; that right is provided through the University's Grade Appeal Procedures policy. The University maintains a log which identifies persons who have accessed a student's record. Students have a right to review logs.

FERPA does not require the University to have student consent to disclose personally identifiable information to parents of students who are listed as dependents on their parents' federal income tax returns.

In the event of a health or safety emergency, the University may disclose personally identifiable information, without student consent, if the information is needed to protect the health or safety of the student or other persons. The University may disclose to the parents of students below 21 years of age disciplinary action for illegal use or possession of alcohol or illegal drugs. FERPA permits the University to disclose the final outcomes of student disciplinary hearings, including sanctions, to victims of misconduct, if they so request, when the misconduct constitutes a crime of violence or a nonforcible sex offense.

FERPA allows the University to disclose students' directory information but requires the University to give students an opportunity at the start of each academic year to request that the University not disclose their directory information. Directory information is information such as name, address, telephone number, date of birth, dates of attendance, major field of study, class level, registered credits for the current term, major field of study, honors and awards, degree conferred, participation in sports and recognized activities.

## Student Regulations

The University reserves the right in its sole judgment to make changes of any nature in the University's academic program, courses, schedule or calendar whenever in its sole judgment it is deemed desirable to do so. The University also reserves the right to shift colleges, schools, institutes, programs, departments or courses from one to another of its campuses. The foregoing changes may include, without limitation, the elimination of colleges, schools, institutes, programs, departments or courses; the modification of the content of any of the foregoing; the rescheduling of classes, with or without extending the announced academic term; and the cancellation of scheduled classes or other academic activities. If such changes are deemed desirable, the University may require or afford alternatives for scheduled classes or other academic activities and will give adequate notification of any change such as is reasonably practical under the circumstances.

The University may suspend classes if they cannot be held for reasons beyond its reasonable control, such as fire, destruction of buildings, civil disturbances, work stoppage, labor dispute, strike, lock out (and whether or not in any of the last four cases it is within the University's power to concede to or meet the demands of its faculty or other employees), wars or governmental actions. If such suspension lasts for an extended period of time and the University does not schedule appropriate make-up classes, a partial refund of tuition will be made as the University deems appropriate under the circumstances. Payment of tuition or attendance at any classes shall constitute a student's acceptance of the University's rights as set forth in this and the preceding and following paragraphs.

Students who accept enrollment at the University are expected to live up to the highest standards of academic integrity, conduct themselves with decorum and responsibility, abide by the rules and regulations promulgated from time to time by the University and otherwise comply with the requirements of the applicable Code of Student Rights, Responsibilities and Conduct as stated in the *Student Handbook*, available from the Dean of Students Office and on the FDU website ([www.fdu.edu](http://www.fdu.edu)). The University reserves the right to discipline, including dismissal or suspension, any student who fails to comply with the foregoing.

# Student Life

---

## Prohibited Discrimination, Harassment and Related Misconduct

The University is committed to maintaining a fair and respectful environment for living, work and study. To that end, and in accordance with federal and state law, the University prohibits any member of the faculty, staff, administration, student body, volunteers or visitors to campus, whether they be guests, patrons, independent contractors or clients, from harassing and/or discriminating against any other member of the University community because of that person's race, creed, color, religion, handicap/disability, gender, age, marital status, sexual orientation, veteran status, pregnancy status, ancestry or national origin. Incidents of harassment and discrimination will be met with appropriate disciplinary action, up to and including dismissal from the University.

## Nondiscrimination and Equal Opportunity

The University is committed to maintaining a discrimination-free academic environment for its students and employees. No one will be denied employment or admission to the University on the basis of race, creed, color, religion, handicap/disability, gender, age, marital status, sexual orientation, veteran status, pregnancy status, ancestry or national origin. The University does not discriminate on the basis of any of the aforementioned protected classes in the recruitment and admission of students, the recruitment and employment of faculty and staff and the operation of any of its programs and activities as specified by the federal or state law and regulations.

Every member of the University community is expected to uphold this policy as a matter of mutual respect and fundamental fairness in human relations. Every student of this institution has a responsibility to conduct himself/herself in accordance with this policy as a condition of enrollment. Further, every University employee has a responsibility to conduct himself/herself in accordance with this policy as a condition of employment.

## Reporting of Complaint

Any University student who feels subjected to harassment or discrimination in any manner should immediately report the matter to the assistant dean of students as they serve as deputy Title IX coordinators for their respective campuses.

Employees should report cases of harassment to the director of benefits and training in the Human Resources Office located in Dickinson Hall on the Metropolitan Campus and can be reached directly at (201) 692-2704. In addition, employees can report to his/her supervisor or anyone employed in a supervisory capacity at the University.

If for any reason, including the unavailability of one of the deputy Title IX coordinators or the complainant's discomfort with their designated deputy Title IX coordinators, complaints of discrimination and/or harassment under this policy can be made to the associate vice president of human resources (University Title IX coordinator), located in Dickinson Hall on the Metropolitan Campus and can be reached directly at (201) 692-2706. This includes complaints concerning administrators, supervisors, employees, staff, faculty, volunteers, students and visitors.

Please refer to the University's Prohibited Discrimination, Harassment and Related Misconduct Policy for more information regarding the adjudication process. The policy is located on the following link: <http://fdupes.edu/hr/nondiscriminationandantiharassmentpolicy.pdf>.

## Clery Act

In accordance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act or Clery Act, FDU's Department of Public Safety reports information relating to crime statistics and security measures to the appropriate government agencies. These statistics are also open for public inspection. Current and prospective students, University employees and job applicants are also advised of the availability of these reports. The University will provide a paper copy of the report upon request. Visit the following link for more information: <http://view2.fdu.edu/about-fdu/facts-about-fdu/clery-act-statistics/>.

## Academic Support and Research

Intellectual life at a university goes beyond the classroom. Each campus of FDU has its own libraries, computer centers and research facilities, which foster the intellectual growth of students outside the classroom.

### Academic Support and Student Services Centers

The Academic Support Center at the Florham Campus, Madison, New Jersey, and the Academic Resource Center at the Metropolitan Campus, Teaneck, New Jersey, help students develop excellence. Dedicated professionals provide a range of services — free of charge — to students who are having difficulty in a course or those who are highly motivated and want to hone their skills to change a potential B to an A.

Although each campus's center has some unique aspects, they all offer three basic services: workshops to develop study skills; tutoring for academic subjects; and testing, placement and instruction in basic skills.

Workshop offerings include those in the Core courses, reading, writing, academic study skills and, for those who require it, English as a second language. Development of reading skills is considered crucial to students' success; participants are taught how to adjust reading skills to the material at hand — whether a biology text or a 19th-century novel — and maximize comprehension and retention of the material. Individualized tutoring sessions help students who come in when they need concentrated assistance in overcoming problems in a specific course. The centers also administer the Accuplacer Placement Tests to selected incoming students and place students in the appropriate classes.

### Libraries

The University maintains libraries at both its New Jersey campuses, the Florham Campus in Madison and the Metropolitan Campus in Teaneck. The University also maintains a library at its Wroxton College campus in England that supports the academic programs offered there. The Vancouver Campus provides a reference and circulating collection that supplements the FDU Online Library.

The Metropolitan Campus libraries include the Frank Giovatto Library in Tea-

neck and the Business Research Library (Dickinson Hall) in Hackensack. The Giovatto Library collection contains approximately 156,000 volumes. Approximately 350 periodical titles are currently received. The Giovatto Library also offers a collection (3,000) of both educational and popular DVDs and audiobooks on CD. Special collections include the Gehl collection of psychoanalytic materials, the Columbia film archives and selected presidential papers on microfilm.

The Sammartino Room, located on the ground floor of the Giovatto Library, is intended to house and to showcase the intellectual and historical heritage of the University. The collection includes monographs by the founder and first president Peter Sammartino and about the University, monographs published by FDU Press, FDU's *The Literary Review*, doctoral dissertations, yearbooks, faculty publications and FDU memorabilia. The Special Collections suite includes the Faculty Display Case with recent faculty publications; the Alumni Publications Display; the Magister Room, which houses the campus's master theses and honors theses. Desktop workstations are available in the Sammartino Room and the entire suite has wireless access. The J. Michael Adams Room, in the Special Collections Suite adjacent to the Sammartino Room, opened in October 2013. In addition to books and memorabilia, it houses the International Association of University Presidents (IAUP) archives.

The library offers a wide variety of workshops and programs open to students, and library news is available through the Giovatto Library Facebook page and blog. The library has two Boston by Steinway pianos and sponsors a library recital program for students and staff. The Giovatto Art Gallery offers exhibit space to faculty, staff and students.

One of the campus's most prominent work of art is Epic of America, which hangs on the face of the Giovatto Library. The casting was created by famous artist William Zorach. He described the symbolism as "The Indians that possessed this land ... left us a rich heritage — We are all sun worshippers, loving life and the great forces of creation, renewed each day and yet never the same." The flags represent all the flags that "have flown over this country until we were all united under one flag."

The woman represents America itself, beautiful and full of fertile promise. And the man and the child represent "the spirit of enterprise and education, leading the new generation to carry on the work of today into the new visions of tomorrow — the new age flowing into life."

At the Florham Campus, the library is part of the John and Joan Monninger Center for Learning and Research. The older portion of the library building occupies the site of the greenhouses of the former Vanderbilt-Twombly estate. The large reading room at the front of the building, the Orangerie, once held tropical plants, and is all that remains of the original greenhouse-orangerie complex. The Fred Hassan Orangerie, designed by McKim, Mead and White, faces Hennessy Hall across a wide expanse of lawn, which is part of the larger Frederick Law Olmsted-designed grounds.

Developed at the Florham Campus location is a library collection of more than 130,000 book volumes, some 200 current newspapers and periodicals plus more than 1,900 backfiles. It also holds more than 1,600 DVDs and videos for classroom and individual use.

The noncirculating print collections in the Monninger Center include the Douglas Lloyd Kahn Collection on the History of Photography and Film with some 3,400 plus titles; and the smaller, noncirculating collections of the Kushen Family Collection in memory of Betty Kushen, Ph.D., including special editions of 19th- and 20th-century British women writers; Literature by Black Authors, in particular African-American writers in first editions; the Twombly estate collection; as well as the archives of Fairleigh Dickinson University founder Peter Sammartino; and the New York Cultural Center.

Extensive reference collections are available at all campus libraries for consultation and research, with the library serving its campus as a center for education and learning. At each facility, professional librarians offer individual guidance as well as classroom instruction in library use and research methodology.

Students and faculty on both campuses have easy access to all FDU library materials plus those of the College of Saint Elizabeth (Morristown, N.J.) through the online catalog CoolCAT. Intercampus loan requests can be delivered to the appropri-

# Academic Support and Research

---

ate campus within a day or two. A user needing special library materials not owned by FDU can access library holdings throughout the country with interlibrary loans. These can be requested either online or in person at any campus library.

The FDU Online Library provides access to more than 143 subscription databases containing more than 40,000 full-text journals, more than 135,000 e-books and a streaming video collection. Most resources within the FDU Online Library are available 24/7, both on campus and remotely.

The FDU library digital collection is available at [www.fdu.edu/digitallibrary](http://www.fdu.edu/digitallibrary). This collection consists of unique items from the University's archives and from distinctive collections developed in collaboration with non-library partners, related to both the history of northern New Jersey and the University. Materials include master's theses, government documents, historical photographs and documents, digital artifacts, maps and podcasts. This collection is continually growing as the University works to preserve its University's heritage.

For further information call:

Monninger Center (Florham Campus) at (973) 443-8516

Giovatto Library (Metropolitan Campus) at (201) 692-2278

Business Research Library (Hackensack) at (201) 692-2608

## Computer Facilities

Almost all students at the University make use of one of the campus computer centers, whether their majors are in the sciences, engineering, business, education or liberal arts, graduate or undergraduate. The computers available feature a wide range of application software and programming languages for students in all disciplines.

**Florham Campus:** The technology client services and support teams (formerly the computing services department) at the Florham Campus manages microcomputer labs in several buildings. The Dreyfuss Building has four general-purpose computer labs. There are also state-of-the-art computer graphics, animation and video-editing labs, which include high-resolution computer graphics equipment for the production of professional-quality, computer-generated art, 2D/3D animation, digital video and multimedia presentations. There are special-purpose computer lab facilities across the campus to support mathematics, business, comput-

er science, physics, biology, chemistry, visual and performing arts and others. There are general and business labs in the John and Joan Monninger Center for Learning and Research and the Academic Support Center.

**Metropolitan Campus:** The Metropolitan Campus technology client services and support teams (formerly the computing services department) manages three general-purpose computer labs in University Hall, along with a state-of-the-art graphics lab used for the production of high-quality graphics, 2D/3D animation, digital video and multimedia presentations, and three general-purpose computer labs in Dickinson Hall. There are special-purpose computer lab facilities across the campus to support mathematics, business, computer science, physics, biology, chemistry, visual and performing arts, psychology, nursing, video editing, engineering, athletics and others. There are general and business labs in the Frank Giovatto Library and the Academic Support Center.

Each computer lab is equipped with Lenovo ThinkCentre All-in-One desktop computers replete with Intel CORE™ i7 processors, LCD flat-panel display and combination CD-RW/DVD-RW drives for file storage and access to optical-based materials. All of the computers are connected to the University-wide network for file and print sharing and access to the internet. All lab computers are running the Microsoft Windows 10 operating system with a large suite of general-purpose software, such as Microsoft Office Professional, and discipline-specific software to support academic computing. Computer labs that are also used as classrooms are equipped with high-resolution/high-intensity computer-projection systems and/or high-definition, flat-panel display technology.

FDU has a laptop loaner program that enables students to "borrow" a laptop computer for use within the campus libraries. The loaner laptops are imaged with many software applications and can access the internet via the University wireless network. Additionally, the University's automated library system provides anyone the ability to search the holdings of both campuses from any location using the internet and NetID (formerly Webmail) credentials for authentication.

To keep pace with changes in technology and increasing demands for memory and processing power, campus computing

center computers are acquired on a three-to four-year technology refresh program. The most recent technology refresh for the general computer labs and many others was in the summer of 2016, and the graphics labs in the summer of 2014.

From the time a student is admitted, he or she may obtain, and use, a NetID (formerly Webmail) account to obtain email, network storage and printing capabilities.

University systems and security operates and maintains the University data centers, enterprise systems and networking infrastructure, which are used by all, regardless of campus or location. These systems support both the academic and administrative needs of the University. Services include a system for University-run web pages, faculty and staff personal web pages, a library automation system, an email system and other platforms for advancing the needs of the academic programs. These systems can be accessed using the internet.

High-speed, fiber-optic networking connects most buildings at the University to FDU's computer network. This facilitates communications among the students and faculty and provides easy access to all of the software and computer resources. Almost all of the academic buildings, including the libraries, have wireless LAN capabilities. This feature allows students with a laptop and a standard 802.11b/g/n/ac wireless LAN card to access the campus network, untethered, from any of those buildings. Every student has access to wired and wireless connectivity in his/her room to connect his/her computer device to the University network. These connections provide students with high-speed access to network resources and the internet. Wireless connectivity is also available in most of the common areas within residence halls.

## UTAC

The Fairleigh Dickinson University Technical Assistance Center (UTAC) provides around-the-clock technical support services for more than 200 commercial off-the-shelf software applications, Google for Education, Microsoft and Macintosh (OS 8.x and higher) operating systems, all common browsers, Webcampus/BlackBoard, virtually all network connectivity options and password-reset support. This 24-hour helpdesk support is available to all students



# Academic Support and Research

from the time they are officially admitted to the University.

For more information call the Office of Information Resources and Technology at (973) 443-8689.

## Acceptable Use Policies for Computer Usage

The University computing resources support the instructional, research and administrative activities of the University. Users of these facilities may have access to University resources, sensitive data and external networks. Consequently, it is imperative for all users to behave in a responsible, ethical and legal manner. Students are responsible for complying with relevant acceptable-use policies. Failure to comply with these policies may result in charges of violation of the Code of Student Rights, Responsibilities and Conduct and possible state and federal action.

The Fairleigh Dickinson University Acceptable Use Policy for Computer Usage and the Resident Network Acceptable Use Policy may be obtained from the University information systems website at the following URL: [http://isweb.fdu.edu/policies/oirt\\_policy.html](http://isweb.fdu.edu/policies/oirt_policy.html).

## Research

The variety, scope and incidence of research and related scholarly activity within the University continue to increase. Usually research carried out by the faculty combines the inquiry for new knowledge with the education of students at the graduate and undergraduate levels. Great emphasis is placed on research and related activities, independent study and inquiry and action projects and employment as means of developing abilities. Faculty research grants support research-related activities and travel. Government and industry, in addition to the University, support and sponsor University research activities.

Research and educational development activity is found in all academic disciplines. Research is integral to graduate programs in chemistry, corporate communication, clinical mental health counseling and psychology in the Maxwell Becton College of Arts and Sciences.

The master's-level program in chemistry provides research experience through a thesis-based research program. Students work alongside experienced faculty researchers in areas as varied as pharmaceu-

tical chemistry, inorganic chemistry, molecular dynamics, biochemistry and biomaterial science. Current research within the department includes computational modeling of collagen mutations to determine their role in biological systems, development of surface bound anti-infective coatings for use in the biomedical industry, quantum mechanics and molecular orbital theory applied to metalloporphyrins, correlation of protein structure and function and separation and purification of biomaterials. Students have an opportunity to perform a full year of research working on original work in these areas, including but not limited to experimental design, analytical techniques, data analysis and conclusions.

At the end of their research experience, students are required to write a formal master's thesis and defend their work during a research seminar to complete the degree requirements.

Due to the nature of the master's program with a concentration in pharmaceutical chemistry, a research component has been integrated into the course work as part of a laboratory experience in Becton College. Foundation courses have been created to expose students to a broad array of topics and techniques to enrich the students' knowledge through hands-on learning and to prepare students for the challenges of industrial pharmaceutical chemistry that they are likely to experience in their postgraduate careers.

In Becton College's psychology and clinical mental health counseling programs, opportunities for research are provided both within courses and on a one-to-one basis with faculty. Student-faculty collaboration is frequent and often results in scholarly presentations at professional meetings as well as publications in relevant academic journals. Both qualitative and quantitative methods are used for data collection and analysis. Students have pursued research interests in a wide variety of areas such as work/life-balance issues, career-development patterns, personal and organizational factors affecting work performance, personality traits and the effects of stress.

Students have also investigated mental health processes (including psychological disorders and resiliency factors) as well as counseling techniques and treatment outcomes.

Communication studies faculty have published work in professional and scholarly journals and written books on communication theory, organizational and crisis communication, advertising, commu-

nication pedagogy, semiotics, network analysis and language and social interaction. Students in the corporate and organizational communication master's program have the option of a research thesis or a comprehensive examination, which also includes a significant research component.

The School of Pharmacy and Health Sciences engages in research across the spectrum of patient care, social and administrative sciences, health outcomes and pharmaceutical science. Faculty engage students in projects on topics ranging from health and wellness, delivery of care, study design and outcome evaluation and the role of the pharmacist in accountable care-organization administration and health care delivery. Additionally, basic-science research on drug delivery, evaluation and analysis of sterile compounds and other sterile techniques also take place within the school's research facilities.

University College: Arts • Sciences • Professional Studies prides itself on its emphasis on research. The Metropolitan Campus houses the clinical psychology and school psychology doctoral programs where students and faculty do research in such areas as behavioral medicine, cognitive, psychological and psycho-educational testing and women's issues to name a few. Faculty in the English and comparative literature department focus on modern and 19th-century English and American writers.

The Henry P. Becton School of Nursing and Allied Health faculty and students are engaged in various research projects and activities in the honors, master's and Doctor of Nursing Practice (D.N.P.) programs. D.N.P. students are engaged in evidence-based research for their dissertation projects. Some students implement research on patient outcomes, health policy and management in collaboration with various hospitals. D.N.P. students are required to pass an oral defense of their research or evidence-based projects.

The Peter Sammartino School of Education, also part of University College, is funded by local and state agencies and the Office of Education for a variety of innovative programs. Research is concentrated in the areas of learning disabilities, ESL, bilingual education and dyslexia.

The Lee Gildart and Oswald Haase School of Computer Sciences and Engineering focuses on research on electronic commerce, electronic business, organizational memory, organizational memory information systems, knowledge manage-

# Academic Support and Research

---

ment, wireless communication systems, radio resource management, optimization for engineering applications, optical devices, multimedia streaming, cross layer design, mobile computing, communication networks, mobile ad hoc networking, network management, conflict control, deadlock, ADA programming, real-time systems and formal methods, digital and adaptive signal processing, array processing, image processing, pattern recognition, biometric authentication, database systems, data warehouse, security, software reuse, component-based software engineering, semantic deep web, service-oriented computing, VLSI design and near-ring theory.

Research interests of faculty in the School of Natural Sciences are wide ranging and include such diverse topics as: microbiology, protozoan ecology and behavior, marine toxicology and invertebrate biology, biochemistry, enzymes, expression of extracellular matrix genes, wound care, application of biocatalysis in the preparation of pharmaceuticals, chitosan nanoparticles, polymer chemistry and computational chemistry.

The Silberman College of Business places significant emphasis on faculty maintaining their academic and professional qualifications to deliver quality business education programs. Faculty maintain their academic qualifications through rigorous research and other intellectual contributions related to their respective fields, thereby enhancing the quality of classroom instruction.

The research interests of faculty in the Silberman College of Business span several disciplines, including business law, economics, entrepreneurship, finance, health care systems, human resources, management, management information systems, marketing, quantitative analysis, production and operations management, managerial accounting and taxation. The faculty have researched and published numerous articles in peer-reviewed journals, presented at various national and international conferences, developed case studies, produced working papers, authored books and also served on expert panels for international organizations such as the United Nations. Some of the topics in which the college faculty have particular expertise include mergers and acquisitions, options theory, entrepreneurship and innovation, forensic science, sustainability, pricing theory, public relations, social networking,

international finance, quality of health care and delivery, international taxation, role of information systems in managerial decision making and e-commerce, among others. Students have the opportunity to participate in such projects after consulting with the appropriate faculty.

Finally, research also is an integral component of activities at Anthony J. Petrocelli College of Continuing Studies. Faculty pursue scholarly inquiry in areas that include 19th-century European history, robotics and applied computer simulations, the history of the Bronx, medieval studies, classical philosophy, ethical issues in the late 20th and 21st centuries and women's studies.

The Public Administration Institute's (PAI) program of applied research focuses on problems and issues in public policy and administration. Current research projects include studies of health services marketing, local government financial management, long-term health care services, public-sector management information systems, AIDS in the workplace and productivity measurement in the delivery of human services. The School of Administrative Science is conducting research in the fields of diplomatic leadership, computer security and forensics through the use of Petrocelli College's Cyber Crime Training Laboratory on the Metropolitan Campus, homeland security, emergency management, school safety, student services and sports administration.

## Students With Disabilities

Fairleigh Dickinson University makes support services available to students with documented disabilities. Students with documented physical, learning or psychological disabilities may request reasonable modifications, accommodations, auxiliary aids or services which will provide them access to participate in programs and activities. Students with documented disabilities may request support services by contacting the campus ADA/504 coordinator. For the Florham Campus contact the director of disability support services at 973-443-8079. For the Metropolitan Campus contact the associate campus executive at (201) 692-2477.

## Fairleigh Dickinson University Press

Fairleigh Dickinson University Press has published scholarly books for the academic market since 1967. It produces between 30 and 40 books each year in a variety of fields, with special emphasis on history, literature, the arts and the social sciences. The press publishes several book series, including *American History and Culture*, *Italian Studies*, *Communication Studies*, *Willa Cather Studies*, *Mormon Studies*, *Shakespeare and the Stage* and *Law and Literature*. It counts many award-winners among its publications, which are held in thousands of libraries around the world. Manuscripts that are considered for publication are subject to peer review by specialist scholars and selected for publication by an Editorial Committee composed of University faculty and an advisory board of associated scholars. The website for Fairleigh Dickinson University Press is [www.fdu.edu/fdupress](http://www.fdu.edu/fdupress).

## The Literary Review

*The Literary Review (TLR)* is an international quarterly journal of contemporary writing founded in 1957. As one of the country's longest continually running university-affiliated quarterly, *TLR* is an ambassador for FDU in the international literary community, asserting and demonstrating FDU's commitment to the arts. Four times a year it publishes a new issue of the highest-quality poetry and prose and is recognized for its style, its bold approach, its loyalty to its contributors — whether they are emerging or established writers, and its dedication to world literature. The journal has won recognition for its good work and reinforces the FDU profile through inclusion in best-of anthologies and online features through aggregation, by being invited to speak on panels of conferences and festivals, by relationships with high-profile literary organizations, such as PEN American Center, the American Literary Translators Association and Council for Literary Magazines and Small Marketplaces (CLMP). Members train and mentor more than 25 undergraduate and graduate students a year through internships in literary publishing and collaborate extensively with the creative writing department and M.F.A. program of FDU.

## Academic Regulations

### Attendance

Students are required to attend class, arrive on time and participate in all courses for which they are enrolled. Class attendance and participation are essential to academic progress. At the beginning of each semester, instructors will announce the specific attendance requirements for each course according to the policies of their academic departments and colleges. The policy will clearly delineate the number of permissible absences and the sanctions to be applied for excessive absences or tardiness. Each instructor will include the attendance policy on each syllabus to prevent any misunderstanding of the requirements for the course.

### Academic Integrity Policy

Students enrolled at Fairleigh Dickinson University are expected to maintain the highest standards of academic honesty. Students have the responsibility to make known the existence of academic dishonesty to their course instructor and then, if necessary, to their school director or department chair, as well as to the academic dean of their college. Course instructors have the added responsibility to state in advance, in their syllabi, any special policies and procedures concerning examinations and other academic exercises specific to their courses. Students should request this information if it is not provided by their course instructor.

Academic dishonesty includes, but is not necessarily limited to, the following:

1. *Cheating* — Giving or receiving unauthorized assistance in any academic exercise or examination. Using or attempting to use any unauthorized materials, information or study aids in an examination or academic exercise.
2. *Plagiarism* — Representing the ideas or language of others as one's own. A more complete description is listed below in the section titled "Plagiarism Described."
3. *Falsification* — Falsifying or inventing any information, data or citation in an academic exercise.
4. *Multiple Submission* — Submitting substantial portions of any academic exercise more than once for credit without the prior authorization and approval of the current instructor.
5. *Complicity* — Facilitating any of the

above actions or performing work that another student then presents as his or her assignment(s).

6. *Interference* — Interfering with the ability of a student to perform his or her assignment(s).

### Plagiarism Described\*

As defined by the Council of Writing Program Administrators, plagiarism "occurs when a writer deliberately uses someone else's language, ideas or other original (not common-knowledge) material without acknowledging its source." ("Defining and Avoiding Plagiarism: The WPA Statement on Best Practices" <<http://www.wpacouncil.org/positions/WPAplagiarism.pdf>>)

Plagiarism can occur in the following ways:\*\*

- Using text from another source (e.g. websites, books, journals, newspapers, etc.) without documenting the source;
- Using direct quotation from a text without quotation marks, even if the source has been cited correctly;
- Paraphrasing or summarizing the ideas or text of another work without documenting the source;
- Substituting a word or phrase for the original while maintaining the original sentence structure or intent of the passage;
- Using graphics, visual imagery, video or audio without permission of the author or acknowledgment of the source;
- Translating text from one language to another without citing the original work;
- Obtaining packaged information, foreign language translation or a completed paper from an online source and submitting it as one's own work without acknowledgment of the source; and
- Presenting the work of another student as one's own.

Fairleigh Dickinson University students are responsible for authenticating any assignment submitted to a course instructor should the instructor request it. Students must be able to produce proof that the assignment they submit is actually their own work. Therefore, students must engage in a verifiable work process on all assignments:

\*Adapted from the Kirkwood Community College plagiarism policy distributed at "Critical Challenges in Distance Education: Cheating and Plagiarism Using the Internet" workshop — April 5, 2005.

\*\*From the Newark Academy Plagiarism Statement.

- Keeping copies of all drafts of work;
- Making photocopies of research materials (including downloads from websites);
- Writing summaries of research materials;
- Keeping Writing Center receipts;
- Keeping logs or journals of their work on assignments and papers; and
- Saving drafts or versions of assignments under individual file names on a computer, external drive or other source.

In addition to requiring students to authenticate their work, Fairleigh Dickinson University course instructors may employ various other means of ascertaining authenticity — such as using search engines to detect plagiarism, using external plagiarism-detection services, creating quizzes based on student work and requiring students to explain their work and/or process orally. The inability to authenticate work is sufficient grounds for a charge of plagiarism.

If subsequent evidence of plagiarism should be found after a grade has already been assigned, course instructors have the right to lower the grade and/or apply one of the sanctions listed below.

### Sanctions

Any student violating the University's Academic Integrity Policy will, for their first offense, receive one or a combination of the following penalties imposed by the course instructor:

1. *No Credit (0) or Failure* for the academic exercise.
2. *Reduced grade* for the course.
3. *Failure* in the course.
4. Recommendation for *Academic Probation* to the dean of the college in which the student is registered.

The course instructor shall file a notice using the University's Academic Integrity Policy Violation Report, a copy of which will be placed in the student's file maintained in the campus Office of Enrollment Services and in the Office of the Dean of Students.

In cases of interference and complicity, whether or not the student is registered in the affected course, the incident and penalties shall be recorded in the student's file maintained in the campus Office of Enrollment Services and in the Office of the Dean of Students.

# Academic Regulations

---

For a subsequent violation of academic integrity, a student will be subject to any combination of the above sanctions, and, after due review by the academic dean according to the procedure noted below, one of the following:

1. *Suspension* from the University for one year. Readmission will be contingent upon the approval of the academic dean.

2. *Dismissal* from the University. (Note: Dismissal from the University will be identified on the student's academic transcript as a result of the violation of the Academic Integrity Policy.)

## Procedure

When a course instructor believes that a student has violated the Academic Integrity Policy, the course instructor shall discuss the incident with the student as soon as possible. If, after the conference, the course instructor determines that an act of academic dishonesty has occurred, the course instructor may impose the appropriate sanctions. Within five days of the course instructor's action, the course instructor shall complete the Academic Integrity Policy Violation Report, copying his or her school director or department chair and the college dean. Within five days of completion of the course instructor's report, the academic school or department shall notify the student via certified mail/return receipt of the sanctions and the appeals' process. Copies of the notice shall be sent to the director of the school or chair of the department of the student's major, to the dean of the college in which the course is offered and to the campus Office of Enrollment Services and Office of the Dean of Students. The student may appeal the course instructor's decision as outlined below. Upon completion of the appeals process, the school director or department chair shall notify the student of the final disposition of the matter and the sanctions to be imposed, if any, via certified mail with copies to the course instructor, college dean, campus director of enrollment services and dean of students.

## Appeals Process

A student who is charged with violating the Academic Integrity Policy by a course instructor may appeal in writing to the director of the school or chair of the department in which the alleged incident took place. The letter must state the specific grounds for the appeal. The student

must submit a written appeal to the school director or department chair within 14 days of receipt of the notification of the imposed sanctions. Failure to make an appeal within this 14-day period shall constitute a waiver of the student's right to appeal. Within 10 working days of receipt of the student's appeal, the school director or department chair will review the circumstances of the alleged violation with the student and the course instructor and recommend upholding, modifying or dismissing the sanctions imposed by the instructor. The school director or department chair, within five working days, shall notify the student in writing via certified mail of the outcome, with copies to the course instructor, school director or department chair of the student's major, academic dean of the college in which the course is offered, campus director of enrollment services and dean of students. If it is determined that a violation of academic integrity did not occur, the student's final grade in the course cannot be based on the assumption of such violation. If the differences between the course instructor and the student are not resolved by this review, the student may appeal the outcome to the dean of the college in which the course is offered.

Within 10 working days of the school director or department chair's notification, the student may submit a written appeal to the dean of the college in which the alleged dishonesty took place. The letter must state the specific grounds for the appeal. Upon receipt of the student's appeal, the dean shall provide the course instructor and his or her school director or department chair with a copy of the student's appeal. Within 10 working days, the dean shall convene a five-person appeals committee consisting of a faculty member at large from the college in which the course is offered, the dean or his or her designee, the campus dean or his or her designee, a faculty member from the department or school of the student's major and a student selected by the campus dean of students from the college in which the alleged dishonesty took place. The hearing will be chaired by the college dean or his or her designee. The role of the appeals committee is to review the record of the matter and determine whether a finding of academic dishonesty is founded and whether the sanction imposed by the course instructor is consistent with the

terms of this policy. The committee shall base its decision upon a review of the record but may meet with the student and the course instructor to secure additional information to help it in making a determination about the merits of the appeal. The committee can uphold, modify or dismiss the sanction imposed by the course instructor. The college dean shall notify the student (and campus director of enrollment services and dean of students) of the committee's decision within five working days of the hearing. For a second offense of academic dishonesty, the academic dean can "suspend or dismiss" the student as indicated above.

For a sanction of suspension or dismissal imposed by the academic dean, the student may file a written appeal to the University provost/senior vice president for academic affairs within 10 working days of receiving the notification of the dean's decision. The University provost or his or her designee, shall review the case within 10 working days of the receipt of the appeal. The University provost shall make the final decision, using any appropriate resources to assist in deciding the appeal. The University provost shall then notify all parties in writing of his or her final decision within five working days of the decision.

*Revised January 28, 2015*

## Credit Hour Definition

The University's calculation of credit hours for all credit-bearing courses and degree programs follow rules established by the New Jersey Secretary of Higher Education, which are consistent with the U.S. Department of Education's definition of a credit hour:

Section 9A:1-1.2 of the New Jersey Administrative Code provides that "*Semester credit hour*" means 50 minutes of face-to-face class activity each week for 15 weeks (or the equivalent attained by scheduling more minutes of face-to-face class activity per week for fewer weeks in the semester) in one semester complemented by at least 100 minutes each week of laboratory or outside assignments (or the equivalent thereof for semesters of different length).

## Academic Load

A student registered for 9 credits per semester is considered a full-time graduate student. Half-time status is applied to students who register for a minimum of 4.5

credits. A student may register for a maximum of 15 credits (18 credits in some cases) with written approval of the college dean and the department chairperson, school director or institute director of his/her major.

No credit will be allowed for courses taken at another accredited institution of higher learning while enrolled in a degree program at Fairleigh Dickinson University unless approved in advance and in writing by the college dean, school or institute director and the student's major department chairperson or school/institute director.

## Degree Requirements

1. Students must complete all required credits for the program at Fairleigh Dickinson University other than those for which transfer credits have been awarded.

2. A cumulative grade point ratio (CGPR) of at least 2.75\* is required for graduation from all colleges except the Silberman College of Business, the Public Administration Institute and corporate and organizational communication program (Maxwell Becton College of Arts and Sciences) and the Henry P. Becton School of Nursing and Allied Health's Doctor of Nursing Practice (DNP) program, which require 3.00; a grade point ratio of at least 3.25 is required for the Ph.D. program in clinical psychology and Psy.D. program in school psychology. Students who receive two or more C grades will be warned, and if evidence of definite improvement in their academic performance does not ensue, they will be asked to withdraw from graduate study.

3. All graduate programs have an exit requirement for graduation. Students should ascertain the specific requirements from their departments.

4. Students must check with their department to ascertain whether a thesis is required for the degree. When the master's thesis is completed — whether required or optional — a candidate must file three copies of the approved thesis with the Office of Enrollment Services, no later than the last day of final examinations for any given semester. If the student's adviser does not require a copy of the approved master's thesis, a candidate need only file two copies of the approved thesis with the Office of Enrollment Services. Students

must register for two semesters of Research and Thesis consecutively. Students must use the approved form for typing the master's thesis. Information may be obtained from the student's adviser.

5. Students should check with their major department to ascertain whether a comprehensive examination is required for their degree. If a comprehensive examination is required, students should inquire from their department as to the date for filing for the examination and the date on which it will be given.

6. A graduate program of study must be completed within a period of five years from the time the student first registers for graduate study. Exceptions to the **five-year** limitation or to the Silberman College of Business' and School of Pharmacy and Health Sciences' **seven-year** limitation must be requested **in writing** to the dean or the institute director and the student's major department chairperson or school director or institute director.

7. A candidate who is deficient in the basic undergraduate prerequisites will be required to meet the deficiency or deficiencies according to department or school guidelines.

## Maintenance of Matriculation Status

In order to maintain matriculation status, students must register consecutively for the fall and spring semesters. If consecutive registration is not maintained, students must reapply to the Admissions Office. It is recommended that graduate students who find it necessary to absent themselves from a major semester at the institution register for matriculation maintenance, thereby retaining active status. This process also provides the opportunity for the students to avail themselves of the use of various University facilities, i.e., recreational facilities and the libraries. See the "Tuition and Fees" section (page 20) for matriculation maintenance fee.

## Academic Leave of Absence

A leave of absence allows students to interrupt their graduate studies if necessary.

A leave of absence is granted for one semester with the privilege of renewal for one more consecutive semester. Request for a leave of absence must be approved in

writing by the student's department chairperson or school director and the college dean. (Information on procedures for requesting a leave of absence is available from the Dean of Students Office on each campus.) Students wishing to renew their leave of absence also must do so in writing.

Students who have been granted a leave of absence will be maintained as students in good standing during the semester in which a leave of absence is taken, but will be discontinued from graduate study unless students register the semester following a leave of absence, or request and are granted an extension of the leave of absence.

## Withdrawal

Students must notify the Office of Enrollment Services in writing of their intention to withdraw from graduate study. Students who wish to return at a later date must reapply through the Admissions Office.

## Candidacy for a Graduate Degree

The application for graduation is located in WebAdvisor under Student Profile. Students should click on the link: Apply for Graduation. This must be done no later than eight months preceding graduation. Filing dates must be obtained from the Office of Enrollment Services. Degrees are awarded September 1, February 1 and the day of commencement in May.

## Grades

A system of grade points is used to determine students' general averages. Weighted letters for each credit hour are assigned grade points. (See below.)

The value of weighted letter grades is as follows:

A	= 4.00	C+	= 2.33
A-	= 3.67	C	= 2.00
B+	= 3.33	F	= 0.00
B	= 3.00		
B-	= 2.67		

The definition of other letter grades is as follows:

P	Pass
NC	No Credit
W	Withdrawal
I	Incomplete

\*Check degree requirements for individual majors.

# Academic Regulations

---

If students wish to withdraw from a course, they must notify the Office of Enrollment Services on the form provided. Mere nonattendance or nonpayment of tuition does not constitute an official withdrawal.

## Regulations Governing Letter Grades

**P–Pass** — to be counted toward degree requirements but not averaged into students' cumulative grade point ratio (CGPR). P–Pass is not permitted in the Silberman College of Business.

**NC–No Credit** — not to be credited toward the degree requirements nor averaged into the CGPR. NC–No Credit is not permitted in the Silberman College of Business.

**W–Withdrawal** — not to be credited toward the graduate requirements nor averaged into the CGPR. Graduate students may withdraw from a course through the ninth week of a semester (through the fourth week of a summer session). After the ninth week (fourth week in summer sessions), withdrawal may be permitted for serious, documented, medical reasons or other unusual extenuating circumstances. Students requesting late withdrawal should present evidence of unusual circumstances and/or medical documentation to the Office of Enrollment Services.

**I–Incomplete** — this designation is not a substitute for a letter grade. It merely describes a student's temporary status in a course. It is to be given only in exceptional or emergency circumstances at the discretion of, and after consultation with, the instructor. Students have a responsibility to notify the instructor of circumstances preventing them from completing the requirements on time. Students will have up to the third week of the next full semester (excluding summer sessions) to complete the requirements. If the requirements have not been met within the prescribed period, the I will automatically become an F. The F is a letter grade and will count in the student's CGPR.

Special regulations may apply for Research and Thesis and Advanced Special Projects.

Requests for extensions must be made to the instructor, approved by the chair or director and forwarded to the college dean and the Office of Enrollment Services.

## Grade Appeal Procedure

While it is recognized that faculty hold the right and responsibility to grant a grade, a student who receives a grade that he or she believes to be unwarranted may appeal that grade by engaging in the following process:

1. Within the first three weeks\* of the start of the following full semester (fall or spring) in which the grade is received, the student shall have informally appealed the grade to the instructor. If no resolution of the matter results to the student's satisfaction, the student may initiate the following formal appeal process.

2. The student shall request in writing a meeting with the respective department chairperson or school director concerning the grade in question.

3. The chair or director shall report to the student on the resolution of the appeal within two weeks of that meeting.

4. If the issue is not resolved to the student's satisfaction, the student has one week to appeal in writing to the dean of the college in which the course is taught.

5. The dean shall review the entire matter with the student, the faculty member and/or the chairperson/school director involved.

6. If the dean feels there is no basis for a grade change, that determination is final and should be conveyed to the student in writing within two weeks of receipt of the student's appeal.

7. If the dean believes that an erroneous grade exists, the dean shall attempt to resolve the issue with the instructor. If, however, resolution is not achieved, the dean shall refer the case to the College Ad Hoc Grade Appeal Committee.

8. The committee is expected to convene within two weeks after receipt of the dean's referral.

9. Each College Ad Hoc Grade Appeal Committee shall consist of three faculty and one alternate selected by the college dean, and a professional staff person selected by the dean of students. Whenever possible, two of the faculty shall belong to the department or discipline of the instructor whose grading is in question.

*\*In the case of a student who is being kept from either graduating or registering because of the grade in question, the process should begin immediately upon receipt of the grade report. If either the instructor or department chair/school director is unavailable, the student may proceed directly to the dean.*

10. The committee shall have the authority to recommend an appropriate course of action to the dean who shall have the authority to implement the recommendation. The recommendation shall be conveyed to all parties involved, in writing.

## Repeated Courses

If a student repeats a course, both the first and the second grade will remain on the transcript and will be computed into the cumulative grade point ratio.

## Transcripts of Records

Transcripts of records are made available via an online ordering service at [www.getmytranscript.org](http://www.getmytranscript.org). The cost of a transcript is \$4.00. Transcripts may be withheld if a student owes money to the University or has past-due federal loans at the time of the request.

## Major Religious Holy Days

The University respects the observance of major religious holy days by members of the campus community. Officers of administration and of instruction responsible for the scheduling of required academic activities or essential services are expected to avoid conflict with such holy days as much as possible.

# Graduate Programs

**FLOR** = Florham Campus (Madison, New Jersey)  
**METR** = Metropolitan Campus (Teaneck, New Jersey)  
**O-C** = Off Campus (See chart on inside front cover for locations of off-campus programs.)

	FLOR	METR	O-C
<b>Administrative Science (M.A.S.)</b>	■	■	■ online option
<b>Biology (M.S.)</b>	■	■	
<b>Business</b>			
Master of Business Administration (M.B.A.)			
Accounting	■	■	
Business Administration	■	■	
Finance	■	■	
International Business		■	
Management	■	■	
Marketing	■	■	
Pharmaceutical Management Studies	■		
Saturday M.B.A.	■		
M.B.A. for Executives			
General Management	■		
Health Sector Management	■		
Master of Science (M.S.) — Accounting	■	■	
Master of Science (M.S.) — Digital Marketing			■ online
Master of Science (M.S.) — Supply Chain Management	■	■	
Master of Science (M.S.) — Taxation	■		
<b>Chemistry (M.S.)</b>	■	■	
<b>Clinical Mental Health Counseling (M.A.)</b>	■		
<b>Communication (M.A.)</b>	■		
<b>Computer Engineering (M.S.)</b>		■	
<b>Computer Science (M.S.)</b>	■	■	
<b>Cosmetic Science (M.S.)</b>		■	
<b>Creative Writing (M.F.A.)/ Low-Residency Program</b>	■		■
<b>Creative Writing and Literature for Educators (M.A.) Low-Residency Program</b>	■		
<b>Criminal Justice (M.A.)</b>		■	

## Concentrations and Certificate Programs

Concentrations and certificate programs are available within many graduate degree programs. For information, turn to the Table of Contents (pages 2–3) or the Index (pages 266–285).

	FLOR	METR	O-C
<b>Cybersecurity and Information Assurance</b>		■	
<b>Education</b>			
Education for Certified Teachers (M.A.)	■	■	■
Educational Leadership (M.A.)	■	■	■
Learning Disabilities (M.A.)		■	
Mathematical Foundations (M.A.)			■ online option
Teaching (M.A.T.)	■	■	■
Teaching English as a Second/Foreign Language (TESL/TEFL) (M.A.)		■	
<b>Electrical Engineering (M.S.E.E.)</b>		■	■
<b>Electronic Commerce (M.S.)</b>		■	
<b>Health Science (M.H.S.)</b>	■		
<b>Homeland Security (M.S.)</b>	■	■	■ online option
<b>Hospitality Management Studies (M.S.)</b>	■	■	■
<b>Management Information Systems (M.S.)</b>		■	
<b>Medical Technology (M.S.)</b>		■	
<b>Nursing (M.S.N.)</b>	■	■	■
<b>Nursing Practice (D.N.P.)</b>		■	
<b>Pharmacy (Pharm.D.)</b>	■		
<b>Psychology</b>			
Clinical Psychology (Ph.D.)		■	
Clinical Psychopharmacology (Postdoctoral M.S.)			■ online option
Forensic Psychology (M.A.)		■	
General/Theoretical Psychology (M.A.)		■	
Industrial/Organizational Psychology (M.A.)	■		
Postbaccalaureate Respecialization Program in Psychology		■	
School Psychology (Psy.D.)		■	
School Psychology (M.A.)		■	
<b>Public Administration (M.P.A.)</b>	■	■	■
<b>Service Innovation and Leadership (M.S.)</b>	■	■	■ online option
<b>Sports Administration (M.S.A.)</b>	■	■	■ online option
<b>Student Services Administration (M.A.)</b>	■	■	■ online option

## Accounting (M.B.A.)

See Business, Accounting (M.B.A.), page 62.

## Accounting (M.S.)

See Business, Accounting (M.S.), page 69.

## Administrative Science (M.A.S.)

The Master of Administrative Science (M.A.S.) degree program is structured to meet the career-development needs of adult learners working in administrative and professional positions in government agencies, not-for-profit organizations and corporate settings. Its primary purpose is to enhance the administrative skills of its graduates.

The program is designed to primarily serve in-service students with five or more years of relevant professional work experience. The degree program is targeted toward working adults, and admission is based on multiple criteria, including the applicants' career and other accomplishments, personal maturity and evidence of commitment to graduate study and professional development. Special consideration will be given to applicants having a significant record of relevant professional and/or administrative experience in government and not-for-profit organizations.

The program combines both cognitive and affective (interactive) instruction through case studies, simulations, individual and group exercises and fieldwork that helps to develop the critical managerial effectiveness. The M.A.S. educational experience seeks to develop administrative competencies in a supportive learning environment in conjunction with specific and clear feedback.

This program is offered under the auspices of the School of Administrative Science, Anthony J. Petrocelli College of Continuing Studies, at the Florham Campus, Madison, New Jersey; the Metropolitan Campus, Teaneck, New Jersey; various locations throughout New Jersey; at the Vancouver Campus, British Columbia, Canada; and online.

### Program Highlights

- A 30-credit program that can be completed in 20 months while working full-time.
- An opportunity to begin the program at any one of three entry points during the year: September, January and April.
- Small classes offered one evening per week (6:15–9:30 p.m.) in a 12-week trimester format or five consecutive Saturdays (8:30 a.m.–4:30 p.m.) to accommodate the needs of working professionals.

- More than 25 convenient off-campus locations throughout New Jersey.
- Many courses are available online through an asynchronous delivery.
- Partial tuition scholarships for employees of government and nonprofit organizations. Tuition, which includes a 50 percent scholarship for all public and nonprofit organization personnel, is \$1,797.00\* per course, and entitles participants to use FDU's facilities (library, recreation center, etc.).

### Graduate Certificate Programs

#### Administrative Science

Students who wish to qualify for a Certificate in Administrative Science may do so by completing six courses (18 credits) from the M.A.S. degree course offerings listed on pages 42 to 53. These credits may then be applied to the M.A.S. degree. Any six courses (18 credits), on a matriculating or nonmatriculating basis, qualify for a Certificate in Administrative Science.

#### Career Development

This 18-credit, six-course certificate is designed for individuals working in workforce-investment systems. It is designed to provide participants with common knowledge throughout the system. Courses include MADS6628 Building Strategic Partnerships, MADS6629 Planning and Program Development, MADS6662 Customer Service for Public and Not-for-Profit Organizations, MADS6775 Career-development Process, MADS6776 Research Methods for Workforce Professionals and MADS6781 Social Media Marketing.

#### Computer Security and Forensic Administration

This 18-credit graduate certificate program focuses on the criminal justice system's response to the expanding area of computer crime. Designed for law enforcement officials, corporate security executives and state agency investigators, the certificate provides training to appropriate personnel in the investigation, case development and protocols relating to computer crimes.

*\*This fee is a 2017–2018 fee. New tuition and fee charges for 2018–2019 will be announced in the spring of 2018. Please check with the Office of Enrollment Services for current charges.*



Each course is taught in a computer laboratory to ensure direct relevance and practical application of all information being covered. Students are required to take six courses: MADS6637 Computer Systems Seizure and Examination, MADS6638 Computer Security Administration, MADS6639 The Forensic Expert, MADS6654 Forensics Administration, MADS6697 Current Issues in Cyber Forensics, MADS6701 Introduction to Computer Network Security, MADS6702 Investigation of Computer System/Network Emergencies, MADS6730 Malware Investigations, MADS6735 Introduction to Countermeasures for Malware and MADS6773 Current Issues in Forensic Sciences.

## ***Correctional Administration and Leadership***

This 18-credit graduate certificate program focuses on the administration and leadership of correctional institutions. Courses include MADS6600 Theory and Practice of Administration, MADS6602 Personnel Administration, MADS6606 Administrative Leadership in Complex Organizations, MADS6610 Organizational Decision Making, MADS6618 Leadership Plus, MADS6647 Organizational Planning and Risk Communications, MADS6656 Social Problems and Solutions, MADS6661 Managing Organizational Change and MADS6693 Leading Culturally Diverse Workplaces.

## ***Diplomacy and International Relations***

This 18-credit, six-course certificate is designed for those who are engaged in the field of diplomacy or international relations. The program will study critical topics of a global nature including globalization, international conflicts and relations, leadership and global marketing. Students may select six courses from the following: MADS6608 Organizational Communication and Conflict Resolution, MADS6611 Special Topics: Introduction to Diplomacy and International Relations, MADS6615 Global Leadership, MADS6640 Leading in Times of Crisis, MADS6672 Ethics and Human Rights, MADS6693 Leading Culturally Diverse Workplaces, MADS6732 International Conflict Resolution, MADS6733 World Economy and Globalization and MADS6740 Comparative Political Systems.

## ***Displaced Persons Administration***

There is a myriad of issues that displaced individuals are faced with, and organizations must be able to identify such issues in order to provide assistance. This 18-credit graduate certificate will investigate various issues as well as remedies for problems. Courses include MADS6617 Emergency Management and Safety Administration, MADS6628 Building Strategic Partnerships, MADS6636 Global Preparedness for Catastrophic Emergencies, MADS6656 Social Problems and Solutions, MADS6672 Ethics and Human Rights, MADS6674 Sociological Perspectives of Disaster and MADS6717 Special Topics: Leading Out of the Mainstream.

## ***Emergency Management Administration***

This 18-credit graduate certificate is designed for community leaders involved in planning, policy making, implementation and administration of emergency management. Participants can select any six of the following courses: MADS6617 Emergency Management and Safety Administration, MADS6633 GIS and Emergency Administration, MADS6634 Community Threat Assessment and Risk Analysis, MADS6636 Global Preparedness for Catastrophic Emergencies, MADS6647 Organizational Planning and Risk Communications, MADS6648 Disaster Recovery and Organizational Continuity, MADS6698 Current Issues on Terrorism and Security and MADS6715 Special Topics: Global Terrorism and Emergency Management Preparation.

## ***European Studies and Administration***

This 18-credit, six-course certificate explores European political, cultural, social, technological and economic conditions. Students may select six courses from the following: MADS6614 Comparative Public and Legal Systems, MADS6626 Law-enforcement Executive Leadership Seminar, MADS6640 Leading in Times of Crisis, MADS6666 The New European Map, MADS6694 New Challenges of Leadership in a Global Society, MADS6700 Global Technology Project Management and MADS6751 Cultural and Social Awareness Seminar. Students may take as an elective any of the MADS courses taught in Europe.

## ***First-responder Administration***

This 18-credit, six-course certificate is designed to provide theoretical and practical application of concepts used by first responders. Students may select six courses from the following: MADS6600 Theory and Practice of Administration, MADS6601 Financial Administration, MADS6602 Personnel Administration, MADS6628 Building Strategic Partnerships, MADS6714 Special Topics: First-responder Stress Awareness and Management, MADS6747 Relational Leadership and MADS6777 Leading Volunteers in Organizations.

## ***Global Emergency Medical Services Administration***

This 18-credit certificate is designed to enhance the knowledge and leadership skills of administrators and staff of organizations responsible (or potentially responsible) for provision of emergency medical services. All of New Jersey's mobile health care resources should be prepared to respond to crisis events, as well as to the everyday needs of their communities. Students are required to take six of the following courses: MADS6602 Personnel Administration, MADS6608 Organizational Communication and Conflict Resolution, MADS6617 Emergency Management and Safety Administration, MADS6620 Human Resource Systems: Approaches and Techniques for the Modern Workplace, MADS6636 Global Preparedness for Catastrophic Emergencies, MADS6646 Finance and Accounting for Health and Human Services and MADS6698 Current Issues on Terrorism and Security.

## ***Global Health and Human Services Administration***

An 18-credit graduate certificate designed for professionals interested in health, hospital and human services administration. Students are required to take the following two courses: MADS6642 Global Health and Human Services Systems and MADS6643 Community Needs Assessment and Qualitative Analysis for Health and Human Services. Students may select four electives from the following: MADS6628 Building Strategic Partnerships, MADS6644 Law, Ethics and Policy for Health and Human Services, MADS6645 Marketing Social Change, MADS6646 Finance and Accounting for Health and Human Services, MADS6647 Organizational Planning and Risk Commu-

# Administrative Science

---

nications, MADS6718 Special Topics: Lifestyle Modification for Community Leaders, MADS6747 Relational Leadership, MADS6753 Special Topics: Elder Care: Legal Issues and MADS6763 Grants and Sponsored Projects Operations.

## **Global Leadership and Administration**

This 18-credit graduate certificate is especially designed for leaders and administrators of worldwide organizations. Participants can choose six courses from the following list: MADS6600 Theory and Practice of Administration, MADS6606 Administrative Leadership in Complex Organizations, MADS6609 Productivity and Human Performance, MADS6610 Organizational Decision Making, MADS6615 Global Leadership, MADS6618 Leadership Plus, MADS6627 Women's Leadership in Today's Global World, MADS6634 Community Threat Assessment and Risk Analysis, MADS6653 Global Citizenship Seminar, MADS6658 Leadership: Global Advanced Scholarship and Practice, MADS6661 Managing Organizational Change, MADS6675 Optimum Leadership, MADS6706 Collaborative Leadership, MADS6709 Special Topics: Creativity, Change and the 21st Century Leaders, MADS6731 Executive Communication as a Leadership Tool and MADS6747 Relational Leadership.

## **Global Security and Terrorism Studies**

This 18-credit graduate certificate program is designed for military, police, fire and emergency management professionals who comprise the first-responder community. The certificate provides a broad understanding of terrorist groups and the methods they employ along with in-depth training on how to prevent and respond to terrorist acts. Courses include MADS6617 Emergency Management and Safety Administration, MADS6634 Community Threat Assessment and Risk Analysis, MADS6636 Global Preparedness for Catastrophic Emergencies, MADS6648 Disaster Recovery and Organizational Continuity, MADS6698 Current Issues on Terrorism and Security, MADS6701 Introduction to Computer Network Security, MADS6705 Homeland Security and Constitutional Issues and MADS6715 Special Topics: Global Terrorism and Emergency Management Preparation.

## **Global Technology Administration**

This 18-credit graduate certificate provides a comprehensive examination of project-management processes, integrating technical tools with leadership and team communication skills. This program is designed for managers and information technology professionals to improve innovation, strategy, operations and effectiveness in today's agile global business architectures. Students learn technical aspects of project-management planning and execution methods as well as people skills that are critical to successful projects. Students are required to take the following two courses: MADS6605 Principles of Information Systems and MADS6700 Global Technology Project Management. Students may select four electives from the following: MADS6610 Organizational Decision Making, MADS6618 Leadership Plus, MADS6632 Technology Applications for Not-for-Profit Management, MADS6638 Computer Security Administration, MADS6677 Planning for Change in Information Technology, MADS6696 Building Effective Teams and MADS6781 Social Media Marketing.

## **Government and Administration**

This 18-credit, six-course certificate explores government and its operation. It is designed for those in the public sector to explore different concepts for governance and different ways that services are provided. Courses include MADS6603 Law and Administrative Practice, MADS6614 Comparative Public and Legal Systems, MADS6616 Grant Writing and Administration, MADS6629 Planning and Program Development, MADS6640 Leading in Times of Crisis, MADS6747 Relational Leadership and MADS6763 Grants and Sponsored Projects Operations.

## **Homeland Security Administration**

This 18-credit, six-course certificate is designed to provide an introduction to the area of homeland security. Courses include MADS6617 Emergency Management and Safety Administration, MADS6636 Global Preparedness for Catastrophic Emergencies, MADS6648 Disaster Recovery and Organizational Continuity, MADS6697 Current Issues in Cyber Forensics, MADS6698 Current Issues on Terrorism and Security, MADS6705 Homeland Security and Constitutional Issues and

MADS6715 Global Terrorism and Emergency Management Preparation.

## **Human Resource Administration**

This 18-credit graduate certificate program is geared to the human resource practitioner. Select any six courses from the following offerings to earn the certificate: MADS6602 Personnel Administration, MADS6603 Law and Administrative Practice, MADS6607 Collective Bargaining and Contract Administration, MADS6608 Organizational Communication and Conflict Resolution, MADS6609 Productivity and Human Performance, MADS6620 Human Resources Systems: Modern Approaches and Techniques for the Modern Workplace, MADS6661 Managing Organizational Change, MADS6662 Customer Service for Public and Not-for-Profit Organizations and MADS6695 Advanced Employment Law.

## **Information Literacies and Learning Environments**

This 18-credit, six-course certificate is in the emerging field of information literacies and learning environments. It is designed to help individuals address the new complexities facing the professionals in the field of information literacy and educational technology. Students are required to select at least three courses from the following: MADS6741 Information Literacies and Research, MADS6742 Learning Theories and Practice, MADS6743 Connectivism: New Learning Environments and MADS6744 Academic Support. Students can choose the remaining courses from the following electives: MADS6632 Technology Applications for Not-for-Profit Management, MADS6745 New Media Literacies, MADS6746 Specialized Research and Argument and MADS6781 Social Media Marketing.

## **Intelligence-led Policing**

Intelligence-led policing involves the modern techniques that integrate the best practices of community policing with law-enforcement intelligence. This 18-credit graduate certificate builds on the use of data and information to solve issues involving crime, homeland security and quality of life. Students are required to take the following two courses: MADS6679 Intelligence-led Policing: Concepts, Practices and Issues and MADS6680 Strategic Planning

for Intelligence-led Policing. To complete the certificate, select four electives from the following: MADS6628 Building Strategic Partnerships, MADS6681 Intelligence Team Management, MADS6682 Intelligence Analysis, MADS6683 Tactical and Operational Management, MADS6684 Principles of Information and Intelligence Collection and MADS6685 Fusion Center Operations and Integration.

### **Latin American Studies**

This 18-credit, six-course certificate explores historical and current aspects of Latin America's culture, social, economic and political influences on the Western Hemisphere. Students may select six courses from the following: MADS6614 Comparative Public and Legal Systems, MADS6752 Current Issues in Latin America, MADS6788 Political and Economic History of Latin America, MADS6789 Modern Latin America, MADS6790 Economic Development in Latin America, MADS6791 Economic Integration and Free Trade Agreements in Latin America, MADS6793 Brazil, Mexico, Colombia and Argentina: A Comparative Perspective and MADS6794 Cuba: Past, Present and Future.

### **Law and Public Safety Administration**

This 18-credit graduate certificate provides a leadership foundation for law and public safety professionals. Select any six courses from: MADS6601 Financial Administration, MADS6604 Ethics and Public Values, MADS6608 Organizational Communication and Conflict Resolution, MADS6610 Organizational Decision Making, MADS6617 Emergency Management and Safety Administration, MADS6618 Leadership Plus, MADS6620 Human Resource Systems: Approaches and Techniques for the Modern Workplace, MADS6626 Law-enforcement Executive Leadership Seminar, MADS6628 Building Strategic Partnerships, MADS6655 Contemporary Issues in Community Policing, MADS6656 Social Problems and Solutions, MADS6675 Optimum Leadership, MADS6703 Public Presentations and Media Strategies and MADS6762 Current Issues in Immigration Law.

### **Leadership Theory and Practice**

This 18-credit, six-course certificate is designed for individuals who would like to increase their leadership skills. There are differences between managers and leaders, and this course of study looks at the attributes of leaders, different theories that can be used and how leaders can vary their styles based on the situation at hand. Students are required to take at least two of the following courses: MADS6600 Theory and Practice of Administration, MADS6618 Leadership Plus and MADS6747 Relational Leadership. Students can choose the remaining courses from the following electives: MADS6640 Leading in Times of Crisis, MADS6675 Optimum Leadership, MADS6676 Perspectives on Leadership from Films, MADS6717 Special Topics: Leading Out of the Mainstream and MADS6731 Executive Communication as a Leadership Tool.

### **Legal Environment Administration**

This 18-credit graduate certificate is designed for legal support staff. Courses include MADS6603 Law and Administrative Practice, MADS6607 Collective Bargaining and Contract Administration, MADS6620 Human Resource Systems: Approaches and Techniques for the Modern Workplace, MADS6635 Legal Research Methods and Analysis, MADS6641 Contemporary Legal Issues, MADS6695 Advanced Employment Law and MADS6708 Special Topics: Administrative Research.

### **Nonprofit Organizational Development**

This 18-credit graduate certificate program is designed for professional leaders in the not-for-profit community. Students pursuing this credential may apply the credits toward the M.A.S. degree. Three core courses are required from the following four offerings: MADS6628 Building Strategic Partnerships, MADS6629 Planning and Program Development, MADS6631 Advanced Funding Practices and MADS6632 Technology Applications for Not-for-Profit Management. Students may choose three other courses from among those offered in the M.A.S. program. Recommended additional courses are: MADS6606 Administrative Leadership in Complex Organizations, MADS6608 Organizational Communica-

tion and Conflict Resolution, MADS6613 Marketing of Public, Private and Not-for-Profit Organizations, MADS6616 Grant Writing and Administration, MADS6618 Leadership Plus, MADS6645 Marketing Social Change, MADS6661 Managing Organizational Change, MADS6662 Customer Service for Public and Not-for-Profit Organizations, MADS6675 Optimum Leadership, MADS6747 Relational Leadership, MADS6763 Grants and Sponsored Projects Operations and MADS6781 Social Media Marketing.

### **Public Relations Administration**

This 18-credit, six-course certificate focuses on the concepts relative to public relations including media strategies and how organizations market their programs and policies. Students may select six courses from the following: MADS6613 Marketing of Public, Private and Not-for-Profit Organizations, MADS6703 Public Presentations and Media Strategies, MADS6704 Managing Media Relations: From Local to Global, MADS6731 Executive Communication as a Leadership Tool, MADS6779 Mass Communication Theories, MADS6780 Society and Mass Communication and MADS6781 Social Media Marketing.

### **School Security and Safety Administration**

This 18-credit graduate certificate program is designed for K-12 administrators and teachers to support the "Safe Schools" initiative. Courses include MADS6617 Emergency Management and Safety Administration, MADS6634 Community Threat Assessment and Risk Analysis, MADS6636 Global Preparedness for Catastrophic Emergencies, MADS6655 Contemporary Issues in Community Policing, MADS6691 Preventing Future Columbines, MADS6698 Current Issues on Terrorism and Security, MADS6707 The Impact of Terrorism on School Safety and MADS6714 Special Topics: First-responder Stress Awareness and Management.

### **Wroxton Experience — Global Perspective**

Two courses, MADS6615 Global Leadership and MADS6627 Women's Leadership in Today's Global World, are offered in the summer at FDU's Wroxton College in England.

# Administrative Science

---

## Online Graduate Degree and Certificate Programs

### Online Availability

As a result of funding provided by the U.S. Department of Defense through the National Guard Bureau, three administrative science graduate certificates — the Global Security and Terrorism Studies Certificate, the Emergency Management Administration Certificate and the Computer Security and Forensic Administration Certificate — as well as five additional Master of Administrative Science (M.A.S.) courses have been created online. Public safety leaders and managers from around the world have the opportunity to earn an online M.A.S. degree that has been reviewed and approved by the National Guard. In addition to these National Guard-approved programs, the school also offers online graduate certificates in Law and Public Safety Administration, Global Leadership and Administration and Global Technology Administration.

### Admission Requirements

The credentials required for admission to the Master of Administrative Science degree program as a matriculated student include the following:

1. A graduate application for admission and nonrefundable application fee.
  2. A bachelor's degree from an accredited college or university with a minimum cumulative grade point ratio (GPR) of 2.70. Applicants with a GPR of less than 2.70 may be admitted as matriculated students on probation.
  3. Official transcripts from all colleges and universities previously attended.
- Applicants who are unable to provide official documents at the time of enrollment may register as nonmatriculated or nondegree students, with the approval of a graduate faculty adviser.

Candidates for the graduate certificate program in administrative science may be accepted as matriculated students, based on proof of a bachelor's degree from an accredited college or university.

### Post-graduate Certificate in Public and Nonprofit Leadership

This 24-credit post-graduate certificate program is designed to further enhance the competencies of public and not-for-profit organization administrators. Upon successful

completion of either the 30-credit M.A.S. program or the 39-credit Master of Public Administration (M.P.A.) program, graduates can enroll in eight additional courses of their choice and earn a Certificate in Public and Nonprofit Leadership. Courses taken for the master's degree cannot be repeated; however, there are ample new courses to choose from under Special Topics plus other listed courses including the Wroxton College, Oxfordshire, England, summer seminars. Students who have graduated from universities other than Fairleigh Dickinson can also take advantage of the post-graduate certificate program.

### Requirements for the Master of Administrative Science Degree

The following are the specific program requirements for the M.A.S. degree. The curriculum areas and credit-distribution requirements are designed to provide students with flexibility in planning a program of study within a competency-focused framework for professional development. Students must successfully complete 30 credits of graduate course work in the following three categories.

#### Administrative Competencies (18 credits)

This core area includes the following areas of administrative science: budgeting and financial administration, human resources administration, information systems administration, regulatory and legal issues in administration, organizational behavior and organizational communications.

#### Analytic and Decision-making Competencies (9 credits)

This core area includes course work in public policy analysis, economic analysis, quantitative reasoning, ethical and values issues and decision-making techniques that enable the student to analyze complex problems and develop appropriate strategies to address them.

#### Capstone Seminar (3 credits)

This core area provides an integrative learning experience that focuses on organizational leadership and strategic planning. Ordinarily the last course that a student takes in the program, the capstone seminar is offered on the Metropolitan Campus and Florham Campus.

## For Information

For information about the M.A.S. and certificate programs, contact: the assistant dean, School of Administrative Science, Fairleigh Dickinson University, Anthony J. Petrocelli College of Continuing Studies, School of Administrative Science, 1000 River Road, H-DH2-13, Teaneck, New Jersey 07666; Telephone: (201) 692-6522; Fax: (201) 692-7179.

## Course Offerings

### Administrative Science

#### School of Administrative Science

#### MADS5000

##### 1 Credit

#### Curricular Practical Training

This one-credit independent study is designed primarily for graduate international students but may apply to any student wishing to engage in a paid internship. Students are expected to comply with the internship guidelines and meet any other requirements that may apply. This class allows students to experience the work environment while completing their studies in the appropriate Anthony J. Petrocelli College of Continuing Studies program.

#### MADS5001

##### 1 Credit

#### Curricular Practical Training

Students expand their knowledge of their area of specialization and apply concepts of different organizational structures and working relationships within a workplace environment. (For Vancouver Campus.)

#### MADS6600

##### 3 Credits

#### Theory and Practice of Administration

Introduction to issues of administration of public, private and not-for-profit organizations. Cases are used to analyze the relation of theory to practice and to illustrate the direct practical relevance of theoretical models to administrative action. This course is waived for graduates of the New Jersey Certified Public Manager<sup>®</sup> (CPM) program.

#### MADS6601

##### 3 Credits

#### Financial Administration

Analysis of the concepts and principles used in the financial administration of the public, private and not-for-profit sectors. This includes the key elements of accounting, budgeting, planning and control, auditing and their integration into a comprehensive administrative control system, including issues of systems design and implementation.

## MADS6602

3 Credits

### **Personnel Administration**

This course provides an overview of personnel administration, focusing on a unified human resources management program, including the integration of human resources planning, job analysis, employee selection, training performance evaluation and compensation administration. This course is waived for graduates of the New Jersey Certified Public Manager<sup>®</sup> (CPM) Program.

## MADS6603

3 Credits

### **Law and Administrative Practice**

Exploration and analysis of the function of law in a democratic society. Emphasis is placed on understanding the law as a legal and moral force guiding and constraining public decision making and action.

## MADS6604

3 Credits

### **Ethics and Public Values**

This course focuses on the ethical dimensions of the personal and professional judgments of public sector managers. Cases are used to examine the ethos of public service organizations and the moral foundation of public policy.

## MADS6605

3 Credits

### **Principles of Information Systems**

This course provides an overview of the role of information systems in the administration of public, private and not-for-profit organizations by presenting an integrated view of administration, information and systems concepts into a unified framework. Topics include information systems development, design implementation and evaluation strategies.

## MADS6606

3 Credits

### **Administrative Leadership in Complex Organizations**

Analysis of leadership behavior and administrative activities. Examination of major theories of leadership and motivation, including trait, behavioral, situational and power-influence leadership theories and acognitive and cognitive motivational principles for various levels of the formal organization.

## MADS6607

3 Credits

### **Collective Bargaining and Contract Administration**

Analysis of federal and state employee relations laws and regulation. Topics include the bargaining environment, contract negotiations, wage and benefit issues in arbitration, grievance arbitration and employee relations in nonunion organizations.

## MADS6608

3 Credits

### **Organizational Communication and Conflict Resolution**

Theories and models of communications and communications media; barriers to effective communication and techniques for improving interpersonal, group and organizational communications. Sources of conflict at the individual, group and organizational levels; methods of conflict management and resolution.

## MADS6609

3 Credits

### **Productivity and Human Performance**

Definitions and measurement of individual, team and organizational productivity, effectiveness and efficiency. Models for the analysis of organizational and individual productivity and productivity growth. Techniques for improving productivity.

## MADS6610

3 Credits

### **Organizational Decision Making**

Examination of processes in organizational decision making, the state of theory, research and applications for the practicing manager. Topics include administrative style and decision making; problem discovery and diagnosis; the search for solutions, evaluation and choice; group decision making; decision aids and support systems; and risk analysis.

## MADS6611

3 Credits

### **Special Topics: Introduction to Diplomacy and International Relations**

Introductory course on the role and importance of diplomatic protocol in international relations for government and public officials. Topics include definition of diplomacy, types of international relations, international organizations and NGOs, comparative foreign policy, international human rights.

## MADS6612

3 Credits

### **Seminar in Strategic Management – Capstone\***

Approaches to formulating strategies that enable public, private and not-for-profit organizations to adapt to changing social, technological, economic and political conditions. Strategic management from the administrator's perspective. Development of long-range organizational strategies. Topics include forecasting, goal setting, environmental scanning, implementation of organizational strategies and strategic management and public policy. Note: Taken as the last or next to last course after completion of at least 24 credits.

\*Students should declare for graduation when registering for this course via the University's WebAdvisor system.

## MADS6613

3 Credits

### **Marketing of Public, Private and Not-for-Profit Organizations**

Course examines marketing concepts relevant to public, private and not-for-profit organizations that will enable administrators to match the goals, strengths and resources of an organization with the needs, wants and opportunities in the public sector.

## MADS6614

3 Credits

### **Comparative Public and Legal Systems**

A global examination of alternative government and legal systems, public policy formulation and implementation and conflict resolution. Organization and operational characteristics of public providers, private organizations and not-for-profit providers in global settings are analyzed with particular reference to different approaches to leading political and social issues as advanced by the United States, United Kingdom and European Union. This course begins with a mandatory orientation at FDU's Metropolitan Campus. The class will discuss course format, research-paper requirements, books and other practical concerns of the trip.

*Fee*

## MADS6615

3 Credits

### **Global Leadership**

Leadership theories of European and American theoreticians as well as the methods and practices of world organization leaders in government, private and not-for-profit organizations are studied, compared and discussed. Presenters are drawn from local governments and entrepreneurs who have created, innovated and implemented sweeping policy changes in the operation of government. Several site visits are included. This course begins with a mandatory orientation at FDU's Metropolitan Campus. The class will discuss course format, research-paper requirements, books and other practical concerns of the trip. Students must make their own travel arrangements. The cost of this program (tuition, room and board) is to be determined.

## MADS6616

3 Credits

### **Grant Writing and Administration**

The course provides students with an understanding of the process of writing successful grant proposals, including responding to the Request for Proposal, letter proposals, defining needs, methodology, timelines and the budget. Learn the elements of preparing a winning proposal that can secure funding for major public sector initiatives. Students prepare and submit full grant proposals relevant to their organizations.

# Administrative Science

---

**MADS6617**

**3 Credits**

## **Emergency Management and Safety Administration**

The course will provide for an in-depth analysis of planning and administration for emergency management in the public and not-for-profit sectors, the need for emergency planning, recovering losses from Federal Emergency Management Agency (FEMA) and state agencies due to catastrophic events, identification and allocation of resources, incident command procedure, safety in the working environment and federal Occupational Safety and Health Administration (OSHA) and state Public Employee Occupational Safety and Health Act (PEOSHA) regulations. Students evaluate their environment and prepare a safety plan that is presented to the class.

**MADS6618**

**3 Credits**

## **Leadership Plus**

Master the best principles practiced by great leaders, past and present. Topics include creative and innovative thinking, super-conscious mental laws, the constant pursuit of professionalism, craftsman-like dedication to quality, building effective self-directed teams, creating an energized workplace, the characteristics of effective learning organizations, capitalizing on leverage and the art of identifying and designing a shared destiny.

**MADS6620**

**3 Credits**

## **Human Resource Systems: Approaches and Techniques for the Modern Workplace**

New approaches and techniques in human resource systems go beyond the theories and principles of personnel administration. A “hands-on” experience that utilizes case studies in each topic allows students to devise solutions. This course will use case studies, lectures, assigned readings and recent rulings. State and federal court decisions that impact public, private and not-for-profit sector organizations will be thoroughly examined.

**MADS6626**

**3 Credits**

## **Law-enforcement Executive Leadership Seminar**

New and complex challenges facing the law-enforcement community worldwide will be studied and discussed with top criminal justice leaders in Great Britain and the United States. Subjects include multijurisdictional police forces — Europol and Interpol, policing in a multi-racial society, riot and public order, leadership and community policing, forensics and crime-scene investigation, combating drugs, the global impact of terrorism and combating chemical and biological warfare.

**MADS6627**

**3 Credits**

## **Women's Leadership in Today's Global World**

Public, private and not-for-profit sector administration and leadership development challenges are compared and studied as part of a women's leadership seminar focusing on global networking. Presenters are renowned CEOs and scholars whose cutting-edge accomplishments have distinguished them as leaders representing the public and not-for-profit sectors in and outside the United States. Study is combined with travel and experiential learning. This course begins with a mandatory orientation at FDU's Metropolitan Campus. The class will discuss course format, research-paper requirements, books and other practical concerns of the trip.

**MADS6628**

**3 Credits**

## **Building Strategic Partnerships**

Building strategic partnerships is key to organizational survival and success. This course will use case studies to explore the principles, approaches and motivations behind some of the most noteworthy collaborations forged by private and not-for-profit leaders.

**MADS6629**

**3 Credits**

## **Planning and Program Development**

Effective program development requires a clearly stated purpose of what an organization is trying to achieve, compelling evidence that demonstrates the importance of that need and a well-reasoned plan that outlines how an organization will meet this need in a cost-effective manner. This course will explore how to turn an idea into a feasible project that merits funding. Students will learn the skills and strategies needed to assess need, plan for and design identifying trends and organize and manage information. Valuable online resources will be explored zeroing in on the top internet sites for research, reference and continued learning.

**MADS6631**

**3 Credits**

## **Advanced Funding Practices**

This course is designed to provide an in-depth study of comprehensive fund-raising planning. The course will focus on management issues including assessing organizational readiness, strategic approaches to the development process and evaluating results. The course also will provide students the opportunity to broaden their knowledge with regard to prospect research and cultivation, planned giving, corporate philanthropy and cause-related marketing.

**MADS6632**

**3 Credits**

## **Technology Applications for Not-for-Profit Management**

Learn to develop an approach to technology that best serves the needs of the organization. This

course will provide an overview of how to plan for technology including website development, online marketing, database management, finance, accounting and working with consultants.

**MADS6633**

**3 Credits**

## **GIS and Emergency Administration**

The course will provide an overview of GIS (Geographic Information Systems) applications at the administrative level of emergency management. Topics covered will include uses of GIS within the planning and mitigation phases, along with response and recovery assessments. Students will gain a valuable perspective on planning for and administering resources. A final course project will be assigned to include GIS budget funding and implementation strategies relative to individual administrative roles.

**MADS6634**

**3 Credits**

## **Community Threat Assessment and Risk Analysis**

An analytic course designed for public safety officers, elected officials and business community leaders for developing collaborative approaches to counterterrorism and other security threats. Topics include vulnerability assessments, hazard mitigation, best practices, emergency planning, physical security surveying, networking of experts and community policing. Students will conduct a vulnerability-assessment survey within their organization and community and present a comprehensive response plan.

**MADS6635**

**3 Credits**

## **Legal Research Methods and Analysis**

Hands-on study of methods of legal research for nonlawyers, with a concentration on utilizing both fee-based and free internet legal sites. Instruction also will be provided in the procedures used in analyzing and interpreting court opinions and statutes. Students will prepare and present a legal brief, with supportive references and arguments, regarding an assigned legal issue. This hybrid course consists of classroom instruction, asynchronous online delivery plus independent research at FDU's law collection (Lexis Nexis and Westlaw).

**MADS6636**

**3 Credits**

## **Global Preparedness for Catastrophic Emergencies**

This course, taught by international experts, covers the following topics in a lecture/seminar format: emergency management, hazardous risk analysis, social dimensions of disasters, disaster recovery and organizational continuity, the psychology of terrorism, counterterrorism, weapons of mass destruction, biodefense mobilization and cyber security and forensics.

## MADS6637

3 Credits

### **Computer Systems Seizure and Examination**

This analytic course will cover the appropriate protocols for seizure of computer systems and their examination in cases of internet or computer fraud, terrorism, child pornography, internet crimes and other high-tech crimes or violations of organization rules and regulations. It will explore the use of technology to retrieve data and copy data on computers and on websites without disturbing the original data/site. It will study essential protocols needed to ensure the integrity of the data from the investigation process through prosecution or administrative disciplinary procedures.

## MADS6638

3 Credits

### **Computer Security Administration**

This course will provide an introduction to the basics of computer security (confidentiality, message integrity, authenticity, etc.) and investigate ways to prevent hackers from accessing websites. Encryption processes and firewall protection may not be enough for someone who wants to access data maintained on a computer or system. The course will analyze formal criteria and properties of hardware, software and database security systems, and will determine ways to improve overall site and system security. Additional topics to be reviewed include: formal specifications, verification of security properties, security policies that include hardening a site and preventing an intrusion, detection of an intrusion and how to react to such an intrusion, safeguards for systems, organizational training and protocols and other methods for providing data security in this technological age will be reviewed and assessed.

## MADS6639

3 Credits

### **The Forensic Expert**

This analytic course will study what is necessary to become a forensic expert, the methods for preparing and presenting technical information in a courtroom or administrative-hearing setting and the use of technical and scientific witnesses in the area of high-tech crimes or violations of or agency rules and regulations. Appropriate interaction with criminal justice agencies to develop internal security protocols will be emphasized. Individuals will learn how to trace security intrusions, what constitutes admissible proof, how to manage evidence and how to develop proactive initiatives in this area.

## MADS6640

3 Credits

### **Leading in Times of Crisis**

This course examines the principles of leadership during times of significant stress. Various models, strategies and tactics of leadership are

studied using the examples of civilian and military leaders during the planning, implementation and execution of the World War II D-Day operation of June 1944.

## MADS6641

3 Credits

### **Contemporary Legal Issues**

This seminar will examine relevant legal issues in the workplace with a comparison of United States and United Kingdom law. Topics presented by leading experts will include workplace violence, social and privacy issues in the workplace, the troublesome employee, harassment in the workplace and various issues of hiring and termination.

## MADS6642

3 Credits

### **Global Health and Human Services Systems**

Offered in the United States with the option of an international setting, this course includes a comparison of health and human services philosophies, concepts and practices. Policy decisions and politics of health and human services delivery mechanisms are discussed with special emphasis on problem analysis and strategies to address issues.

## MADS6643

3 Credits

### **Community Needs Assessment and Qualitative Analysis for Health and Human Services**

Presents a framework for conducting and analyzing health and human services needs within the community. Designing projects, methods of collecting data, matching evaluation plans with community priorities and writing and evaluating proposals/reports providing an essential foundation for planning initiatives.

## MADS6644

3 Credits

### **Law, Ethics and Policy for Health and Human Services**

Examines health and human services within the context of law, ethics, policy and the role of government and society. Provides a framework for analyzing policies in terms of social needs, workplace diversity and environmental issues in the context of exposure to liability and prevention of lawsuits.

## MADS6645

3 Credits

### **Marketing Social Change**

Fundamental marketing concepts are applied to health and human services issues as a means to bring about social change. Attention is given to understanding the needs, wants and perception of the consumer in developing a social marketing plan, implementing it and evaluating its impact.

## MADS6646

3 Credits

### **Finance and Accounting for Health and Human Services**

This course provides an overview of fiscal administrative decision-making and financial performance in health and human services organizations. Budget course and structure, planning and preparation, revenue forecasting, reporting, controls, cash-flow management, grants, endowments, audits and evaluation are emphasized.

## MADS6647

3 Credits

### **Organizational Planning and Risk Communications**

Risk-communications practices, emergency-operations planning and theory for public, private and not-for-profit organizations. Includes an overview of existing federal, state and local emergency-operations planning and communication processes using case studies and practical exercises.

## MADS6648

3 Credits

### **Disaster Recovery and Organizational Continuity**

This course examines the differences between accidents and disasters, the response for disasters, those "players" that will become involved in disaster response and recovery, the disaster cycle and how to maintain operations, whether civilian or military, to ensure organizational continuity. A key element in disaster recovery is the concept of isomorphism, where there is the opportunity for one organization to learn from the experiences of another organization, and this course seizes the opportunity to fully capture what has been learned dealing with previous events.

## MADS6651

3 Credits

### **Operations Administration**

Operations management is the direction and control of various processes that move inputs into completed goods and services. Organizations administer products or services and determine how they are delivered. Various components of the organization must be coordinated to efficiently provide these services and/or products. Decisions are made every day on inventory, scheduling and capacity of the operations. Planning, project management, benchmarking, PERT (Program Evaluation and Review Techniques), CPM (Critical Path Method) and decision making are topics included in this course. This course will deal with management of processes, introduce students to the problems and issues involved with operations management and familiarize students with concepts, languages and tools in both service and production industries.

# Administrative Science

---

## MADS6653

3 Credits

### **Global Citizenship Seminar**

Current workplaces are diverse in various aspects. Most organizations have a mix of workers from different ethnic and cultural backgrounds. For leaders, managers and supervisors to be effective in their workplaces, they must be aware of the diversity issues that impact their organization. This is increasingly important in a global context. Global citizenship requires awareness of the challenges globalization presents. Special emphasis will be placed upon a study of leadership, ethical worldview, communications and diverse subcultures presented from a global perspective along with political, social and economic issues. Comparative studies of the different systems will be the focus of student course work. The Global Citizenship Seminar will include various site visits designed to enhance the individual's understanding of the international issues that have direct and indirect effects on current and long-term goals of an organization.

## MADS6654

3 Credits

### **Forensics Administration**

This course examines the principles of forensics administration and how to apply them. Proper administration of forensic work is required to produce consistently high-quality forensic analysis. This course begins with a case study in a failed forensic administration. It provides the context for a review of the basics of forensics administration. Near the end of the course, the class will look at some new concepts. Topics covered include training and education of forensic analysis, accreditation, proficiency testing, audits, evidence presentation, information hiding and strategic redundancy.

## MADS6655

3 Credits

### **Contemporary Issues in Community Policing**

This course explores community policing — a revolutionary movement, a philosophy and an organizational strategy that expands the traditional police mandate. It draws on the fields of administration, supervision, community organization, psychology, sociology, advertising, journalism, public speaking and problem solving. The history of policing is examined to determine how and why community policing has emerged as the predominant philosophy used by police departments today. Special attention will be given to current issues that impact law enforcement and the future of community policing, especially in light of global terrorism.

## MADS6656

3 Credits

### **Social Problems and Solutions**

This course presents a conceptual framework for understanding social problems. It presents administrative and managerial roles and issues

concomitant with working in government, private and not-for-profit organizations, as well as implications for private enterprise. The nature of social problems, causes and consequences, incidence and prevalence, gainers and losers and underlying ideologies are developed using generalist and specific perspectives. The nature of managerial roles with a focus on solutions is developed theoretically and practically.

## MADS6658

3 Credits

### **Leadership: Global Advanced Scholarship and Practice**

The historical discourse on advanced learning has as its genesis work implemented in many Old World cities. This course will investigate the global history of educational institutions and models of scholarship. The topics included are: an overview of leadership, leadership as boundary spanning, diplomatic leadership as a behavior and an organizational auspice, impression management, interpersonal management, interpersonal communications in a multicultural world and levels of government and relationships to the private sector. This course is intended to provide students with theoretical and practical applications of scholarship and leadership. In addition to the course material, students will experience the culture of one of the University's international partners.

## MADS6659

3 Credits

### **Latin America and Globalization**

This customized course reviews the past and current situations of Central and South American countries in relation to the world economy and globalization. Topics include historical relations between Latin America, the United States and Europe; revolution as a response to globalization; World Bank and International Monetary Fund (IMF) projects in Latin America; and the future of Latin-American products in the international market.

## MADS6661

3 Credits

### **Managing Organizational Change**

This course provides an overview of the principles of organizational change in order to develop the knowledge skills and abilities to design and/or oversee basic change efforts, understand the change process along with the tools to conduct basic change efforts. The ability to change is essential for individual health and organizational growth and development, but change is often resisted for a variety of reasons.

## MADS6662

3 Credits

### **Customer Service for Public and Not-for-Profit Organizations**

Learn how to connect an organization with customers and to train and develop a staff and customers for a shared-learning environment for

customer-focused action. Communicate effectively through newsletters, surveys, instructor outreach meetings, videos, press conferences, seminars, internet, email and telephone. Exceed expectations through quality service, gaining trust and building a loyal customer base and civil coalition for a long-term, satisfying and productive leadership.

## MADS6666

3 Credits

### **The New European Map**

This course provides students with a comprehensive exploration of the current state of the political environment of Europe through historical background and country-by-country analysis. Topics include the European Union, European legal systems, comparative political systems, the fall of communism, European international relations, etc.

## MADS6672

3 Credits

### **Ethics and Human Rights**

Although there are internationally recognized human rights standards, many individuals who are displaced are not afforded the same rights as others. As countries accept a more global view of the world, human rights issues are being brought to the attention of the world. There is also a linkage between values, morality, ethics, law and human rights. This course will investigate the plight of displaced persons as far as human rights and its related issues are concerned. This includes the concept of ethics and ethical treatment of individuals regardless of their status.

## MADS6674

3 Credits

### **Sociological Perspectives of Disaster**

This course identifies broadly defined significant historical and contemporary disasters. It then analyzes causes and effects of these disasters using classical and contemporary sociological theory. Particular emphasis is placed on implications for public policy. The course integrates facts, theories and public policies.

## MADS6675

3 Credits

### **Optimum Leadership**

This course will explore major theories and practices of scholars and philosophers with a focus on the tools and knowledge necessary for 21st-century leadership development. Principles will be extracted from major contributors in the field, including Drucker, Bennis, Burns, Heifetz, Zenger, Folkman, Kanter, Gardner, Pouzes, Vaill, Greenleaf, Kellerman, Lipmann-Bluman, Goleman and others.



## MADS6676

3 Credits

### **Perspectives on Leadership from Films**

Movies exaggerate and oversimplify, but they can still be compelling case studies for the traits and actions they portray. This course uses a dozen classic movies, readily available for rental or purchase, as the material for the study of leadership issues. Students are invited to contribute insights from other movies and from their own experiences, to complement the assigned films.

## MADS6677

3 Credits

### **Planning for Change in Information Technology**

New or upgraded information technologies affect many areas of the workplace. The first steps in the development of any automated system are to understand and document what is needed. This course introduces the terms and techniques of information technology requirements planning that help promote a smooth transition from manual procedures or old technologies to new automated tools.

## MADS6679

3 Credits

### **Intelligence-led Policing: Concepts, Practices and Issues**

This course is designed as an introduction to the intelligence-led policing model. Intelligence-led policing links strategic planning crime analysis, priority setting, accountability, risk management and stakeholder involvement with investigative and front-line delivery of services. The course will include collection and analysis of data and essential actions to be taken. Case studies will be utilized to illustrate principles included in the course.

## MADS6680

3 Credits

### **Strategic Planning for Intelligence-led Policing**

This course will emphasize highly productive collaborations to address goal setting, problem solving and decision making relative to situational awareness to address crime, homeland security and quality-of-life issues. Assessing environmental issues is also included. This course is designed for current or future senior-level decision makers.

## MADS6681

3 Credits

### **Intelligence Team Management**

This course will explore methodologies for developing and managing an intelligence initiative that includes the roles of decision makers, analysts and operators. Also included are situations that illustrate collaboration, integration and networking.

## MADS6682

3 Credits

### **Intelligence Analysis**

This course will investigate the process of moving from raw data to intelligence. Included are methods for analyzing raw intelligence and determining the source credibility, critical thinking, logical reasoning, hypothesis testing and analytical reasoning. Introducing quantitative and qualitative analysis will also be covered. Assessing the validity of information received from various sources will be included along with the importance of maintaining an open mind to information and data. How to represent the analysis and recommendations through finished intelligence products to senior-level decision makers will also be included.

## MADS6683

3 Credits

### **Tactical and Operational Management**

This course will define and distinguish between tactical and operational management relative to the effective and efficient deployment of resources to respond to crime, homeland security and emergency management issues.

## MADS6684

3 Credits

### **Principles of Information and Intelligence Collection**

This course will explore the differences between information and intelligence collection within the framework of constitutional safeguards afforded to citizens. Covert and overt data-collection strategies including open-source information types are emphasized.

## MADS6685

3 Credits

### **Fusion Center Operations and Integration**

This course will explore the methodologies for managing a high-performance fusion center that creates intelligence and warning for diverse constituencies. Included are strategies, principles, and practices for addressing all crimes, all hazards, all threats approach to homeland security and intelligence-led policing.

## MADS6691

3 Credits

### **Preventing Future Columbines**

This course is based on research using sociology, psychology and brain research to develop program outlines for preventing school violence that may culminate in school shootings. Columbine is used as the index because it was the single most lethal case of school shootings in the United States. In addition, shootings that preceded and followed Columbine, along with Columbine, are examined for commonalities, signs and processes that led to shooting in the schools as well as programs that can be established to prevent shootings long before the violence escalates. The movement from bullying,

the single most important forerunner of lethal violence, to uncontrollable rage, along with life-long effects on self-imagining and quality of life are also examined.

## MADS6692

3 Credits

### **Cultural Diversity, Stereotype and Profile**

The human cultural array possesses certain universals such as family, belief systems and modes of socialization. All of these are based on the system of social rules (the norms), which make life predictable and patterned. These also become the basis of stereotypes. A close examination of various subcultures to show their commonalities with all cultures will assist school personnel in reducing adversarial encounters.

## MADS6693

3 Credits

### **Leading Culturally Diverse Workplaces**

With increased globalization, different cultures, beliefs and values become important aspects that an organization's leadership must understand and address. Cultural differences may result in conflict or ineffective and inefficient work groups and teams. Leaders who understand their own behaviors and beliefs are better able to acknowledge and embrace cultural differences and understand the implications of the global market and human capital strategies. This course will explore the dimensions of diversity, cross-cultural models, assessment tools and best practices to improve cross-cultural relationships. Effective team building and the impact of team-building activities on culturally diverse populations will be discussed. In addition to assigned readings and student projects, this course will include an international experience.

## MADS6694

3 Credits

### **New Challenges of Leadership in a Global Society**

The importance of advanced leadership skills will be explored in all areas confronted by the challenges of the global society. Emphasis will be placed on current trends in global-communication conflict management and international negotiation. Priority of study on latest trends in each activity will be highlighted.

## MADS6695

3 Credits

### **Advanced Employment Law**

This course is designed to provide an in-depth study of the essential principles and foundations of employment law for managers and human resource personnel. The course will cover theories and practical applications of contractual law as a source of employment obligations, public policy claims, exceptions to the employment-at-will concept, workplace torts, federal and state regulation of the employment relationship with

# Administrative Science

---

emphasis on the various laws against workplace discrimination and controlling court cases, family leave, health and safety issues, wage and hour considerations, disability and unemployment compensation. The course will be concluded with practical considerations concerning the present status of the various areas discussed.

## MADS6696

3 Credits

### **Building Effective Teams**

Establishing teamwork in an organization is not easy. This course provides students with a comprehensive overview of the team-leadership skills that make and keep organizations competitive. Topics include: team fundamentals, managing by vision and principle, achieving improvements in quality and productivity, setting goals and boundaries that change as the team matures, resolving common team problems.

## MADS6697

3 Credits

### **Current Issues in Cyber Forensics**

This course will emphasize the use of computers and computer technology in investigating cases where computers or computer technology played a significant role. Techniques for safeguarding evidence, computer fingerprinting of suspected parties and interacting with investigative authorities will be covered. Students will become familiar with core computer science theory and practical skills necessary to perform preliminary computer forensic investigations, understand the role of technology in investigating computer-based crime and be prepared to deal with investigative bodies at basic levels. Students will also learn various techniques that aid in preventing computer incidents and recovery from such events.

## MADS6698

3 Credits

### **Current Issues on Terrorism and Security**

This course provides an in-depth analysis of terrorism, the ideological forces and psychology behind terrorism and its worldwide network. Discussions and class assignments will focus on what government leaders can do to prepare their communities for the effects of a catastrophic event including assessing their security plan, its design and construction, agency policies, procedures and various types of security staffing.

## MADS6700

3 Credits

### **Global Technology Project Management**

The course addresses the role of the project manager and the project team at each phase of the project life cycle. It will educate students about information technology project-management skills through hands-on exercises, interactive case studies and relevant discussions with peers.

## MADS6701

3 Credits

### **Introduction to Computer Network Security**

This course will introduce the basics of computer network security for the professional or personal user. The course will include both theoretical and practical application processes to block unauthorized access, remove covert programs and assess network vulnerabilities. In addition, it will provide mechanisms for strengthening computer network defenses from malicious users. This course is held in the U.S. with the option of taking the course overseas when scheduled, including FDU's Wroxtton College in Oxfordshire, England.

## MADS6702

3 Credits

### **Investigation of Computer System/Network Emergencies**

This course will introduce students to computer-system emergencies and responses to these emergencies. It will explore techniques and system configurations to create redundancy in critical computer systems and learn proper standards for data backup and recovery. It will also cover the pros and cons of adapt encryption. Students will learn how common hacking techniques are used for computer system intrusion as well as common techniques used to obtain information from employees. Also covered will be the development of a user agreement for the workplace, remote users and vendors with access to systems and consultants.

## MADS6703

3 Credits

### **Public Presentations and Media Strategies**

This course provides the knowledge and skills needed to develop effective media-relations strategies for an organization. Public presentation skills are addressed in the context of developing and delivering effective messages, persuasion and communicating with key audiences during crisis situations. Emphasis will be placed on targeting audiences and analyzing their needs, developing positive working relationships with journalists and creating plans and policies which use media relations to enhance organizational goals.

## MADS6704

3 Credits

### **Managing Media Relations: From Local to Global**

This course will offer practical, hands-on techniques in understanding the media, how to build relationships with journalists, how to communicate messages effectively and clearly and what steps to take when faced with a crisis. The aim is to equip administrators with common-sense tools to properly manage their own messages while also handling a variety of media — from newspapers to radio and TV to the Internet.

## MADS6705

3 Credits

### **Homeland Security and Constitutional Issues**

This required course provides an overview of constitutional issues, statutes and case law that govern homeland security professionals at the local, state and federal levels. Social, ethical and political implications of actions intended to preserve the safety and security of citizens are studied in relationship to the legal constraints placed on systems. This course will utilize case studies.

## MADS6706

3 Credits

### **Collaborative Leadership**

This course will investigate the concept of leadership exhibited by a group that is acting collaboratively to resolve issues that all feel must be addressed. Since the collaborative process ensures that all people who are affected by the decision are part of the process, the course will explore how power is shared in the process and how leadership is developed.

## MADS6707

3 Credits

### **The Impact of Terrorism on School Safety**

Increased incidents of violence in the schools has impacted how schools are responding to and preparing for potential issues. This course will investigate the latest school-violence trends, including fatal and nonfatal shootings, and the threat of terrorist attacks on American schools. The impacts of terrorism on school safety as well as crisis planning and current strategies for preparedness planning will be analyzed. Case studies of incidents as well as best practices in both the United States and the world will be studied.

## MADS6708

3 Credits

### **Special Topics: Administrative Research\***

This course surveys the basic methods of research likely to be encountered by administrators. The goal of the course is *not* to make students researchers or statisticians but to make them better research and statistics consumers. Quantitative techniques help administrators make budget projections, set staffing levels, determine service quantity and delivery logistics and estimate service demand. Topics covered include descriptive statistics, measurement and research design, inferential statistics and regression.

*\*Qualifies for administrative or analytic competence. Students are permitted to take two Special Topics courses in the M.A.S. program. Contemporary issues in administrative sciences — specific course topics will vary — may be repeated once for credit. Examples include customer service, professional development seminar, entrepreneurial public and not-for-profit organizations, administration organizational changes, public policy issues and analyses, etc.*

MADS6709

3 Credits

**Special Topics: Creativity, Change and 21st-century Leaders\***

Leaders of the 21st century can no longer deal just with change; they must be able to create, discover and invent new ways of thinking, new ways of dealing with greater changes yet to come and new ways of building organizations. This course focuses on recognized leadership characteristics and skills that stimulate change: vision, communication, synergistic decision-making, motivation and talent development. Students will engage in highly interactive stimulations and other exercises that require the willingness and an ability to challenge convention, shift paradigms, communicate effectively and challenge the status quo in order to develop unusual solutions to usual problems.

MADS6710

3 Credits

**Special Topics: Dissonant Issues Seminar\***

This course will explore a myriad of divisive and conflicting issues in contemporary society including: school reform, gangs, obscenity, religious extremism, global warming, identity theft, human trafficking, poverty, unemployment/underemployment, disease, immigration, drug smuggling, war, capital punishment and political corruption. Guest speakers will share their experiences and expert knowledge on these critical and sensitive issues supplemented by films and documentaries.

MADS6714

3 Credits

**Special Topics: First-responder Stress Awareness and Management\***

An in-depth analysis of the causes and consequences of first-responder perceived stressors is presented along with a detailed explanation of stress-management techniques. The course is designed primarily for members of the emergency service community (police, fire, emergency medical services [EMS] and health care providers).

MADS6715

3 Credits

**Special Topics: Global Terrorism and Emergency Management Preparation\***

Terrorism and its impact on governmental, social, legal and financial organizations is the basis of this course. Various measures to stem the growth of terrorism and to prevent it through intelligence, legislation and international collaboratives will be fully explored.

*\*Qualifies for administrative or analytic competence. Students are permitted to take two Special Topics courses in the M.A.S. program. Contemporary issues in administrative sciences — specific course topics will vary — may be repeated once for credit. Examples include customer service, professional development seminar, entrepreneurial public and not-for-profit organizations, administration organizational changes, public policy issues and analyses, etc.*

MADS6717

3 Credits

**Special Topics: Leading Out of the Mainstream\***

This course includes an extensive analysis of paradigms and how they affect behavior and decision making by examining both sides of major issues on public and private policy, politics, global economy, environment, media, health, law, public safety and ethics. Numerous guest speakers will present different views on current topics and events.

MADS6718

3 Credits

**Special Topics: Lifestyle Modification for Leaders\***

Leaders and managers face many workplace and life challenges that can lead to imbalance and conflict resulting in wrong decisions that affect the lives of many people. Everyone is living a stressful life leading to a depletion of energy, fatigue and even depression. This course will focus on achieving a healthier, more fulfilling lifestyle to meet the demands of life and work. This course is designed to lead students to a new level of awareness and empower them to make the life changes needed for full engagement as leaders.

MADS6720

3 Credits

**Special Topics: Metropolitan America: Influence of the Past and Future\***

The American metropolis at the end of the century is very different from what people anticipated about 50 years ago. At mid-century, they envisioned a clean, rationally planned environment of the future, free of long-standing problems such as traffic and poverty. The reality is so much more complex. Leaders built a metropolis that addressed some major problems, while at the same time creating new ones. The next 50 years surely will contain similar surprises. This class will take an in-depth view of those key influences shaping the past and future of the American metropolis. The overwhelming impact of government policy on the American metropolis, especially those policies which promote suburbanization and urban sprawl, will be reviewed and analyzed. To the future, a view of the growing disparities of wealth, a suburban political majority and perpetual urban underclass, racial integration and cultural diversity and the possible intensification of the urban crisis will be addressed.

*\*Qualifies for administrative or analytic competence. Students are permitted to take two Special Topics courses in the M.A.S. program. Contemporary issues in administrative sciences — specific course topics will vary — may be repeated once for credit. Examples include customer service, professional development seminar, entrepreneurial public and not-for-profit organizations, administration organizational changes, public policy issues and analyses, etc.*

MADS6730

3 Credits

**Malware Investigations**

Short for malicious software, malware is defined as a program or file that is designed to specifically damage or disrupt a system, such as a virus, worm or a Trojan horse. This course will cover various malicious software applications used by today's cyber criminals. Reverse engineering techniques will be practiced. Understanding malware signatures and heuristics will be discussed and fully explained. Encryption and cryptography practices and procedures will be touched upon as additional means of destructive and illicit behavior.

MADS6731

3 Credits

**Executive Communication as a Leadership Tool**

This broad-based and highly interactive course will help students develop a strong foundation in communication theory and practice, with an emphasis on communication skills development in the five key areas: written, oral, presentation, cross-cultural and listening skills. Further, students will examine great leaders — from inside and outside the business world — and how their communication skills, styles and approaches contributed to their leadership impact.

MADS6732

3 Credits

**International Conflict Resolution**

Sources and analysis of international conflicts, barriers to effective communication and diplomatic approaches to leading political solutions. Principles of international law and multilateral organizations. Study of different techniques used during important 20th- and 21st-century cases.

MADS6733

3 Credits

**World Economy and Globalization**

This course reviews the past and current world economy and globalization. Topics include: relations between the industrialized nations and some specific countries in Asia, Africa and Latin America; current communist markets, transnational corporations, World Bank and International Monetary Fund; and the future of developing countries' products in the international market.

MADS6735

3 Credits

**Introduction to Countermeasures for Malware**

This course will offer the basics of computer security countermeasures for the professional or personal user who encounters various types of malware such as spyware, phishing sites, spam, bots, root kits, viruses, key loggers, cookies and hijackers. The course will include both theoretical and practical-application processes to block

# Administrative Science

---

unauthorized access, remove covert programs and assess network vulnerabilities. In addition, it will provide mechanisms for strengthening computer-network defenses from malicious users. This course will demonstrate to students how one can forensically copy a hard drive and run it in a virtual machine to examine the effects of the malware without changing the original hard drive.

## MADS6740

3 Credits

### **Comparative Political Systems**

This course provides an overview of the main political regime, considering the different branches of power political parties, electoral systems, citizen participation, mass media, pressure groups and social movement. The course consists of case study and independent research.

## MADS6741

3 Credits

### **Information Literacies and Research**

Research today requires competence in using information representations across a wide range of media, from print to Facebook. This course is a “hands-on” entry to the Information Age and explores topics such as knowing when information is needed and accessing and managing the information legally to solve the problem.

## MADS6742

3 Credits

### **Learning Theories and Practice**

There are many theories that address how individuals learn. This class will explore learning theories and practices, intelligence and learning styles, formative-learning outcomes assessment, tutoring practicum and the concept of learner-centered education.

## MADS6743

3 Credits

### **Connectivism: New Learning Environments**

Increased use of technology has led to the development of a theory specifically related to the digital age. This course explores the new learning environment along with its technology, and includes topics such as: learning-support technologies, e-portfolios, social learning and knowledge building and the collaboration they enable.

## MADS6744

3 Credits

### **Academic Support**

A learner-centered environment may involve a series of support services to ensure the learner is attaining his or her potential. This course will explore various services available to students both on and off campus as well as adults who seek to educate themselves.

## MADS6745

3 Credits

### **New Media Literacies**

This course provides an in-depth look at “new” media and representational diversity. Digital, multimedia representation access and utilization, basic visualization tools and practices and the use of online social networks and video gaming as learning media will be explored.

## MADS6746

3 Credits

### **Specialized Research and Argument**

This course will focus on an inquiry/discovery research project of interest and value to the individual or organization. It will include a survey of a variety of research methods, an analysis and presentation of findings.

## MADS6747

3 Credits

### **Relational Leadership**

As the world continues to become even more complex, the need to connect and collaborate across disciplines, functional realities and worldviews is a necessity. This complexity calls for leadership that is inclusive, ethical, empowering and sustaining. Whether viewed from an individual, group or process perspective, leading is very much about relating on every level and from different perspectives. Notable theory and research in the field will be discussed in a case-study approach to relational leadership. This course will explore relational leadership and its international implications for individuals and organizations.

## MADS6751

3 Credits

### **Cultural and Social Awareness Seminar**

As individuals become more global in their perspectives, it is important that they understand how cultures and social structures are impacting their lives. Each person has a culture upon which beliefs and values are based. This course will explore various components relative to culture and social groups, such as diversity, verbal and nonverbal differences, prejudices and biases and barriers associated with culture and social awareness. This seminar will explore cultural and social awareness through case studies, the media, films, lectures and discussions.

## MADS6752

3 Credits

### **Current Issues in Latin America**

This course provides students with a comprehensive exploration of the core issues in Latin America through historical, political and social background and country-by-country analysis. Topics will include economics and comparative politics.

## MADS6753

3 Credits

### **Special Topics: Elder Care: Legal Issues\***

Increases in the elderly population have resulted in new and complex issues and concerns that impact everyone. These issues include making decisions for the elderly, caregiving, maintaining self-sufficiency or assistive-living accommodations and home and estate planning. This course will explore topics such as informed consent, decision-making capabilities, legal issues related to death and dying, privacy rights, geriatric services and funding, age discrimination and family-law issues. In addition to lectures, the course will include case studies and discussions.

## MADS6758

3 Credits

### **Politics, Ideologies and Religion in the Middle East**

This course provides students with a comprehensive exploration of the politics, ideologies and religious issues through historical, political and social background. Lectures will also include a country-by-country analysis.

## MADS6760

3 Credits

### **Economics in the Middle East**

This course provides students with a comprehensive exploration of the historical and current economic issues of the Middle East, taking into account oil as a key resource and its multiple political and economic consequences. Topics will also include country-by-country analysis.

## MADS6762

3 Credits

### **Current Issues in Immigration Law**

Topics will include human resources, political, economic and cultural issues involved in immigration law. It also will discuss the practical side of immigration in today's business world.

## MADS6763

3 Credits

### **Grants and Sponsored Projects Operations**

Receipt of a grant or funded project requires a solid foundation of concepts, methods and requirements necessary to administer the enterprise. This course will cover the steps involved in setting up a grants-management system, managing documentation in line with compliance obligations, ensuring due diligence, reporting properly and utilizing best practices in implementing and completing the project as planned.

*\*Qualifies for administrative or analytic competence. Students are permitted to take two Special Topics courses in the M.A.S. program. Contemporary issues in administrative sciences — specific course topics will vary — may be repeated once for credit. Examples include customer service, professional development seminar, entrepreneurial public and not-for-profit organizations, administration organizational changes, public policy issues and analyses, etc.*

MADS6764

3 Credits

### **Current Issues in Africa**

This course provides students with a comprehensive exploration of the current issues in Africa through a historical, political, economic and social background and country-by-country analysis. Topics will also include present economics and comparative political systems.

MADS6773

3 Credits

### **Current Issues in Forensic Sciences**

This course explores current issues and challenges confronting the forensic science community. The issues include reviews of the scope of forensic services, the various ways forensic services are organized, the professional and education requirements for careers in forensic science. The challenges include the uneven levels of service, the admissibility of scientific evidence and testimony in courts of law and the differences between criminal and homeland security forensic investigations.

MADS6775

3 Credits

### **Career-development Process**

The career-development process includes a number of steps which individuals may undergo numerous times. The process includes assessment of skills, interests, personality styles and values. Additional steps include effective job-search strategies as well as educational and training goals. The decision process looks at narrowing the options to determine the best choices for the individual. This course provides the theoretical and practical aspects of the career-development process.

MADS6776

3 Credits

### **Research Methods for Workforce Professionals**

Workforce professionals need information from various sources to help make decisions for themselves and their customers. In addition to labor-market information, the workforce professional needs to look at projections for growth industries and labor demand. This course explores basic research methods as well as decision-making processes to assist the professional in providing the best choices for the customers.

MADS6777

3 Credits

### **Leading Volunteers in Organizations**

Many organizations rely on volunteers to provide essential services to public, private and not-for-profit organizations. Issues arise with how to recruit and utilize volunteers in organizations, whether all-volunteer or a mixed agency that includes individuals where part of the work force is paid and part are volunteers. This course explores recruitment, training and retention issues that affect such types of organizations.

MADS6778

3 Credits

### **White-collar Crimes**

White-collar crimes were originally those identified as embezzlement or theft after trust offenses. Technology has made this crime more difficult to investigate and prosecute. In addition, there are issues with sentencing and what appears to be leniency in these cases. This course explores the total issue of what these crimes are, how to investigate and prosecute them and the courts' impact on the issue.

MADS6779

3 Credits

### **Mass Communication Theories**

Mass communication involves creating and sending a message to a large group. Those in the field of public relations need to understand these theories and utilize them as efficiently as the media, which have studied this and have utilized different theories to get their message out. A number of theories will be studied, including diffusion theory, cultivation theory, media dependency and functional approach to mass communication, among others.

MADS6780

3 Credits

### **Society and Mass Communication**

This course explores the relationship between society and mass communication. Mass communication influences society in various ways, including advertising and education. Society's beliefs, values and norms are influenced by the media and also influence the media. The media provide news, information and even entertainment.

MADS6781

3 Credits

### **Social Media Marketing**

Social media has become a necessary component of leading digital marketing programs. This course explains how to use social networks such as Twitter, Facebook, blogs, YouTube, message boards and other social media to understand what customers are saying. More importantly, this course helps students act on that knowledge with smarter digital campaigns in social media and elsewhere that show provable return on investment.

MADS6788

3 Credits

### **Political and Economic History of Latin America**

The history of Latin America beginning with the Spanish conquest and colonial period; the Independence movements; the new Republics and their evolution in the 19th century; social, economic and political perspectives. Students will do research on particular countries based on case studies.

MADS6789

3 Credits

### **Modern Latin America**

A comprehensive exploration of the most important trends and events affecting social, economic and political structures in Latin America during the 20th century. Circumstances specific to individual nations will be subject to case studies.

MADS6790

3 Credits

### **Economic Development in Latin America**

Latin-American nations as "developing countries"; research on the economic, political and social causes that explain current situations, consideration of poverty, income inequality, social discrimination, lack of technology and capital, increasing public debt, weak public institutions and the like, as well as the economic models and alternatives addressing these general difficulties.

MADS6791

3 Credits

### **Economic Integration and Free Trade Agreements in Latin America**

Recent attempts to achieve regional economic integration in South America, Central America and the Caribbean; review of these efforts, taking into account achievements and remaining difficulties; consideration of new economic trends based on globalization and Free Trade Agreements among certain Latin American countries and other nations or block of nations, such as the United States, China and the European Union.

MADS6793

3 Credits

### **Brazil, Mexico, Colombia and Argentina: A Comparative Perspective**

Brazil, Mexico, Colombia and Argentina are currently the most populated countries of Latin America. Each has an economic, political and social background that shows, with respect to the others, some similarities and differences; a comprehensive exploration of their current political situations and economic models, as well as social issues such as poverty, income distribution, discrimination, women's place in society, public debt, natural resources, foreign capital and the like.

MADS6794

3 Credits

### **Cuba: Past, Present and Future**

Cuba as a Spanish colony; Jose Marti's ideology and the struggle for Independence; the Spanish-American War; the first decades of the new republic; Fulgencio Batista's dictatorship; and Fidel Castro's revolution, as well as the five decades of communist regime; its relationship

# Administrative Science

---

with the United States and the World; the current situation under Raul Castro's government, and the perspectives for the near future.

## **MADS6803**

**3 Credits**

### **China: Past, Present and Future**

A comprehensive exploration of China's history and its impact on contemporary Chinese policies toward trade, democracy, human rights, resources, religious toleration and diversity, demographics, ethnic groups and China's role on the world stage.

## **MADS6806**

**3 Credits**

### **Exploring the United Nations**

History of the United Nations, its mission, membership, leadership; the General Assembly, Security Council, Economic and Social Council and other constituent bodies; the United Nations and global issues, for example, human rights, the environment, nuclear weapons; the United Nations as an ideal and as a reality — achievements and controversy.

## **MADS6808**

**3 Credits**

### **Current Issues in Central and Southern Asia**

A comprehensive review of current issues in central and southern Asia. Countries discussed include: the former republics of the Soviet Union, Pakistan, Afghanistan and India; the nations of southeast Asia, such as Cambodia; and other important regions. Economic, political, cultural and social developments are studied through country-by-country and cross-cultural analysis.

## **MADS6809**

**3 Credits**

### **The World of Tomorrow**

This course provides an interesting exploration of the main forces that will determine the world of tomorrow. Topics include the changing nature of war; the mob impact of the new social mass media (Twitter, Facebook); security versus privacy (data-mining); and climate change, to the erosion of borders and sovereignty, free markets versus socialist ideals and the like.

## **MADS6813**

**3 Credits**

### **The U.N. Millennium Development Goals**

This course takes the students through analysis of the eight millennium development goals (MDGs), which range from extreme poverty rates to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015 — to form a blueprint agreed to by all the world's countries.

## **MADS6814**

**3 Credits**

### **Regional Organizations**

Selective exploration of regional organizations and their political, economic and strategic purposes and impact; organizations representative of the major geographical global regions: the European Union, the African Union, NAFTA, NATO and the Andean Group will be among those studied.

## **MADS6816**

**3 Credits**

### **The Impact of Media in World Politics**

This course will provide a comprehensive exploration of the impact of media in world politics, taking account of the different regions and considering some case studies.

## **MADS6817**

**3 Credits**

### **Diplomacy and the U.S.A.:**

#### **The Impact of Global Leadership**

This course will examine the importance of global leadership in international relations within the context of a review of the diplomatic history of the United States. Among the topics to be explored are: global leadership, internationalism, isolationism, realism, idealism, multilateralism and unilateralism.

## **MADS6818**

**3 Credits**

### **Sustainable Development**

Issues of growth in developing countries; limits of expansion in developed nations; the impact of environmental concerns and proposed solutions; the sustainability of United States and European expansion.

## **MADS6819**

**3 Credits**

### **Women's Rights**

This course provides a comprehensive and comparative vision of women's rights in today's world. Although women's presence has highly increased in areas such as politics, economics, literature, public relations, arts and medicine in the last 50 years, there are still regions of the world where women's rights and opportunities are severely weakened. A comparative perspective of ideologies, religions and cultures will give the students a renovated approach on this fascinating topic.

## **MADS6820**

**3 Credits**

### **U.N. Truths and Half Truths**

This course provides a comprehensive exploration of the United Nations' goals and structure, considering its main organs such as the secretary-general, Security Council, General Assembly and Economic and Social Council (ECOSOC). It will emphasize their dynamic roles, in particular their achievements and miss-

ing objectives in today's world, taking account of a great variety of topics: human rights, nuclear weapons, environmental issues and the like.

## **MADS6821**

**3 Credits**

### **Russia: Past, Present and Future**

This course provides an exploration of the Russian past, considering the Soviet era as well as the transition to the Russian Federation, taking account of the main political, economic and social aspects. The course also studies the role Russia plays in today's world as a member of the United Nations Security Council, and analyzes its relationship with the United States, the European Union, China and other regions of the world.

## **MADS6822**

**3 Credits**

### **Terrorism and Terrorist Acts**

This course provides a comprehensive approach to the concepts of terrorism, its psychology and impact on governments and societies. Analyzing different aspects such as intelligence, cyber security legislation and international collaborations in order to develop a strong counterterrorism policy. Specific terrorist acts will be considered taking account of their causes and effects.

## **MADS6823**

**3 Credits**

### **Global Migration: Past, Present and Future**

This course provides students with an understanding of the most important periods of migrations throughout history, as well as the main trends in today's world considering their causes, consequences and different state policies. Particular emphasis will be given to the economic relations among societies during the globalization era.

## **MADS6824**

**3 Credits**

### **U.S. Presidential Campaigns: Foreign Perspectives**

This course provides an overview of United States presidential campaigns, focusing on the rules for competition, the political parties and their candidates, the role of ideologies, money, media and public opinion and, more specifically, foreign perspectives and implications for the world of today.

## **MADS6825**

**3 Credits**

### **Introduction to Diplomacy and International Relations**

This course is directed to students interested in contemporary international politics and relations between various actors in the international scene. Students will become familiar with the leading theories and concepts of international relations in conjunction with the historical con-

text, explaining overall dynamics in global affairs such as human rights, globalization, security, terrorism and the like.

## **MADS6826**

**3 Credits**

### **ISIS or The Islamic State**

This course provides students with a comprehensive exploration of the origins, methods and goals this terrorist group as well as the main strategies developed by the United States and other world powers to encounter it. Topics include particular terrorist actions and reactions, media coverage, religious extremism, military organization, international promotion and the like.

## **MADS6827**

**3 Credits**

### **U.S.A.-Latin America Relations**

This course will provide a comprehensive exploration of the political, economic, social and cultural relations between the United States and Latin America throughout history. It will also require some special case studies.

## **MADS6828**

**3 Credits**

### **U.S.A. New Foreign Policy: Risks and Fears**

The United States foreign policy under Trump's presidency explores interesting issues such as free trade agreements; economic relations with China, Cuba and Venezuela; the wall and the Mexican border; immigration; ISIS; terrorism; the support to NATO; Guantanamo; and the like.

## **Biology (M.S.)**

This program is offered at both the Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey. These programs are listed by campus: Florham Campus, this page, and Metropolitan Campus, page 56.

## **Biology (M.S.)**

### **Florham Campus**

This program is offered under the auspices of the department of biological and allied health sciences, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### **Admission Requirements**

1. Graduation from an accredited college or university with at least a 2.75 cumulative grade point ratio.
2. At least 24 semester hours in biology and a general program, including related scientific subjects, that would be equivalent to the biology major program offered for the Bachelor of Science degree at Fairleigh Dickinson University. Students who are deficient in some subject, but whose records are otherwise superior, may make up their deficiencies while they are enrolled in the graduate program.
3. Submission of an official score report for the Graduate Record Examinations (GRE) General Test, Medical College Admission Test (MCAT) or Dental Admission Test (DAT) taken within the last five years. (The GRE, MCAT or DAT test requirement is waived for applicants who have completed a master's degree.)
4. Three letters of recommendation.  
Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

### **Requirements for the Master of Science Degree**

1. A minimum of 32 credits, the equivalent of one year of full-time study beyond the undergraduate degree, is required for the Master of Science degree in biology.
2. A minimum of 21 credits must be biology courses, 12 of which must be completed within the department of biological and allied health sciences of the Maxwell Becton College of Arts and Sciences.
3. **Specialized areas of concentration** include **business, chemistry/pharmaceutical sciences, education and psychology/counseling** (minimum of 12 credits).
4. Electives, up to 12 credits, may include graduate courses from business, chemistry, education, psychology or as approved by the graduate program director. Students should note that Silberman College of Business courses taken by M.S.

# Biology

students in biology also may fulfill preliminary requirements for an M.B.A.

5. A maximum of 6 credits may be transferred from other institutions, with the approval of the graduate program director.

6. Students must consult the graduate program director when registering for courses.

7. A cumulative grade point ratio of 3.00 (B) is required for graduation. If a grade lower than a B is attained, the student will be placed on probation and warned that any additional grade below a B will result in dismissal from the program. A grade of D or F will result in automatic dismissal from the program.

8. Students have the option of completing their degrees with or without a research and thesis option.

Students who select the research and thesis option must declare their intent before registering beyond 15 credits and must begin preliminary work with a mentor. Students selecting the research and thesis option must complete the 4-credit sequence consisting of BIOL7803 Research and Thesis I and BIOL7804 Research and Thesis II. The thesis topic must be presented to and approved by the graduate faculty. The thesis must be written in the prescribed form and submitted for review by members of the graduate faculty. A thesis defense must be scheduled and the thesis successfully defended as a requirement of graduation.

Students who do not select the research and thesis option must complete two additional biology courses in lieu of BIOL7803 Research and Thesis I and BIOL7804 Research and Thesis II (33 credits required).

9. Students must obtain written approval from the biology graduate adviser prior to registering for any class outside of Becton College.

## Concentration in Business Areas

This curriculum is designed to enable biology graduate students to have a concentration in the business areas of either **management, marketing** or **finance**.

### Curriculum Requirements

The same 21-credit requirement as for the Master of Science degree in biology (see page 53) and at least 12 credits of business courses taken as a unit concentra-

tion. Courses may not be selected at random from the three areas of concentration. An adviser from the Silberman College of Business must be consulted. Any business course that an adviser from the College of Business deems appropriate may be selected.

## Concentration in Chemistry/Pharmaceutical Sciences

This curriculum is designed to enable biology graduate students to have a concentration in chemistry and pharmaceutical sciences.

### Curriculum Requirements

The same 21-credit requirement as for the Master of Science degree in biology (see page 53) and at least 12 credits of chemistry courses taken as a unit concentration. An adviser from the department of chemistry and pharmaceutical science must be consulted. Any chemistry course deemed appropriate by the adviser may be selected.

## Concentration in Education

For those allied health professionals interested in teaching in their professions, FDU offers an M.S. in biology with an education concentration. A master's student would take at least 21 graduate credits in biology and at least 12 credits in education.

### Curriculum Requirements

The same 21-credit requirement as for the Master of Science degree in biology (see page 53) and at least 12 credits of education courses taken as a unit concentration. An adviser from the Peter Sammartino School of Education must be consulted. Any education course deemed appropriate by the adviser may be selected.

## Concentration in Psychology/Counseling

This curriculum is designed to enable biology graduate students to have a concentration in psychology and counseling.

### Curriculum Requirements

The same 21-credit requirement as for the Master of Science degree in biology (see page 53) and at least 12 credits of psychology courses taken as a unit concentration. An adviser from the department of psychology and counseling must be con-

sulted. Any psychology course deemed appropriate by the adviser may be selected.

## Course Offerings

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with department chair.*

## Biology

### Department of Biological and Allied Health Sciences

In addition to the courses listed herein, the department offers a number of specialty courses. To determine the availability of courses for each semester, please contact the department of biological and allied health sciences at (973) 443-8778 or consult the FDU website, WebAdvisor (<http://webadvisor.fdu.edu>).

#### BIOL6010

##### 3 Credits

#### Global Parasitology Lecture

The history, geographic distribution, life cycles, diagnosis, symptomatology, control and treatment of protozoan-, helminth-, fungus- and arthropod-borne diseases; their effects on humans, domesticated and wild animals and economically important crop plants; plant and animal diseases that influenced history; and pathogens important in today's world will be studied in detail.

#### BIOL6011

##### 1 Credit

#### Global Parasitology Laboratory Workshop

Designed to complement BIOL6010 Global Parasitology Lecture, this course is a hands-on study of microscopic specimens and preserved materials emphasizing the structure, identification and life cycles of major protozoan, fungal and helminth parasites and arthropod vectors. Corequisite: BIOL6010 Global Parasitology Lecture.

#### BIOL6031

##### 3 Credits

#### Mycology

A survey of the fungi with emphasis on taxonomy, morphology, physiology and economic importance, including current research (primary journal articles, reviews and invited presentations). Corequisite: BIOL6032 Mycology Laboratory.

#### BIOL6052

##### 1 Credit

#### Mycology Laboratory

Students will learn the techniques used by mycologists to observe diverse fungal groups and how to isolate and identify fungi from natural and artificial sources. Corequisite: BIOL6051 Mycology.

Fee



## **BIOL6100**

**3 Credits**

### **Marine Ecology**

A detailed study of the structure and function of marine and estuarine environments, including the ecology of intertidal, estuarine, pelagic, tropical and benthic habitats. Emphasis will be placed on adaptations of marine organisms and their roles within the environment at individual, population and community levels of organization. Requires major research paper and readings from primary literature.

## **BIOL6380**

**3 Credits**

### **Animal Behavior**

A study of the causation, development and adaptive value of behavioral patterns of animals as individuals and in groups. Topics will include biological rhythms, migration, interactions, communication, reproductive behavior and sociality. Requires major research paper and additional readings from primary literature.

## **BIOL6430**

**3 Credits**

### **Cell Biology of Cancer**

Cancer is a collection of different genetic diseases. This course will discuss the major genes and cellular pathways that play a role in cancer. It will explore how these genes regulate the cell under normal conditions, and how they are perturbed in cancerous cells. The course also will cover some of the latest cancer therapies developed to target these misregulated genes.

## **BIOL6445**

**3 Credits**

### **Cell Signaling in Development and Human Disease**

This course will cover the details of intracellular and extracellular communication. Topics will include cell communication channels such as gap junctions, cell-signaling molecules such as growth factors and hormones, cellular receptors, cytoplasmic signal-transduction cascades and regulatory molecules changing gene expression based on certain cell signals. The course will also discuss the impact of cell signaling on pattern formation during development and its misregulation in diseases such as diabetes.

## **BIOL6470**

**3 Credits**

### **Reproductive Biology**

The course will provide a comprehensive examination of vertebrate reproduction. The goal will be to provide a foundation in the field of reproductive biology with an understanding of the principles and mechanisms of vertebrate reproduction. Topics will include: the genetics of sex determination, the evolution of sex, wildlife contraception, the biology of fertilization, the role of hormones in reproduction and cloning.

Students will be expected to read and discuss peer-reviewed scientific literature in addition to articles from popular and scientific press. Grading will be based on lecture exams and one major project.

## **BIOL6650**

**3 Credits**

### **Emerging Pathogens**

Human pathogens include bacteria, viruses, protozoan parasites and fungi. The goal of this course is to examine how pathogenic organisms cause human infections, and the underlying mechanisms of host defense and response to these pathogens. This course will provide students with a comprehensive introduction to the factors involved in pathogenic-derived human diseases. Pathogen mode of action, current relevance and emergence factors will be discussed in detail. The course will include both lectures and discussions of primary research articles.

## **BIOL6660**

**3 Credits**

### **Ecotoxicology**

This course will provide a foundation in the field of environmental toxicology and an understanding of the mechanisms and effects of toxin exposure in organisms. In addition, this course will incorporate specific environmental and ecological examples from primary literature. Topics include: acute and chronic exposures, bioaccumulation and trophic transfer of toxic compounds, sublethal and lethal effects of compounds on organisms, biomarkers, biomonitoring and population and community-level effects of toxin exposure. Requires major research paper and additional readings from primary literature.

## **BIOL6710**

**3 Credits**

### **Immunobiology**

A comprehensive study of the foundations and principles of immunology. The semester will be divided into four sections covering immunology, immunobiology, immunogenetics and immunopathology. Topics include antibody structure and diversity, allergy, mechanism of cellular immunity, histocompatibility, autoimmunity and tumor immunology.

## **BIOL6741**

**3 Credits**

### **Endocrinology**

The ductless glands, their hormones, interrelationships and influences on physiology, behavior, internal chemistry and disease. Glands of non-mammalian forms are studied; modern experimental methods and results are discussed and evaluated. Prerequisites: 20 credits of biological sciences including courses in anatomy and physiology.

## **BIOL6830**

**3 Credits**

### **Selected Studies in Biology**

Specific courses may be offered with prior departmental approval of course description and rationale for offering the course based on student interest.

## **BIOL6867**

**3 Credits**

### **Psychosexual Development**

Human prenatal and postnatal psychosexual development prior to puberty is examined in a descriptive and analytical bilinear model emphasizing interactions among nature, nurture and critical period. Development of the fetal genital system, encoding of neural templates and normophilic and paraphilic "love maps." Genetic, neuroanatomical and behavioral evidences for biological basis for gender difference, gender identity and gender orientation are considered. Chromosomal, genetic and developmental anomalies in psychosexual development are discussed.

## **BIOL6873**

**3 Credits**

### **Cardiovascular Physiology**

This course will cover the basic concepts and physiological mechanism of myocardial function, peripheral vascular function and the integrated functions of these two subsystems of the cardiovascular system. Interactions among other organ systems will be considered, particularly the interaction of the cardiovascular system with the renal and pulmonary systems. Specific topics include myocardial function, smooth muscle function, regulation of blood flow and blood pressure and transvascular exchange and fluid balance. The cardiovascular system will be considered from the cellular level to the whole organism level.

## **BIOL6877**

**3 Credits**

### **Insect-transmitted Diseases**

A study of insects and other arthropods as vectors of human and animal diseases; insect life cycle, disease-organism life cycle and environmental conditions for vector development; and disease transmission symptomatology, treatment and methods of control.

## **BIOL6878**

**3 Credits**

### **Pathophysiology**

Comprehensive study of physiological disorders in human-organ systems; examination of loss of functional capacities of affected organs and evaluation of underlying mechanisms of disease processes; mechanism of action of current therapeutic measures.

# Biology

## BIOL6879

3 Credits

### Human Genetics

Concepts of human genetics, the human genome project and molecular basis of genetic disorders; genetic diversity in human populations; application of genetic technologies in clinical therapy; social and ethical implication of genetic engineering.

## BIOL6880

3 Credits

### Neurobiology

Neuron-signaling processes including sensory transduction, action potential generation and transmission across chemical and electrical synapses. Sensory, motor systems and higher brain processes are explored. Prerequisites: Human Structure and Function or Human Anatomy and Physiology.

## BIOL6881

3 Credits

### Renal Physiology

A detailed study of the structure and physiology of the kidneys and urinary system.

## BIOL6895

3 Credits

### Gene Expression and Regulation

Gene expression, in which genetic information stored in the cellular DNA is decoded, is central to the survival of living organisms. The goal of this course is to introduce the biochemical mechanisms involved in gene expression and describe the principles underlying its regulation. Topics covered include bacterial and eukaryotic RNA transcription, translation and processing. The course includes lecture and discussion of primary research articles.

## BIOL7803, BIOL7804

6 Credits (3 Credits Each Semester)

### Research and Thesis I and II

The successful completion of a thesis under the supervision of a biology faculty member.

# Biology (M.S.)

## Metropolitan Campus

This program is offered under the auspices of the School of Natural Sciences, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

## Admission Requirements

1. Graduation from an accredited college or university with a 3.00 cumulative grade point ratio and at least 24 semester hours in biology and a general program, including related scientific subjects, which would be equivalent to the biology major program offered for the Bachelor of Science degree at Fairleigh Dickinson University. Students who are deficient in some subjects, but whose records are otherwise superior, may make up their deficiencies while they are enrolled in the graduate program.

2. Undergraduate academic attainment in biology, which meets with the approval of the graduate biology faculty.

3. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. (The GRE requirement is waived for applicants who have completed a master's degree.)

4. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

## Requirements for the Master of Science Degree

1. Satisfactory completion of a minimum of 32 credits in the courses approved for a graduate major in biology. A minimum of 20 credits must be taken in biological sciences, selected from the courses described on pages 57–59. A maximum of 6 credits may be transferred from another institution with the permission of the school director if these credits are not part of an existing master's degree. In addition, courses may be taken in other colleges and campuses of the University, with the director's permission.

2. Before a student may register beyond 9 credits, he or she is required to select a biology adviser. The adviser will help the

student select courses most appropriate for the student's needs and interests. Ideally, the student will select a faculty member in the area of interest most closely paralleling his or her own. This faculty member also may serve as the student's mentor.

3. Students have the option of completing their degrees with or without a research option. Students electing to do the research and thesis option must take BIOL7803, BIOL7804 Research and Thesis I, II, 2 credits each semester.

4. BIOL6900 Biology Seminar I and BIOL6901 Biology Seminar II are required 1-credit courses and must be taken in the fall and spring semesters.

## Required Biology Courses (20 credits)

With or without research option

	Credits
BIOL6900 Biology Seminar I.....	1
BIOL6901 Biology Seminar II.....	1

## Graduate Biology Courses (18 credits)

Choose from the following courses:

BIOL5306 Immunology.....	3
BIOL6240, BIOL6241 Molecular Cell Biology (Lecture and Laboratory).....	4
BIOL6705 Advances in Cell Biology.....	3
BIOL6719 Developmental Genetics.....	3
BIOL6725 Human Evolution.....	3
BIOL6728 Bioethics.....	3
BIOL6733 Enzymology.....	3
BIOL6761 Advances in Microbiology.....	3
BIOL6771 Behavioral Ecology.....	3
BIOL6775 Physiological Ecology.....	3
BIOL6845, BIOL6846 Molecular Biology Techniques (Lecture and Laboratory).....	4
BIOL7803 Research and Thesis I.....	2
BIOL7804 Research and Thesis II.....	2
BIOL7810 Selected Studies in Biology.....	3

	Credits
ENVR6552	
Environmental Risk Assessment.....	3
ENVR6569	
Wetland and Watershed Resources.....	3

### **Elective Courses (12 credits)**

Elective courses must be approved by the student's School of Natural Sciences' graduate adviser.

These courses may include additional graduate biology courses or independent studies that will fulfill a student's specific needs.

### **Undergraduate Students**

Senior undergraduate students with a 3.00 grade point ratio (GPR) may take graduate courses for undergraduate credit with permission of the instructor.

### **Curriculum Requirements**

Same as for the Master of Science degree in biology (see pages 56–57), but including 12 credits of business courses taken as a unit concentration. Courses may not be selected at random from the three areas of concentration. An adviser from the Silberman College of Business should be consulted for additional courses.

### **Business Concentration**

The students have a choice of six courses for 2 credits each in accounting, economics, law, management, marketing and entrepreneurship.

ACCT5012	
Financial Accounting: End-User Applications.....	2
ACCT6012	
Managerial Accounting Applications.....	2
ECON5012	
Economic Analysis.....	2
ECON6012	
Managerial Economics.....	2
ENTR6012	
Entrepreneurship and Innovation.....	2
LAW6012	
Society, Ethics and the Legal Environment of Business.....	2
LAW6657	
Applied Business Law.....	2
MGMT5012	
Foundations of Management.....	2
MGMT6012	
Organizational Behavior and Leadership.....	2

	Credits
MGMT6621	
Strategic Human Resource Management.....	2
MKTG5012	
Marketing Principles.....	2
MKTG6012	
Strategic Marketing.....	2
MKTG6112	
Social Media Strategy.....	2
The above listed elective courses have been approved by the graduate adviser and director of the business concentration for the Master of Science in biology degree.	
The 5000-level courses are prerequisites for the 6000-level courses and must be completed with a minimum grade of C.	

### **Elective Concentration Courses**

Elective courses (12 credits) must be approved by the student's School of Natural Sciences graduate adviser and director of the intended concentration.

These courses may include additional graduate biology courses, independent studies or other graduate courses that will fulfill a student's specific needs.

### **For Information**

For more information contact Dr. Marion McClary, professor of biological sciences and co-director, School of Natural Sciences, at (201) 692-2606 or mcclary@fd.edu.

### **Course Offerings**

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director.*

### **Biological Sciences**

*School of Natural Sciences*

#### **BIOL5306**

**3 Credits**

#### **Immunology**

Study of the structure and function of the molecular and cellular components of the immune system, genetic bases of immune responses, normal and pathological responses, tumor immunology, transplantation and immunological techniques. Open to qualified undergraduates with permission of instructor or adviser.

#### **BIOL6240**

**4 Credits**

#### **Molecular Cell Biology**

Modern cell biology investigates the central concept for cellular functioning — DNA to RNA to protein — by integrating biomolecules, biotechnology, regulating mechanisms, signals and sig-

naling pathways and aberrations that result in pathology, such as cancer. Corequisite: BIOL6241 Laboratory: Molecular Cell Biology.

#### **BIOL6241**

**0 Credits**

#### **Laboratory: Molecular Cell Biology**

The laboratory encompasses sequential experiments using tissue culture: cell toxicity; apoptosis; oxidative stress; immunocytochemistry; ELISA (enzyme-linked immunosorbent assay), SiRNA (small interfering RNA) or promoter-reporter transfection, mRNA isolation, polymerase chain reaction, gel electrophoresis; Northern blotting. Corequisite: BIOL6240 Molecular Cell Biology.

#### **BIOL6652**

**3 Credits**

#### **Selected Studies in Biology**

Recent developments in special fields of biology.

#### **BIOL6661**

**2 Credits**

#### **Lab: Advanced Microbiology**

Experiments illustrating topics discussed in BIOL6761 Advanced Microbiology. Corequisite: BIOL6761 Advanced Microbiology.

#### **BIOL6700**

**3 Credits**

#### **Advanced Biotechnology**

Molecular biotechnology encompasses the principles and applications of recombinant DNA technology in the production of commercial products such as ascorbate, antibodies, vaccines, growth factors, cytokines, nucleic acids, drugs, crops, livestock; the diagnosis of genetic diseases or infections with nucleic acids, immunological or biological probes/systems that are mostly PCR based; the analysis of information through bioinformatics, genomics and proteomics; and protein or nucleic-acid therapy with agents such as enzymes, aptamers or interfering nucleic acids.

#### **BIOL6705**

**3 Credits**

#### **Advances in Cell Biology**

Molecular organization of cells. Internal membranes and synthesis of macromolecules. The cell nucleus and cell division. Control of cell cycle. Cytoskeleton and cell-cell adhesion. The extra cellular matrix and signal transduction. *Fall, Spring*

#### **BIOL6719**

**3 Credits**

#### **Developmental Genetics**

This course introduces methods of current genetic and genomic analysis to understand the molecular mechanisms of development and regulation of genes in embryonic development. Lectures are based on developmental biology textbook and scientific literature on model organisms.

# Biology

---

## BIOL6724

3 Credits

### Human Genetics

Structure and function of human genes and chromosomes. Chromosome mapping and the human genome project. Numerical and structural chromosomal abnormalities, metabolic defects, genetic aspects of cancer and disorders of the immune system, gene therapy, genetic counseling and ethical issues.

Fall

## BIOL6725

3 Credits

### Human Evolution

Evolutionary biology of human species. History of hominid lineage and how evolutionary pressures explain physical and behavioral adaptations to past and present environments. Modern human genetic diversity and its relevance to biomedical research. Prior course work in evolution is required.

Spring

## BIOL6728

3 Credits

### Bioethics

Studies relating implications of biotechnological and biomedical innovations, individual perception of issues and the universal policies influencing the state of living species.

Summer

## BIOL6733

3 Credits

### Enzymology

Enzyme sources and purification, structure, kinetics and mechanisms. Sequencing and characterization, biocatalysis, control of enzyme activity, clinical aspects of enzymology and applications in biotechnology. Use of protein data banks and molecular modeling.

Spring

## BIOL6740

3 Credits

### Molecular Endocrinology

The course comprises of the biochemistry and molecular biology of hormone action: synthesis, secretion, release, regulation, metabolism, receptors, signal transduction, gene expression and the cellular effects of insulin, glucagon, catecholamines, glucocorticoids, growth hormone, growth factors, thyroxine, parathyroid hormone, calcitonin, gonadotropins, ovarian steroids, androgens, aldosterone, vasopressin; and hormone imbalance and effects in aging, malignancy and disease.

## BIOL6743

3 Credits

### Topics in Bioinformatics

Current biological research using mega amounts of data provided by microarrays, crystallographic, sequencing and other techniques. Topics

explore such data and some of the analysis methods available online focusing primarily on the DNA chips used for transcriptional profiling. Corequisite: BIOL6744 Lab: Topics in Bioinformatics.

## BIOL6744

0 Credits

### Lab: Topics in Bioinformatics

Experiments illustrating the topics discussed in BIOL6743 Topics in Bioinformatics. Corequisite: BIOL6743 Topics in Bioinformatics.

## BIOL6747

3 Credits

### Biotechniques

Current biotechnology techniques, including DNA cloning, gene regulation and protein expression/activity, using in-vitro models such as prokaryotic and eukaryotic cells or tissue-equivalents. Corequisite: BIOL6748 Lab: Biotechniques.

## BIOL6748

0 Credits

### Lab: Biotechniques

Experiments illustrating the topics discussed in BIOL6747 Biotechniques. Corequisite: BIOL6747 Biotechniques.

## BIOL6756

3 Credits

### Dermal Pharmacology and Immunology

Skin structure, function and immunology and their impact on the application and efficacy of cosmetic products. Pharmacological principles such as pharmacokinetics and pharmacodynamics are reviewed. The importance of skin safety testing.

Spring

## BIOL6758

3 Credits

### Advances in Pharmacology

Development and approval of new medications in the United States. Current medications used in the management of pathophysiological conditions involving the cardiovascular, respiratory, gastrointestinal, endocrine and nervous systems. Antiviral and antibacterial agents. Immunotherapy. Orphan drugs.

## BIOL6760

3 Credits

### Virology

Virus morphology and chemical composition, transmission and dynamics of infection, virus entry, virus assembly and virus vectors. Recent discoveries in molecular biology, pathogenesis and medical aspects of viruses.

## BIOL6761

3 Credits

### Advanced Microbiology

Organization of physiological processes in microorganisms, including structure, energy-yielding

mechanisms, macromolecular biosynthesis, growth and regulation. Prerequisite: undergraduate organic chemistry and microbiology.

Spring

## BIOL6771

3 Credits

### Behavioral Ecology

Behavioral ecology, conservative biology, mate choice, dispersal, reserve design, genetic diversity, subsistence harvesting and hunting. Note: FDU NetID (formerly Webmail) account required. Fully online course.

Summer

## BIOL6772

3 Credits

### Ecotoxicology

Principles and methods of biological testing for toxicity of effluents and receiving waters. Principles of cost-efficient compliance with toxicity limits placed on discharges.

Fall

## BIOL6775

3 Credits

### Physiological Ecology

Discussion of current topics addressing physiological adjustment of animals to the physical and chemical environment, tolerance of temperature, osmotic conditions, partial pressures of oxygen and starvation. Lecture and seminar. Note: FDU NetID (formerly Webmail) account required. Fully online course.

Summer

## BIOL6776

4 Credits

### Advances in Ecology

Interrelationships of biotic and abiotic components of the environment. Ecological energetics, population dynamics, distribution patterns, environmental imbalances and community succession will be studied. Corequisite: BIOL6777 Lab: Advances in Ecology.

Fall

## BIOL6777

0 Credits

### Lab: Advances in Ecology

Experiments illustrating the topics discussed in BIOL6776 Advances in Ecology. Corequisite: BIOL6776 Advances in Ecology.

Fall

## BIOL6779

3 Credits

### Darwinian Medicine

Application of Darwinian reasoning to medical research and clinical practice. Intrinsic biological aging, pathology due to defense mechanisms, acute and stealth infection, novel environments, genetic diversity, design compromises and evolutionary legacies. Prior course work in evolution is required.

Spring

**BIOL6840****3 Credits****Cell Culture**

Biology, characteristics and requirements of cells in culture. Aseptic cell culture methods and applications of the techniques to specific types of cell lines. Evaluation of cultured cell function. Scale-up of cell cultures. Cell-based assays and drug discovery. Applications in recombinant DNA technology.

*Fall**Fee***BIOL6845****4 Credits****3 Contact hours****Molecular Biology Techniques**

Classic and current biotechniques to include handling numbers, weighing and solution preparation, experimental design, spectrophotometry, chromatography, enzyme kinetics/inhibition, assays for reactive organ species, cell culture, agarose and polyacrylamide gel electrophoresis, Southern and Western blotting, cloning, eukaryotic cells, polymerase chain reaction (PCR) and real time. Corequisite: BIOL6846 Lab: Molecular Biology Techniques.

**BIOL6846****0 Credits****Lab: Molecular Biology Techniques**

Experiments illustrate the topics discussed in BIOL6845 Molecular Biology Techniques. Corequisite: BIOL6845 Molecular Biology Techniques.

**BIOL6888****3 Credits****Physiology of Disease**

The study of the physiological and biological manifestations of disease. Provides a basis as to how alterations in structure and function disrupt the human body as a whole. Prerequisites: BIOL3357 Human Structure and Function II and BIOL3358 Laboratory: Human Structure and Function II. Note: FDU NetID (formerly Webmail) account required. Fully online course.

**BIOL6890****3 Credits****Neuroscience**

The organization and function of the human nervous system including the molecular, cellular systems, behavioral and cognitive levels of analysis. Note: FDU NetID (formerly Webmail) account required. Fully online course.

**BIOL6891****3 Credits****Histology**

The structure and functional correlations of body tissues, cells, organs and organ systems. Note: FDU NetID (formerly Webmail) account required. Fully online course.

**BIOL6892****3 Credits****Human Physiology**

Molecular, cellular and systems physiology of the nervous, muscular, cardiovascular, respiratory, urinary, immune, endocrine and reproductive systems. Note: FDU NetID (formerly Webmail) account required. Fully online course.

**BIOL6900, BIOL6901****1 Credit Each Semester****Biology Seminar**

A series of lectures by invited speakers on topics of current interest. Exposure of students to research developments and techniques in selected areas of specialization.

**BIOL7803, BIOL7804****2 Credits Each Semester****Research and Thesis I, II**

The student is required to write and then defend before a faculty committee a thesis based on laboratory research and prepared under the supervision of a faculty member.

*Fall, Spring**Fee***BIOL7810****3 Credits****Selected Studies in Biology**

As student interest requires, courses in highly specialized topics may be offered.

*Fall, Wintersession, Spring***BIOL8000****1 Credit****Curricular Practical Training**

A Curricular Practical Training (CPT) requirement for work-experience course/independent study registration in most academic programs at FDU. The training experience is integral to the course and the detailed course objectives will be on a separate independent study proposal form. The student's work or training experience will be: part-time (20 hours or less per week) or full-time (more than 20 hours per week). A non-letter grade of P for Pass or NC for No Credit will be applied to degree audit as this course will be excess credit and not counted toward a degree requirement.

**ENVR6552****3 Credits****Environmental Risk Assessment**

This course describes the scientific basis for the steps in the risk-assessment processes and discusses current guidelines and procedures for performing them.

**ENVR6569****3 Credits****Wetland and Watershed Resources**

Includes the study of natural characteristics of inland (freshwater) and coastal (tidal) wetland ecosystems. It also provides an overview of

basic ecological principles related to watershed planning and describes the benefits of watershed management. It also examines wetland and watershed functions and values with applications to environmental impact assessment, wetlands and watershed planning, management and restoration. Course lectures and discussions will be supplemented by short, on-campus and local, off-campus field trips.

## Business

### Programs

#### Master of Business Administration (M.B.A.) (Specializations)

##### Accounting

See page 62.

##### Business Administration

See page 62.

##### Finance

See page 63.

##### International Business

See page 63.

##### Management

See page 63.

##### Marketing

See page 64.

##### Pharmaceutical Management Studies

See page 64.

##### Post M.B.A. Graduate Certificate Program

See page 65.

#### Master of Business Administration (M.B.A.) — Saturday M.B.A.

See page 66.

#### Master of Business Administration (M.B.A.) — Management for Executives

See page 67.

##### General Management Specialization

See page 68.

##### Health Sector Management Specialization

See page 68.

#### Master of Science (M.S.) — Accounting

See page 69.

#### Master of Science (M.S.) — Digital Marketing

See page 70.

#### Master of Science (M.S.) — Supply Chain Management

See page 70.

#### Master of Science (M.S.) — Taxation

See page 71.

The Silberman College of Business is accredited by AACSB International - The Association to Advance Collegiate Schools of Business. AACSB is the premier business school accrediting body.

The College of Business offers programs leading to the degrees of Master of Business Administration (M.B.A.) and

Master of Science in taxation (M.S.), Master of Science in accounting (M.S.), Master of Science (M.S.) in digital marketing and Master of Science in supply chain management (M.S.). Courses for the M.B.A. and M.S. degrees are scheduled during the evening and on Saturdays. Some courses are offered during the day. Courses for the M.S. in digital marketing are fully online. Programs may be pursued either on a full-time basis or part-time basis.

### Admission Requirements

All students who wish to enroll for graduate course work within the Silberman College of Business must apply for admission as matriculated students. All students must meet the requirements for graduate status or receive special permission from the M.B.A. Office. Check the specific requirements for the program in which you are interested.

### Academic Regulations

In addition to the academic regulations found elsewhere in this bulletin, the following regulations apply to all College of Business students.

#### 1. Cumulative Grade Point Ratio

A cumulative grade point ratio of 3.00 is required for graduation from the graduate programs of the College of Business.

#### 2. Graduation Requirements

To be eligible for graduation, students must be matriculated, must have completed a minimum of 30 nonwaivable credits in the M.B.A. and a minimum of 24 nonwaivable credits in the M.S. program, must have completed all required courses in the program and must have a cumulative grade point ratio of 3.00 or better. Core courses cannot be waived.

#### 3. Incompletes

The grade of I must be removed by the third week of the next full semester (excluding summer sessions). An incomplete that is not removed within this period is automatically changed to an F. In case of well-documented extenuating circumstances, an instructor and a student may jointly petition the dean for additional time in which to complete the course work. Such petitions must be submitted within the same period. The grade of I cannot be removed by registering for the course at Fairleigh Dickinson University or by taking its equivalent elsewhere.

#### 4. Matriculation Status

At least 80 percent of each student's non-waivable credits must be completed at Fairleigh Dickinson University.

#### 5. Residency Requirement

Matriculated students must maintain residency with the University during the period of time required to complete the course work required for the graduate degree. Residence means that students must be enrolled in the fall and spring semesters. Summers are not counted in the residency requirement. In addition, a total of 30 non-waivable credits must be completed in residency. A student who fails to enroll in a fall or spring semester without filing an *approved* leave of absence is considered to have broken residency and must apply for readmission. In this case, all rules and regulations effective at the time that the student applies for readmission are applicable to the student. M.B.A./M.S. students are permitted two one-semester leaves of absence. The total time permitted to complete the degree is seven calendar years, excluding leaves of absence. Any extension may be granted only under extenuating circumstances and only by the M.B.A./M.S. program director.

#### 6. Second M.B.A.

Award of a second M.B.A. is not permitted; however, students with an M.B.A. degree may receive certification in a second specialization upon completion of required and elected credits for that specialization. Students seeking a second area of specialization should consult with the M.B.A. program director. A 3.00 grade point ratio is required. Contact the respective M.B.A. advisers at the Metropolitan Campus, (201) 692-2424; and at the Florham Campus, (973) 443-8800.

#### 7. Scholarly Requirements

Grades for graduate work may be found in the academic regulations section in the front of this bulletin.

An average of 3.00 or better is required for graduation. A graduate student who receives a grade of F is required to present cause for consideration by the M.B.A. program director (in the case of non-M.B.A. students the program's director) as to why continued studies should be permitted. Documentation must be presented and approved before commencement of the next semester or the student will not be allowed to continue the graduate program.

A graduate student receiving the grade of F in a required course must repeat the

# Business • Master of Business Administration

course and achieve at least a grade of B. (Such a retake does not expunge the grade of F and it remains part of the student's records.) Should this level of performance not be attained, the student will be denied further registration.

## 8. Probation, Suspension and Dismissal

A student who completes 9 or more credits with a cumulative grade point ratio (CGPR) of less than 3.00 will be placed on academic probation. If at the completion of an additional 9 credits the CGPR is still below 3.00, the student will be subject to suspension or dismissal. This decision will be based on the student's overall academic performance and the student's likelihood of obtaining the minimum CGPR of 3.00 needed for graduation. Subsequently, if the student is allowed to continue his or her studies, the student's records will be reviewed each semester in which the CGPR remains below 3.00. The student will either be dismissed or be subject to credit limitations and minimum grade point requirements in order to be permitted to continue his or her studies.

*Please Note:* A student who is *suspended* has a right to apply for readmission after the lapse of one 15-week semester, not including the summer sessions. To be readmitted, a student must submit evidence to the M.B.A. program director of the student's likelihood of successfully completing all remaining degree requirements.

A student who has been *dismissed* may not apply for readmission. The student is dropped from the University (full-time and part-time programs).

## 9. Transfer Credit

A maximum of 6 nonwaivable credits of graduate course work required for a degree may be approved for transfer from another AACSB-accredited college or university under the following conditions: the course work must be approved as part of the student's program of studies; it must not have been applied to the completion of the requirements for another degree; it must have been taken at the graduate level; it must have been taken within the past five years; and the student must have received a grade of B or better. Approval of transfer credit will be made by petition to the department chairperson for the course in question. A transcript of the course work must be on file before the petition can be considered.

# Master of Business Administration (M.B.A.)

## General Programs

*Fairleigh Dickinson University's Silberman College of Business offers an M.B.A. program accredited by both the AACSB International - Association to Advance Collegiate Schools of Business and the Middle States Commission on Higher Education.\* A graduate student in the Silberman College of Business currently earns an M.B.A. by completing 42 credits of course work.*

## Admission Requirements

Complete credentials for the evaluation of applicants for the M.B.A. degree program include the following:

1. A four-year bachelor's degree from an accredited or government-recognized college or university.
2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.
3. An official score report for the Graduate Management Admission Test (GMAT)/ Graduate Record Examinations (GRE). FDU undergraduates with exemplary grade point ratios are eligible to waive the GMAT/GRE requirement. Contact the Office of Graduate Admissions for information.

4. An updated résumé.
5. A minimum score of 550 (paper-based) or 213 (computer-based) or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) is required for all applicants whose native language is not English.

## Requirements for the Master of Business Administration Degree

The M.B.A. program consists of 42 credits. In addition to the requirements set forth by each specialization (10 of 42 credits) and the capstone course (2 of 42 credits), all students must complete a set of foundation courses (12 credits) and the M.B.A. core module (18 credits) that includes the following courses:

\*3624 Market Street, Philadelphia, Pa. 19104-2680; telephone: (267) 284-5000.

## Foundation Courses (12 credits)

The foundation includes six courses. All classes are two credits.

	Credits
ACCT5012 Financial Accounting: End-User Applications.....	2
DSCI5012 Statistical Data Analysis.....	2
ECON5012 Economic Analysis.....	2
FIN5012 Principles of Finance.....	2
MGMT5012 Foundations of Management.....	2
MKTG5012 Marketing Principles.....	2

For each foundation course, the Silberman College of Business grants waiver credit. The waiver policy that governs each course is established by the department responsible for that course. Requests for waivers must be submitted to the appropriate department and approvals received **before the end of the student's first semester in the program**. For further information visit the **Waiver Credit Policy Procedures** section of the M.B.A. Advising website.

Each waiver of a foundation course reduces the number of required credits by the amount indicated.

## M.B.A. Core (18 credits)

The M.B.A. core consists of a total of **18 credits of required courses**. These courses **cannot be waived**; however, a student will be eligible to transfer a maximum of 6 credits provided these credits have been earned in an M.B.A. program at another AACSB-accredited institution under the conditions listed in the Transfer Credit section. The M.B.A. core includes:

ACCT6012 Managerial Accounting Applications.....	2
DSCI6012 Operations Management.....	2
ECON6012 Managerial Economics.....	2
ENTR6012 Entrepreneurship and Innovation.....	2
FIN6012 Corporate Finance.....	2
LAW6012 Society, Ethics and Legal Environment of Business.....	2
MGMT6012 Organizational Behavior and Leadership.....	2

# Business • Accounting • Business Administration

	Credits
MIS6012 Information Systems for Managers.....	2
MKTG6012 Strategic Marketing.....	2

## Capstone (2 credits)

All M.B.A. students must, within the final 8 credits of course work, complete either:  
ENTR7012

Entrepreneurship Capstone  
or

MGMT7012 Global Business Capstone.....	2
---	---

NOTE: Students with an entrepreneurship specialization are required to take ENTR7012 Entrepreneurship Capstone. Students with a management specialization are required to take MGMT7012 Global Business Capstone. Students enrolled in other specializations can select either capstone course.

## International Student Requirement

In certain circumstances it may be necessary for students to further develop their proficiency in English to ensure academic success. In these cases, students are required to take EPS5109 English for Occupational Purposes and EPS5119 English for Academic Purposes.

NOTE: Although EPS is a 0-credit course, students may elect to apply 3 developmental credits (using EPS) to their first semester plus 6 credits of graduate course work to complete full-time student schedule requirements.

## Graduation

To qualify for graduation, the student must, within seven years from the entry date, complete the prescribed curriculum and do so with no lower than a 3.00 cumulative grade point ratio. Only grades for graduate courses offered by the Silberman College of Business at Fairleigh Dickinson University or taken off-campus with prior authorization are used to compute the cumulative grade point ratio.

Students in the M.B.A. program have the option of earning a specialization in accounting, entrepreneurship, finance, information systems, international business, management, marketing, pharmaceutical management or through business administration electives. Details about the requirements for each specialization follows.

## Accounting (M.B.A.)

Students interested in seeking a specialization in accounting are recommended to schedule an appointment with the department chair if they are interested in the requirements for the CPA exam in New Jersey. Due to the variations in the requirements specified by each state, the department chair will best be able to determine the requirements a student must satisfy for being eligible to appear for the exam. To schedule an appointment contact department chair, accounting, tax and law.

This specialization is offered under the auspices of the department of accounting, taxation and law, Silberman College of Business, Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey.

## Specialization Requirements

Specialization requirements consist of a total of 10 credits of required courses.

In addition to the College's requirements for the Master of Business Administration degree (see page 61), students must complete the specialization requirements specific to their majors.

## Required Courses (6 credits)

	Credits
ACCT6630 Intermediate Accounting I.....	3
ACCT6635 Intermediate Accounting II.....	3

## Elective (4 credits)

Choose from the following:

ACCT6605 Federal Tax I: Individual.....	3
ACCT6617 Cost: Measurement, Planning and Control.....	3
ACCT6618 Auditing Concepts and Methods.....	3
ACCT6640 Advanced Financial Accounting.....	3
ACCT6800 Graduate Independent Study*.....	1-3

For up-to-date course information go to <http://view2.fdu.edu/academics/silberman-college/graduate/mba/mba-accounting/>.

## Course Descriptions

See "Course Offerings," pages 72-84.

*\*In lieu of a one-credit Graduate Independent Study course needed to complete 10 credits of required accounting courses, students may substitute ACCT6617 Cost: Measurement, Planning and Control, which is a 3-credit course, or ACCT6012 Managerial Accounting Applications, which is a 2-credit course.*

## Business Administration (M.B.A.)

M.B.A. students who do not wish to specialize in a specific discipline may customize their education by choosing any five graduate courses offered by the Silberman College of Business that meet their specific career goals and interests.

All students interested in the business administration M.B.A. degree must still complete the M.B.A. foundation courses (unless they receive waivers in any of these courses), the M.B.A. Core courses, as well as the capstone requirement (either ENTR7012 Entrepreneurship Capstone or MGMT7012 Global Business Capstone). However, students may fulfill their elective requirements with a mix of five graduate courses offered by any of the five departments within Silberman College of Business, Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey (subject to course availability).

For current course information visit [view2.fdu.edu/academics/silberman-college/graduate/mba/business-administration-mba/](http://view2.fdu.edu/academics/silberman-college/graduate/mba/business-administration-mba/).

## Course Descriptions

See "Course Offerings," pages 72-84.



## Finance (M.B.A.)

This specialization is offered under the auspices of the department of economics, finance and international business, Silberman College of Business, Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey.

### Specialization Requirements

In addition to the College's requirements for the Master of Business Administration degree (see page 61), students must complete the specialization requirements listed below.

#### Required Courses (6 credits)

	Credits
FIN6701	
Strategic Financial Decisions.....	2
FIN6721	
Financial Markets and Investments.....	2
FIN6731	
Portfolio Management.....	2

#### Electives\* (4 credits)

Choose two from the following:

FIN6742	
Global Finance.....	2
FIN6751	
Mergers and Acquisitions.....	2
FIN6800	
Graduate Independent Study.....	1–2
FIN6801	
Seminar in Corporate Finance.....	2

For current course information visit <http://view2.fdu.edu/academics/silberman-college/graduate/mba/mba-finance/>.

#### Course Descriptions

See “Course Offerings,” pages 72–84.

\*Other elective courses in finance will be added to this list for satisfying this requirement.

## International Business (M.B.A.)

Rewarding careers for international business specialists exist in global corporate operations, international financial services, national and international government agencies, travel and leisure and transportation and banking, just to name a few.

The M.B.A. with a specialization in international business is offered under the auspices of the department of economics, finance and international business, Silberman College of Business, at the Metropolitan Campus, Teaneck, New Jersey.

### Specialization Requirements

In addition to the College's requirements for the Master of Business Administration degree, general programs (see page 61), students must complete the specialization requirements listed below.

#### Required Courses (4 credits)

	Credits
IBUS6012	
International Business Concepts.....	2
IBUS6020	
Economics of International Trade.....	2

#### Electives (6 credits)

Choose three from the following:

IBUS6072	
International Management.....	2
IBUS6706	
International Marketing.....	2
IBUS6742	
Global Finance.....	2
IBUS6800	
Graduate Independent Study.....	1–2

For current course information visit <http://view2.fdu.edu/academics/silberman-college/graduate/mba/mba-international-business/>.

#### Course Descriptions

See “Course Offerings,” pages 72–84.

## Management (M.B.A.)

The M.B.A. with a specialization in management program is for professionals seeking to improve their skills in managing people and organizational systems. It is designed to build skills in leadership, team building and motivation of the workforce. The program builds knowledge of how business strategy affects organizational interaction with the marketplace and how to structure the workplace to enhance organizational growth and productivity.

This program is offered under the auspices of the department of management and entrepreneurship, Silberman College of Business, at the Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey.

### Specialization Requirements\*

In addition to the College's requirements for a Master of Business Administration degree, general programs (see page 61), students must complete the specialization requirements listed below.

#### Required Courses (8 credits)

	Credits
MGMT6112	
Managing Sustainability in a Global Environment.....	2
MGMT6621	
Strategic Human Resource Management.....	2
MGMT6635	
Leadership and Change Management.....	2
MGMT6640	
Leadership Development Project.....	2

#### Elective (2 credits)

Choose one from the following

MGMT6625	
Managing a Healthy Workforce.....	2
MGMT6700	
Negotiation and Conflict Management...	2
MGMT6800	
Graduate Independent Study.....	1–2

For current course information visit <http://view2.fdu.edu/academics/silberman-college/graduate/mba/mba-management/>.

#### Course Descriptions

See “Course Offerings,” pages 72–84.

\*Students specializing in management are required to take MGMT7012 Global Business Capstone as their capstone course.

# Business • Marketing • Pharmaceutical Management Studies

## Marketing (M.B.A.)

The marketing specialization curriculum prepares students with a solid foundation in the fundamentals of marketing strategy, consumer behavior and marketing research. Students build on this foundation by selecting from a number of marketing electives in specialized areas. The selection of electives is typically driven by the career goals of the students and include areas such as advertising, sales and promotions.

This specialization is offered under the auspices of the department of marketing, information systems and decision sciences, Silberman College of Business, at the Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey.

### Specialization Requirements

In addition to the College's requirements for the Master of Business Administration degree (see page 61), students must complete the specialization requirements listed below.

### Required Courses (4 credits)

	Credits
MKTG6602	
Marketing Research.....	2
MKTG6603	
Consumer Behavior.....	2

### Electives (6 credits)

Choose three courses

MKTG6111	
Digital Marketing Strategies* .....	2
MKTG6112	
Social Media Strategy.....	2
MKTG6113	
Mobile Marketing Strategies* .....	2
MKTG6605	
Marketing Communications.....	2
MKTG6800	
Graduate Independent Study.....	1-2

For current course information visit  
<http://view2.fdu.edu/academics/silberman-college/graduate/mba/mba-marketing/>.

### Course Descriptions

See "Course Offerings," pages 72-84.

\*Distance learning course.

## Pharmaceutical Management Studies (M.B.A.)

The M.B.A. with a specialization in pharmaceutical management program has two objectives:

1) to prepare employees for greater management responsibilities in a challenging world and 2) to enhance the competitive position of pharmaceutical companies in global markets.

The program achieves these objectives by providing talented, motivated students with a thorough grounding in the principles of business management, coupled with training in subjects and skills of specific value to those working in these technology-intensive and heavily regulated pharmaceutical companies.

The program is sufficiently flexible to accommodate students of varied educational and industrial backgrounds. Past and present participants include men and women whose positions run the gamut from entry level to the executive suite, from production, research, finance and accounting to sales and marketing. Their educational backgrounds vary from undergraduate majors in liberal arts, science, engineering and business to earned master's and doctoral degrees.

This specialization is offered under the auspices of the department of management and entrepreneurship, Silberman College of Business, at the Florham Campus, Madison, New Jersey.

### Specialization Requirements

In addition to the College's requirements for the Master of Business Administration degree (see page 61), students must complete the specialization requirements listed below.

### Required Courses (6 credits)

	Credits
PHAR6601	
Health Care Systems and Policy.....	3
PHAR6690	
Managing the Value Proposition.....	3

### Electives (4 credits)

Choose two courses

PHAR6615	
Pharmaceutical Marketing and Product Development.....	2

Credits

PHAR6640	
Management of Research and Technology in the Pharmaceutical Industry.....	2
PHAR6650	
Management of Production, Purchasing and Quality Control in the Pharmaceutical Industry.....	2
PHAR6680	
Structure, Regulation and Strategy of the Pharmaceutical Industry.....	2
PHAR6800	
Graduate Independent Study.....	1-2

For current course information visit  
<http://view2.fdu.edu/academics/silberman-college/graduate/mba/mba-pharmaceutical-management/>.

### Course Descriptions

See "Course Offerings," pages 72-84.

# Business • Post-M.B.A. Graduate Certificate Program

## Post-M.B.A. Graduate Certificate Program

The Post-M.B.A. Graduate Certificate Program was developed to meet the needs of M.B.A. graduates who, after receiving their degrees, find themselves working in environments that require a continuation of their education. Through promotion, employment with new companies, relocation or otherwise, M.B.A. degree holders often find themselves working in areas for which they were not originally trained. Other graduates realize the necessity of keeping current with a business environment that is rapidly changing. Courses are offered both in the evenings and on Saturdays.

### Admission Requirements

To qualify for the Post-M.B.A. Graduate Certificate Program, applicants must have received an M.B.A. or a specialized master's degree in a business-related field from an accredited college or university.

Students are not required to submit Graduate Management Admission Test (GMAT) scores.

### Requirements for the Post-M.B.A. Certificate

Students may choose courses from one of the following M.B.A. study areas:

Accounting  
Finance  
International Business  
Management  
Marketing  
Pharmaceutical Management

To qualify for the certificate, students must have at least a 3.00 cumulative grade point ratio.

### Accounting Graduate Certificate

For a Certificate in Accounting, students must complete the following five courses (13 credits):

	Credits
ACCT5012	
Financial Accounting: End-User Applications*	2
ACCT6012	
Managerial Accounting Applications.....	2

\*Can be completed as part of the M.B.A. curriculum.

	Credits
ACCT6630	
Intermediate Financial Accounting I.....	3
ACCT6635	
Intermediate Accounting II.....	3
ACCT6640	
Advanced Financial Accounting.....	3

In addition students have to complete any two courses (6 credits) from the following list:

ACCT6605	
Federal Income Tax I: Individual.....	3
ACCT6606	
Federal Income Tax II: Business Entities.....	3
ACCT6617	
Cost: Measurement, Planning and Control.....	3
ACCT6618	
Auditing Concepts and Methods.....	3

### Finance Graduate Certificate

For a Certificate in Finance, students must complete the following six courses (12 credits):

ECON6012	
Managerial Economics*.....	2
FIN5012	
Principles of Finance*.....	2
FIN6012	
Corporate Finance*.....	2
FIN6701	
Strategic Financial Decisions.....	2
FIN6721	
Financial Markets and Investments.....	2
FIN6731	
Portfolio Management.....	2

In addition students will be required to complete any three courses (6 credits) from the following list:

FIN6112	
Finance Decisions for a Sustainable Enterprise.....	2
FIN6742	
Global Finance.....	2
FIN6751	
Mergers and Acquisitions.....	2
FIN6800	
Graduate Independent Study.....	2
FIN6801	
Seminar in Corporate Finance.....	2

### International Business Graduate Certificate (at Metropolitan Campus only)

For a Certificate in International Business, students must complete the following five courses (10 credits):

	Credits
ECON5012	
Economic Analysis*.....	2
ECON6012	
Managerial Economics*.....	2
IBUS6012	
International Business Concepts.....	2
IBUS6020	
Economics of International Trade.....	2
MKTG5012	
Marketing Principles*.....	2

In addition students have to complete any four courses (8 credits) from the following list:

IBUS6072	
International Management.....	2
IBUS6706	
International Marketing.....	2
IBUS6742	
Global Finance.....	2
IBUS6800	
Graduate Independent Study.....	2

### Management Graduate Certificate

For a Certificate in Management, students must complete the following seven courses (14 credits):

MGMT5012	
Foundations of Management*.....	2
MGMT6012	
Organizational Behavior and Leadership*.....	2
MGMT6112	
Managing Sustainability in a Global Environment.....	2
MGMT6621	
Strategic Human Resource Management.....	2
MGMT6633	
Leadership and Change Management... ..	2
MGMT6640	
Leadership Development Project.....	2
MGMT7012	
Global Business Capstone*.....	2

In addition students have to complete any two courses (4 credits) from the following list:

MGMT6625	
Managing a Healthy Workforce.....	2
MGMT6700	
Negotiation and Conflict Management.....	2
MGMT6800	
Graduate Independent Study.....	2

\*Can be completed as part of the M.B.A. curriculum.

# Business • Saturday M.B.A.

## Marketing Graduate Certificate

For a Certificate in Marketing, students must complete the following five courses (10 credits):

	Credits
ENTR6012	
Entrepreneurship and Innovation*.....	2
MKTG5012	
Marketing Principles*.....	2
MKTG6012	
Strategic Marketing*.....	2
MKTG6602	
Marketing Research.....	2
MKTG6603	
Consumer Behavior.....	2

In addition students have to complete any four courses (8 credits) from the following list:

ENTR6112	
Strategic Innovation Management.....	2
MKTG6111	
Digital Marketing Strategies**.....	2
MKTG6112	
Social Media Strategy.....	2
MKTG6113	
Mobile Marketing Strategies**.....	2
MKTG6605	
Marketing Communications.....	2
MKTG6800	
Graduate Independent Study.....	2

## Pharmaceutical Management Graduate Certificate

For a Certificate in Pharmaceutical Management, students must complete the following five courses (12 credits):

	Credits
ECON5012	
Economic Analysis*.....	2
MGMT5012	
Foundations of Management*.....	2
MKTG5012	
Marketing Principles*	
or	
DSCI6012	
Operations Management*.....	2
PHAR6601	
Health Care Systems and Policy.....	3
PHAR6602	
Managing the Value Proposition.....	3

In addition students have to complete any three courses (6 credits) from the following list:

PHAR6615	
Pharmaceutical Marketing and Product Development**.....	2
PHAR6640	
Management of Research and Technology in the Pharmaceutical Industry.....	2
PHAR6650	
Management of Production, Purchasing and Quality Control in the Pharmaceutical Industry***.....	2
PHAR6680	
Structure, Regulation and Strategy of the Pharmaceutical Industry.....	2
PHAR6800	
Graduate Independent Study.....	2

## For Additional Information

Students interested in this program should contact the Silberman College of Business M.B.A. Offices on the Metropolitan Campus at (201) 692-2424 or on the Florham Campus at (973) 443-8800 or visit <http://view2.fdu.edu/academics/silberman-college/graduate/mba/graduate-certificates/>.

\*Can be completed as part of the M.B.A. curriculum.

\*\*Must take MKTG5012 Marketing Principles.

\*\*\*Must take DSCI6012 Operations Management.

# Master of Business Administration (M.B.A.) — Saturday M.B.A.

The Saturday M.B.A. program is designed for the business professional. The curriculum is designed using a blended pedagogical model that comprises both in-class sessions with online interactions. Courses are delivered in eight-week modules, where students are required to attend in-class sessions every other Saturday (on the average). The other sessions are completed online. Students complete the program as a cohort, and this design enables them to balance work, personal and class commitments and achieve their career goals. Students can earn their M.B.A. within a 21-month period while continuing to meet their full-time responsibilities at work.

The program consists of 21 courses, each comprising 2 credits, for a total of 42 credits. The in-class sessions (every other Saturday) are scheduled between 8:30 a.m. and 5 p.m. Program cohorts are established twice a year, in the spring semester (January start), as well as in the fall semester (August start). Students may apply for the fall cohort as late as the second week of August and for the spring cohort as late as the second week of January.

## Admission Requirements

1. A four-year bachelor's degree from an accredited or government-recognized college or university.
2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.
3. An official score report for the Graduate Management Admissions Test (GMAT). Students who have taken the Graduate Record Examinations (GRE) may submit their GRE score in lieu of a GMAT score. FDU undergraduates with exemplary grade point ratios are eligible to waive the GMAT/GRE requirement. Contact the Office of Graduate Admissions for information.
4. An updated résumé.
5. A minimum score of 550 (paper-based), 213 (computer-based) or 79 (internet-based) on the Test of English as a For-

\*Can be completed as part of the M.B.A. curriculum.

\*\* Distance learning course

# Business • Management for Executives

English Language (TOEFL) is required for all applicants whose native language is not English.

## Requirements for the Master of Business Administration Degree

### Foundation Courses (12 credits)

	Credits
ACCT5012	
Financial Accounting: End-User Applications.....	2
DSCI5012	
Statistical Data Analysis.....	2
ECON5012	
Economic Analysis.....	2
FIN5012	
Principles of Finance.....	2
MGMT5012	
Foundations of Management.....	2
MKTG5012	
Marketing Principles.....	2

### Core Courses (20 credits)

ACCT6012	
Managerial Accounting Applications.....	2
DSCI6012	
Operations Management.....	2
ECON6012	
Managerial Economics.....	2
ENTR6012	
Entrepreneurship and Innovation.....	2
FIN6012	
Corporate Finance.....	2
LAW6012	
Society, Ethics and Legal Environment of Business.....	2
MGMT6012	
Organizational Behavior and Leadership.....	2
MGMT7012	
Global Business Capstone	
	or
ENTR7012	
Entrepreneurship Capstone.....	2
MIS6012	
Information Systems for Managers.....	2
MKTG6012	
Strategic Marketing.....	2

### Discipline-enrichment Courses

These courses are intended to enhance the content covered in the core courses by identifying a few specialized business topics that are of contemporary relevance and interest. Students have to complete five such courses, each worth 2 credits.

	Credits
DSCI6112	
Project Management.....	2
ENTR6112	
Strategic Innovation Management.....	2
FIN6112	
Financial Decisions for Sustainable Enterprise.....	2
MGMT6112	
Managing Sustainability in a Global Environment.....	2
MKTG6112	
Social Media Strategy.....	2

## Master of Business Administration (M.B.A.) — Management for Executives

The M.B.A. — Management for Executives program is structured such that it enables a current or future executive the opportunity to complete the academic requirements for the degree within 21 months while he or she continues to meet full-time work responsibilities. Each group of students (cohort) goes through the entire program as an integrated cohort, thereby developing a close working relationship that enriches and reinforces the learning process.

The program consists of 45 credits. The **general management specialty** includes two specialty courses (45-credit program) and **health sector management specialty** includes one specialty course (45-credit program).

Classes are scheduled on Saturdays, from 8:30 a.m. to 4:30 p.m.

The program curriculum also includes a required, 12-day study-abroad visit to an emerging market in Europe, Asia or Latin America. This visit is associated with the EXEC6509 International Business course. This visit is designed to provide the student with an appreciation of the opportunities and challenges associated with pursuing global business opportunities. In addition, students in the program also benefit from an executive coaching experience where each student works individually with an executive coach on issues ranging from career development to strengths and areas for improvement.

The program charge\* includes tuition, fees, books, meals, round-trip airfare and room and board during the overseas seminar. Tuition is payable at the beginning of each semester, intersession and summer session. The tuition is nonrefundable after the semester begins.

\*For tuition and fees, see *Registration, Tuition and Billing Information*, pages 20–22. New tuition and fee charges will be announced in the spring of each year. Please check with the Office of Enrollment Services for current charges.

# Business • Management for Executives

Program cohorts are established twice a year, both in the spring (February) and in the fall (September). New students may apply for the fall cohort as late as the third week of August and for the spring cohort as late as the third week of January.

This program is offered under the auspices of the Office of Executive Programs, Silberman College of Business.

## Admission Requirements

Complete credentials for the evaluation of applicants for the Master of Business Administration for Executives program include the following:

1. A bachelor's degree from an accredited college or university.
2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.
3. A minimum of five years of business experience.
4. A personal interview with the program director.
5. A current professional résumé.
6. Two letters of recommendation, with one from the student's immediate supervisor.
7. At the discretion of the program director, the Graduate Management Admission Test (GMAT) requirement may be waived, based on experience and prior academic achievement.

## Requirements for the Master of Business Administration Degree

### M.B.A. — Management for Executives

- General Management Specialization (45 credits)
- Health Sector Management Specialization (45 credits)

### General Management Specialization (45 credits)

#### Foundation Courses (13.5 credits)

	Credits
EXEC5501	
Macroeconomic Analysis.....	3
EXEC5502	
Social, Legal and Ethical Issues.....	1.5
EXEC5503	
Fundamentals of Management.....	1.5
EXEC5504	
Fundamentals of Marketing.....	1.5
EXEC5505	
Fundamentals of Financial Accounting.....	1.5

	Credits
EXEC5506	
Principles of Microeconomics.....	1.5
EXEC5507	
Principles of Finance.....	1.5
EXEC5508	
Statistical Thinking and Methods.....	3

#### Core Courses (28.5 credits)

EXEC6501	
Corporate Creativity and Innovation... 1.5	1.5
EXEC6502	
Financial Accounting and Reporting..... 3	3
EXEC6503	
Managerial Economics.....	3
EXEC6504	
Finance for Managers.....	3
EXEC6505	
Organizational Behavior and Leadership.....	3
EXEC6506	
Strategic Marketing.....	3
EXEC6507	
Strategic Management of Information Systems.....	3
EXEC6508	
Supply Chain Management.....	3
EXEC6509	
International Business.....	3
EXEC6510	
Global Business Capstone.....	3

#### Specialization Courses (3 credits)

EXEC6901	
Managing Sustainability for Competitive Advantage.....	1.5
EXEC6902	
Project Management.....	1.5

### Health Sector Management Specialization (45 credits)

#### Foundation Courses (13.5 credits)

EHCM6901	
Fundamentals of Health Systems and Policy.....	3
EHCM6902	
Essentials of Health Care Financial Management.....	1.5
EXEC5503	
Fundamentals of Management.....	1.5
EXEC5504	
Fundamentals of Marketing.....	1.5
EXEC5505	
Fundamentals of Financial Accounting.....	1.5
EXEC5506	
Principles of Microeconomics.....	1.5
EXEC5508	
Statistical Thinking and Methods.....	3

#### Core Courses (28.5 credits)

	Credits
EHCM6903	
Finance for Health Care Managers.....	3
EHCM6904	
Health Care Operations Management... 3	3
EXEC6501	
Corporate Creativity and Innovation... 1.5	1.5
EXEC6502	
Financial Accounting and Reporting..... 3	3
EXEC6503	
Managerial Economics.....	3
EXEC6505	
Organizational Behavior and Leadership.....	3
EXEC6506	
Strategic Marketing.....	3
EXEC6507	
Strategic Management of Information Systems.....	3
EXEC6509	
International Business.....	3
EXEC6510	
Global Business Capstone.....	3

#### Specialization Course (3 credits)

EHCM6905	
Contemporary Issues in Health Sector Management.....	3

## Course Descriptions

See "Course Offerings," pages 72–84.

## Master of Science (M.S.) — Accounting

There are two tracks in this 30-credit program. Completion of either track will academically qualify students to take the CPA Exam. Track A is designed for students who have an undergraduate major or concentration in accounting. Track B is suited for those students who lack an undergraduate background in accounting and desire a focus in this area at the graduate level. The tracks are offered evenings and Saturdays.

This program is offered under the auspices of the department of accounting, taxation and law, Silberman College of Business, at the Florham Campus, Madison, New Jersey; the Metropolitan Campus, Teaneck, New Jersey; and offsite.

### Admission Requirements

Complete credentials for the evaluation of applicants for the M.S. degree program include the following:

1. A four-year bachelor's degree from an accredited or government-recognized college or university.
2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.
3. An official score report for the Graduate Management Admission Test (GMAT). FDU undergraduates with exemplary grade point ratios are eligible to waive the GMAT/GRE. The GMAT requirement may be waived based on experience and prior academic achievement. Contact the Office of Graduate Admissions for information.
4. A minimum score of 550 (paper-based) or 213 (computer-based) or 79 (Internet-based) on the Test of English as a Foreign Language (TOEFL) is required for all applicants whose native language is not English.
5. International Student Proof of Financial Responsibility (for international students only).

### Requirements for the Master of Science Degree — Accounting

#### Track A

This 30-credit program is for students who have the bachelor's degree or concentration in accounting and is designed to meet the 150-hour educational requirements for the CPA Exam.

Completion of Track A will academically qualify students to take the CPA Exam in New Jersey.

<i>Required Courses (15 credits)</i>	Credits
ACCT6606	
Federal Tax II: Business Entities.....	3
ACCT6680	
Selected Accounting Topics.....	3
ACCT6682	
Advanced Auditing.....	3
ACCT6690	
Seminar: Accounting and Auditing	
Case Studies.....	3
LAW6657	
Applied Business Law.....	3

#### Electives (15 credits)

Accounting Elective.....	3
Accounting or Tax Electives.....	6
Business Electives.....	6

Tax electives may be chosen from the tax courses offered by the M.S. in taxation program at the University. See pages 71–72 or <http://www.fdu.edu/tax>. Subject to prior approval, such tax courses may be counted toward the M.S. in taxation degree.

#### Track B

This 30-credit program is for students who do not have the bachelor's degree in accounting. NOTE: At least one undergraduate course in financial accounting is required for admission into the program.

The requirements for the New Jersey CPA Exam will change effective June 2017. In addition to 24 credits of accounting courses, 24 credits of business courses are also required. Six credits of business courses are already included in this Track B program. Students who have a business background with sufficient number of business credits will qualify to sit for the New Jersey CPA Exam. Students who do not have any business credits or have insufficient business credits will have to take up to an additional 18 credits of business courses to take the New Jersey CPA Exam.

#### Required Courses (30 credits)

	Credits
ACCT6605	
Federal Tax I: Individual.....	3
ACCT6606	
Federal Tax II: Business Entities.....	3
ACCT6617	
Cost: Measurement, Planning and Control.....	3
ACCT6618	
Auditing Concepts and Methods.....	3
ACCT6630	
Intermediate Accounting I.....	3
ACCT6635	
Intermediate Accounting II.....	3
ACCT6640	
Advanced Financial Accounting.....	3
ACCT6680	
Selected Accounting Topics.....	3
FIN6020	
Financial Analysis for Accountants*.....	3
LAW6657	
Applied Business Law.....	3

### For Information

For detailed information contact department of accounting, taxation and law, at (973) 443-8810 or (201) 692-7215.

### Course Descriptions

See "Course Offerings," pages 72–84.

\*An ACCT or TAX course may be substituted with documentation of an equivalent finance class.

# Business • Digital Marketing • Supply Chain Management

## Master of Science (M.S.) — Digital Marketing

The emergent digital environment has been transforming all aspects of business. Firms, regardless of their specialty, industry and size, are increasingly using digital technologies to communicate with clients, recruit employees, form relationships with consumers and develop brands. Spending on digital marketing is rising with 80 percent of companies planning to increase their digital budget with digital ads estimated to make up 41.4 percent of total media ad expenditures by 2019. Digital engagement and marketing operations/technology are top areas for skill development. Specifically, digital marketing, social media, search-engine optimization and analytics-related jobs are particularly in high demand.

This **online program** is offered under the auspices of the department of marketing and entrepreneurship, Silberman College of Business, Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey.

The M.S. in digital marketing prepares students to be tech savvy and strategically creative to fill a range of digital marketing positions ranging from content creation and social media to creative services and production.

The 30–34 credit program is **delivered entirely online**. The program credits are distributed across a core curriculum followed by elective courses and a flexible experiential learning module (i.e. internship or thesis option).

### Admission Requirements

Complete credentials for the evaluation of applicants for the M.S. degree program include the following:

1. A bachelor's degree from an accredited college or university.
2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.
3. An official score report for the Graduate Management Admissions Test (GMAT)/GRE taken within the last five years. GMAT may be waived based on experience and prior academic achievement.

4. Current résumé.
5. A minimum score of 550 (paper-based) or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) is required for all applicants whose native language is not English.

### Requirements for the Master of Science Degree

#### Foundation Module (4 credits)

Provides an understanding of the marketing discipline. May be waived based on prior academic preparation, reducing the degree to 30 credits.

	Credits
DSCI5012	
Statistical Data Analysis.....	2
MKTG5012	
Marketing Principles.....	2

#### Digital Marketing Core (14 credits)

In addition to covering core topics in marketing strategy and consumer behavior, this module will provide a comprehensive understanding of digital marketing, social media marketing and mobile marketing.

MKTG6012	
Marketing Strategy.....	2
MKTG6111	
Digital Marketing Strategies.....	2
MKTG6112	
Social Media Strategy.....	2
MKTG6113	
Mobile Marketing Strategies.....	2
MKTG6602	
Marketing Research.....	2
MKTG6603	
Consumer Behavior.....	2
MKTG6605	
Marketing Communications.....	2

#### Specialized Core (up to 14 credits)

Enables acquisition of specialized knowledge and skills based on personal interest and career path. Courses include topics related to search-engine optimization, web analytics, harnessing big data, database management and emerging technologies in marketing.

#### Experiential Learning (4 credits)

Students may seek academic credit for internships, or they may write a thesis on a digital marketing topic of their choice.

### Course Descriptions

See “Course Offerings,” pages 72–84.

## Master of Science (M.S.) — Supply Chain Management

Effective management of their supply chain and operations is the key to value creation for many organizations, especially in today's fast-paced and highly global business environment. Employers increasingly seek candidates with skills that will enable their organizations to better manage their supply chains and operations. The supply chain management (SCM) profession has therefore witnessed significant job growth coupled with steadily increasing salaries. Whether individuals are starting off in their careers or are looking to make a career transition into supply chain management, an advanced degree such as a Master of Science in supply chain management will train them in critical aspects of supply chain management and will enable them to take advantage of the growing opportunities in the field.

The M.S. in supply chain management program at Silberman College of Business is an interdisciplinary program that emphasizes methodological, conceptual and strategic aspects of the management of supply chains and operations. The program is designed to foster the development of critical skills and capabilities required to manage globally distributed and diversified supply chains.

The program can be completed within 21 months while still being employed full time.

This program is offered under the auspices of the department of information systems and decision sciences, Silberman College of Business, Florham Campus, Madison, New Jersey, and Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

Complete credentials for the evaluation of applicants for the M.S. degree program include the following:

1. A bachelor's degree from an accredited college or university.
2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.
3. An official score report for the Graduate Management Admissions Test (GMAT)/GRE taken within the last five



years. GMAT may be waived based on experience and prior academic achievement.

4. Current résumé.

5. A minimum score of 550 (paper-based) or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) is required for all applicants whose native language is not English.

## Requirements for the Master of Science Degree — Supply Chain Management

The M.S. in supply chain management is obtained by completing 10 required classes in foundation courses (6 credits), core courses (15 credits) and enrichment courses (9 credits).

### Foundation Courses (6 credits)

	Credits
DSCI6600	
Business Analytics.....	3
DSCI6700	
Supply Chain Strategies.....	3

### Core Courses (15 credits)

DSCI6810	
Operations Analysis.....	3
DSCI6820	
Logistics Management.....	3
DSCI6830	
Demand and Revenue Management.....	3
DSCI6840	
Global Sourcing, Procurement and Negotiations.....	3
DSCI6850	
Global Supply Chain Finance.....	3

### Enrichment Courses (9 credits)

DSCI6650	
Project Management.....	3
DSCI6750	
Supply Chain Technologies.....	3
DSCI6780	
Sustainable and Lean Six Sigma.....	3

## Course Descriptions

See “Course Offerings,” pages 72–84.

## Master of Science (M.S.) — Taxation

The Master of Science in taxation is designed for those who currently practice in the field of taxation, such as accountants, attorneys and financial planners, as well as those who wish to enter the field by undertaking an intense study of the subject. It is highly focused and practice oriented, dedicated exclusively to the study of taxation. In scope, it is much more specific than the traditional course of study pursued in an M.B.A. program with only a concentration in taxation. The M.S. in taxation program provides students with an in-depth exposure to many areas of taxation, including individual, partnership, corporate, international, compensation, trusts, procedures and estate taxation. The course offerings in the program will not only cover the basic areas of taxation but will also encompass advanced subject matter and procedural areas of tax law. Credits in the M.S. in taxation program may qualify toward the 150 semester hours of education requirement for obtaining CPA certification. Details on what will qualify may, however, vary from state to state depending on the rules of each state accounting board.

Weekday evening classes are offered at the Florham Campus, Madison, New Jersey. From time to time, classes may be offered at the Metropolitan Campus, Teaneck, New Jersey. In addition, some classes are offered on Saturdays at the Florham Campus.

For more information, contact the program director at (973) 443-8869.

For the latest updates about the M.S. program, visit the M.S. in taxation website at <http://www.fdu.edu/tax>.

The program is offered under the auspices of the department of accounting, taxation and law, Silberman College of Business, Florham Campus, Madison, New Jersey.

### Admission Requirements

Complete credentials for the evaluation of applicants for the M.S. degree in taxation program include the following:

1. A bachelor's degree from an accredited college or university.

2. Official transcripts from all colleges and universities in which undergraduate or graduate course work was completed.

3. An official score report for the Graduate Management Admissions Test (GMAT) or Graduate Record Examinations (GRE) taken within the last five years (see GMAT Waiver below).

4. A minimum score of 550 (paper-based) or 213 (computer-based) or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) is required for all applicants whose native language is not English.

5. International Student Proof of Financial Responsibility (for international students only).

### GMAT Waiver

The GMAT requirement is waived for CPAs, Enrolled Agents, Certified Financial Planners, Certified Management Accountants, Chartered Financial Analysts, attorneys and graduates with an M.B.A. degree from an AACSB-accredited college or university as long as applicants have undergraduate/graduate grade point ratios (GPRs) of 3.00 or higher (or if the Graduate Committee grants an exception for lower than 3.00 GPR).

Fairleigh Dickinson University graduates with exemplary GPRs are eligible to waive the GMAT.

The GMAT is also waived for applicants who have relevant and substantial professional work experience in the field of accounting, financial planning and/or taxation. Such applicants will need to document at least three years of relevant professional work experience. Students admitted under the work-experience exception will gain conditional admission and will be required to maintain at least a cumulative 3.00 GPR in their first 9 credits in the M.S. in taxation program or else be required to take the GMAT.

The admission formula for all others, for whom the GMAT is not waived, is a minimum score of 1,050, arrived at based on the applicant's cumulative GPR x 200, plus the GMAT score.

For example, an applicant with a 3.20 undergraduate GPR and 470 grade on the GMAT would score 1,100.

For more information about the GMAT, call 1-800-717-4628 or 609-771-7330. Its website is [www.mba.com](http://www.mba.com).

# Business • Course Offerings

## Requirements for the Master of Science Degree — Taxation

The M.S. in taxation degree is obtained by completing 10 tax classes (30 credits) in required and elective courses. Seven core courses (21 credits) listed below are required of all students. The remaining courses (9 credits) may be selected from electives listed below. To graduate, students must maintain a cumulative grade point ratio (CGPR) of 3.00 or better.

Additional prerequisite courses may be required of incoming students not meeting the appropriate undergraduate requirements. These prerequisite courses (or equivalents) include 3 credits in accounting, 6 credits in taxation, 3 credits in business law and 3 credits in finance.

### Required Courses

	Credits
TAX6621	
Advanced Federal Tax: Individual Income Taxation.....	3
TAX6622	
Advanced Corporate Tax I.....	3
TAX6670	
Tax Accounting.....	3
TAX6850	
Tax Research.....	3
TAX7724	
Tax Practice and Procedure I.....	3
TAX7727	
Advanced Federal Tax: Property Transactions.....	3
TAX7728	
Partnership Taxation.....	3

### Electives

Three courses (9 credits) from the following:

TAX6625	
Estate and Gift Taxation.....	3
TAX7705	
U.S. International Corporate Taxation.....	3
TAX7708	
International Tax I: Sourcing and Inbound.....	3
TAX7710	
International Tax II: Outbound.....	3
TAX7711	
International Tax III: Special Topics.....	3
TAX7723	
Estate and Gift Tax Planning.....	3
TAX7725	
Advanced Corporate Tax II.....	3

Credits

TAX7726	
Compensation: Executive Compensation and Nonqualified Plans.....	3
TAX7730	
Income Taxation of Estates and Trusts.....	3
TAX7732	
Tax Practice and Procedure II.....	3
TAX7734	
Consolidated Returns.....	3
TAX7735	
Tax-exempt Organizations.....	3
TAX7736	
State and Local Taxation: Constitutional Issues.....	3
TAX7738	
Compensation: Qualified Pension and Profit-sharing Plans.....	3
TAX7750	
State and Local Taxation: Corporate and Individual Income Taxation.....	3
TAX7752	
State and Local Taxation: Sales, Use and Property Taxes.....	3
TAX8840	
Taxation of S Corporations: Selected Studies.....	3
TAX8850	
Taxation of Financial Products.....	3
TAX8860	
Accounting for Income Taxes.....	3

### Course Descriptions

See “Course Offerings,” pages 72–84.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate department chair.

*Note: Prerequisite courses for 6000-level and higher courses typically include the discipline’s M.B.A. core courses. Check with your adviser.*

### ACCT5012

2 Credits

#### Financial Accounting: End-User Applications

This course focuses on the information needs of the users-of-financial-statements community that includes, but is not limited to, managers, investors, creditors and regulators. The primary context of the course is financial accounting for corporate entities. This course assumes no prior knowledge of financial accounting.

### ACCT5521

3 Credits

#### Financial Accounting: An End-user Approach

An introduction to the financial reporting environment. Develops an understanding of the conceptual framework that underlies financial-statement preparation and presentation for both domestic and multinational firms. The course will provide students with the necessary skills to understand, use and analyze financial statements.

### ACCT6012

2 Credits

#### Managerial Accounting Applications

This course focuses on the decision-support information that managers regularly use and need in the contemporary business setting. Topics include cost-volume profit, cost behavior, product costing, pricing, quality costs, budgeting variance analysis, short-term decision making and business-unit performance measurement. The course will begin with a session on understanding financial statements to provide articulation with the financial accounting course prerequisite. Prerequisite: ACCT5012 Financial Accounting: End-User Applications.

### ACCT6605

3 Credits

#### Federal Tax I: Individual

A first course in taxation for graduate students without prior study in taxation. It examines tax principles as they affect the individual.

### ACCT6606

3 Credits

#### Federal Tax II: Business Entities

This course is a sequel to ACCT6605 Federal Tax I: Individual. It examines taxation as it concerns business entities, such as C and S corporations, LLCs and partnerships. Students are encouraged to take ACCT6605 Federal Tax I:

# Business • Course Offerings

Individual before ACCT6606 Federal Tax II: Business Entities. Any student who has not taken ACCT6605 Federal Tax I: Individual will be instructed to self study certain materials from ACCT6605 Federal Tax I: Individual. Prerequisite: ACCT4267 Fundamentals of Federal Taxation or ACCT6605 Federal Tax I: Individual.

## ACCT6610

3 Credits

### **Managerial Accounting Applications**

An introduction to management accounting as part of a company's quantitative information system. Emphasis is placed on the role of accounting in decision making.

## ACCT6612

3 Credits

### **Planning and Budgeting**

Importance of business planning and control from the managerial point of view. Emphasis is on budgeting as a tool for profit planning and control. Prerequisite: ACCT5012 Financial Accounting: End-User Applications.

## ACCT6617

3 Credits

### **Cost: Measurement, Planning and Control**

The basic elements of cost and cost control. Cost-accounting systems such as process costing, job-order costing, standard and direct costing, the planning, budgeting and control functions. Prerequisite: ACCT2021 Introductory Financial Accounting or ACCT5012 Financial Accounting: End-user Applications.

## ACCT6618

3 Credits

### **Auditing Concepts and Methods**

The auditor's report. Basic auditing concepts and methods are studied in detail as they relate to assets, liabilities, revenues and expenses. Prerequisite: ACCT6630 Intermediate Financial Accounting I.

## ACCT6630

3 Credits

### **Intermediate Accounting I**

An in-depth study of generally accepted accounting principles as they relate to corporations; particular attention is given to financial reporting, revenue recognition, asset valuation and measurement. Basic difference in U.S. and international accounting are identified. Topics of current interest and controversy are introduced to prepare the student for more advanced courses. Prerequisite: ACCT5012 Financial Accounting: End-User Applications or undergraduate equivalent.

## ACCT6635

3 Credits

### **Intermediate Accounting II**

This course continues the in-depth study of financial accounting began in ACCT6630

Intermediate Accounting I. Pronouncements of the Financial Accounting Standards Board and their applications, such as imgmtn the areas of accounting for liabilities, stockholders equity, dilutive securities, earnings per share and statement of cash flows are examined. Basic differences in U.S. and international accounting are identified. Recent developments and prospects for the future change in accounting thought are considered. Prerequisite: ACCT6630 Intermediate Accounting I or undergraduate equivalent.

## ACCT6640 (formerly ACCT6616)

3 Credits

### **Advanced Financial Accounting**

An in-depth study of the accounting principles related to special areas such as business combinations, consolidations, foreign operations and partnerships. There is some exposure to accounting for nonprofit institutions such as state and local governments, educational systems, institutions and hospitals. Prerequisite: ACCT6630 Intermediate Financial Accounting I.

## ACCT6680

3 Credits

### **Selected Accounting Topics**

A graduate-level course for students with a strong financial-theory background. The course focuses on a wide range of areas confronting accounting graduates in the public and private sectors. Topics include public offerings, SEC reporting and compliance, accounting and reporting in the regulated industries, not-for-profit accounting and recent pronouncements by the Financial Accounting Standards Board. Prerequisite: ACCT6635 Intermediate Accounting II.

## ACCT6682

3 Credits

### **Advanced Auditing**

The material for the first half of the course introduces the concept of auditing in the environment of a modern information system. The second half of the course covers analytic methods and statistics in an auditing environment. Prerequisite: ACCT4263 Auditing Concepts or ACCT6618 Auditing Concepts and Methods.

## ACCT6684

3 Credits

### **Advanced Managerial Applications**

This is an advanced course in managerial accounting designed to develop a further appreciation for the uses of cost information in the administration and control of business organizations. The course focuses on measurement, analysis and use of accounting information for management decision-making in manufacturing, merchandising and service-oriented businesses. The course may employ the case method to better understand how managerial accounting can create positive change in business organizations in a variety of industries. The course focuses on

critical-thinking skills, decision making and communication. Prerequisite: ACCT4243 Cost Measurement and Control.

## ACCT6690

3 Credits

### **Seminar: Accounting and Auditing Case Studies**

A capstone course in the graduate program integrating technical and analytical accounting and auditing skills acquired throughout the program. The course makes exclusive use of case studies and group problem solving conducted by faculty and professionals from the corporate and public accounting sectors. Prerequisites: ACCT4242 Financial Accounting Theory II and ACCT4263 Auditing Concepts or ACCT6618 Auditing Concepts and Methods and ACCT6635 Intermediate Accounting II.

## ACCT6800

1-3 Credits

### **Graduate Independent Study**

Studies in area of discipline with departmental approval.

## ACCT7701

3 Credits

### **International Accounting**

International accounting concepts and practices, including the influence of foreign national policies, legal requirements and business structures. Prerequisite: ACCT6630 Intermediate Financial Accounting I.

## ACCT7702

3 Credits

### **Forensic Accounting and Litigation Support**

Focuses on the role of the accountant in the area known as litigation support services. The course will be heavily case oriented and will encompass the accountant's role in such diverse consulting services as fraud investigation, commercial damages, business valuation, matrimonial disputes and forensic accounting services.

## ACCT7737

3 Credits

### **Corporate Financial Reporting**

The fundamental underlying assumptions of accounting, the communications problem, the uses of the financial statements and the subjective standards of "fairness." Ethical problems of reporting as they relate to management and to the auditor. The surveillance and enforcement functions of the Securities and Exchange Commission and other related institutions. The expansion of the reporting function to include forecasting, disclosures by diversified companies and other topics of current interest. Prerequisite: ACCT6630 Intermediate Financial Accounting.

# Business • Course Offerings

---

## **BUSI5500**

**3 Credits**

### **Executive Communication and Leadership**

This course is designed to provide students with: 1) a foundation in communication theory; 2) opportunities to evaluate and improve their managerial communication skills, both written and oral; and 3) an understanding of the strong correlation between communication and the responsibilities of top-level executives in organizations. Sample topics include persuasion theory, leadership styles, active listening, the writing process, audience analysis and platform dynamics.

## **DSCI5012**

**2 Credits**

### **Statistical Data Analysis**

This course introduces statistical thinking and practices of how to draw conclusions from the sample data. Topics include descriptive statistics, probability theory, statistical influence methods, analysis of variance and regression. Statistical software is frequently used for the computation. Emphasis is on understanding and interpreting statistical information and explaining statistical ideas to non-specialists.

## **DSCI6012**

**2 Credits**

### **Operations Management**

The course provides concepts and knowledge on how firms design, produce and deliver goods and services to their customers. The broad themes of the course touch upon strategy, planning and control operations to achieve quality, efficiency, flexibility and speed. The course emphasizes the flows of material and information among the various supply-chain participants that create value. Analytical techniques in management science are introduced to solve various operations-management problems. Prerequisite: DSCI5012 Statistical Data Analysis.

## **DSCI6112**

**2 Credits**

### **Project Management**

This course is designed to offer the student the opportunity to learn how to effectively plan and manage projects that meet their organization's business goals. The course addresses fundamental concepts of successful project management, and the technical and managerial issues, methods and techniques of project management, and of managing project managers.

## **DSCI6600**

**3 Credits**

### **Business Analytics**

This course explores data-driven methods that are used to analyze and solve complex business problems. Students will acquire analytical skills in building, applying and evaluating various models with hands-on computer applications. Topics include descriptive statistics, time-series

analysis, regression models, decision analysis, Monte Carlo simulation and optimization models.

## **DSCI6650**

**3 Credits**

### **Project Management**

This course addresses fundamental concepts of successful project management, with emphasis on project selection, planning and scheduling, team formation and governance, risk management, resource allocation and progress monitoring. Students will develop the skills on how to effectively plan, execute and manage projects and project portfolios that meet their organization's business goals.

## **DSCI6700**

**3 Credits**

### **Supply Chain Strategies**

This course provides an integrated and comprehensive coverage of topics in supply-chain management, emphasizing issues, challenges and opportunities. It surveys current best practices in strategies and business models in a global supply chain. Topics include supply-chain coordination, management of demand, sourcing, inventories, operations and logistics in a global supply chain, supply chain risk management and the role of information technology.

## **DSCI6750**

**3 Credits**

### **Supply Chain Technologies**

This course examines information technology applications that support a firm's operations in supply-chain management, purchasing, logistics and customer/supplier relations. It illustrates how the internet and information technologies are used to gain and sustain competitive advantage. Topics include ERP systems, SCM systems, CRM systems, e-procurement and e-logistics management systems and other e-business applications. Prerequisite: DSCI6700 Supply Chain Strategies.

## **DSCI6780**

**3 Credits**

### **Sustainable and Lean Six Sigma**

As organizations strive to provide high-quality goods and services while achieving financial sustainability and growth, they are facing increasing pressures and government regulations in terms of environmental responsibilities. This course presents a holistic approach to operational excellence in supply chains, demonstrating the methodologies and practices that successfully combine Six Sigma ideas with lean and environmental sustainability. Prerequisite: DSCI6700 Supply Chain Strategies.

## **DSCI6800**

**1–6 Credits**

### **Graduate Independent Study**

Studies in an area of discipline with departmental approval.

## **DSCI6810**

**3 Credits**

### **Operations Analysis**

This course focuses on developing skills in building, implementing and evaluating optimization models and techniques to facilitate and assist decision making in the supply-chain and operations-management context. It is a hands-on course with applied fields including production planning, workflow scheduling, process analysis, inventory management, capacity management, resource planning and allocation and assortment planning. Prerequisites: DSCI6600 Business Analytics and DSCI6700 Supply Chain Strategies.

## **DSCI6820**

**3 Credits**

### **Logistics Management**

Stressing both analytical and strategic aspects, this course covers key logistics functions within the supply chain such as logistics network design, transportation planning and execution, distribution operations, order fulfillment and reverse logistics. Emphasis is placed on being able to recognize and manage risk, and analyze various tradeoffs in the global marketplace. Prerequisites: DSCI6600 Business Analytics and DSCI6700 Supply Chain Strategies.

## **DSCI6830**

**3 Credits**

### **Demand and Revenue Management**

This course aims to give the students a broad understanding of current demand management and revenue-management practices that use forecasting and optimization models to make tactical decisions about pricing and product/service availability. Topics include demand forecasting, market segmentation and price differentiation, marketing mix, market-response modeling, capacity allocation, overbooking, markdown pricing, dynamic pricing for e-commerce and customized pricing. Prerequisite: DSCI6600 Business Analytics

## **DSCI6840**

**3 Credits**

### **Global Sourcing, Procurement and Negotiations**

This course teaches concepts and processes in supply and sourcing management, including analysis and selection of supply markets and suppliers, price and cost analysis, development of requirements, procurement of materials, services and equipment, buyer-supplier relationships, international contracts and negotiations and negotiation simulation with emphasis on global competitiveness, legal issues, social responsibilities and ethics. Prerequisite: DSCI6700 Supply Chain Strategies.

## DSCI6850

3 Credits

### **Global Supply Chain Finance**

This course demonstrates how successful management of the supply-chain activities and processes tie to the financial systems, objectives and performance of the firm. Topics include financial-statements analysis, supply-chain valuation, activity-based costing, capital-investment analysis, management of working capital, international financial markets, global trade finance and financial risk management. Prerequisite: DSCI6700 Supply Chain Strategies.

## ECON5012

2 Credits

### **Economic Analysis**

Microeconomics foundations of consumers and business decisions, review of the rationale for government intervention in specific markets, macroeconomic principles relating to the level of aggregate economic activity and government policies aimed at meeting growth, employment and price-stability goals.

## ECON6012

2 Credits

### **Managerial Economics**

The application of microeconomic theory to decision making in the business firm. Overview of demand and consumer behavior, production and cost management, market structure and pricing. Understanding of tools developed to support the decision-making process at managerial level. Prerequisite: FIN5012 Principles of Finance.

## ECON6620

2 Credits

### **Economics of International Trade**

An introduction to international trade, including elements of international economics and finance: barriers to trade, international commercial policies and their impact on the balance of trade, the balance of payments, capital flows, the international monetary systems. Prerequisite: ECON5012 Economic Analysis.

## ECON6800

1-3 Credits

### **Graduate Independent Study**

Studies in area of discipline with departmental approval.

## ECON7745

2 Credits

### **Econometrics**

The construction and testing of econometric models. Estimation of economic parameters, multiple regression analysis, cross section and time-series data.

## EHCM6801

3 Credits

### **Health Sector Management and Policy**

This course provides a comprehensive overview of the structure and operations of the health care industry in the United States. Special emphasis is placed on the major forces and trends that are likely to shape the industry landscape and influence relationships among key stakeholders. Fundamentals of health care delivery, funding, insurance and reimbursement are addressed. Contemporary approaches to managing access, quality, technology and costs are discussed. The political policymaking process is examined with due regard for social and ethical implications of system reform initiatives.

## EHCM6802

3 Credits

### **Health Care Insurance, Reimbursement and Cost Control**

The course will provide an overview of the principles of insurance and alternative methods of reimbursing providers for delivery of health services. Techniques used in prospective rate setting and financial risk-sharing will be discussed within the context of managed care. Contractual, regulatory and legal issues between insurers and health care providers are also examined. Contemporary approaches to managing the utilization and cost of health care services are considered. The course concludes with an assessment of future trends in health care insurance, reimbursement and cost control within the changing health care environment. Prerequisite: EHCM6801 Health Sector Management and Policy.

## EHCM6803

3 Credits

### **Health Care Quality and Service Management**

A study of the techniques and applications for measuring, assessing and improving the efficiency and effectiveness of organizational outcomes for health care firms. Qualitative and quantitative tools for managing the clinical and experiential domains of health care are presented. Contemporary models and methods for controlling process/outcome variance, enhancing health-service quality, benchmarking performance and reporting results are discussed. This course will also consider strategies for managing the human-service experience as a means to enhance patient satisfaction and achieve competitive advantage. Topical coverage will be adjusted to reflect current issues in the health care industry. Prerequisite: EHCM6801 Health Sector Management and Policy.

## EHCM6901

3 Credits

### **Fundamentals of Health Systems and Policy**

This course is designed to provide students with an overview of the fundamental characteristics of health systems in the United States relative to those in place globally. Identifies the major economic, social, demographic, political and regulatory forces that are likely to shape the external environment and linkages among the firms in this important and growing sector. The impact of these forces on health care decision making and policy formulation are discussed with due regard for legal and ethical implications.

## EHCM6902

1.5 Credits

### **Essentials of Health Care Financial Management**

This course focuses on providing students with an understanding of the unique aspects of managing financial transactions in the heavily regulated health care industry. The role of insurance coverage, health-plan design, managed-care protocols and third-party reimbursement methods will be examined from the health care provider's perspective. Attention will also be given to managing the health care revenue cycle, including medical coding systems, billing procedures and claims adjudication. The course is intended to establish the contextual foundation of the health care financial environment and to prepare students to receive formal exposure to the principles and theories of finance at the graduate level. Prerequisite: EHCM6901 Fundamentals of Health Systems and Policy.

## EHCM6903

3 Credits

### **Finance for Health Care Managers**

This course is targeted for the health care sector manager and is intended to provide an understanding of the role of financial management in the context of health care operations. It provides both the financial theories that a general manager needs to know and their applications to decision making in the health services. The course will build on the contextual foundations of the health care environment discussed in earlier courses. Prerequisites: EHCM6902 Essentials of Health Care Financial Management, EXEC5508 Statistical Thinking and Methods, EXEC6502 Financial Accounting and Reporting and EXEC6503 Managerial Economics.

## EHCM6904

3 Credits

### **Health Care Operations Management**

This course aims to provide the student with an understanding of — and skills to apply — the techniques for improving the performance of decision-making and delivery processes that enable provision of high-value health care services from a multi-stakeholder perspective. The course will present contemporary qualitative

# Business • Course Offerings

---

and quantitative operations management tools and methodologies with applications in health care service infrastructure, including balanced scorecards, performance measurement, monitoring, benchmarking and reporting, statistical process control, quality management, process design and improvement, scheduling and capacity management. This course will also consider strategies for managing the human service experience as a means to enhance patient satisfaction and achieve competitive advantage. Prerequisites: EHCM6901 Fundamentals of Health Systems and Policy, EHCM6902 Essentials of Health Care Financial Management and EXEC5508 Statistical Thinking and Methods

## **EHCM6905**

**3 Credits**

### **Contemporary Issues in Health Sector Management**

This course is designed to offer students the opportunity to explore emerging issues and trends influencing the delivery of health care that may not have been covered in the standard set of health sector management specialization courses. The learning experience is designed as a seminar and will offer sufficient flexibility to accommodate the educational interests of the unique group of participants enrolled in a particular class cohort. Prerequisites: EHCM6901 Fundamentals of Health Systems and Policy, EHCM6902 Essentials of Health Care Financial Management, EHCM6903 Finance for Health Care Managers and EHCM6904 Health Care Operations Management.

## **EHLS6801**

**3 Credits**

### **The Health Care and Life Sciences Industry Cluster**

The course provides an overview of the health care/life sciences super-cluster. It identifies major forces and trends that are likely to shape the operating environment for companies in the sector and linkages among the firms in the cluster. The fundamentals of health care economics, financing, reimbursement, quality assurance and political policymaking are discussed. The spectrum of life science entities is considered in relation to the continuum of health care delivery.

## **EHLS6802**

**3 Credits**

### **Legal and Ethical Issues in Health Care and Life Sciences Management**

This course outlines the underlying social framework for current legal, regulatory and ethical issues affecting health-policy formulation and the provision of medical services. It will address how the regulatory environment impacts health care and life sciences companies. It also provides an understanding of key ethical principles of decision-making in clinical practice and research involving human subjects. An overview of intellectual property and patent law is presented.

## **EHLS6805**

**3 Credits**

### **Managed Care and Provider Reimbursement**

The study of current public- and private-sector reimbursement methodologies for acute, primary and chronic-care service providers. Techniques used in prospective rate setting and financial risk-sharing arrangements in the context of managed care will also be discussed. The course also examines regulatory and contractual issues as well as methods for expense management such as the use of formularies and tiered-benefits designs. The impact of managed care and reimbursement trends are considered as future challenges to health care and life sciences managers.

## **EHLS6804**

**3 Credits**

### **Health Sector Marketing and Consumer Behavior**

An integrated overview of the theory and processes of modern marketing and consumer behavior as they apply to the delivery of health products and services to diverse populations. Emphasis is placed on the uniqueness of health services and social responsibility. Topics include market analysis, competitive positioning, development of the strategic marketing mix and customer service quality. Principles of product-concept development, pricing and distribution are presented. Strategies for promotion of health-related goods and services as well as regulations governing advertising, education and use of opinion leaders are discussed.

## **EHLS6805**

**3 Credits**

### **Health Care Financial Operations**

A manager's view of the principles of finance and their application to the internal operations of health care organizations. Methods for assessing the financial performance of health care facilities are reviewed. Techniques for financial planning, budgeting, cost analysis and current asset management are discussed. Issues pertaining to capital formation, project analysis and corporate combinations are also addressed. Emphasis is on managerial decision-making rather than on the technical aspects of accounting and financial analysis.

## **EHLS6807**

**3 Credits**

### **Health Quality and Outcomes Management**

A study of the techniques and applications for measuring and improving the efficiency and effectiveness of organizational and service performance outcomes. Research methods, study designs and measurement issues are presented in the context of improving health care quality and outcomes. Contemporary models and methods of clinical-outcome research, benchmarking, performance measurement and public-outcomes reporting are also presented.

## **ENTR6012**

**2 Credits**

### **Entrepreneurship and Innovation**

This course is an integral component of the M.B.A. core curriculum. It provides students with an understanding of the processes associated with innovation in the context of changing economic environments that are marked by fast cycle times for services and products. Challenges and opportunities associated with creating sustainable value for an organization will be considered through the application of key concepts, processes and tools of decision-making at the level of the firm. Key concepts associated with innovation, entrepreneurship and business strategy will be validated by the use of appropriate pedagogical tools and the development of a business model project.

## **ENTR6101**

**2 Credits**

### **Small Business Management**

Given the low survival rates of start-ups, the primary aspect of small business management is scaling — moving from start-up to an ongoing business. In this course, students will learn through simulation tools how to iterate products in response to changes in the market, adapt the initial business model for different stages in the lifecycle of an entrepreneurial business and address capacity-constraint dilemmas with respect to distribution-channel issues on rapid product launch. Students will also learn how to raise growth capital through crowd-funding and learn the concept of pivoting through case studies and by examining companies. Prerequisite: ENTR6012 Entrepreneurship and Innovation.

## **ENTR6112**

**2 Credits**

### **Strategic Innovation Management**

This course provides an opportunity for students to gain an understanding, from a strategy perspective, of what innovation is, the importance of innovation within organizations and how it can be managed. It introduces students to key concepts and models from the strategic management and innovation management literature. Prerequisite: ENTR6012 Entrepreneurship and Innovation.

## **ENTR6301**

**2 Credits**

### **Family Business Management**

Family businesses are both the most complex and common form of business worldwide, but 85 percent fail within three generations. In this course, students will use cases and play the role of a business consultant in the process of learning how to successfully incorporate the needs of family, business and ownership, and use simulation to develop a business model that allows family businesses to successfully work together from one generation to the next — namely, from family and business development through man-

# Business • Course Offerings

agement to succession and change in the business. Though this course is particularly relevant for students who work in or may become part of a family business, it will give students the knowledge necessary for them in their future careers to advise family businesses. Prerequisite: ENTR6012 Entrepreneurship and Innovation.

## ENTR6502

2 Credits

### Entrepreneurial Finance

This course covers all aspects of entrepreneurial finance including company and investor strategy, expectations and negotiations, angel investors, venture capital, private equity, strategic alliances, the informal investor market, initial and secondary public offerings, bank lending and alternative sources of funding. Emphasis is on financing elements and techniques that make deals succeed, the implications of strategic decisions on finance and the impact of financing on the company strategy. Students are immersed in concepts such as valuation, cash flow, cash burn and analysis of viable revenue models and cost structures from both internal financing strategy and outside investor viewpoints. Financing issues will be explored in the context of start-ups, small businesses, growing ventures and internal ventures of established companies. Prerequisites: ACCT6012 Managerial Accounting Applications, ENTR6012 Entrepreneurship and Innovation and FIN6012 Corporate Finance.

## ENTR6800

1–2 Credits

### Graduate Independent Study

Studies in area of discipline with departmental approval.

## ENTR7012

2 Credits

### Entrepreneurship Capstone

This course immerses students in strategic planning, financing and growing of a business or a new venture within an existing business. Under the guidance of a faculty member, student teams partner with the management teams of real businesses to create and develop an entrepreneurial strategy and a business plan. Each team develops its business plan to provide an integrated framework for profitable growth in the context of the venture's strategic objectives. The course provides hands-on fieldwork in which students apply concepts they have acquired in their previous course work in addition to their professional experiences. Client companies typically cover a wide range of industries, markets, sizes and growth opportunities. MBA capstone course; available to every MBA candidate.

## ENTR7804

2 Credits

### Social Entrepreneurship

This course provides an opportunity for students to gain an understanding of the impor-

tance of employing entrepreneurial approaches to solving social problems and how social enterprises can be created and effectively managed. It introduces students, through lectures and case analyses, to challenges in running a social enterprise and strategies available to social entrepreneurs to effectively meet the challenges. Students will have an opportunity to develop a business model for a new social enterprise or analyze the strategies and performance of an existing social enterprise, through a project. Prerequisite: ENTR6012 Entrepreneurship and Innovation.

## EXEC5501

1.5 Credits

### Macroeconomic Analysis

This course will introduce students to the principles of macroeconomics and the application of theory for analyzing the impacts of government regulation of fiscal and monetary policy on employment, economic growth, inflation, interest rates and exchange rates.

## EXEC5502

1.5 Credits

### Social, Legal and Ethical Issues

This course is an introduction to the legal environment of business and includes coverage of regulatory agencies, litigation, contracts, business organizations and agency and employment issues.

## EXEC5503

1.5 Credits

### Fundamentals of Management

This course provides a baseline understanding of the processes of working with people and resources to accomplish organizational goals. In today's business world, highly effective executives not only apply the fundamental management principles of planning, organizing, leading and controlling, but also anticipate and adapt to change. This course explores the nature and application of these fundamental principles in the evolving environment of globalization and increased competitiveness. An integrative case study will be used to connect management principles to those from other disciplines in the executive M.B.A. foundations module.

## EXEC5504

1.5 Credits

### Fundamentals of Marketing

This course will introduce students to marketing terminology and concepts. The goal is to provide sufficient foundation knowledge to enable students to take courses in the core M.B.A. program. Accordingly, this course introduces students to such fundamental marketing concepts as the marketing mix, segmentation, marketing research and consumer behavior.

## EXEC5505

1.5 Credits

### Fundamentals of Financial Accounting

An introduction to the basic financial statements and the underlying concepts, conventions and principles.

## EXEC5506

1.5 Credits

### Principles of Microeconomics

Microeconomic foundations of consumer and business decisions, market structure and industrial organization.

## EXEC5507

1.5 Credits

### Principles of Finance

The course studies the essential compounding-discounted techniques used to price assets and projects with deterministic cash flows. The course also studies the role of financial systems with regard to raising capital.

## EXEC5508

3 Credits

### Statistical Thinking and Methods

This course introduces statistical ideas and methods of how to draw conclusions from the data. It provides students with the ability to think statistically and appreciate statistical ideas. Topics include descriptive statistics, probability theory, confidence intervals, hypothesis testing, correlation, regression, analysis of variance and an introduction to nonparametric statistics. Statistical software is used frequently for computations. Emphasis is on interpreting statistical results and using statistical analyses for decision making.

## EXEC6501

1.5 Credits

### Corporate Creativity and Innovation

This 1.5-credit course is an integral part of the core curriculum in the M.B.A. management for executives program. It provides students with an appreciation for the role of creativity and innovation in facilitating the emergence of organizations and their continued development and growth. Students will examine the opportunities and challenges associated with applying these concepts in the creation of sustainable organizational value. A variety of individual and team-based assignments will be used to validate and apply the concepts presented in this course.

## EXEC6502

3 Credits

### Financial Accounting and Reporting

This course focuses on the decision-support information that managers regularly use and need in the contemporary business setting. Topics include cost-volume profit, cost behavior, product costing, pricing, quality costs, budgeting variance analysis, short-term decision making and business-unit performance measure-

# Business • Course Offerings

---

ment. The course will begin with a session on understanding financial statements to provide articulation with the financial accounting prerequisite. Prerequisite: EXEC5505 Fundamentals of Financial Accounting.

## EXEC6503

3 Credits

### Managerial Economics

Microeconomic theory as applied to decision making in the business firm. Emphasis is placed on customer demand, cost management, strategic and tactical pricing, market and competitive actions and analyses. Prerequisites: EXEC5501 Macroeconomic Analysis and EXEC5506 Principles of Microeconomics.

## EXEC6504

3 Credits

### Finance for Managers

The course provides a practical view of the theories and models of finance for the general manager. It will explore risk-return models, cost of capital, capital budgeting, capital structure theory and practice. The course will also introduce a selection of topics such as, but not limited to, corporate reorganization and governance, quantifying strategic decisions with real options, dividend policy mergers and acquisitions or other timely topics of interest. Prerequisite: EXEC5507 Principles of Finance.

## EXEC6505

3 Credits

### Organizational Behavior and Leadership

Creating and leading sustainable, ethical, successful and responsive organizations is the primary challenge for business and nonprofit leaders today. This course brings together the knowledge, research, insights and experiences of both management academics and organization development and management practitioners to address the challenges and opportunities in understanding and managing organizational behavior. This course emphasizes concepts and tools for assessing the social processes encountered in the workplace, so that one can become an effective and responsible leader, and it develops the students' own leadership skills and competencies. Prerequisite: EXEC5503 Fundamentals of Management

## EXEC6506

3 Credits

### Strategic Marketing

This course addresses the strategic and consequent tactical concerns of a business in terms of building value. The course will address topics such as segmentation and positioning, new-product development and launch, brand equity, sustainability, product policy, pricing policy, distribution choices (bricks-and-mortar and e-commerce) and supply-chain management, promotional strategy and customer relationship management. Students will apply marketing

principles in formulating marketing strategies and making managerial recommendation. Prerequisite: EXEC5504 Fundamentals of Marketing.

## EXEC6507

3 Credits

### Strategic Management of Information Systems

This course focuses on the alignment of information systems (IS) with business strategies in order for business organizations to gain competitive advantage in a globalized environment. It explores fundamental concepts, models and frameworks of IS regarding the planning, investment, implementation and evaluation of information systems for strategic purposes. The course also examines the role of IS in transforming the organizational and business environment through the employment of various strategies, applications and technologies.

## EXEC6508

3 Credits

### Supply Chain Management

The course addresses the strategic and operational role of supply-chain management in the global business environment. It examines how supply-chain participants enhance the value of their products and services by orchestrating the management of quality, efficiency, flexibility and speed. Management science methods are utilized to obtain analytical solutions using mathematical models and software.

## EXEC6509

3 Credits

### International Business

The study of basic managerial functions appropriate to international business. The role of the multinational corporation in contemporary world trade is discussed. Topics covered include organization, foreign licensing, international aspects of management, finance, taxation and cultural differences. This course includes a structured foreign-study tour to permit students to compare international business practices with those of U.S. firms. Knowledge acquired through the experience will be linked to other courses.

## EXEC6510

3 Credits

### Global Business Capstone

The focus of this course is on corporate-level strategy for multidivisional firms striving to strategically restructure their business portfolios by expanding and diversifying domestically and internationally. Topics will include diversification strategies, tactics for global market entry/exit and structural alternative to support growth. Emphasis will be placed on integrating functional plans for implementing strategy at the corporate level. Students will work in teams to develop a comprehensive strategic plan using case studies of real-world companies as the primary learning modality.

## EXEC6901

1.5 Credits

### Managing Sustainability for Competitive Advantage

Pursuing the "triple bottom line" of financial success, ecological stewardship and social equity has become essential to achieving sustained competitive advantage. This course will focus on the current and future challenges and opportunities relating to climate change, sustainable economic development and the role of business. It also will explore the theory, values and practical aspects of sustainability with special emphasis on strategic effectiveness. The class will draw on real issues and experiences of managers through case studies and guest speakers. Career opportunities in relation to sustainability will also be discussed.

## EXEC6902

1.5 Credits

### Project Management

This course is designed to offer students the opportunity to learn how to effectively plan and manage projects that meet their organization's business goals. The course addresses fundamental concepts of successful project management, and the technical and managerial issues, methods and techniques of project management and of managing project managers.

## FIN5012

2 Credits

### Principles of Finance

This course surveys the financial environment and performs comparisons of firms based on their financial statements. It studies the essential compounding-discounting techniques used to price assets and projects with deterministic cash flows. Prerequisites: ACCT5012 Financial Accounting: End-user Applications and ECON5012 Economic Analysis.

## FIN6012

2 Credits

### Corporate Finance

This course discusses how some of the most important financial theories are applied to a corporate setting. Blending theory and practice, the course introduces the concepts of risk, cost of capital, commitment of funds for long-term capital investment and other applications of interest. Prerequisites: DSCI5012 Statistical Data Analysis and FIN5012 Principles of Finance.

## FIN6020

3 Credits

### Financial Analysis for Accountants

The course covers the essential financial topics for the CPA exam. An introduction to time value of money and financial markets is followed by the valuation of bonds and stocks. Risk return models and capital structure are incorporated into a discussion of the cost of capital. Evaluation of cash-flow and project selection introduces the student to asset valuation.



Analysis of financial ratios and of cash-conversion cycle lead to an understanding of the short-term management of the financial position of the firm.

## FIN6112

2 Credits

### **Financial Decisions for Sustainable Enterprise**

This course introduces the student to strategic financial decisions for a sustainable enterprise. The course discusses various strategic real options that would ensure that the corporation acts at the best time capturing the most value from its multiple strategic options. In addition, the course discusses capital structure and the various theories leading to a minimum cost of capital that would ensure that corporations have access to more projects and thus could create more value. Finally, concepts of valuation and its maximization toward achieving sustainability of the enterprise as well as the social and natural environment would be presented. Therefore, the course proposes to raise the awareness of the student to concepts of sustainable enterprise from financial perspectives leading to sound actions. Prerequisite: FIN6012 Corporate Finance.

## FIN6701

2 Credits

### **Strategic Financial Decisions**

This course explores how sophisticated financial theory and knowledge can be used for the strategic decisions of the corporation. Prerequisite: FIN6012 Corporate Finance.

## FIN6721

2 Credits

### **Financial Markets and Investments**

This course sets forth the theoretical framework underlying the role of capital markets. It studies the various financial instruments within the many asset classes and their trading. In addition, it introduces macro and industry analysis, the term structure of interest rates and other relevant concepts for investment analysis. Prerequisite: FIN6012 Corporate Finance.

## FIN6731

2 Credits

### **Portfolio Management**

Applications of economics, statistics and investment analysis to the process of constructing, managing, revising and analyzing equity and fixed-income portfolios. Futures, options and other derivative securities are also considered, along with international investments. Prerequisite: FIN6721 Financial Markets and Investments.

## FIN6742

2 Credits

### **Global Finance**

This course examines how the access and exposure to different currency, country and market

environments can affect the financial and investment decisions of the firm. Topics include the determination of the exchange rates, measurement and management of the different exposures to currency risk, international investment decisions by firms, hedging and other timely topics. Prerequisite: FIN6012 Corporate Finance.

## FIN6751

2 Credits

### **Mergers and Acquisitions**

The course covers mergers and acquisitions (M&A), leveraged buyouts and joint ventures and strategic alliances as well as corporate restructurings. The history, laws and strategy of M&A along with corporate governance, sell-offs and business valuation are covered. Prerequisite: FIN6012 Corporate Finance.

## FIN6800

1–2 Credits

### **Graduate Independent Study**

Studies in area of discipline with departmental approval.

## FIN6801

2 Credits

### **Seminar in Corporate Finance**

Advanced study in corporate finance. Specific topics vary by instructor. May be taken more than once with different instructors. Prerequisite/corequisite: FIN6012 Corporate Finance.

## IBUS6012

2 Credits

### **International Business Concepts**

This is a survey course that introduces graduate students to international business. The underlying factors that drive globalization, shape international business environments and influence business strategies and organizational structures of multinational corporations are critically examined in the course. Thus, the course provides students with the necessary concepts, tools and skills that will permit them to analyze and respond effectively to dynamic changes in the global environment.

## IBUS6020

2 Credits

### **Economics of International Trade**

An introduction to international economics, including international commercial policies and their impact on the balance of trade, the balance of payments, capital flows and the international monetary system. Prerequisite: ECON5012 Economic Analysis.

## IBUS6072

2 Credits

### **International Management**

Operation of businesses in an international environment and the issues involved in ownership, management, labor, production, legal, control and public affairs as a result. Prerequisite: MGMT5012 Foundations of Management.

## IBUS6706

2 Credits

### **International Marketing**

An introduction of marketing considerations in international markets. Cultural differences, social patterns, channels of distribution, product attributes, pricing policies and promotional policies are examined within an international framework. Prerequisite: MKTG5012 Marketing Principles.

## IBUS6742

2 Credits

### **Global Finance**

This course examines how the access and exposure to different currency, country and market environments can affect the financial and investment decisions of the firm. Topics include the determination of the exchange rates, measurement and management of the different exposures to currency risk, international investment decisions by firms, hedging and other timely topics. Prerequisite: FIN6012 Corporate Finance.

## IBUS6800

1–2 Credits

### **Graduate Independent Study**

Studies in area of discipline with departmental approval.

## LAW6012

2 Credits

### **Society, Ethics and the Legal Environment of Business**

This course provides an overview of the legal environment of business, including the court system, business litigation and alternate dispute-resolution methods; the regulatory agencies and administrative law; basic contract and commercial law; and tort law as it relates to business issues. It also explores the relationship that exists between legal issues and the ethical issues that arise in connection with the ways that legal and social problems are addressed within the legal system.

## LAW6657

3 Credits

### **Applied Business Law**

This course covers the essential areas of the Uniform Commercial Code, namely contracts, agency, negotiable instruments, secured transactions, bankruptcy, partnerships and corporations. In addition, the Securities and Exchange Acts are given appropriate coverage.

## MGMT5012

2 Credits

### **Foundations of Management**

This course prepares students to understand at a basic level how the functional areas of business fit within the larger context of organizations. The role of managers and the evolution of management from the classical, human relations and behavioral-systems schools of thought will be

# Business • Course Offerings

---

discussed. The general management functions of planning, organizing, controlling, staffing and leading will be introduced. Also covered in this course will be the basics of competitive strategy formulation, organization design, motivation, goal setting, group/team dynamics, international management and ethical decision making, as foundations for more advanced treatment of these topics in the M.B.A. core.

## **MGMT6012**

**2 Credits**

### **Organizational Behavior and Leadership**

This course emphasizes concepts and tools for assessing the social processes encountered in the workplace. Although the primary focus is on understanding and managing individuals and teams, there is significant attention to system-level behavior and change. Students will focus on the application theories and the development of managerial skills, such as understanding individual differences, effectively working in teams, motivating and influencing others, managerial communications, ethical decision-making and leadership, as well as managing organizational change. Prerequisite: MGMT5012 Foundations of Management.

## **MGMT6112**

**2 Credits**

### **Managing Sustainability in a Global Environment**

The course will focus on the current and future challenges and opportunities relating to climate change, sustainable economic development and the role of business. It will explore theory, the values and practical aspects of sustainability, with special emphasis on the role of leadership and managing change. Prerequisite: MGMT6012 Organizational Behavior and Leadership.

## **MGMT6621**

**2 Credits**

### **Strategic Human Resource Management**

This course focuses on the new and expanded role of the human resource professional. The course content is centered on the activities performed by a human resource department, for example, recruitment and selection, and compensation and benefits, which are the building blocks for the HR professional. An understanding of these HR functions also is important for line managers who have substantial responsibility for managing people. Prerequisite: MGMT6012 Organizational Behavior and Leadership.

## **MGMT6625**

**2 Credits**

### **Managing a Healthy Workforce**

People are the most important resource in determining the overall performance of organizations. Business enterprises are the largest financiers of health insurance in the United States and are

uniquely positioned to promote and influence the health, well being and productivity of workers. This course adopts an interdisciplinary approach to the challenge of managing a healthy workforce. Students will utilize knowledge acquired in their M.B.A. core courses to analyze and propose solutions to contemporary challenges such as responding to the mandates of recent health care reform legislation, promoting the health status of employees and their dependents, occupational health and safety, coping with job stress, managing the chronic-care needs of an aging workforce, controlling the cost and quality of health care and creating a corporate culture of health and wellness. Course participants will identify current issues and use a team approach to develop actionable management programs that foster workforce health and welfare. Prerequisites: MGMT6012 Organizational Behavior and Leadership and MGMT6621 Strategic Human Resource Management.

## **MGMT6633**

**2 Credits**

### **Leadership and Change Management**

Organizations must become more nimble so they can readily adapt to the shifting needs of the global marketplace. To that end, the ability to navigate organizational change is a competitive advantage. This course focuses on the development and application of strategies that will enable individuals to successfully lead organizational change. Topics include models and frameworks of change, as well as ethical responsibility and stakeholder engagement. Prerequisite: MGMT6012 Organizational Behavior and Leadership.

## **MGMT6640**

**2 Credits**

### **Leadership Development Project**

This course would include project-based and reflective learning. Emphasis will be placed on negotiation, conflict or knowledge management. This serves as the capstone experience within the management major. Prerequisite: MGMT6012 Organizational Behavior and Leadership.

## **MGMT6700**

**2 Credits**

### **Negotiation and Conflict Management**

Negotiation is a crucial aspect of the interactions among individuals, teams and organizations. Moreover, successful negotiations can create value for all participants. This course will introduce students to the theory and practice of negotiation through readings, role-play and other experiential exercises. Influences of culture and ethics on negotiation strategies will be assessed. Students will develop self-awareness through the discovery of their own negotiating style and build a repertoire of personal negotiation strategies. Prerequisite: MGMT6012 Organizational Behavior and Leadership.

## **MGMT6800**

**1–3 Credits**

### **Graduate Independent Study**

Studies in area of discipline with departmental approval.

## **MGMT7012**

**2 Credits**

### **Global Business Capstone**

Students will integrate strategic, marketing, operating and financial theories and practices to evaluate the formulation and implementation of business strategy in multinational-firm contexts. Issues pertaining to corporate diversification will be examined. Prerequisite: Completion of all 6012 core classes.

## **MIS6012**

**2 Credits**

### **Information Systems for Managers**

This course helps students understand the role of information systems (IS) in supporting business operations and strategy and become effective in IS-related decision making as it relates to the organization and the global marketplace. The students learn the key information technologies and their business applications, including e-business, m-commerce and web-based applications. The influence of information technologies on management and organizations is also studied. Challenges and opportunities that arise in using and managing information resources are examined together with the application of emerging technologies.

## **MKTG5012**

**2 Credits**

### **Marketing Principles**

This course will introduce students to marketing terminologies and concepts. The goal is to provide sufficient foundation knowledge to enable students to take courses in the core M.B.A. program. Accordingly, the course introduces students to such fundamental marketing concepts as the marketing mix, segmentation, marketing research and consumer behaviors.

## **MKTG6012**

**2 Credits**

### **Strategic Marketing**

This course addresses the set of strategic and tactical decisions that marketers need to make to be able to create, communicate and deliver value to selected target markets. The course will address topics such as segmentation, targeting and positioning; new-product development and launch; management of brand equity; and product, price, distribution and promotional strategy. Students will critique firms' marketing strategies that illustrate these issues. Students will also be responsible for integrating these concepts into a marketing plan for a new product. Prerequisite: MKTG5012 Marketing Principles.

# Business • Course Offerings

## MKTG6111

2 Credits

### Digital Marketing Strategies\*

This course explores digital marketing trends from a theoretical and practical perspective. The class will examine topics such as website design, search-engine optimization, search-engine advertising, email marketing, reputation management and analytics. Exercises and assignments are designed to provide students with the skills to develop, implement and evaluate effective digital marketing programs. Prerequisite: MKTG6012 Strategic Marketing.

## MKTG6112

2 Credits

### Social Media Strategy

This course explores current social media platforms and their role in a company's marketing communication strategy, facilitating customer relationships, product innovation and brand equity. Specifically, the course examines how to create and implement a social media campaign, measure and track its performance and utilize appropriate analytic metrics and software platforms. Social media will be examined as part of a larger integrated marketing communication strategy. In addition, it will briefly cover social media's potential role in overall business operations. Applicable consumer behavior, communication and advertising theories will be covered. Prerequisite: MKTG5012 Marketing Principles.

## MKTG6113

2 Credits

### Mobile Marketing Strategies\*

This course will examine the strategic uses of mobile marketing to be able to create and critique a mobile marketing plan. Students will be introduced to the quickly evolving mobile field and be exposed to topics such as mobile-ready websites, proximity marketing, mobile advertising, mobile applications, messaging and analytics. Prerequisites: MKTG6012 Strategic Marketing and MKTG6111 Digital Marketing Strategies.

## MKTG6602

2 Credits

### Marketing Research

This course is designed to provide an in-depth understanding of the marketing research process. This includes identifying and defining marketing problems with sufficient precision to permit the collection of the appropriate market data using a variety of methods. In addition, the course will focus on analyzing data using appropriate techniques to yield useable knowledge that can aid marketers in making better educated decisions. Prerequisites: DSCI5012 Statistical Data Analysis and MKTG6012 Strategic Marketing.

## MKTG6603

2 Credits

### Consumer Behavior

This course will expose students to various theories and concepts relevant to understanding consumer behavior. The course will focus heavily on consumer psychology and consumer decision-making processes, including factors that influence these processes. This foundation will form the basis of understanding how managers can benefit from such knowledge so that they are better equipped to both predict and influence consumers' responses to marketing strategies and tactics. Prerequisite: MKTG6012 Strategic Marketing.

## MKTG6605

2 Credits

### Marketing Communications

The course is designed to provide an overview of marketing communications theory, strategy, management and tactics. Students will be exposed to a mixture of applied theory and practical examples of how marketing communications plans and tactics are developed and executed. Prerequisite: MKTG6012 Strategic Marketing.

## MKTG6614

3 Credits

### Search Engine Optimization and Advertising

This course will provide an overview on search engine optimization (SEO), search engine marketing (SEM) and display advertising. Students will learn the importance of keyword research, onsite and offsite SEO best practices, writing effective ad copy, ad bidding, account monitoring and organizing and display networks. Prerequisites: MKTG6012 Strategic Marketing, MKTG6111 Digital Marketing Strategies and MKTG6605 Marketing Communications.

## MKTG6615

3 Credits

### Email and Database Marketing

This course will provide an overview of email marketing and database management and their role within an integrated marketing communication strategy. The course will examine how to create, manage and measure an email campaign as well as navigate ethical issues. In addition, emphasis will be given to developing and maintaining customer databases to further the students' understanding of consumer behavior and build stronger customer relationships. Prerequisite: MKTG6012 Strategic Marketing, MKTG6111 Digital Marketing Strategies, MKTG6603 Consumer Behavior and MKTG6605 Marketing Communications.

## MKTG6616

3 Credits

### Content Marketing

This course will explore the important role that marketing plays in a company's inbound marketing strategy. Students will learn how to identify/develop engaging content, manage digital assets, understand applicable copyright and legal regulations, execute a content strategy and measure campaign results. Prerequisites: MKTG6012 Strategic Marketing, MKTG6111 Digital Marketing Strategies and MKTG6605 Marketing Communications. Corequisite: MKTG6112 Social Media Strategy.

fy/develop engaging content, manage digital assets, understand applicable copyright and legal regulations, execute a content strategy and measure campaign results. Prerequisites: MKTG6012 Strategic Marketing, MKTG6111 Digital Marketing Strategies and MKTG6605 Marketing Communications. Corequisite: MKTG6112 Social Media Strategy.

## MKTG6617

3 Credits

### Web Analytics

This course will explore how to utilize quantitative and qualitative data to better inform marketing decisions. Students will identify key performance indicators (KPI), be exposed to a variety of analytic tools, conduct A/B testing, familiarize themselves with analytic dashboards and create actionable analytic reports that will provide insight into website design, buying behavior, social media and advertising-related decisions. Prerequisites: DSCI5012 Statistical Data Analysis, MKTG6012 Strategic Marketing, MKTG6111 Digital Marketing Strategies and MKTG6602 Marketing Research.

## MKTG6800

1–2 Credits

### Graduate Independent Study

Studies in area of discipline with departmental approval. (Internship or special projects)

## MKTG8850

1–2 Credits

### Advanced Special Projects: Marketing

Studies in an area of marketing, with departmental approval. It is the student's responsibility to obtain a faculty mentor. Prerequisite: MKTG5012 Marketing Principles.

## PHAR6601

3 Credits

### Health Care Systems and Policy

This course provides a comprehensive overview of the structure and operations of the United States health care delivery system. Major forces and trends that are likely to shape the external environment and linkages among industry stakeholders are identified and examined. Fundamentals of health care economics, financing, reimbursement, quality assurance and political policymaking are discussed with due regard for social and ethical implications. The spectrum of life sciences is considered in relation to the continuum of health care delivery. Students will prepare a position paper that applies course concepts to a contemporary issue of relevance to their specific career interests.

## PHAR6615

2 credits

### Pharmaceutical Marketing and Product Development

This course surveys sales and marketing practices, constraints and promotion tools in the

\*Distance learning course.

# Business • Course Offerings

pharmaceutical and related industries, including new product development and licensing. Prerequisites: MKTG5012 Marketing Principles and PHAR6601 Health Care Systems and Policy.

## PHAR6640

2 credits

### **Management of Research and Technology in the Pharmaceutical Industry**

Strategic, organizational and human factors involved in successful research and development operations in pharmaceutical and chemical companies are reviewed. Also covered are the selection and development of projects, creativity, liaison problems, control devices, analysis, reports and communications and other factors involved in program/project management. Prerequisites: MGMT5012 Foundations of Management and PHAR6601 Health Care Systems and Policy.

## PHAR6650

2 credits

### **Management of Production, Purchasing and Quality Control in the Pharmaceutical Industry**

Overview of the problems and factors involved in effective supply-chain management of pharmaceutical facilities, from purchasing through production and quality control. Prerequisites: DSCI6012 Operations Management and PHAR6601 Health Care Systems and Policy.

## PHAR6680

2 Credits

### **Structure, Regulation and Strategy of the Pharmaceutical Industry**

This course examines industry structure and its implications for both industry regulation and corporate strategy. Key issues of corporate strategy are addressed including, globalization, vertical integration, diversification and focus. Strategy and regulation are considered from the point of view of biotech companies, big pharmaceutical companies and industry suppliers. Prerequisite: PHAR6601 Health Care Systems and Policy.

## PHAR6690

3 Credits

### **Managing the Value Proposition**

Of strategic concern to pharmaceutical managers, regardless of their particular career focus, is the current emphasis on delivering “value” to stakeholders (whomever they may be). Successful response to this challenge requires a balanced approach to managing the effectiveness (quality) and efficiency (cost) of products/services delivered. The role of managed-care organizations as adjudicators of health care coverage and value will be explored. As their course project, students will be challenged to develop a compelling value proposition for a product or service germane to their chosen area

of industry specialization. Prerequisites: PHAR6601 Health Care Systems and Policy and PHAR elective.

## PHAR6800

1–2 Credits

### **Graduate Independent Study**

Studies in area of discipline with departmental approval.

## PHAR7715

2 credits

### **Topics in Current Developments**

Current issues, ideas and problems of interest to the pharmaceutical and chemical industries. An emphasis on the use of current literature, the participants in current issues, specialists and intervention by government authorities. Enrollment by special permission only.

## TAX6621

3 Credits

### **Advanced Federal Tax: Individual Income Taxation**

This course is designed to introduce the student to the case method and the use of the Internal Revenue Code as a foundation for tax research and planning. Substantively, the course examines gains and losses, basis rules, capital assets, section 1251, taxation of capital transactions, depreciation and recapture, interest, charitable contributions and tax aspects of divorce. Prerequisite: ACCT6605 Federal Tax I: Individual.

## TAX6622

3 Credits

### **Advanced Corporate Tax I**

This course introduces the study of corporate taxation. It covers the tax aspects of incorporation, financing the entity, distributions, redemptions and liquidations. S corporations also are covered, as well as the alternative minimum tax and computation of taxable income and tax. Prerequisite: ACCT6606 Federal Tax II: Business Entities.

## TAX6625

3 Credits

### **Estate and Gift Taxation**

The study of transfer taxes during life and death. Concepts such as gross and taxable estate and gifts will be explored in detail. The course covers inclusions, deductions, valuations, exemptions, credits and tax computations for gifts and estates.

## TAX6670

3 Credits

### **Tax Accounting**

The study of tax law as it pertains to the timing and treatment of tax items. Topics will include the cash and accrual method for income tax, installment sales, inventories (including unicap), changes in accounting methods, the tax benefit rule, accounting periods, time value of money and the annual accounting period.

## TAX6850

3 Credits

### **Tax Research**

A study and implementation of tax research techniques, including internet and proprietary research databases. Through a variety of written projects, oral presentations and class material, the student will develop the ability to identify, research and communicate the solutions to a variety of tax issues that are encountered in practice. Emphasis will be on the development of sound research and writing skills. Prerequisites: TAX6621 Advanced Federal Tax I: Individual Income Taxation, TAX6622 Advanced Corporate Tax I and TAX7724 Tax Practice and Procedure I.

## TAX7705

3 Credits

### **U.S. International Corporate Taxation**

A comprehensive course for corporate tax practitioners who do not choose to specialize in international tax. The course is an intensive course limited in scope. Certain topics, such as foreign tax credit and Subpart F, are covered in the same depth as they are in specialist courses, but offer only limited, if any, coverage of other specialist topics. The goal is to teach those operating in a large corporate environment what they need to know to function as an international tax person. This course covers topics such as the foreign tax credit, sourcing of income, deemed paid credits, separate limitation categories, allocation and apportionment rules and Subpart F. Prerequisite: TAX6622 Advanced Corporate Tax I. TAX7725 Advanced Corporate Tax II recommended. Waivers may be granted by the program director in consultation with the course professor.

## TAX7708

3 Credits

### **International Tax I: Sourcing and Inbound**

This first of three courses for international tax specialists provides in-depth coverage of the source-of-income rules and U.S. taxation of foreign persons. The course also explains the rules for U.S. taxation of international assignees, provides an overview of income tax treaties and covers withholding taxes.

## TAX7710

3 Credits

### **International Tax II: Outbound**

This second course for international tax specialists covers foreign tax credits for corporations and related topics. Included are creditable taxes, separate limitation categories, deemed paid credits, allocation and apportionment, Subpart F, PFIC rules and the various international tax implications of the American Jobs Creation Act of 2004. Prerequisites: TAX6622 Advanced Corporate Tax I and TAX7708 International Tax I: Sourcing and Inbound or TAX7705 U.S.

International Corporate Taxation or permission from the director of the tax program in consultation with the course professor.

## TAX7711

3 Credits

### **International Tax III: Special Topics**

This third course for international tax specialists provides a comprehensive review of international structuring and reorganizations, including use of hybrid entities. In addition, there is coverage of the U.S. transfer pricing rules and sourcing rules related to produced inventory. Prerequisites: TAX7710 International Tax II: Outbound and TAX7725 Advanced Corporate Tax II.

## TAX7725

3 Credits

### **Estate and Gift Tax Planning**

This course explores estate planning for gifts and other transfers by use of various techniques. Planning for business and other wealth transfers among family members will be highlighted. Topics will include marital deduction, split gifts, life insurance, charitable gifts, use of trusts and planning for estate liquidity. Prerequisite: TAX6625 Estate and Gift Taxation.

## TAX7724

3 Credits

### **Tax Practice and Procedure I**

A study of Subtitle F of the Code, dealing with tax procedures applicable to individuals and businesses. Topics include IRS organization, tax aspects of returns, administrative rulings and position statements, civil litigation in tax and district court, statutes of limitations, various types of assessments, waivers, overpayment and refunds, interest and civil penalties. The course also will include a study of Circular 230, professional responsibility and penalties that apply to practitioners.

## TAX7725

3 Credits

### **Advanced Corporate Tax II**

A continuation of TAX6622 Advanced Corporate Tax I, this course covers corporate acquisitions and dispositions, including both taxable transactions and nonrecognition reorganizations. The course examines acquisitive reorganizations in depth, followed by reorganizations within a single corporation and divisive reorganizations. Topics include the judicial doctrine of business purpose, step transaction and continuity of interest. The course ends with a study of the transfer and survival of corporate tax attributes after reorganization. Prerequisite: TAX6622 Advanced Corporate Tax I.

## TAX7726

3 Credits

### **Compensation: Executive Compensation and Nonqualified Plans**

A study of the tax aspects of various forms of executive and employee compensation. The major focus of the course will be on nonqualified plans. The course covers various compensation techniques, including traditional deferred compensation arrangements, nonqualified stock options, stock appreciation rights, phantom stock plans, stock awards, restricted stock plans, excess benefit arrangements, rabbi trusts, split-dollar plans and severance-pay plans.

## TAX7727

3 Credits

### **Advanced Federal Tax: Property Transactions**

This course concentrates on the tax aspects of acquisitions and dispositions of property. Topics will include like-kind exchanges, involuntary conversions, assignment of income doctrine, disposition of residence, cancellation of indebtedness and limitation on losses, such as at-risk rules and passive activity rules, hobby losses, home office and net operating losses (NOL). Prerequisite: ACCT6605 Federal Tax I: Individual.

## TAX7728

3 Credits

### **Partnership Taxation**

The study of the federal taxation of partnerships and partners. The course covers formation, operation and liquidation of a partnership, including the acquisition of partnership interests, compensation of a service partner, treatment of partnership distributions, basis, allocations, liquidations and problems associated with the disposition of partnership interests or property by sale. Prerequisites: ACCT6606 Federal Tax II: Business Entities, TAX6621 Advanced Federal Tax: Individual Income Taxation and TAX7727 Advanced Federal Tax: Property Transactions.

## TAX7730

3 Credits

### **Income Taxation of Estates and Trusts**

A study of the federal income taxation of estates and trusts (grantor, simple and complex). The course analyzes tax consequences to fiduciaries, beneficiaries, grantors and other parties from inception through termination. Topics include general rules for taxation, fiduciary accounting income, distributable net income, income distribution deduction, computation of taxable income, various distributions and income in respect of a decedent.

## TAX7732

3 Credits

### **Tax Practice and Procedure II**

A complete review of procedures and strategies involved in the audit, appeal and collection process. Other topics include liens and levies, offers in compromise, installment agreements, closing agreements, summons enforcement, IRS investigatory powers and criminal aspects of the tax laws. Prerequisite: TAX7724 Tax Practice and Procedure I or permission from the director of the tax program.

## TAX7734

3 Credits

### **Consolidated Returns**

This course covers in depth the most important aspects of the current consolidated return regulations. Topics include intercompany transactions with a detailed study of both the matching principle and acceleration rules, loss disallowance rules, consolidated Section 382, investment adjustments in the basis of the stock of subsidiaries, excess loss accounts and allocation of consolidated tax liability to members of an affiliated group. Class discussions emphasize working through important examples contained in the regulations. Prerequisites: TAX6622 Advanced Corporate Tax I and TAX7725 Advanced Corporate Tax II.

## TAX7735

3 Credits

### **Tax-exempt Organizations**

This course covers the formation, operation and taxation of tax-exempt organizations. Emphasis will be placed on the qualification process for tax exemption, the unrelated business tax and the special "excise" taxes on private foundations. Compliance requirements also are reviewed.

## TAX7736

3 Credits

### **State and Local Taxation: Constitutional Issues**

This foundation course examines the constitutional limits on states' rights to impose various forms of taxation on income, capital and transactions of individuals and multistate businesses. Topics include nexus, constitutionally acceptable income-allocation methods and strategies for avoiding unnecessary taxation by nondomiciliary states.

## TAX7738

3 Credits

### **Compensation: Qualified Pension and Profit-sharing Plans**

A study of qualified compensation arrangements, including pension and profit-sharing plans. The course covers plan selection, qualification requirements, limitations on contributions, benefits, deductions and funding, nondiscrimination, taxation of distributions, rollovers, minimum distributions, incidental benefits, spousal rights,

# Chemistry

---

multiple-entity structure, reporting and disclosure, prohibited transactions and fiduciary responsibility.

## **TAX7750**

**3 Credits**

### **State and Local Taxation: Corporate and Individual Income Taxation**

A study of the major income and franchise tax issues confronting nonresident individuals, pass-through entities, nonresident shareholders of S corporations and multistate and multinational corporate businesses covered in the context of current litigation and rule-making at the state and local levels. The course also explores tax-planning opportunities for the multistate business and the use of transfer pricing in state and local income tax matters. Individual income taxation and the interaction between the state and federal systems also are discussed. Special attention is paid to tax systems used in New York and New Jersey.

## **TAX7752**

**3 Credits**

### **State and Local Taxation: Sales, Use and Property Taxes**

This course examines the sales, use and property tax schemes prevailing in the United States. Sales and use tax constitutes roughly 33 percent of all state tax collections, whereas property tax constitutes about 50 percent. The course examines the definition of a sale, the nuances relative to a manufacturing and construction, the power of the states to assert jurisdiction over aspects of a transaction occurring beyond their borders and exemptions. Relating to property tax, the course examines State Constitutional Principles of Uniformity and Equal Protection, approaches to valuation, exemption and incentives. Special attention is paid to tax systems used in New York and New Jersey. Other common levies also may be covered.

## **TAX8840**

**3 Credits**

### **Taxation of S Corporations: Selected Studies**

This course undertakes an in-depth study and analysis of the tax laws that apply to S corporations and their shareholders. Topics will include eligibility, election, revocation and termination, stock and debt basis, losses, distributions, various corporate level taxes, subsidiaries, fringe benefits and comparisons to other forms of business entities. Prerequisites: ACCT6606 Federal Tax II: Business Entities and TAX6622 Advanced Corporate Tax I.

## **TAX8850**

**3 Credits**

### **Taxation of Financial Products**

This course focuses on the taxation of financial instruments, products and transactions. It begins by covering basic principles, including financial terminology, types of market participants, as well as the tax concepts of timing, character and source. It then proceeds with a study of the detailed rules regarding tax treatment of financial instruments including stocks, bonds, options, forward contracts, futures contracts, convertible and contingent payment instruments, swaps, as well as hybrid instruments. Tax issues that will be addressed include wash sales, constructive sales, short-sale rules, straddles, market discount, original issue discount, Section 1256 and notional principal contract regulations. International tax and reporting issues will also be covered.

## **TAX8860**

**3 Credits**

### **Accounting for Income Taxes (ASC 740/FAS 109/FIN 48)**

This course provides an in-depth analysis of the financial accounting for income taxes under U.S. Generally Accepted Accounting Principles (GAAP). The course begins with a conceptual framework and then discusses such practical applications as computing the tax provision, effective tax rate, quarterly and annual reporting and financial disclosures for income taxes. All major elements of ASC 740 (FAS 109) are considered, as are related pronouncements such as (pre-codification) FIN 48, APB 28, FIN 18 and other accounting guidance. Emphasis will be given to practical application of the accounting standards to "real-world" situations.

# Chemistry (M.S.)

This program is offered at both the Florham Campus, Madison, New Jersey, and the Metropolitan Campus, Teaneck, New Jersey. These programs are listed by campus on pages 84 through 90.

## Chemistry (M.S.)

### Florham Campus

The Master of Science in chemistry program provides training for those who wish to advance their careers in research, industry, government service or teaching. In addition to advancing students toward a doctoral program, the program also provides courses of interest to industrial chemists who already may hold advanced degrees. In addition to full-time faculty, the department of chemistry and pharmaceutical science draws part-time faculty from local industries, allowing a broader range of offerings.

This program is offered under the auspices of the department of chemistry and pharmaceutical science, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admission Requirements

1. Graduation from an accredited college or university.
2. Satisfactory completion of a minimum of 24 credits in undergraduate chemistry with laboratory work, including physical and organic chemistry, a working knowledge of calculus and one year of physics with laboratory.
3. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. (The GRE requirement is waived for applicants who have completed a master's degree.)
4. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

### Requirements for the Master of Science Degree

1. Satisfactory completion of a minimum of 32\* credits in courses prescribed or approved for the degree of Master of Science in chemistry.
2. Compliance with the minimum course requirements listed in the next column.

\*A student may substitute 9 credits of additional chemistry courses for the CHEM6801, CHEM6802 Research and Thesis and CHEM6803 Thesis Seminar (total 7 credits) requirements. This makes a minimum of 34 credits in courses for the Master of Science degree when a student elects the nonthesis option.

<b>Core Courses</b>	Credits
CHEM6613	
Advanced Inorganic Chemistry.....	3
CHEM6673	
Physical Organic Chemistry.....	3
CHEM6781	
Biochemistry.....	3
CHEM6805	
Graduate Seminar.....	1
CHEM7771	
Advanced Organic Synthesis.....	3

### Two of the following three courses:

CHEM6641	
Quantum Chemistry.....	3
CHEM6651	
Chemical Thermodynamics.....	3
CHEM7751	
Chemical Kinetics.....	3

### Other Courses

CHEM6801, CHEM6802	
Research and Thesis (Optional)* —	
3 credits each semester.....	6
CHEM6803	
Thesis Seminar (Optional)*.....	1
Minimum of 6 credits in additional chemistry courses approved by adviser.**	

### Pharmaceutical Chemistry Concentration

The Master of Science in chemistry with a concentration in pharmaceutical chemistry is intended to serve the needs of the pharmaceutical industry in the North Jersey area. With the help of experienced industrial adjunct faculty, the department provides a rigorous and flexible course of study in this important area.

The program is intended for professionals in the pharmaceutical industry wishing to advance their skills and credentials. Financial assistance in the form of teaching assistantships and research scholarships is not available.

\*A student may substitute 9 credits of additional chemistry courses for the CHEM6801, CHEM6802 Research and Thesis and CHEM6803 Thesis Seminar (total 7 credits) requirements. This makes a minimum of 34 credits in courses for the Master of Science degree when a student elects the nonthesis option. The thesis option is not open to the pharmaceutical chemistry concentration student.

\*\*Up to 6 credits of graduate courses in a single area outside of chemistry to be approved by adviser may be substituted.

Pharmaceutical chemistry, as a separate discipline, is relatively new and emerging, so the M.S. program has been designed with flexible entrance requirements to accommodate a wide range of experience and training. For those with minimal chemistry backgrounds, it includes practical components that will prepare students for rapid entry to laboratory positions.

The thesis option is not open to the pharmaceutical chemistry concentration student.

### Minimum Admission Requirements

1. Graduation from an accredited college or university.
2. Satisfactory completion of a minimum of 24 credits in undergraduate chemistry with laboratory work, including physical and organic chemistry, a working knowledge of calculus and one year of physics with laboratory.
3. Applicants also must meet all the general admission requirements for matriculated students.

### Course Requirements

Satisfactory completion of 36 or 31 credits in courses approved for the degree of Master of Science in chemistry with a pharmaceutical chemistry concentration.

For students entering with a bachelor's degree in biology or pharmacy, including general and organic chemistry (16 credits), calculus and physics, the program described on page 86 (41 credits) should be completed in two years (four semesters).

For students entering with a bachelor's degree in chemistry from an American Chemical Society (ACS)-certified program that includes physical chemistry, analytical chemistry and undergraduate laboratory experience, the following courses may be waived from the above program: CHEM5242 Physical Chemistry II (3 credits) and CHEM5803 Foundations in Chemical Analysis (2 credits). In this case, the total credit requirement is 31 credits, and the program should also be completed in two years (four semesters).

# Chemistry

## Core Courses (31–36 credits)

31 credits for students with U.S. or Canadian B.A. or B.S. in the area of chemistry or biochemistry, international degrees or degrees in related areas.

### Foundational Courses

	Credits
CHEM5242 Physical Chemistry II.....	3
CHEM5803 Foundations in Chemical Analysis.....	2

### Required Courses

CHEM6663 Introductory Medicinal Chemistry.....	3
CHEM6673 Physical Organic Chemistry.....	3
CHEM6685 Pharmacology.....	3
CHEM6781 Biochemistry.....	3
CHEM6805 Graduate Seminar.....	1
CHEM7733 Instrumental Analysis.....	3
CHEM7735 Pharmaceutical Analysis.....	3
CHEM7751 Chemical Kinetics.....	3
CHEM7753 Pharmacokinetics.....	3

### Elective Courses (6 credits)

Select courses from the following:\*

CHEM6806 Graduate (Nonthesis) Research in Chemistry.....	3
CHEM6850 Special Topics in Chemistry.....	3
CHEM7747 Protein Chemistry.....	3
CHEM7765 Heterocyclic Chemistry.....	3
CHEM7771 Advanced Organic Synthesis.....	3
CHEM7783 Biochemistry II.....	3
CHEM7891 Internship/Laboratory Work Experience.....	3
PHAR6615 Pharmaceutical Marketing and Product Development.....	2

\*Up to 6 credits of graduate courses in a single area outside of chemistry to be approved by adviser may be substituted.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate department chair.

### Chemistry

Department of Chemistry and  
Pharmaceutical Science

#### CHEM5242

3 Credits

#### Physical Chemistry II

Introduction to the principles of kinetics, quantum mechanics, spectroscopy and molecular structure.

Spring

#### CHEM5803

2 Credits

#### Foundations in Chemical Analysis

Instrumental methods, including electrochemical methods, spectroscopy (UV/Vis, IR, NMR) and chromatography (GC-MS, HPLC). Computer handling of data and report writing. Corequisite: CHEM7733 Instrumental Analysis.

Fee

#### CHEM6605

3 Credits

#### Chemical and Pharmaceutical Statistics

This class presents applied statistical procedures and research designs in pharmacology research contexts. The major techniques and methods of analyzing research results commonly published in pharmacology are highlighted. Note: FDU NetID (formerly Webmail) account required.

#### CHEM6613

3 Credits

#### Advanced Inorganic Chemistry

Modern theories of bonding, structure, stability of molecules, complexes and reaction mechanisms, using examples drawn from the current literature.

Spring

#### CHEM6631

3 Credits

#### Theories of Analytical Chemistry

Theoretical principles and applications of selected modern methods of analysis.

#### CHEM6641

3 Credits

#### Quantum Chemistry

Fundamental theories of quantum chemistry applied to chemical bonding and molecular structure.

#### CHEM6651

3 Credits

#### Chemical Thermodynamics

Principles of classical thermodynamics and an introduction to statistical thermodynamics.

#### CHEM6663

3 Credits

#### Introductory Medicinal Chemistry

This course is based on all branches of chemistry, but especially organic chemistry. Its focus is on improving a drug's therapeutic effect while minimizing its undesirable side effects.

#### CHEM6673

3 Credits

#### Physical Organic Chemistry

Current theories of structure and reactivity of organic compounds.

#### CHEM6685

3 Credits

#### Pharmacology

A study of drugs, their history, sources, physical and chemical properties, compounding, biochemical and physiological effects, mechanism of action, absorption, distribution in the body and therapeutic uses.

#### CHEM6757

3 Credits

#### Neuropharmacology

This course studies the functional neuropharmacology and receptorology of the mammalian central nervous system, focusing on the neurochemistry of precursors, synthesis, release and second messenger systems for various neurotransmitter systems as well as the mechanism of action of psychoactive drugs and medications used to treat pain, mental illnesses and disorders such as Parkinson's disease, Alzheimer's and epilepsy.

#### CHEM6759

3 Credits

#### Radiochemistry

A presentation of radioisotope production, detection and application in chemistry. Statistical and safety aspects of radiation also are included.

#### CHEM6768

0–3 Credits

#### Engaging Students in Physical Science Classroom

Students will participate in an interactive workshop course to discuss and explore effective ways to excite and engage students in areas of chemistry, physics and earth science. Note: For Institute for the Enhancement of Teaching Science and Math (IETSMT) teachers only.

#### CHEM6769

0–3 Credits

#### Curricular Change in Physical Science

The course is offered to support teachers currently involved within the Institute for the Enhancement of Teaching Science and Math.



**CHEM6773****3 Credits****Chemistry of High Polymers**

A study of natural and synthetic polymers derived from free radical, cationic and anionic polymerizations.

**CHEM6775****3 Credits****Chemistry of Natural Products**

Chemical and biochemical transformations of selected natural products.

**CHEM6781****3 Credits****Biochemistry**

Structure and function of biological molecules. (Equivalent to HSCI6781 Biochemistry for the Medical Sciences.)

*Fall***CHEM6800****1-3 Credits****Advanced Special Projects: Chemistry**

An in-depth independent study of a problem in chemistry.

**CHEM6801, CHEM6802****6 Credits (3 Credits Each Semester)****Research and Thesis**

Individual research investigation in an area of chemistry under the supervision of a faculty adviser. Approved thesis must be submitted.

**CHEM6803****1 Credit****Thesis Seminar**

An oral presentation and defense of thesis before a departmental committee. Prerequisites or corequisites: CHEM6801, CHEM6802 Research and Thesis.

**CHEM6805****1 Credit****Graduate Seminar**

Chemical literature is reviewed through lectures, library assignments and student seminars. Prerequisite: CHEM5805 Foundations in Chemical Analysis.

*Spring***CHEM6806****0-3 Credits****Graduate (Nonthesis) Research in Chemistry**

Graduate level, nonthesis research with an adviser in the chemistry and pharmaceutical science department. Prerequisite: undergraduate degree in chemistry.

**CHEM6830, CHEM6831, CHEM6832,****CHEM6833****3 Credits****Special Topics in Chemistry****CHEM7733****3 Credits****Instrumental Analysis**

Applications of spectroscopy, electrochemistry and chromatography to chemical problems, with particular emphasis on comparison of methods and interpretation of experimental data.

*Fall***CHEM7735****3 Credits****Pharmaceutical Analysis**

The analytical chemistry unique to pharmaceutical compounds from the viewpoint of a pharmaceutical scientist.

**CHEM7747****3 Credits****Protein Chemistry**

The chemistry and physical properties of amino acids, peptides and proteins; the three-dimensional structure of proteins; protein function in enzymes, biological membranes, connective tissues, oxygen transport and storage; biosynthesis of proteins in muscle contraction, membrane transport, sensory systems, hormones and the immune response.

**CHEM7751****3 Credits****Chemical Kinetics**

Theory of homogeneous and heterogeneous reactions, factors influencing reaction rates, theory of absolute rates, chain reactions, catalysis. Prerequisite: CHEM5242 Physical Chemistry II.

**CHEM7753****3 Credits****Pharmacokinetics**

The study of the rate of change of drug concentration in the body. Understanding the absorption, distribution, biotransformation and excretion of drugs is used in the design and optimization of drug formulations and dosage regimens.

**CHEM7765****3 Credits****Heterocyclic Chemistry**

A discussion of the preparation and chemical properties of mono- and polycyclic compounds containing oxygen, nitrogen and sulfur atoms. Those of biological interest also will be discussed.

**CHEM7771****3 Credits****Advanced Organic Synthesis**

A study of selected synthetic organic reactions. (Equivalent to HSCI7771 Advanced Organic Synthesis.)

**CHEM7783****3 Credits****Biochemistry II**

Continues the study of the molecular basis of life. Topics include more details and discussions

of current research: structure of biological molecules, mechanisms of enzyme action, metabolism with emphasis on energy production and use, the expression of genetic information and cellular signaling and signal transduction.

**CHEM7785****3 Credits****Physical Biochemistry**

The physical chemistry of biological macromolecules and systems of biochemical interest.

**CHEM7891****3 Credits****Internship/Laboratory Work Experience**

Provides on-the-job education and training in the concepts presented in the graduate pharmaceutical chemistry curriculum. Students must submit for the University's approval a proposal from the employer detailing the nature of the intended work. Weekly contact must be maintained with the University's adviser to confirm the quality of the work experience. A report at the conclusion of the working experience is required, detailing both the educational and training aspects of the job. Prerequisite: students must have been enrolled in the graduate pharmaceutical chemistry program for at least 18 graduate chemistry credits.

# Chemistry

## Chemistry (M.S.)

### Metropolitan Campus

The School of Natural Sciences, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey, offers a Master of Science in chemistry with **concentrations in informatics and pharmaceutical chemistry**. This focused concentration is designed to fulfill the practical and intellectual needs of chemists pursuing research and development careers within the pharmaceutical industry. For those without industrial experience, the programs can help launch a career in the pharmaceutical industry. It is also geared to current technologists aspiring to supervisory roles in the laboratory or plant. To accommodate part-time students who are already working in the industry, classes are offered in the evenings.

### Admission Requirements

1. Graduation from an accredited college or university with a baccalaureate degree in an allied science (biology, chemistry, biochemistry or pharmacy).

2. Satisfactory completion of a minimum of 24 credits in chemistry including a two-semester sequence of organic and physical chemistry.

3. Submission of the general Graduate Record Examinations (GRE) scores and three letters of recommendation.

4. A minimum score of 550 (paper-based) or 213 (computer-based) or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) is required for all applicants whose native language is not English.

Note that financial assistance in the form of teaching assistantships and research scholarships is not available.

### Informatics Concentration

This concentration is an interdisciplinary program including training not only in chemistry but also in applied statistics and computer science. Students will complete graduate course work in chemistry, biology and mathematics.

Graduates of this concentration will be able to use information technology to improve productivity and success rates in pharmaceutical research. They will develop and evaluate new chemical research strategies by analyzing or mining large amounts of data available in drug discovery, public health, clinical research and

genomics databases. Since informatics is a rapidly evolving field, there are career opportunities in the pharmaceutical industry as well as in academic research.

To accommodate part-time students already working in the industry, classes are offered on an evening schedule.

### Chemistry Core Requirements (12 credits)

	Credits
CHEM6525 Physical Chemistry.....	3
CHEM6673 Physical Organic Chemistry.....	3
CHEM6781 Biochemistry.....	3
CHEM7713 Structural Inorganic Chemistry.....	3

### Informatics Concentration Requirements (21 credits)

BIOL6743 Topics in Bioinformatics.....	3
BIOL6744 Lab: Topics in Bioinformatics.....	0
CHEM6751 Pharmaceutical Discovery Informatics.....	3
CHEM6752 Drug Design and Discovery.....	3
CHEM6755 Medicinal Chemistry.....	3
CHEM7757 Chemical Analysis of Pharmaceuticals.....	3
MATH6729 Statistical Programming.....	3
MATH6737 Applied Statistics I.....	3

### Pharmaceutical Chemistry Concentration

This focused concentration is designed to fulfill the practical and intellectual needs of chemists pursuing research and development careers within the pharmaceutical industry. For those without industrial experience, the programs can help launch a career in the pharmaceutical industry. It is also geared to current technologists aspiring to supervisory roles in the laboratory or plant. To accommodate part-time students who are already working in the industry, classes are offered in the evenings.

### Chemistry Core Requirements (12 credits)

	Credits
CHEM6525 Physical Chemistry.....	3
CHEM6673 Physical Organic Chemistry.....	3
CHEM6781 Biochemistry.....	3
CHEM7713 Structural Inorganic Chemistry.....	3

### Pharmaceutical Chemistry Concentration Requirements (12 credits)

CHEM6754 Drug-delivery Systems.....	3
CHEM6755 Medicinal Chemistry.....	3
CHEM7757 Chemical Analysis of Pharmaceuticals.....	3
Communication Requirement (COMM5000 or higher).....	3

### Free Electives (9 credits)

BIOL6733 Enzymology.....	3
BIOL6840 Cell Culture.....	3
BIOL6900 Biology Seminar.....	1
CHEM6752 Drug Design and Discovery.....	3
CHEM6773 Polymer Chemistry.....	3
CHEM7753 Instrumental Analysis.....	3
MATH6729 Statistical Programming.....	3
MATH6738 Applied Statistics II.....	3
PHAR6615 Pharmaceutical Marketing and Product Development.....	2
PHAR6650 Management of Production, Purchasing and Quality Control in the Pharmaceutical Industry.....	2

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director.

## Chemistry

School of Natural Sciences

### CHEM6525

3 Credits

#### Physical Chemistry

Principles of thermodynamics, kinetics, quantum chemistry, statistical mechanics, spectroscopy and molecular structure. Assumes prior knowledge of MATH2202 Calculus II or equivalent.

### CHEM6526

3 Credits

#### Product Development

Principles of research and development of new products from ideation to market distribution. An overview of the product-development process from the perspective of the cosmetic chemist, from project inception through manufacturing.

### CHEM6529

3 Credits

#### Microtoxicology and Biochemistry

Relationships between microorganisms, toxicity and cosmetic products. The application of principles of biochemistry and toxicology as they relate to and impact on both microorganisms and human metabolism.

Fall

### CHEM6546

3 Credits

#### Lecture Perfumery

The history, raw materials, development and marketing of fragrances.

### CHEM6613

3 Credits

#### Advanced Inorganic Chemistry

Modern theories of bonding, structure, stability of molecules, complexes and reaction mechanisms, using examples drawn from the current literature.

### CHEM6631

3 Credits

#### Advanced Analytical Chemistry

Physicochemical methods used to effect separations prior to analytical measurements and a study of matter and energy-matter interactions.

### CHEM6641

3 Credits

#### Quantum Chemistry

Fundamental theories of quantum chemistry applied to chemical bonding and molecular structure. Prerequisite: one year of calculus including differential equations.

### CHEM6651

3 Credits

#### Chemical Thermodynamics

Principles of classical thermodynamics and statistical thermodynamics.

### CHEM6673

3 Credits

#### Physical Organic Chemistry

Current theories of the structure and reactivity of organic compounds, including dipole moments, stereochemistry and modern mechanisms.

### CHEM6697

1 Credit

#### Introduction to Research

An individual research investigation in a selected area of chemistry is planned under the supervision of a faculty mentor. Preliminary readings are assigned, and a report outlining the proposed investigation is submitted to the department at the conclusion of the course. Prerequisite: 12 graduate credits in chemistry.

### CHEM6751

3 Credits

#### Pharmaceutical Discovery Informatics

This course introduces how information systems and computer technology interrelate to collect, manipulate and disseminate data and information within the context of pharmaceutical and biotechnology industries. The course examines the concepts, techniques and methods used in the description and analysis of data and in statistical inference.

### CHEM6752

3 Credits

#### Drug Design and Discovery

Structure and mechanism of drug action, rational drug designing on basis of structure-activity relationship and biotechnology approaches for drug discovery.

### CHEM6754

3 Credits

#### Drug-delivery Systems

Theoretical and practical considerations in the development and design of drug-delivery systems.

### CHEM6755

3 Credits

#### Medicinal Chemistry

Principles of absorption, distribution, metabolism and excretion (ADME); drug-protein interactions; concepts of drug targets; and toxicology.

### CHEM6761

3 Credits

#### Advanced Organic Chemistry

Advanced topics in organic chemistry, stereochemistry, organophosphorous-, organoboron-, organosilicon-, organometallic chemistry, significant current developments.

### CHEM6773

3 Credits

#### Polymer Chemistry

Polymerization of vinyl monomers by free radical, cationic and anionic mechanisms; polymerization kinetics; copolymerization; stereospecific polymerization; condensation polymerization; chemistry and properties of vinyl, diene and condensation polymers and rubbers; natural and inorganic polymers.

### CHEM6775

3 Credits

#### Chemistry of Natural Products

Structural and biogenetic relationships of natural products, chemical transformations, stereochemistry and synthesis.

### CHEM6781

3 Credits

#### Biochemistry

Chemistry of substances of biological significance, structures and mechanisms of hydrolytic and respiratory enzymes, biosyntheses of proteins, bio-oxidations and molecular structures of complex molecules.

### CHEM6830

3 Credits

#### Special Topics in Chemistry

Topics of current interest in theoretical and applied chemistry. Prerequisite: permission of the department. Course may be repeated in successive years for credit with the permission of the department.

### CHEM7713

3 Credits

#### Structural Inorganic Chemistry

Structural patterns of inorganic molecules and crystals, emphasizing symmetry concepts and the group theory of symmetry operations, with applications of this theory to metal complexes and other compounds.

### CHEM7733

3 Credits

#### Instrumental Analysis

Applications of spectroscopy, electrochemistry and chromatography to chemical problems, with particular emphasis on interpretation of experimental data.

### CHEM7735

3 Credits

#### Pharmaceutical Analysis

The analytical chemistry unique to pharmaceutical compounds from the viewpoint of a pharmaceutical scientist.

### CHEM7737

3 Credits

#### Chemical Analysis of Pharmaceuticals

Analytical chemistry, techniques and methods most commonly used in the pharmaceutical industry.

# Clinical Mental Health Counseling

## CHEM7747

3 Credits

### Protein Chemistry

Chemistry and physical properties of amino acids, polypeptides and proteins; sequence and structure determination; correlation of structure and biological properties; protein biosynthesis.

## CHEM7771

3 Credits

### Advanced Organic Synthesis

Modern synthetic techniques and procedures, emphasizing the theoretical background of the procedures and preparing the student for advanced research.

## CHEM7785

3 Credits

### Physical Biochemistry

The physical chemistry of biological macromolecules: osmometry, light scattering, viscosity, ultra centrifugation, electrophoresis and X-ray diffraction. Thermodynamics, electrostatics and acid-base equilibria, with reference to biochemistry. Structure and function of nucleic acids, bioinorganic chemistry.

## CHEM8000

1 Credit

### Curricular Practical Training

A Curricular Practical Training (CPT) requirement for work-experience course/independent study registration in most academic programs at FDU. The training experience is integral to the course and the detailed course objectives will be on a separate independent study proposal form. The student's work or training experience will be: part-time (20 hours or less per week) or full-time (more than 20 hours per week). A non-letter grade of P for Pass or NC for No Credit will be applied to degree audit as this course will be excess credit and not counted toward a degree requirement.

## PHYS6753

3 Credits

### Applied Colloid and Surface Science

The technical aspects of emulsions, solubilized systems, foams and dispersions. Structure and dynamics of complex systems. Polyphase equilibrium, phase transitions and kinetic distributions. The physics of interfaces and effects of surface structure. Principles of colloid science along with practical procedures as applied in cosmetic formulations, including examples.

## Clinical Mental Health Counseling (M.A.)

The clinical mental health counseling program, accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), prepares its graduates for the professional practice of counseling in a variety of work settings such as universities, community agencies, clinics, hospitals, drug abuse centers, child protective services, private practice, business and industry. The program also prepares highly competent counseling professionals — including entry- and advanced-level counselors, counseling researchers and counseling administrators — to have a significant impact on the mental health field as counselors, program directors, researchers, grant writers and policy makers on the local, state and national levels. With those goals in mind, the curriculum focuses on a broad spectrum of issues including: assessing, treating or working to ameliorate a disability, problem or disorder; the antecedent conditions that predispose people to developmental, emotional, personality or relationship problems experienced by individuals, couples, families or groups; the nature and treatment of those disorders, crisis-intervention strategies; and the influence of various family and group dynamics, gender differences, cultural diversity, social problems and age on the emergence of various problems and symptoms.

Students will be trained to conduct intake and assessment interviews, to develop treatment plans and counseling interventions and to function as an ethical and competent counselor. Students also will acquire a knowledge of research and assessment techniques and the pragmatic concerns (e.g., managed care and budget constraints) facing the mental health field today.

In order to apply what they have learned in the classroom, students will, in consultation with and with the approval of the coordinator of practicum/internship, procure a practicum and internship site and complete 100 hours of practicum and 600 hours of internship at a mental-health counseling site. Experiences will

be arranged with the coordinator of practicum/internship, and the student will be supervised both "on-site" and on campus by licensed personnel.

The M.A. in clinical mental health counseling is a 60-credit degree. To meet the requirements of New Jersey licensure as a **licensed professional counselor (LPC)**, students must complete 60 credits. To meet the requirements for the **student assistant coordinator (SAC)**, students must complete 24 graduate credits.

This program is offered under the auspices of the department of psychology and counseling, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admission Requirements

1. Graduation from an accredited college or university.

2. If a person's undergraduate degree was in psychology (with a minimum of 12 credits in psychology), he/she must have completed at least one course in statistics and experimental psychology, and have a minimum grade point ratio (GPR) of 3.30 in the psychology major and a 3.00 overall GPR.

3. If a person's undergraduate degree was *not* in psychology, he/she must successfully complete an undergraduate general psychology course or a graduate advanced general psychology course with a grade of B or better.

4. Submission of undergraduate transcripts.

5. Submission of three letters of recommendation.

6. A written personal statement of professional goals.

7. Completion of a Fairleigh Dickinson Graduate School application form.

8. A personal interview, which will be scheduled after the application is submitted, is required.

### Requirements for the Master of Arts Degree

#### Required Professional Core Courses in Counseling

	Credits
COUN7700	
The Counseling Profession: History and Theories.....	3
COUN7701	
Counseling Skills and Practices.....	3
COUN7702	
Diagnosis/Treatment Planning (in Counseling).....	3

# Clinical Mental Health Counseling

	Credits
COUN7703	
Development Across the Life Span.....	3
COUN7704	
Crisis Intervention.....	3
COUN7705	
Group Counseling.....	3
COUN7706	
Lifestyle and Career Counseling.....	3
COUN7707	
Family Systems and Counseling.....	3
COUN7708	
Appraisal of Individuals:	
Assessment and Measurement.....	3
COUN7709	
Multicultural Counseling.....	3
COUN7710	
Behavioral Research.....	3
COUN7711	
The Professional Counselor:	
Ethical Issues.....	3
COUN7713	
Addictions Counseling.....	3
COUN8700	
Program Planning and Evaluation:	
Prevention and Education.....	3
COUN8706	
Counseling: Sexual Issues.....	3
COUN9800	
Fundamentals of Supervision	
in Counseling.....	3
EDUC6810	
Schools, Communities and	
Substance Abuse*.....	3
<b>Clinical Course Sequence</b>	
COUN9701	
Practicum.....	3
COUN9702	
Internship I.....	3
COUN9703	
Internship II.....	3
COUN9704	
Internship III (for students unable to	
complete 600 hours in	
two semesters or who opt	
for additional fieldwork).....	3
<b>Comprehensive Exam</b>	
COUN9900	
Comprehensive Exam** .....	0
COUN9901	
Comprehensive Exam II: Electronic	
Portfolio Review.....	0

\*See Education Course Offerings.

\*\*The student will register for the comprehensive exam in the next to final or final semester of the program.

## Course Offerings

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate department chair.*

## Clinical Mental Health Counseling Department of Psychology and Counseling

### COUN7700 3 Credits

#### The Counseling Profession: History and Theories

This course will acquaint students with the profession of counseling. This is the introductory graduate course in counseling which provides a general overview and survey of the profession. Students will explore their personal motivation and interest in a counseling profession as well as integrate professional concepts with personal style. Emphasis is placed on the development of professional identity, standards in the profession, accreditation and credentialing, counseling theory, application and ethics. Roles and responsibilities of counselors across a variety of settings will be addressed. The course should be taken concurrently with COUN7701 Counseling Skills and Practices.

### COUN7701 3 Credits

#### Counseling Skills and Practices

This is a competency-based course with experiential emphasis which addresses basic skills and techniques of counseling. Students will be able to demonstrate basic counseling skills, techniques and professionally ethical and legal behavior; accurately critique one's own level of skills development; explain how one's life experiences have led him/her to the profession of counseling; and increase one's self-awareness of interpersonal dynamics. The student is required to demonstrate proficiency in counseling skills, concepts and techniques before proceeding to COUN7705 Group Counseling, COUN7709 Multicultural Counseling and COUN9701 Practicum. The course should be taken concurrently with COUN7700 The Counseling Profession: History and Theories.

### COUN7702 3 Credits

#### Diagnosis/Treatment Planning (in Counseling)

A consideration of the etiology, treatment and prevention of psychopathology. An exploration of the most frequently appearing abnormal behaviors in American culture, such as psychosomatic disorders, alcoholism, drug addiction, character disorders, psychoses and disorders associated with brain pathology. Recent research in this area and its practical applications will be emphasized.

### COUN7703 3 Credits

#### Development Across the Life Span

This course is an introduction to theories and patterns of development from conception through late adulthood, emphasizing early childhood and adolescence. The focus is on growth and development of sensory, motor, language, cognitive, emotional and social processes. Individual, family and environmental factors which affect development throughout the life span are explored.

### COUN7704 3 Credits

#### Crisis Intervention

A form of brief therapy, focusing on stress-induced reactions studied in historical and theoretical contexts. Course will cover treatment of family conflicts, child abuse, divorce, illness, substance abuse and national disasters. Prevention techniques and evaluation of services also are discussed.

### COUN7705 3 Credits

#### Group Counseling

This course covers the therapeutic nature of the group process by drawing from counseling, social, psychological and psychotherapeutic literature. The many approaches to counseling, ranging from encounter to more traditional methods, are discussed in depth. Classroom process is used as a demonstration of group process.

### COUN7706 3 Credits

#### Lifestyle and Career Counseling

This course introduces strategies for career planning and counseling (e.g., skills and interest assessment and values clarification). The course provides an understanding of career-development theories, lifestyle and career decision-making and career-development program planning. It includes important components such as enhancing the client's sense of self-esteem and self-efficacy and career and leisure counseling.

### COUN7707 3 Credits

#### Family Systems and Counseling

This course will examine the broader context of a client's life to include families, schools, work groups, religious institutions and other significant organizations. Its primary goal is to promote an understanding of family-development structure, history and process to aid in the assessment, intervention and treatment of psychological problems and other dysfunctional behaviors. Emphasis will be on understanding the family, forming a therapeutic system, exploring areas of dysfunction and initiating a change process.

# Clinical Mental Health Counseling

---

COUN7708

3 Credits

## **Appraisal of Individuals: Assessment and Measurement**

A critical survey of the philosophy and techniques of measurements and appraisal, with emphasis given to the administration, interpretation and evaluation of intelligence, achievement, interest, aptitude and objective personality instruments.

COUN7709

3 Credits

## **Multicultural Counseling**

This course builds on previous assessment and counseling skills to consider the systemic and cultural issues that influence an individual's world view and life experience. An in-depth exploration of cultural heritage and multidimensional (racial/gender/class/religious) identity development in relation to the therapeutic relationship. The goal is to develop the skills of a culturally competent counselor.

COUN7710

3 Credits

## **Behavioral Research**

The goals of this course are to acquaint the student with the basic premises of scientific investigation, the major methods of conducting psychological research and the statistical procedures employed in analyzing data. The methodological section includes experimental design, questionnaire construction and interviewing strategies, field projects, evaluation research and survey techniques.

COUN7711

3 Credits

## **The Professional Counselor: Ethical Issues**

This course will focus on issues that counselors and supervisors face due to their professional roles. It includes topics such as ethics, ACA (American Counseling Association) guidelines, supervisory challenges and the pressures from public policy and managed-care decisions.

COUN7713

3 Credits

## **Addictions Counseling**

This course is designed to review the etiology, diagnoses and treatment of alcohol and drug addiction. Ethical considerations and philosophy of treatment are discussed. The physiology and pharmacology of alcohol and drugs are also covered.

COUN7714

3 Credits

## **Psychopharmacology**

Study in the relationship between drugs and behavior, especially maladaptive behavior, and research in human biochemical changes.

COUN8700

3 Credits

## **Program Planning and Evaluation: Prevention and Education**

The course provides an overview of the approaches to the planning, formulation and evaluation of programs in various community and industrial settings, principles and applications of needs assessment and use of research findings to inform programs and policy-level decision making. The course also covers the issues that must be addressed in designing effective prevention and education programs. Planning of realistic service delivery with built-in evaluation components, survey research.

COUN8706

3 Credits

## **Counseling: Sexual Issues**

This is an advanced counseling course that focuses on the diagnosis and treatment of sexual issues. The range of topics include psychosexual issues and the gay, bisexual and transvestite/transsexual client. Dealing with sexual dysfunction for the individual and in a relationship is explored.

COUN8710

3 Credits

## **The Counseling Profession: Ethics and Standards of Practice**

This course is designed to promote the importance of understanding and embracing the professional identity of the counselor. It introduces the students to the ethical and legal issues that challenge counselors in today's complex society. It reviews ethical codes and standards of practice for the professions of the American Counseling Association (ACA), American School Counselor Association (ASCA) and American Mental Health Counselors Association (AMHCA).

COUN9701

3 Credits

## **Practicum**

A course designed to be a transitional experience from the graduate counseling classroom to the professional-counselor role in a mental health setting. Students engage in a clinical experience appropriate to their level of professional development. Class includes didactic and experiential activities and supervision of field experience. Requires 100 hours with 40 direct-client contact supervised by on-site mental health professionals.

COUN9702

3 Credits

## **Internship I**

Following successful completion of their practicum, students complete a supervised 600-hour (240-hour direct contact) field experience in a clinical setting. Interns are supervised by an on-site mental health professional and on campus in weekly group supervision by University faculty. The goal is integration of intake assessment, case conceptualization, treatment planning, case

management and counseling skills as a professional counselor. Course will be pass/fail. Prerequisite: COUN9701 Practicum.

COUN9703

3 Credits

## **Internship II**

This course is the second half of an already established course of field placement for counseling students. The student must complete a minimum of 300 hours in the field for the course. Course will be pass/fail. Prerequisites: COUN9701 Practicum and COUN9702 Internship I.

COUN9704

3 Credits

## **Internship III**

This course is for students who are unable to complete their 600 hours of internship in two semesters. Prerequisites: COUN9701 Practicum, COUN9702 Internship I and COUN9703 Internship II.

COUN9800

3 Credits

## **Fundamentals of Supervision in Counseling**

This course will provide a summary and critique of the literature in counselor supervision. The course will focus on defining and conceptualizing various supervision models; the dynamics of supervisory relationship and counselor development; supervision methods and techniques; and multicultural and ethical concerns. Prerequisites: COUN9701 Practicum, COUN9702 Internship I, COUN9703 Internship II and permission of the department chair.

COUN9900

0 Credits

## **Comprehensive Exam**

The student will register for the comprehensive exam in the final semester of the program.

COUN9901

0 Credits

## **Comprehensive Exam II: Electronic Portfolio Review**

Capstone requirement for M.A. in clinical mental health counseling program. The student will present a portfolio representative of learning objectives throughout the clinical mental health counseling program.

COUN9990

3 Credits

## **Clinical Supervision for Supervisors**

This course provides a summary and critique of the literature on counselor supervision. The focus will be on defining and conceptualizing various supervision models, discussing the dynamics of the relationship between supervisor and supervisee and developing supervisory forms. Issues such as multicultural concerns and techniques of supervision will be discussed as well.

## Clinical Psychology (Ph.D.)

See Psychology, Clinical Psychology, page 208.

## Clinical Psychopharmacology (Postdoctoral M.S.)

See Clinical Psychopharmacology (Postdoctoral M.S.), page 212.

## Communication (M.A.)

The M.A. in communication is offered by the department of communication studies in the Maxwell Becton College of Arts and Sciences at the Florham Campus, Madison, New Jersey. The program offers continuing students and returning professionals a theory-based curriculum that incorporates communication principles and practices into applied learning in cultural, interpersonal and public contexts. The program's mission is to produce critically informed and creative graduates who will be competitive contributors to a challenging global workplace. Courses emphasize the development of skills in critical thinking, collaboration, leadership, ethics, interpersonal relations and cultural intelligence, as well as enhancing students' professional writing and presentation skills.

### Admission Requirements

1. A bachelor's degree from an accredited college or university.
2. A cumulative undergraduate grade point ratio (CGPR) of at least 3.00 on a scale of 4.00.
3. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if:
  - a) the applicant enrolls initially as a nonmatriculating student and completes 9 graduate credits with a minimum CGPR of 3.00 and no grade below B;
  - b) the applicant is a Fairleigh Dickinson University communication studies major enrolled in the five-year B.A./M.A. program and has an undergraduate CGPR of 3.00;
  - c) the applicant is a non-Fairleigh Dickinson University student who has an undergraduate CGPR of 3.50 or higher; or
  - d) the applicant has completed a master's degree.
4. An essay articulating the prospective student's goals and expectations and the relationship of those goals and expectations to the program.
5. Two recent letters of recommendation.

### Requirements for the Master of Arts Degree

1. The completion of a minimum of 30 credits.
2. The completion of the six required courses with a minimum grade of B in all six.
3. Students must complete three context courses, one each in the cultural, interpersonal and public contexts.
4. A minimum overall CGPR of 3.00.
5. The successful completion of the capstone experience.

### Basic Requirements

#### Required Courses (18 credits)

	Credits
MCOM6001	
Principles and Practices of Communication.....	3
MCOM6002	
Professional Writing and Editing.....	3
MCOM6003	
Presentation Methods.....	3
MCOM6004	
Executive Lectures.....	3
MCOM6005	
Group Communication and Leadership.....	3
MCOM6006	
Research Methods.....	3

#### Capstone Experience (3 credits)

MCOM6099	
The Capstone Experience: Principles into Practice.....	3

#### Context Courses (9 credits)

The following courses will provide students with experience applying principles they learn to communication practices in cultural, interpersonal and public contexts. Students must take one course in each context.

##### Cultural Context

MCOM7001	
Communication, Culture and Change....	3
MCOM7002	
International Communication and Culture (at Wroxton College)....	3
MCOM7003	
Communication and Globalization.....	3

##### Interpersonal Context

MCOM7101	
Communication and Technology.....	3
MCOM7102	
Narrative Communication.....	3

# Communication

	Credits
MCOM7103 Language and Communication.....	3
<i>Public Context</i>	
MCOM7201 PR in the Modern Organization.....	3
MCOM7202 Crisis Communication.....	3
MCOM7203 Strategic Communication.....	3

## The Global Experience

The M.A. program offers a unique, intensive, 12-day seminar in international communication and culture, held at Wroxton College, Fairleigh Dickinson University's campus in Oxfordshire, England (MCOM7002 International Communication and Culture). The seminar includes panel discussions and lectures conducted by recognized international experts from business, academia, politics and the media and offers unique insight into professional communication experiences in other parts of the world.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate department chair.

## Communication

Department of Communication Studies

### MCOM6001

3 Credits

#### Principles and Practices of Communication

This course introduces new graduate students to foundational theories and essential concepts of communication studies and their application to everyday problems and unique practices they are likely to encounter in their professional lives. Course activities include introduction to the communication studies faculty and their areas of specialization, familiarization with key sources in the discipline and application of course materials to contemporary discourses and interactions.

Fall

### MCOM6002

3 Credits

#### Professional Writing and Editing

This course introduces students to writing techniques in the academic, professional and workplace settings. Students will be required to communicate with clarity of thought and appropriate tone and style. Students will demonstrate their professional writing and editing skills in a

variety of assignments. The goals of this course are to acquaint students with professional writing practices, editing and revision procedures and methods for polishing their professional and scholarly writing skills.

Fall

### MCOM6003

3 Credits

#### Presentation Methods

This course emphasizes the design and delivery of oral presentations by and for communication professionals. Lectures, discussions and workshop sessions will consider such topics as brainstorming, audience analysis, gathering and organizing data, citing sources, integrating media, presentation techniques and managing questions and answers.

Fall

### MCOM6004

3 Credits

#### Executive Lectures

The Schering-Plough Executive Lecture Series is a forum in which communication experts and students explore skills such as collaboration, creativity and problem-solving relevant to a wide range of professional settings. Theories and their application to practice will be presented through readings, case studies, lectures and discussions. Students will actively engage in exercises and projects to develop and demonstrate comprehension of course content.

Spring

### MCOM6005

3 Credits

#### Group Communication and Leadership

Organizations function and survive according to the ability of their members, and in particular their leaders, to communicate effectively. This course is an in-depth study of current theories of message-processing in organizations: leadership and followership communication, service leadership, innovation and creativity and more.

Course work includes experiential learning that allows students to explore practical applications of theory. The course is as much about developing personal leadership as organizational leadership.

Spring

### MCOM6006

3 Credits

#### Research Methods

This is a survey course examining both quantitative and qualitative approaches to investigating communication problems, practices and phenomena. The course provides students with an introduction to and experience in a diverse range of principles and methods appropriate for conducting research in a variety of professional communication contexts.

Spring

### MCOM6099

3 Credits

#### The Capstone Experience: Principles into Practice

The capstone experience seeks to blend knowledge/theory and application/action. Students will be expected to apply concepts learned during the course of the program toward the completion (i.e. action) of a communication-based project of suitable scope within their own workplace or within another appropriate professional site. In addition to integrating knowledge gained from course work, capstone students must be able to conduct research to determine the viability of the projects they elect to undertake, and in presenting their project, must demonstrate the oral and written communication skills expected of those nearing the completion of a Master of Arts degree in communication. The capstone experience is taught as a blended, three-credit course, and students complete their projects under the supervision of the course instructor. All graduate faculty will be involved in the review of project proposals and final projects.

Fall, Spring

### MCOM7001

3 Credits

#### Communication, Culture and Change

This course analyzes the relationship among communication, change management and organizational culture. Discussions and lectures include: definitions and types of organizational culture, methods for the study of corporate cultures, the essence and functions of organizational culture, diagnosis of corporate culture, managing and auditing communication and culture and perpetuating or reshaping cultures. In addition, the connection between effecting organizational change by transforming the culture is a dominant theme throughout the course.

### MCOM7002

3 Credits

#### International Communication and Culture

This 12-day seminar is offered at Wroxton College, England, each summer and consists of invited speakers, case studies, site visits and leisure trips to London, Stratford-upon-Avon and Oxford. The objective of the seminar is to make students familiar with the cultural, historical and political contexts in which professional and other interactions take place from a U.K. and European perspective. Students will also examine case studies conducted by U.K. media, advertising and public relations practitioners which show how issues of culture, history, politics and theory play out in actual corporate communication practice.

Summer



## Computer Engineering (M.S.)

Fairleigh Dickinson University's Master of Science in computer engineering program is designed to train and educate students to work as computer engineers who understand the design tradeoff and the interdependency between hardware and software in computers, computer-based systems, computer communications and computer networks. Computer-based systems are widely used in data acquisition, signal processing and conditioning, instrumentation, communications, control, automation and manufacturing. The curriculum provides students with design skills, theoretical concepts and a solid foundation in both hardware and software design in an integrated manner, as well as competency in advanced computer technology. The program emphasizes practical applications of computer engineering.

This program is offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

1. A Bachelor of Science degree in electrical engineering, computer engineering or computer science from an accredited university. This should include courses or equivalent experience in the following areas: introductory computer programming, digital system design, microprocessor system design and data structures. These courses can be taken at Fairleigh Dickinson University but will not count toward the 30-credit master's degree requirement. Students with a Bachelor of Science degree in technology or other areas of science and engineering may be admitted if they complete undergraduate prerequisites as determined by an adviser of the school.

2. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if the applicant enrolls initially as a nonmatriculating student and completes 9 graduate credits in computer engineering with a minimum grade point ratio (GPR) of 3.00 and no grade below C or is a graduate of

### MCOM7005

3 Credits

#### Communication and Globalization

This course examines communication in intercultural contexts, both domestic and international. The course focuses on (a) how culture influences the communication process and the development of relationships, (b) the dynamics of intercultural encounters and (c) the impact of globalization on intercultural communication.

### MCOM7101

3 Credits

#### Communication and Technology

This course gets students to think critically about how digital innovations are shaping our communication and aims to help students gain some perspective on the influences that the rapid transition to the digital age have on almost every aspect of society. The class will discuss where society is today technologically speaking (and ask how it got there), but students will spend most of their time trying to figure out what impacts emerging communication technologies have and are likely to have on the essentials of the human condition: on sense of identity as individuals, on how they form and regulate their communities (on- and offline) and on how the nation and world function politically, socially and economically.

### MCOM7102

3 Credits

#### Narrative Communication

This seminar explores a variety of forms narrative communication takes in institutional and professional contexts and considers the multiple functions they may serve for individuals and institutions working in various professions. Students are guided through a selection of theory and methodology offered in required readings and the application of them to exercises. The course culminates with a research project analyzing narrative communication addressing a contemporary problem or crisis.

### MCOM7103

3 Credits

#### Language and Communication

This course draws on contemporary theories of language and social interaction to examine how practices of human communication are designed and used to accomplish the work that people do in a variety of professions. Readings, exercises and assignments train students to analyze how language is used to constitute certain roles, relationships, activities and responsibilities. The approach of the class is pragmatic, microanalytic and highly interactive.

### MCOM7201

3 Credits

#### PR in the Modern Organization

This course will focus on theories, strategies and techniques for organizational public relations. This course specifically examines the dy-

amic practice of public relations on the organizational level, with particular focus on the publics that organizations serve. Organizations must be proactive and reactive in their public relations practices. The class will cover a variety of topics throughout the course. Each week the class will engage in scholarly readings that deal with a specific topic in public relations.

### MCOM7202

3 Credits

#### Crisis Communication

This course specifically examines the dynamic practice of crisis communication on the organizational level. It seems that people live in a culture of crisis — organizations must be proactive and reactive in their public relations practices. Topics discussed will include image-repair strategies, options available to organizations facing crisis, crisis-management teams, crisis management as a form of public relations and examinations of case studies. Using the most recent scholarship, students will learn about this timely topic in an interactive and engaging environment.

### MCOM7203

3 Credits

#### Strategic Communication

This course examines practices of communication that are goal-oriented, deliberate or purposive. Cases will be studied in which communication is designed and targeted to achieve goals such as running a campaign; building or repairing a reputation; or bringing about social, cultural or institutional change. Course work will explore ways of dealing with real-world challenges in domestic and global contexts of professional communication.

# Computer Science

Fairleigh Dickinson University's computer science, electrical engineering or closely related programs with an undergraduate GPR of 3.00 or is a graduate of computer science, computer engineering or electrical engineering programs from other institutions with an undergraduate GPR of 3.50. This GRE-waiver policy is only applicable to applicants who graduated from a regionally accredited college or university in the United States. (The GRE requirement also is waived for applicants who have completed a master's degree from a regionally accredited college or university in the United States.)

3. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

## Requirements for the Master of Science Degree

Students must successfully complete 30 credits, including 12 credits of core requirements and 18 credits of electives as described below:

### Core Requirements (12 credits)

CSCI6620 Software Engineering  
CSCI6638 Operating Systems  
EENG7701 Logic System Design  
EENG7702 Microprocessor Design\*

### Electives (18 credits)

6 credits from the following:

CSCI6623 Database Systems  
CSCI6730 Advanced Network: TCP/IP and Routing  
CSCI6731 Computer Networks\*\*  
CSCI6732 Local Area Networks  
CSCI7645 Systems Programming  
CSCI7871 Unix Shell Programming

6 credits from the following:

EENG6610 Computer-aided Analysis and Design  
EENG6633 Digital Signal Processing  
EENG6747 Digital Communications  
EENG7706 Robotics Engineering  
EENG7707 Neural Networks and Fuzzy Logic Systems

EENG7737 Computer Communication Networks\*

EENG7773 Digital Image Processing

6 additional credits from computer science or electrical engineering courses (6000-level and higher) must be taken.

Students may register for CSCI8891 Internship/Work Experience or EENG8891 Internship/Work Experience only after completing 18 graduate credits.

## Telecommunications and Networking Certificate

Admissions requirements and requirements for the certificate are provided in the Computer Science section (page 98).

## Course Offerings

See Computer Science and Electrical Engineering course offerings pages 98–103 and 145–147.

# Computer Science (M.S.)

The graduate program in computer science prepares students for the direct pursuit of productive careers in industry and for continued graduate study. The program's orientation is toward educating professionals to become leaders in various areas of computer science ranging from software engineering to computer design, and from systems analysis to the management of information systems.

The M.S. in computer science program is offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey. The program is offered full-time at the Metropolitan Campus, Teaneck, New Jersey, and part-time at the Florham Campus, Madison, New Jersey.

## Admission Requirements

1. Graduation from an accredited college or university with a satisfactory academic record.
  2. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if the applicant enrolls initially as a nonmatriculating student and completes 9 graduate credits in computer science with a minimum cumulative grade point ratio (CGPR) of 3.00 and no grade below C, or is a Fairleigh Dickinson University computer science graduate with an undergraduate CGPR of 3.00 or is a non-Fairleigh Dickinson University computer science graduate with an undergraduate CGPR of 3.50. This GRE-waiver policy is only applicable to applicants who graduated from a regionally accredited college or university in the United States. (The GRE requirement also is waived for applicants who have completed a master's degree.)
  3. Three letters of recommendation.
- Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

\*Students may substitute EENG7709 Embedded Systems.

\*\*Either EENG7737 Computer Communication Networks or CSCI6731 Computer Networks may be taken, but not both.

\*Either EENG7737 Computer Communication Networks or CSCI6731 Computer Networks may be taken.

## Requirements for the Master of Science Degree

1. Students must complete 42 credits in approved graduate courses. The 42 credits are distributed as follows: 12 credits of prerequisite courses, 15 credits of core requirements and 15 credits of electives. Students with backgrounds in the field may reduce the number of required credits by having some, or all, of the prerequisite courses waived. In any event, a minimum of 30 credits will be required for the degree. Requests for waivers must be made in writing to the department prior to the student's first semester.

2. Students must earn a cumulative grade point ratio (CGPR) of at least 2.75 for the prerequisite courses if required or be subject to dismissal from the program. Students may take no more than 6 credits of core or elective courses before completing all of the prerequisites.

3. Students must earn a CGPR of at least 2.75 for the 30 credits beyond the prerequisite courses.

### Prerequisite Courses (12 credits)

The prerequisite courses for the M.S. in computer science are:

	Credits
CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
CSCI5555	
Data Structures.....	3
CSCI5565	
Assembly Language.....	3

### Core Requirements (15 credits)

The required core courses for the M.S. in computer science are:

CSCI6603	
Computer Architecture.....	3
CSCI6620	
Software Engineering.....	3
CSCI6623	
Database Systems.....	3
CSCI6638	
Operating Systems.....	3
CSCI7645	
Systems Programming.....	3

### Elective Courses (15 credits)

Elective courses in computer science are listed with course numbers ranging from CSCI6617 to CSCI8891. Students may register for CSCI8891 Internship/Work

Experience only after completing 18 graduate credits.

Students may take up to 6 credits in non-CSCI prefixed courses with the permission of their adviser. An additional 3 to 6 credits of non-CSCI prefixed courses may be taken in electrical engineering with the permission of an adviser.

## Advanced Computer Programming Certificate

The certificate program in advanced computer programming provides individuals with comprehensive experience in program development in several languages, including C/C++, assembly language, Java, ASP.NET, C#, VB.NET, Unix Shell and systems programming.

### Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

### Requirements for Certificate in Advanced Computer Programming

18 credits (six courses) are to be chosen from the following:

	Credits
CSCI5505	
Introduction to Computer Programming.....	3
CSCI5555	
Data Structures	
	or
CSCI5565	
Assembly Language.....	3
CSCI6617	
Computer Game Programming.....	3
CSCI6723	
Database Project with Visual Basic.....	3
CSCI6810	
Java and the Internet.....	3
CSCI6844	
Programming for the Internet.....	3
CSCI7645	
Systems Programming.....	3
CSCI7871	
Unix Shell Programming.....	3

Students must satisfy the prerequisites of the courses that they will take.

**Academic Credits:** Courses with numbers 6000 or higher completed through this certificate can be credited toward the **M.S. in computer science** program. Other courses may be substituted with prior approval of the student's academic adviser.

## Computer Security Certificate

The certificate program in computer security provides individuals with expertise in hardening computer systems, as well as in establishing information security policies and business-continuation planning in organizations.

### Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

### Requirements for Certificate in Computer Security

18 credits (six courses) are to be chosen from the following:

	Credits
CSCI5525	
Introduction to Computer Science.....	3
CSCI6731	
Computer Networks.....	3
CSCI6869	
Network Security.....	3
CSCI6873	
Firewalls and Intrusion-detection Systems.....	3
CSCI7741	
Disaster Recovery.....	3
CSCI7783	
Information Security.....	3

Students must satisfy the prerequisites of the courses that they will take.

**Academic Credits:** Courses with numbers 6000 or higher completed through this certificate can be credited toward the **M.S. in computer science** program. Other courses may be substituted with prior approval of the student's academic adviser.

## Database Administration Certificate

The certificate program in database administration provides expertise in the development, maintenance and supervision of databases.

### Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

# Computer Science

## Requirements for Certificate in Database Administration

18 credits (six courses) are to be chosen from the following:

	Credits
CSCI5505 Introduction to Computer Programming	
or	
CSCI5525 Introduction to Computer Science.....	3
CSCI6623 Database Systems.....	3
CSCI6882 Data Warehouse and Data Mining.....	3
CSCI7741 Disaster Recovery.....	3
CSCI7781 Advanced Database Systems.....	3
CSCI7783 Information Security.....	3
CSCI7785 Distributed Database Systems.....	3
Students must satisfy the prerequisites of the courses that they will take.	

### Degree Options or Academic Credits:

Courses with numbers 6000 or higher completed through this certificate can be credited toward the **M.S. in computer science** program. Other courses may be substituted with prior approval of the student's academic adviser.

## Internet Programming Certificate

Internet programming is a contemporary field of computer programming. It refers to network communication, distributed computing and web applications. The certificate program in internet programming provides expertise in computer-programming fundamentals, web programming and internet-based application software development.

### Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

## Requirements for Certificate in Internet Programming

18 credits (six courses) are to be chosen from the following:

	Credits
CSCI5505 Introduction to Computer Programming.....	3
CSCI5555 Data Structures.....	3
CSCI6731 Computer Networks.....	3
CSCI6735 Client-server Computing.....	3
CSCI6810 Java and the Internet.....	3
CSCI6844 Programming for the Internet.....	3
Students must satisfy the prerequisites of the courses that they will take.	

**Academic Credits:** Courses with numbers 6000 or higher completed through this certificate can be credited toward the **M.S. in computer science** program. Other courses may be substituted with prior approval of the student's academic adviser.

## Telecommunications and Networking Certificate

The certificate program in telecommunications and networking provides expertise in the development, maintenance and supervision of telecommunications systems and computer networks.

### Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

## Requirements for Certificate in Telecommunications and Networking

One 3-credit course is to be chosen from the following:

CSCI6731 Computer Networks.....	3
EENG7737 Computer Communication Networks.....	3
15 credits (five courses) are to be chosen from the following:	
CSCI6730 Advanced Network: TCP/IP and Routing.....	3
CSCI6732 Local Area Networks.....	3

Credits

CSCI6736 Wireless LANs.....	3
CSCI6844 Programming for the Internet.....	3
CSCI6869 Network Security.....	3
EENG6747 Digital Communications.....	3
EENG7738 Wireless Communication.....	3
EENG7748 Advanced Digital Communications.....	3
Students must satisfy the prerequisites of the courses that they will take.	

**Degree Options:** Courses appropriately selected and completed for this certificate program under the direction of the student's academic adviser can be credited toward the **M.S. in computer science**, **M.S. in computer engineering** or **M.S. in Electrical Engineering (specialization in digital signal processing and communications)** program. Other courses may be substituted with prior approval of the academic adviser.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director

### Computer Science

Lee Gildart and Oswald Haase School of Computer Sciences and Engineering

#### CSCI5505

3 Credits

#### Introduction to Computer Programming

Use of computers in problem solving. Algorithm development using stepwise refinement. Structured programming techniques. Top-down design and modularity. Readability and documentation techniques. Programming in a high-level language, such as Java.

Fall

#### CSCI5525

3 Credits

#### Introduction to Computer Science

Introduction to computer hardware and software, interactions and tradeoffs. Essentials of computer organization and arithmetic, data manipulation, operating systems, computer networks and computer theory. Foundation for more advanced courses. Corequisite: CSCI5505

Fall

## CSCI5526

3 Credits

### Introduction to Computer Science II

Advanced C++ programming constructs and features will be covered including structured data, file operations, advanced objects and classes, exceptions and templates. Prerequisite: CSCI5525 Introduction to Computer Science.

## CSCI5551

3 Credits

### Mathematics for Computer Science and MIS

Introduction to basic mathematical concepts and how they relate to computer science; formal logic, set theory, functions, relations, Boolean algebra, graph theory and combinatorics.

Fall

## CSCI5555

3 Credits

### Data Structures

Organized collections of data and their use. Arrays, records, linear lists, trees, graphs. Sorting and searching. Sequential and linked memory allocation. Prerequisite: CSCI5505 Introduction to Computer Programming.

Fall

## CSCI5565

3 Credits

### Assembly Language

Assembly language programming and discussion of assembly systems. Numerical and symbolic applications. Prerequisites: CSCI5505 Introduction to Computer Programming and CSCI5525 Introduction to Computer Science.

Fall

## CSCI6603

3 Credits

### Computer Architecture

Study of the relation between the structure and functional behavior of computer systems. Data representation and instruction sets. Control function, memory hierarchy, input-output processors and devices. Micro- and multiprocessors. Prerequisite: CSCI5525 Introduction to Computer Science.

Fall, Spring

## CSCI6605

3 Credits

### Combinatorics

Arrangements, selections and distributions. Generating functions, partitions and recurrence relations. Inclusion-exclusion principle. Graph models and isomorphisms. Planarity, Euler and Hamilton circuits. Graph coloring. Trees and graphs algorithms. Applications particularly to computer science. Prerequisite: CSCI5551 Mathematics for Computer Science and MIS.

## CSCI6617

3 Credits

### Computer Game Programming

Introduction to computer-game development. Topics include fundamentals of Microsoft DirectX game and graphics libraries, 2D graphics and animation, audio output, keyboard/mouse handling and fundamentals of 3D modeling and programming. Prerequisite: CSCI5505 Introduction to Computer Programming.

## CSCI6620

3 Credits

### Software Engineering

Creation of reliable software. Software development life-cycle models. Requirements of engineering object-oriented analysis and design. Documentation of development with Unified Modeling Language (UML). Software quality assurance. A project-oriented course. Prerequisite: CSCI5555 Data Structures.

Fall, Spring

## CSCI6623

3 Credits

### Database Systems

A survey of the current technology available in database systems. Relational, hierarchical and network models. Role of the data administrator. Levels of abstraction. Schema and subschema. Prerequisite: CSCI5505 Introduction to Computer Programming.

Fall, Spring

## CSCI6638

3 Credits

### Operating Systems

An introduction to the fundamental principles of operating systems in terms of resource management and machine virtualization. Topics include system services, process management, synchronization, threads, CPU scheduling, memory, device, file management and security. Integrated lab. Prerequisite: CSCI5565 Assembly Language or CSCI6603 Computer Architecture.

Fall, Spring

## CSCI6702

3 Credits

### Programming Languages

Theory and implementation of high-level programming languages. Information hiding, storage management, sequence control, data abstraction, generics, exception handling, concurrency, imperative and functional languages. Implementation in various languages. Prerequisite: CSCI5555 Data Structures.

## CSCI6720

3 Credits

### Management Information Systems

Role and structure of information systems in an organization. Components of MIS: human resources, software, hardware, files and databases, telecommunications. Levels of MIS. Decision-making process. Cognitive and behavioral aspects of MIS. Concepts of information

and systems. Organizational planning and control with information systems. Prerequisite: CSCI5525 Introduction to Computer Science. Fall, Spring

## CSCI6723

3 Credits

### Database Project with Visual Basic

This course will study the methodology of database design within a total project framework. Students will learn how to develop a database design and how to plan for a total program development and then implement the plan. The database will be implemented in Access while the program's user interactions will be programmed in Visual Basic.

## CSCI6729

3 Credits

### Statistical Programming

This course gives a thorough introduction to using statistical analysis software (SAS) for statistical analysis. Topics include importing and exporting files; output formatting; predictive data modeling and exploration (mixed-models analysis, multivariate statistical analysis, longitudinal analysis and survival analysis); and a programming approach to report writing. Prerequisite: elementary knowledge of a programming language. (Equivalent to MATH6729 Statistical Programming.)

## CSCI6730

3 Credits

### Advanced Network: TCP/IP and Routing

This course is on internet work design and architecture. It covers addressing, binding, routing, internet and application protocols, principles and architecture of the global internet. The focus is on the TCP/IP internet protocol suite.

## CSCI6731

3 Credits

### Computer Networks

Introduction to the theory and practice of computer networking. Protocol design and analysis. Topics include layered protocol architectures, packet and circuit switching, multiplexing, routing, congestion and flow control, error control, sequencing, addressing and performance analysis. Examples from current data networks. Prerequisites: CSCI5505 Introduction to Computer Programming and CSCI5525 Introduction to Computer Science.

Fall

## CSCI6732

3 Credits

### Local Area Networks

This course will cover the topics of local area networks (LANs). The major topic areas include the evolution of local area networks; an overview of LAN applications; LAN models; five taxonomic variables that can be used to classify LAN technology; the IEEE 802 LAN Standard;

# Computer Science

---

repeaters, bridges, routers, routers and gateways; and an overview of major LAN products. Prerequisites: CSCI5525 Introduction to Computer Science and CSCI5551 Mathematics for Computer Science and MIS.

## CSCI6733

3 Credits

### Decision Support Systems

Characteristics of decision support systems (DSS) within the management information systems (MIS) framework; requirements for effective DSS; normative and behavioral theories of decision making; dialog, database and model management; classes of models; DSS development: tools and methodologies. Prerequisite: CSCI6720 Management Information Systems.

## CSCI6734

3 Credits

### Expert Systems

The evolution of knowledge-based expert systems, system structure, knowledge representation schemes, quantifying uncertainty, exact and inexact inference, survey of current systems, languages and tools for building expert systems, problem-selection criteria, the expert system's life cycle, knowledge-acquisition techniques, incremental development, testing and evaluation methods and applications of expert systems. Prerequisite: CSCI5555 Data Structures.

## CSCI6735

3 Credits

### Client-server Computing

An introduction to the theory and technology of client-server computing. Course material includes general software architecture and component-based software system development, n-tier architecture, sockets, PRC, Java remote method invocation (RMI), CORBA, MS COM/DCOM and their applications. Prerequisite: CSCI5555 Data Structures.

## CSCI6736

3 Credits

### Wireless LANs

Introduction to wireless local area networks (LANs) and their technology and use. Topics include design, installation and troubleshooting, security, 802.11 frames. Prerequisite: CSCI6731 Computer Networks.

## CSCI6737

3 Credits

### Advanced Switching Internet Routing

This course focuses on advanced switching and internet routing protocols. Topics include switch design and operation, VLANs, port security 802.1x, trunking, port aggregation, high availability and redundant switched network design, advanced IP addressing architectures, routing algorithm concepts and routing protocols: RIP, OSPF, BGP, multicasting, protocol tunneling

and routing security. Prerequisite: CSCI6730 Advanced Network: TCP/IP and Routing or CSCI6731 Computer Networks.

## CSCI6738

3 Credits

### Cybersecurity

This course deals with the application and management of mechanisms for cybersecurity and information assurance in computing, communication and organizational systems. Projects are structured to assist in the use of analytical skills in developing policies and assessing threats and vulnerabilities. Topics include malware and social engineering, vulnerability assessments, network security, authentication, intrusion detection, basic cryptography, data obfuscation and network forensics. A detailed analysis will be conducted on specific vulnerabilities that are exploited in various types of attacks, such as buffer overflow and virus infection. Prerequisite: CSCI6731 Computer Networks.

## CSCI6739

3 Credits

### Computer Performance and Evaluation

Methods used for evaluation of computer-system design strategies, such as number of servers, communication architecture and database operations. Analysis of models to assess performance of alternate implementation strategies. Evaluation of existing systems. Prerequisites: CSCI5551 Mathematics for Computer Science and MIS and a reading knowledge of a high-level programming language.

## CSCI6740

3 Credits

### Applied Cryptography

This course introduces cryptographic algorithms, protocols and their uses in the protection of information in various states. Topics include block ciphers, data encryption standard (DES), advanced encryption standard (AES), secret and public key encryption (RSA), cryptographic hash functions (e.g., MD5, SHA-3), digital signatures and the key distribution (PKI) problem. Types of attacks and application of cryptography in secure sockets layer (SSL), virtual private networks, secure storage and other security issues are also discussed.

## CSCI6741

3 Credits

### Modeling and Simulation of Continuous Systems

Classification and construction of continuous-systems models. Simulation of systems arising in management practice using the system-dynamics modeling strategy. Design and validation of simulation experiments. Interpretation of experimen-

tal results. Laboratory. Prerequisite: knowledge of a high-level programming language.

## CSCI6743

3 Credits

### IBM System i Enterprise Computing

Students will study the architecture and software of the IBM i computers. This includes the hardware, middleware, system software, application software, interfaces to other systems and software products. Students will also study the security and network communications capabilities of the System i computers. Special emphasis is placed on the control language, unique file system, application programming languages and data-management services. Prerequisites: CSCI5505 Introduction to Computer Programming and CSCI5525 Introduction to Computer Science.

## CSCI6744

3 Credits

### Enterprise Computing for the IBM zSeries

Students will study the architecture and software of the IBM zSeries computers (mainframe). This includes the hardware, middleware, system software, application software, interfaces to other systems and software products. Students will also study the security and network communications capabilities of the zSeries computers. Special emphasis is placed on the control language, unique file system, application programming languages and data-management services. Prerequisites: CSCI5505 Introduction to Computer Programming and CSCI5525 Introduction to Computer Science.

## CSCI6745

3 Credits

### Computer Graphics

Computer analysis of two- and three-dimensional line drawings and halftone images. Capabilities of modern hardware, picture-processing algorithms, image enhancement, pattern recognition, scene analysis, interactive graphics. Prerequisites: linear algebra and knowledge of a high-level programming language.

## CSCI6750

3 Credits

### Advanced Quantitative Analysis

Mathematical programming techniques and optimization methods. Goal, integer, nonlinear and dynamic programming. Regression analysis for planning and forecasting. Construction of models with the use of a modeling language. Laboratory. Prerequisite: CSCI5551 Mathematics for Computer Science and MIS.

## CSCI6751

3 Credits

### Artificial Intelligence

A general introduction to the ideas and methods that will enable computers to be intelligent. Top-

ics include natural language parsing, search, predicate calculus, representation of common sense knowledge, expert systems, managing plans of action, language comprehension. Programming projects. Prerequisite: CSCI5555 Data Structures.

## CSCI6758

3 Credits

### Electronic Commerce

Scope and structure of electronic commerce. Business-to-consumer, business-to-business and intraorganizational e-commerce. Technological infrastructure, intranets and extranets. Market structures, business relationships, enabling services and transaction support. Web entrepreneurship, business models and innovation. Supply-chain management and auction methods. Collaboration and co-production. Security and protection of digital property. Launching an e-business. Two projects: analytical and entrepreneurial.

## CSCI6761

3 Credits

### Automata Theory

Formal languages. Finite automata, push-down automata and Turing machines. Relationship between formal languages and automata. Undecidability. The halting problem, the Post correspondence problem and their relation to other undecidable problems. Prerequisite: CSCI5551 Mathematics for Computer Science and MIS.

## CSCI6767

3 Credits

### Object-oriented Programming

Object-orientated programming in C++. Elements of the C++ language: classes, inheritance, operator overloading, templates, exception handling and real-time type information. An introduction to object-oriented design.

## CSCI6803, CSCI6804

2-5 Credits Each Semester

### Research and Thesis

A program of selected research, tailored to the interest and capabilities of the individual student, under the guidance of a school graduate adviser.

## CSCI6805

3 Credits

### Graduate Research (Nonthesis)

Graduate-level, nonthesis research with a faculty member in computer science.

## CSCI6810

3 Credits

### Java and the Internet

This course is designed for students who have object-oriented programming experience. It focuses on advanced Java programming fea-

tures. The main topics are Java event model, event-driven programming, graphical user interface design, Java Swing components, graphics and media processing, exception handling, multithreading, Java applet and servlet, web-based applications, I/O streams and data files, Java database connectivity (JDBC), Java networking programming, remote method invocation (RMI) and Java beans. Prerequisite: CSCI5555 Data Structures or CSCI6844 Programming for the Internet.

## CSCI6811

1-3 Credits Each Semester

### Advanced Special Projects

Advanced computer projects of special interest to individual students.

*Fall, Spring*

## CSCI6820

3 Credits

### J2EE Programming

This course is designed for students who are interested in learning how to build or maintain enterprise applications based on the J2EE architecture. Students are expected to have a good understanding of web technology and server-side programming for dynamic web content. The main topics are Servlet and JSP programming, EJB programming and the debugging of J2EE applications. Prerequisite: CSCI6810 Java and the Internet.

## CSCI6830

1-3 Credits

### Special Topics in Computer Science

A detailed study of some special area in computer science. The area is chosen by the instructor and will be different each time. For this reason, the course may be taken for credit more than once.

## CSCI6836

3 Credits

### Computer Algorithms

An introduction to algorithm development. Topics include complexity analysis, practical algorithm development and common algorithm methods, including recursion, greedy algorithms, dynamic programming, backtracking and branch-and-bound. The course will include programming assignments implementing the algorithms discussed in class. Prerequisite: CSCI5555 Data Structures or permission of instructor.

## CSCI6837

3 Credits

### Mind-controlled Devices with Robotics

This course teaches people to model the programming needs, create prototypes in the C++ programming language and build an application.

The application uses a cyberlink mental interface as an input device. The resulting efforts control a robotic arm.

## CSCI6844

3 Credits

### Programming for the Internet

This course introduces students to the fundamentals of Microsoft.NET framework, the ASP.NET web development environment and C# programming. It also covers XML web services, SQL Server database and Microsoft web server IIS (Internet Information Services). Students study how to develop powerful websites and web applications that access databases using dynamic, server-side programming in C#. They also will learn how to deploy such applications over various servers. Prerequisite: CSCI6623 Database Systems.

## CSCI6846

3 Credits

### Advanced Programming for the Internet

This second-semester course will build on the technologies and programming techniques taught in CSCI6844 Programming for the internet. The course will cover the Extensible Hypertext Markup Language (XHTML) Version 1.0, which superseded HTML in January 2000 as the standard for marking up web pages. XHTML is the joining of the HTML and Extensible Markup Language (XML) standards. Additional topics on XML will be presented to increase student knowledge and programming expertise. Practical Extraction and Report Language (PERL) and its use in Common Gateway Interface (CGI) scripts to process HTML forms will be discussed. Two additional scripting languages will be covered: Visual Basic Script (VBScript) and PerlScript. The use of Dynamic HTML and DHTML scriptlets in web pages will be covered. Unified Modeling Language (UML) will be discussed and used in the design, development and implementation of a team project. Prerequisite: CSCI6844 Programming for the Internet.

## CSCI6851

3 Credits

### Parallel and Fault-tolerant Systems

This course will include the evolution of computer systems, parallel processing systems, principles of pipelining and vector processing, array processors, multiprocessor architectures, data flow computers, very-large-scale integration (VLSI) systems, fault-tolerant systems and programming in the parallel processor environment. Prerequisites: CSCI5551 Mathematics for Computer Science and MIS, CSCI5555 Data Structures and CSCI6603 Computer Architecture.

# Computer Science

---

## CSCI6860

3 Credits

### Secure Software Development and Analysis

The course introduces the characteristics of secure programs and methods of implementing programs that are free from vulnerabilities. Topics include robust and defensive programming, input validation, buffer overflows, data obfuscation and protection, secure software development life cycle, security assessment, threat modeling and architecture security, design and testing methodologies, fuzz testing, static and dynamic analysis, source and binary code analysis tools and methods. The course will include assignments on analyzing software, either in source code or binary form, to find any vulnerability. Prerequisites: CSCI5505 Introduction to Computer Programming and CSCI6738 Cybersecurity.

## CSCI6863

3 Credits

### Supply Chain Security and Systems Certification

The course deals with the security issues associated with building complex (software and/or hardware) systems out of third-party components of unknown (and potentially unknowable) origin. Topics covered include elements that impact the supply chain, provider security review, storage and distribution, supply chain security program compliance, security auditing and assessments, resources and technology (GPS, RFID). The course additionally introduces the DoD processes and regulations associated with the certification and accreditation of operational systems and the authorities and processes for the approval of their operation.

## CSCI6869

3 Credits

### Network Security

Coverage of potential threats to a stand-alone or networked computer. The course includes strategies to analyze system vulnerabilities and to harden the system against threats. Integrated lab. Prerequisite: CSCI6731 Computer Networks or CSCI6732 Local Area Networks.

## CSCI6870

3 Credits

### Penetration Testing and Vulnerability Analysis

The course provides an overview of system vulnerabilities and methods of discovering ways of exploiting vulnerabilities to gain access to a system. Topics include identifying flaws and vulnerabilities, vulnerability-assessment tools, vulnerability scanning, exploiting scanner findings, web application penetration testing, network privilege escalation, social engineering attacks, patch management, configuration management. Projects on planning, organizing and performing penetration testing on a simple net-

work will be pursued. Prerequisites: CSCI6638 Operating Systems, CSCI6731 Computer Networks and CSCI6738 Cybersecurity.

## CSCI6873

3 Credits

### Firewalls and Intrusion-detection Systems

This course covers the theoretical and practical aspects of firewalls and intrusion-detection systems. Some aspects of virtual private networks (VPNs) and routers will also be covered. Prerequisites: CSCI6638 Operating Systems and CSCI6731 Computer Networks.

## CSCI6880

3 Credits

### Data Mining

This course introduces the fundamental concepts of data mining. Students will gain an in-depth understanding of algorithms in the field, and will learn how to prepare data for learning and classification. Topics covered include data preprocessing, classification, cluster and outlier analysis and text mining. Students will work on projects applying the theory learned. Prerequisites: CSCI6836 Computer Algorithms, MATH3300 Statistics I or permission of department chair.

## CSCI6882

3 Credits

### Data Warehouse and Data Mining

Study of the concepts, design and architecture of the data warehouse. Study of decision-making process using the data warehouse and techniques like online analytical processes and data mining. Topics also include the relationship between data mining and data warehouse, supporting more complex queries than regular structured query language (SQL) and historical and summary transformations and tools to make crucial business decisions. Prerequisite: CSCI6623 Database Systems.

## CSCI6885

3 Credits

### Big Data Analytics with Hadoop and R

The growth of Big Data presents a great challenge for academia and various industries. New technologies are emerging for storing data, information retrieval and knowledge discovery in large unstructured data sets. This course presents core paradigms of Big Data analytics along with cutting-edge tools and techniques. Hands-on training will be provided with NoSQL databases, the Hadoop family of Big Data analytics, scalable cloud computing and the R tool. Prerequisite: CSCI6623 Database Systems.

## CSCI7645

3 Credits

### Systems Programming

Introduction to operating systems software. Topics chosen from process management interprocess communication, interrupt handling

and file systems. Students will develop software that will implement and use operating systems primitives. Prerequisites: CSCI5555 Data Structures and CSCI6638 Operating Systems.  
*Fall, Spring*

## CSCI7740

3 Credits

### Introduction to Real-time Systems

Real-time languages and concurrent programming. Design of real-time kernels, context switching and memory allocation. Reliability, fault-tolerance and exceptions. Verification and validation of real-time software. These topics will be illustrated through examples and projects. Prerequisites: CSCI5555 Data Structures and CSCI6638 Operating Systems.

## CSCI7741

3 Credits

### Disaster Recovery

Students will learn how to prepare and implement a disaster-recovery plan, which includes assessing risks, prioritizing system functions, developing procedures and establishing organizational relationships. Students will also test and then evaluate the disaster-recovery plan. Prerequisite: CSCI6623 Database Systems.

## CSCI7771

3 Credits

### Compilers and Translators

Introduction to language translators. Compilers vs. interpreters. Structure of a compiler. Compiler-writing tools. Lexical analysis: language tokens, state tables, regular expressing scanner generators. Syntax analysis: grammars, Backus-Naur Form (BNF), parsing methodologies, parser generators. Symbol table maintenance. Students will develop scanner and parser for a high-level language. Prerequisites: CSCI5551 Mathematics for Computer Science and MIS and CSCI5555 Data Structures.

## CSCI7773

3 Credits

### Digital Image Processing

A treatment of the techniques used in image enhancement and restoration. Topics will include image modeling and geometry, image transforms, fast Fourier transform (FFT), histogram modification, spatial and frequency domain filtering, image encoding. Some discussion of pattern recognition will be included.

## CSCI7775

3 Credits

### Pattern Recognition

Introduction to pattern recognition, feature detection and extraction, Bayes Classification theory, Fisher discriminant theory, template-based recognition, eigenvector analysis, linear discriminant/perception learning, k-nearest-neighbor classification, K-means clustering, non-parametric classification, density estima-



tion, applications such as fingerprint identification, handwriting signature verification, face recognition will be discussed.

## CSCI7781

3 Credits

### Advanced Database Systems

Database performance, database reorganization, integrity and concurrency, transaction analysis, recovery database aspects, logical database design and physical database design. Prerequisites: CSCI6623 Database Systems and SQL programming ability.

## CSCI7783

3 Credits

### Information Security

This course will study the important area of information security. It will cover both security management and the technical components of security. Topics will include many of these areas: security analysis, logical security design, physical security design, implementation of security systems and security maintenance. Prerequisite: CSCI6623 Database Systems.

## CSCI7785

3 Credits

### Distributed Database Systems

Theory of distributed databases and comparison to centralized databases. Topics include location transparency, locking, deadlock, data sharing and time-stamping. A project to implement a small distributed database system is of prime importance to the course. Prerequisite: CSCI6623 Database Systems.

## CSCI7788

3 Credits

### Advanced Oracle SQL Performance and Tuning

Performance measurement and tuning of Oracle SQL applications. Analysis of Oracle database architecture with regard to optimizer modes. Interaction of SQL language and database engine. Prerequisites: CSCI6623 Database Systems and SQL programming ability.

## CSCI7795

3 Credits

### Building Electronic Commerce Systems

This course covers constructing complete client-server systems for e-commerce. Object-oriented programming, website design, scripting, advanced markup language features, internet database programming, multimedia programming and other techniques will be deployed as necessary to create and document a realistic e-commerce offering. Semester-long team projects will be completed. Prerequisites: CSCI6623 Database Systems, CSCI6758 Electronic Commerce, CSCI6810 Java and the Internet and CSCI6844 Programming for the Internet.

Fall

## CSCI7838

3 Credits

### Introduction to Computer Telephony

Telephone Application Interface (TAPI); active and telephony components; application of Visual C++ to make online telephone calls via mouse or headset (electrode placed on forehead). Prerequisites: CSCI5555 Data Structures and CSCI6638 Operating Systems.

## CSCI7839

3 Credits

### Voice-over IP Technologies

This course gives an introduction of voice-over IP technologies. Topics include the Public Switched Telephone Network (PSTN), signaling specifications, modulation and compression of voice, Quality of Service (QoS), H.323 architecture and protocol suite, Session Initiation Protocol (SIP), gateway protocols and voice and data network convergence. Prerequisite: CSCI6731 Computer Networks or CSCI6732 Local Area Networks.

## CSCI7870

3 Credits

### Linux System Administration

This course introduces the concepts of system administration as they apply to the Linux operating system. Topics include servers and data centers; virtualization; directories and file systems; access control; Linux and Windows; regular expressions and scripting; processes and services; network, network software and the internet; security policy and ethics; change management, backup and restore; database security and installation. Secure configuration of Linux systems will be pursued.

## CSCI7871

3 Credits

### Unix Shell Programming

To enable students to derive maximum benefits from using shell, the course will cover shell for the novice, shell programming for results and shell programming for mastery. It describes the basic skills to create whole applications, together with the steps into the world of software developers and system administrators. Prerequisite: CSCI5525 Introduction to Computer Science or permission of instructor.

## CSCI7874

3 Credits

### Unix System Administration

A detailed introduction to Unix system administration starting with the basics and advancing to scriptwriting concepts, commands and packages that are needed to manage a Unix system. Prerequisite: CSCI7871 Unix Shell Programming.

## CSCI7877

3 Credits

### Development of E-business Applications

Introduction to e-business; e-business methodology; process modeling and documentation; selected SML technologies; Simple Object Access Protocol (SOAP); Web Service Definition Language; Universal Description Discovery and Integration. Prerequisites: CSCI5505 Introduction to Computer Programming and CSCI5555 Data Structures, CSCI6623 Database Systems and CSCI6844 Programming for the Internet.

## CSCI7881

3 Credits

### Operating Systems Audit and Hardening

The course is an introduction to Unix and Windows operating systems security audits (with major emphasis on Unix/Linux and minor on Windows). It is based on students' understanding of operating systems and shell programming skills. Major topics include: compliance audits, authentication security and defense against privilege escalation, role-based digest functions and defense against Rootkits and internal break-in forensics, log analysis, system hardening, patching compliance, virus and worm protection. Prerequisites: CSCI5505 Introduction to Computer Programming, CSCI6638 Operating Systems and CSCI7871 Unix Shell Programming.

## CSCI8891

1-3 Credits

### Internship/Work Experience

The course provides on-the-job education and training in the concepts presented in the graduate computer science, electronic commerce, management information systems and cybersecurity and information assurance curricula. Students must submit, for the school's approval, a proposal from the employer detailing the nature of the intended work. Weekly contact must be maintained with the school's adviser to confirm the quality of the work experience. A report at the conclusion of the work experience is required, detailing both the educational and training aspects of the job. Prerequisite: students must have been enrolled in the computer science, electronic commerce, management information systems and cybersecurity and information assurance programs for at least nine months.

## Mathematics

The following graduate courses in mathematics are offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

# Cosmetic Science

---

## MATH6630

0–3 Credits

### Special Topics in Mathematics Education

A study of topics of current interest in mathematics education.

## MATH6729

3 Credits

### Statistical Programming

This course gives a thorough introduction to using statistical analysis software (SAS) for statistical analysis. Topics include importing and exporting files, output formatting, predictive data modeling and exploration (mixed-models analysis, multivariate statistical analysis, longitudinal analysis and survival analysis) and a programming approach to report writing. Prerequisites: CSCI1201 Computer Programming I and CSCI1202 Computer Programming II. Corequisite: MATH6737 Applied Statistics I. (Equivalent to CSCI6729 Statistical Programming.)

## MATH6737

3 Credits

### Applied Statistics I

This course is an introduction to statistical methods of data analysis emphasizing examples drawn from the biological and life sciences. Topics include probability, descriptive statistics, point and interval estimation, hypothesis testing, statistical design and sampling, linear regression and Chi-square testing.

## MATH6738

3 Credits

### Applied Statistics II

As a continuation of MATH6737 Applied Statistics I, this course covers more advanced statistical methods including analysis of variance (ANOVA), analysis of covariance (ANCOVA), factor and cluster variance, multiple linear regression, nonparametric tests, categorical data analysis, logistics and survival analysis. Time permitting, additional topics include Monte Carlo methods, mixed models and classification and regression trees. Prerequisite: MATH6737 Applied Statistics I.

## MATH6775

3 Credits

### Mathematics of Operations Research

This course is an introduction to mathematical programming using the simplex method and transportation algorithms. Additional topics will be selected from decision analysis, nonlinear programming, Markov process, queuing models and forecasting.

## MATH6830

3 Credits

### Special Topics in Mathematics

A detailed study of some special area in mathematics. The area is chosen by the instructor and will be different each time. For this reason, the course may be taken for credit more than once. Prerequisite: MATH2203 Calculus III.

## MATH6837

3 Credits

### Probability and Statistics I

This calculus-based course is the first part of a two-semester sequence which serves as a comprehensive introduction to the concepts, definitions, theory and practice of probability and statistics. The topics covered include the fundamentals of probability, discrete and continuous random variables (including binomial, poisson, normal, Chi-square, etc.), functions of random variables, moment-generating functions, sampling distributions and applications. Prerequisite: MATH2202 Calculus II.

## MATH6838

3 Credits

### Probability and Statistics II

As a continuation of MATH6837 Probability and Statistics I, this course covers hypothesis testing, regression and correlation in one and several variables, analysis of variance, nonparametric tests, multivariate statistics as well as other advanced topics selected from the design of experiments, Markov processes, Bayesian models selection, neural network and/or time-series analysis. Prerequisite: MATH6837 Probability and Statistics I.

## MATH6841

3 Credits

### Higher Geometry

Axiomatics, groups of transformations and invariants. Erlanger Program, Euclidean and Lobachevskain geometry, special topics.

# Cosmetic Science (M.S.)

To serve the needs of the large population of cosmetic science professionals in the New York metropolitan area, Fairleigh Dickinson University's School of Natural Sciences offers a Master of Science in cosmetic science.

This program, the first of its kind in New Jersey, was introduced in 1982 as an M.A. in science with a concentration in cosmetic science. The current name, M.S. in cosmetic science, more accurately reflects its scientific content. This program continues to fulfill the needs of those responsible for creating commercial products in the cosmetics, toiletries and fragrance industries. It enables practitioners to learn the latest advances in their field and helps students to develop the skills necessary for senior assignments in the cosmetics industry. It is also geared to technologists aspiring to supervisory roles in the laboratory or plant. For those without industrial experience, the program can launch a career in the cosmetic industry.

This program is offered under the auspices of the School of Natural Sciences, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

## Admission Requirements

1. Graduation from an accredited college or university with a baccalaureate degree in an allied science (biology, chemistry, biochemistry or pharmacy). This baccalaureate degree must include a two-semester sequence of organic chemistry.
2. Submission of scores on the Graduate Record Examinations (GRE) General Test.
3. Three letters of recommendation.
4. A minimum score of 550 (paper-based) or 213 (computer-based) or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) or its equivalent is required for applicants whose native language is not English.

Note: Financial assistance in the form of teaching assistantships and research scholarships is not available.

## Requirements for the Master of Science Degree

### Required Courses (20 credits)

	Credits
BIOL6756	
Dermal Pharmacology and Immunology.....	3
CHEM6526	
Product Development.....	3
CHEM6529	
Microtoxicology and Biochemistry.....	3
COSC6543	
Hair-care Raw Materials and Formulations.....	3
COSC6547	
Skin-care Raw Materials and Formulations.....	3
COSC6548	
Cosmetic Science Laboratory.....	2
PHYS6753	
Applied Colloid and Surface Science.....	3

### Cosmetic Science Electives (6 credits minimum)

BIOL6728	
Bioethics.....	3
CHEM6546	
Perfumery.....	3
CHEM6773	
Polymer Chemistry.....	3
CHEM6781	
Biochemistry.....	3
COSC6542	
Claims Substantiation.....	3
COSC6549	
Color Cosmetics.....	3

### Free Electives (6 credits maximum)

MGMT5012	
Foundations of Management.....	2
MKTG5012	
Marketing Principles.....	2
MKTG6602	
Marketing Research.....	2
MKTG6603	
Consumer Behavior.....	2
Biology Elective	
(BIOL5000 or higher).....	1-3
Chemistry Elective	
(CHEM5000 or higher).....	3
Communication Elective	
(COMM5000 or higher).....	3

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director.

### Cosmetic Science

#### School of Natural Sciences

#### COSC6542

3 Credits

#### Claims Substantiation

Discussion of claim types including efficacy, safety and consumer with construction of solid claims support packages through the knowledge of basic skin physiology, noninvasive bioinstrumentation, proper claims support study design and SOPs for claims substantiation (EEMCO guidelines).

#### COSC6543

3 Credits

#### Hair-care Raw Materials and Formulations

Surfactants, proteins, polymers, preservatives, toxicology, performance, theoretical concepts, preparation methods and analytical procedures for shampoos and conditioners, including fixatives, test methods, safety and stability.

#### COSC6547

3 Credits

#### Skin-care Raw Materials and Formulations

Structure, function, use chemistry and application of emulsifiers, emollients, silicones, thickeners, colorants, chelators, preservatives and other ingredients in skin care products.

#### COSC6548

2 Credits

#### Cosmetic Science Laboratory

Hands-on experience creating and evaluating hair and skin products. Emulsions including creams and lotions and surfactant systems including shampoos and gels. Prerequisite: COSC6543 Hair-care Raw Materials and Formulations or COSC6547 Skin-care Raw Materials and Formulations.

#### COSC6549

3 Credits

#### Color Cosmetics

Worldwide cosmetic color regulations, formulations including fillers, conventional colorants and specialty pigments, as well as the manufacture of all types of makeup products. Prerequisite: COSC6547 Skin-care Raw Materials and Formulations.

#### COSC6551

3 Credits

#### Sensory Evaluation of Cosmetic Products

Techniques, methods and statistics used for the sensory evaluation of cosmetic products; the interaction between product functionality and raw materials selection. Prerequisite: COSC6543 Hair-care Raw Materials and Formulations or COSC6547 Skin-care Raw Materials and Formulations.

#### PHYS6753

3 Credits

#### Applied Colloid and Surface Science

The technical aspects of emulsions, solubilized systems, foams and dispersions. Structure and dynamics of complex systems. Polyphase equilibrium, phase transitions and kinetic distributions. The physics of interfaces and effects of surface structure. Principles of colloid science along with practical procedures as applied in cosmetic formulations, including examples.

Fall

# Creative Writing

## Creative Writing (M.F.A.)

The Master of Fine Arts (M.F.A.) in creative writing is a low-residency program in which students work closely with published authors who serve as their mentors and teachers. During the 10-day residencies held twice each year, students participate in workshops; they meet with their mentors and fellow students; and they attend readings and interviews with visiting writers as well as a variety of literary events. During the rest of the academic year, each student works one-on-one with members of the faculty and participates in workshops online. This program gives students access to an international community of acclaimed and award-winning writers.

The M.F.A. degree is offered in five disciplines — **poetry, fiction, creative non-fiction, writing for young adults and children's literature** and **literary translation**.

The program offers a **60-credit single-concentration M.F.A. degree** as well as an **88-credit dual-concentration M.F.A. degree**. The specific details about each program are explained separately on this page.

The program is arranged into modules (8-week courses) and residencies (10 days of study on one of FDU's campuses). Two residencies are offered each year, one in late July at the Florham Campus in Madison, New Jersey, and another in early January at the Wroxton, England campus. The residencies offer individual conferences with mentors, group workshops, readings and instruction by distinguished visiting writers, presentations by publishing professionals, faculty lectures, student readings and other literary-related activities. Students must attend all scheduled events, as the residency is part of the course work.

There are no letter grades. All courses operate on a Pass/Fail system. Academic work is completed during the online writing modules and the residencies, rather than in traditional courses. Each academic year, four online writing modules, each eight weeks long, taken consecutively (rather than simultaneously) are offered, two in the spring and two in the fall. A faculty mentor directs each module. In addition to producing their own original creative and critical work, students are expected to actively participate in peer-oriented online writing workshops throughout each module.

This program is offered under the auspices of the department of literature, language, writing and philosophy, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admission Requirements

1. Students must have a bachelor's degree from an accredited college or university with a satisfactory academic record.
2. Students must submit a writing sample. In admissions decisions, the greatest weight will be given to the writing sample.
3. All incoming students must begin their first semester of the program by attending a residency and registering for two modules.

### Requirements for Single-concentration M.F.A. Degree

Sixty credits (eight modules and three residencies) are required to complete the **single-concentration M.F.A. degree** as follows:

- 5 modules in the chosen genre,
- 1 module in an elective genre other than the student's own,
- 1 module in craft essay (taken in the 5th module),
- 1 thesis module in chosen genre (last module) and
- 3 fully attended residencies (ideally completed before completion of the thesis module).

Each module is worth 6 credits (8 modules = 48 credits) and each residency is worth 4 credits (3 residencies = 12 credits) for a total of 60 credits.

The degree is conferred upon successful completion of eight writing modules, three residencies and a craft essay and thesis manuscript. The degree may be completed in as little as two years but must be completed within five years. Specific requirements are:

1. Five modules in the students' chosen discipline.
2. One module in craft in the student's chosen discipline. The craft module is the fifth module. During these eight weeks, students will work closely with their mentors to explore matters of craft, and by the end of the module, they should complete an essay on craft of 3,500–5,000 words. The topic and approach are the student's choice, but must be approved by the mentor.
3. One module that is an elective (completed at any time during their studies) in a discipline other than their own.

4. During the eighth module, students complete and polish the thesis in their discipline, working closely with their mentor. The thesis should reflect a culmination of all the work the student has completed during the program, and as such, it should represent the student's best possible writing. The thesis may be comprised of poems, short stories, essays, a novella, the beginning portion of a novel or the beginning portion of a memoir. The length should be approximately 25,000 words for prose. For poetry, the thesis should include approximately 375 lines. The thesis must be in the student's declared genre. During the thesis module, the thesis is written and revised by working closely with a mentor. Each thesis will undergo a formal evaluation and critique by the thesis mentor and second reader.

5. Three residencies must be completed. These 10-day intensive residencies are part of the course work. Students must attend every scheduled event in order to receive credit for the residency.

### Requirements for Dual-concentration M.F.A. Degree

Eighty-eight credits (12 modules and four residencies) are required to complete the **dual-concentration M.F.A. degree** as follows:

- 5 modules in the primary genre,
- 1 craft essay module in the primary genre (taken in the fifth module),
- 1 elective module in the secondary genre,
- 1 thesis module in the primary genre,
- 3 additional modules in the secondary genre,
- 1 thesis module in the secondary genre and
- 4 fully attended residencies.

Each module is worth 6 credits (12 modules = 72 credits) and each residency is worth 4 credits (4 residencies = 16 credits) for a total of 88 credits.

The degree is conferred upon successful completion of 12 writing modules, four residencies and two thesis manuscripts. The degree may be completed in as little as three years but must be completed within five years. Specific requirements are:

1. Five modules in the students' primary discipline.
2. One module in craft in the student's primary discipline. The craft module is the fifth module. During this eight-week module, students will work closely with their

mentors to explore matters of craft, and by the end of the module, they should complete an essay on craft of 3,500–5,000 words. The topic and approach are the student's choice, but must be approved by the mentor.

3. One module in the student's secondary genre before taking their eighth module (primary thesis module).

4. During the eighth module, students complete and polish the primary-genre thesis, working closely with their mentor. The thesis should reflect a culmination of all the work the student has completed during the program, and as such, it should represent the student's best possible writing. The thesis may be comprised of poems, short stories, essays, a novella, the beginning portion of a novel or the beginning portion of a memoir. The length should be approximately 25,000 words for prose. For poetry, the thesis should include approximately 375 lines. The thesis must be in the student's declared genre. During the thesis module, the thesis is written and revised by working closely with a mentor. Each thesis will undergo a formal evaluation and critique by the thesis mentor and second reader.

5. Three modules in the secondary genre and the final, 12th, thesis module in the secondary genre.

6. Students must attend four residencies. These 10-day intensive residencies are part of the course work. Students must attend every event, lecture, mentor meeting and workshop.

## Modules

Students must complete six modules in their genre (including the thesis module) and one module in craft as the fifth in their program. The remaining module is an elective in which students work in another genre.

The first module starts at the beginning of the following semester after the residency and the second module follows the first. The modules require a measure of independence on the student's part and a disciplined writing schedule. In each module, the student will have completed the amount of work specified and assigned by the mentor. Generally, work in any module consists of: 1) creative work submitted at three points each module; 2) active, thoughtful, constructive contributions to the online workshop; and 3) two close readings/reviews of relevant texts. Mentors

respond to creative work within a week of submission. Other work may be required according to the wishes of the mentor. At the end of the module, the mentor will prepare a final assessment, evaluating each student's work and progress.

## Electives

The requirement of one module in a genre other than the student's chosen area may be fulfilled through completion of an out-of-genre module in poetry, fiction, creative nonfiction, literary translation or writing for young adults and children's literature.

## Craft Module

Students must complete the module in craft for their genre of concentration during the fifth module of their work in the M.F.A. program.

Working closely with a mentor, the student will research and write an essay devoted to craft. The essay on craft must include: 1) a clear presentation of a central idea (or a sufficient articulation of a specific domain of exploration), fluent and correct syntax and a coherent organization; 2) logical thinking grounded in close readings of the texts; and 3) textual substantiation for the ideas put forth. The essay on craft should be (approximately) between 3,500 to 5,000 words. The mentor must approve the topic and approach, but the essay on craft may be an academic essay, a personal reflection on texts, a profile of an author that includes close readings or it may take another form, so long as it meets the above requirements and the mentor approves. Although the craft module does not contain the program's traditional peer-oriented workshops, there will be opportunities for students to share drafts and discuss ideas at the residency and online.

## Thesis Module

During the eighth module of the single concentration and in the eighth and 12th module of the dual-concentration degree, students complete and polish the thesis, working closely with their mentor. The thesis should reflect a culmination of all the work the student has completed in the genre during the program, and as such, it should represent the student's best possible writing. The thesis may be comprised of poems, short stories, essays, a novella, the beginning portion of a novel or the beginning portion of a memoir. The length

should be approximately 25,000 words for prose. For poetry, the thesis should include approximately 375 lines. The thesis must be in the student's declared genre. During the thesis module, the thesis is written and revised by working closely with a mentor. Each thesis will undergo a formal evaluation and critique by the thesis mentor and second reader.

## Course Offerings

*Courses are offered in the fall and spring. Students will be registered by the M.F.A. coordinator.*

### Creative Writing

*Department of Literature, Language, Writing and Philosophy*

#### CRWR7500

6 Credits

##### Fiction Writing

In the fiction writing concentration, students will generate and revise works of fiction, receive constructive guidance from a faculty member and participate in online discussions with their fellow workshop partners. Students will also be required to write two short essays in which they closely explore an aspect of narrative craft in two works of fiction.

#### CRWR7501

6 Credits

##### Craft and Form in Fiction

Matters of craft and form and specific examples of work in the genre will be discussed. Under the guidance of the instructor, the student will write about specific aspects of their craft and genre. This module is taken in the fifth module in a student's sequence.

#### CRWR7502

6 Credits

##### Creative Nonfiction Writing

In the creative nonfiction writing concentration, students will generate and revise works of creative nonfiction, receive constructive guidance from a faculty member and participate in online discussions with their fellow workshop partners. Students will also be required to write two short essays in which they closely explore an aspect of narrative craft in two works of creative nonfiction.

#### CRWR7503

6 Credits

##### Craft and Form in Nonfiction

Matters of craft and form and specific examples of work in the genre will be discussed. Under the guidance of the instructor, the student will write about specific aspects of their craft and genre. This module is taken in the fifth module in a student's sequence.

# Creative Writing and Literature for Educators

---

**CRWR7504**

**6 Credits**

## **Poetry Writing**

In the poetry writing concentration, students will generate and revise works of poetry, receive constructive guidance from a faculty member and participate in online discussions with their fellow workshop partners. Students will also be required to write two short essays in which they closely explore an aspect of craft in two collections of poetry.

**CRWR7505**

**6 Credits**

## **Craft and Form in Poetry**

Matters of craft and form and specific examples of work in the genre will be discussed. Under the guidance of the instructor, the student will write about specific aspects of their craft and genre. This module is taken in the fifth module in a student's sequence.

**CRWR7509**

**6 Credits**

## **Writing for Young Adults and Children's Literature**

In the writing for young adults concentration, students will study the particular craft consideration in writing for young adult readers — voice, pacing, structure and the idea of the “high concept” young adult story. Through workshops, discussions, close readings of young-adult novels and other works of fiction and one-on-one study with their mentors, students will produce stories or chapters of fiction for young adults.

**CRWR7511**

**6 Credits**

## **Literary Translation**

In the literary translation concentration, students study the art of translating literary works from other languages into English. Through discussion, workshops and one-on-one study with their mentors, students will produce translations from the language or languages in which they specialize.

**CRWR7512**

**6 Credits**

## **Craft and Form in Young Adult and Children's Literature**

Matters of craft and form and specific examples of work in the genre will be discussed. Under the instructor's guidance, the student will write about specific aspects of their craft and genre in preparation for a final lecture presentation. This module is taken in the fifth module in a student's sequence.

**CRWR7513**

**6 Credits**

## **Speculative Fiction**

The concerns of science fiction and fantasy include those of mainstream fiction, with additional questions about world building and sus-

pension of disbelief. The discussions in this workshop will allow students working on speculative fiction to discuss in greater depth issues of craft specific to science fiction and fantasy. This course can substitute as a fiction module.

**CRWR7524**

**3 Credits**

## **Teaching Composition: Theory and Practice**

This course will explore current and long-standing theoretical perspectives and pedagogical practices for teaching written in a first-year composition program. Students will consider curricular, social, political, pedagogical and theoretical ideas and practices that shape the teaching of writing. The course is free to FDU creative writing students taking two modules. Pass/no credit. Note: Students must take CRWR7525 Practicum for Teaching Composition: Theory and Practice and two additional creative writing courses.

**CRWR7525**

**1 Credit**

## **Practicum for Teaching Composition: Theory and Practice**

Required practicum for CRWR7524 Teaching Composition: Theory and Practice. Composition theory in a classroom setting. In order to observe, evaluate and apply composition theory studied in CRWR7524 Teaching Composition: Theory and Practice. Course is free to FDU creative writing students taking two modules. Pass/no credit. Prerequisite: CRWR7524 Teaching Composition: Theory and Practice.

**CRWR7530**

**6 Credits**

## **Craft and Form in Translation**

Matters of craft and form and specific examples of work in the genre will be explored and discussed. Under the instructor's guidance, the student will write about specific aspects of their craft and form in preparation for a final lecture presentation. This module is taken in the fifth module in a student's sequence.

## Creative Writing and Literature for Educators (M.A.)

The M.A. in creative writing and literature for educators is the first graduate program in the nation to focus on the needs of middle- and high-school teachers who teach both creative writing and literature. Its primary goal is to enhance graduates' abilities to teach through a better understanding of the issues and practices facing writers and readers and the connections between both areas.

Teaching creative writing requires an understanding of the creative and analytical processes of both the writer and the reader. FDU's program examines how writers create and revise with a focus on how meaning is created (the “writerly” process) and combines it with exposure to critical analysis from the readers' point of view (the “readerly” process). By combining and connecting writerly and readerly approaches, the M.A. program enhances educators' abilities to teach both creative writing and literature. After a three-day weekend residency, students complete the remaining course work online, working with a renowned creative writing and literature faculty.

Students in the M.A. in creative writing and literature program learn from an accomplished faculty of literary experts and published poets and authors. Faculty members include a finalist for the National Book Award and a winner of the National Magazine Award.

The program is offered under the auspices of the department of literature, language, writing and philosophy, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### **The Curriculum**

All students begin with the foundation course CWLT8001 Reading Like a Writer, which introduces the practice of writerly exegesis with a focus on how meaning is created. Subsequent writing courses are designed specifically to provide both a creative and writerly/analytical experience in the major genres educators are likely to see in student work. The literature courses offer greater breadth and enriched understanding and connection to the advanced

# Creative Writing and Literature for Educators

readerly aspects of the literature often taught in high school, including traditional literature (Shakespeare, young adult literature); non-Western literature (African literature, world literature); intercultural literature (ethnic American literature); and contemporary literary issues (nonlinear narrative, theoretical rewrites).

## Requirements for the Master of Arts Degree

To earn the M.A. degree, students must attend the beginning residency and complete these seven courses:

<b>Foundation Course</b>	Credits
CWLT8001 Reading Like a Writer.....	4
<b>Writing and Critiquing Courses (one from each genre)</b>	
CWLT8101 Writing and Critiquing Fiction.....	4
CWLT8102 Writing and Critiquing Poetry.....	4
CWLT8103 Writing and Critiquing (Creative) Nonfiction.....	4
CWLT8104 Writing and Critiquing Dramatic (and Cinematic) Writing.....	4
<b>Literature Courses (two required)</b>	
CWLT8204 Reading Contemporary African Writers.....	4
CWLT8206 Contemporary World Literature.....	4
CWLT8207 Young Adult Literature: Beyond Harry Potter.....	4
CWLT8209 International Short Story.....	4
CWLT8210 Tropes of Reading — Reading Tropes.....	4
CWLT8211 Modern Poetry.....	4
CWLT8212 Shakespeare.....	4

## Residency Requirement

The M.A. program includes a three-day weekend residency requirement in late June. Students live on FDU's Florham Campus in Madison, New Jersey, where they meet with instructors and participate in such activities as lectures, critical workshops, generative workshops, panel dis-

cussions, analysis seminars and readings. Subsequent course work is completed through online correspondence with instructors and instructor-led online workshops and discussions.

The program's low-residency requirement allows students to enroll whose work and family obligations would otherwise prevent them from attending a traditional, full-time graduate program. The online component provides additional flexibility and enables students to receive individual feedback from fellow students as well as readers and writers throughout the country.

## For Information

For more information go to <http://gradwriting.fdu.edu> or contact the Office of the M.A. in creative writing and literature for educators, department of literature, language, writing and philosophy, Fairleigh Dickinson University, 285 Madison Avenue, M-MS3-01, Madison, New Jersey 07940, at (973) 443-8632.

## Course Offerings

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director.*

### Creative Writing and Literature for Educators

*Department of Literature, Language, Writing and Philosophy*

#### CWLT8000

2 Credits

#### Creative Writing and Literature for Educators Residency

Three-day residency for M.A. in creative writing and literature for educators. *Fee*

#### CWLT8001

4 Credits

#### Reading Like a Writer

This course focuses on reading in a writerly way — exploring how meaning is created from a writer's perspective. The emphasis is on close reading and careful analysis of the bones of the text — structure (narrative, poetic, dramatic); point of view; style; tone; diction; sound, etc.

#### CWLT8101

4 Credits

#### Writing and Critiquing Fiction

In this course, students will create and revise a short work of fiction. The emphasis is not on the completed product but rather on the strategies of critiquing and revision that are developed through common readings and discussions. To

that end, students and instructor will comment on both the writing and critiques in online workshops. Critiques of the writing use close readings to focus on writerly issues of structure, point of view, style, tone, diction, etc. Commentary on the critique will focus on usefulness to the writer and to work.

#### CWLT8102

4 Credits

#### Writing and Critiquing Poetry

In this course, students will create and revise two poems. The emphasis is not on the completed product but rather on the strategies of critiquing and revision that are developed through common readings and discussions. To that end, students and instructor will comment on both the writing and critiques in online workshops. Critiques of the writing use close readings to focus on writerly issues of structure, prosody, line, style, tone, diction, etc. Commentary on the critiques will focus on usefulness to the writer and to work.

#### CWLT8103

4 Credits

#### Writing and Critiquing (Creative) Nonfiction

Students create and revise a short work of nonfiction. The emphasis is not on the completed product but rather on the strategies of critiquing and revision that are developed through common readings, discussions and critiques in online workshops. Critiques of the writing use close readings to focus on writerly issues of structure, point of view, style, tone, diction, etc.

#### CWLT8104

4 Credits

#### Writing and Critiquing Dramatic (and Cinematic) Writing

Students create and revise a short screenplay or a stage play. The emphasis is not on the completed product but rather on the strategies of critiquing and revision that are developed through common readings, discussions and critiques in online workshops. Critiques of the writing use close readings to focus on writerly issues of dramatic structure, point of view, visual storytelling, dialog, style, etc.

#### CWLT8121

4 Credits

#### Comedy, Satire and Parody

An approach to a range of comic genres, from the perspective of the writer and performer: everything from American standup, comic skits and situation comedy to classic literary satire, parody and farce from around the world. The class will look at joke structure, creation of comic personae and the evolution of comic technique, with students trying their hand from time to time at writing within the various comic genres themselves.

# Creative Writing and Literature for Educators

---

## **CWLT8124**

**3 Credits**

### **Teaching Composition: Theory and Practice**

This course will explore current and long-standing theoretical perspectives and pedagogical practices for teaching writing in a first-year composition program. Students will consider curricular, social, political, pedagogical and theoretical ideas and practices that shape the teaching of writing. The course is free to FDU creative writing and literature for educators students taking two courses. Pass/no credit. Note: This includes required practicum CWLT8125 Practicum for Teaching Composition: Theory and Practice.

## **CWLT8125**

**1 Credit**

### **Practicum for Teaching Composition: Theory and Practice**

Required practicum for CWLT8124 Teaching Composition: Theory and Practice. Composition theory in a classroom setting. In order to observe, evaluate and apply composition theory studied in CWLT8124 Teaching Composition: Theory and Practice. Course is free to FDU creative writing and literature for educators students taking two courses. Pass/no credit. Prerequisite/corequisite: CWLT8124 Teaching Composition: Theory and Practice.

## **CWLT8204**

**4 Credits**

### **Reading Contemporary African Writers**

This course focuses on how contemporary African writers challenge or redefine their societies; conventional values, usages and beliefs. Online discussions — through a close reading of poems, stories, plays, novels and memoirs — explore the ways language both carries and subverts cultural assumptions. Interpretations of primary texts focus on the aesthetic choices African writers make in response to very different social realities.

## **CWLT8206**

**4 Credits**

### **Contemporary World Literature**

This course examines changing literary conceptions of the world from perspectives influenced by race, class, gender and sexuality, through contemporary post-colonial fiction from India, Indonesia, Jamaica and Zimbabwe. The course also analyzes how the narrative techniques employed in these novels fuse the political with the aesthetic in constructing national identities.

## **CWLT8207**

**4 Credits**

### **Young Adult Literature: Beyond Harry Potter**

Survey of young adult literature of the mid- to late-20th century. Examines how this relatively new genre reflects growing changes within culture and society. Students will read classics and

novels that are standard in high-school curricula and consider issues including transition to adulthood, sexuality, conflicts between youth and parents, fantasy, responsibility and authority.

## **CWLT8209**

**4 Credits**

### **International Short Story**

Focusing on short stories written in the last few decades, the course will emphasize unique features of the form along with elements of craft that it shares with other narrative genres. Students will study works from a variety of national traditions, in English and translation, asking how cultural identity affects setting, character, conflict and theme.

## **CWLT8210**

**4 Credits**

### **Tropes of Reading — Reading Tropes**

The most commonly read secondary school texts often seem to have inscribed or enforced readings suggested by the history of people's connections to the texts as well as elements of the texts themselves. Such readings can become normative and foreclose other possible interpretations and connections. This course will try to identify the inscribed/enforced readings and the causes and the manner in which such readings might foreclose others. Additionally, it will explore some of the alternative interpretations.

## **CWLT8211**

**4 Credits**

### **Modern Poetry**

The course will focus on recent work by living American poets, mostly written within the last 15 or 20 years, with one exception, the poems of Anne Sexton (which the class will look at to establish a base for comparison). Students will primarily read complete volumes by individual poets, rather than scattered single poems in anthologies, focusing on how poets create identifiable voices, a unique poetic language and poetic landscape that is undeniably their own. The class also will focus particularly on the craft and form of the featured poets. Poets studied will include, among others (in addition to Sexton), C.K. Williams, Kim Addonizio, Paul Muldoon, Rita Dove and Billy Collins.

## **CWLT8212**

**4 Credits**

### **Shakespeare**

What are some of the Bard's models for his comedies? Which plays have left a mark in other national literatures through the centuries? This course aims at analyzing some of the most often-read Shakespeare plays, defining their historical context and their political agenda, while also looking at which sources helped to inspire them and which other plays, in turn, they molded in centuries to come. Particular attention will be given to comedies and to the role of servants in them, with an eye to how plays could be

taught in the classroom going beyond the text and looking at performance history and practice.

## **CWLT8216**

**4 Credits**

### **Contemporary American Drama**

This course focuses on American drama from the 1960s through the first decade of the new millennium, both as literary texts and in performance. Students read plays by a variety of playwrights, focusing on what makes them uniquely American, uniquely contemporary and uniquely dramatic in their structure, stagecraft and means of conveying character, conflict and theme.

## **CWLT8217**

**4 Credits**

### **Irish Literature**

This graduate course surveys the literature of Ireland: a millennium-and-a-half of multilingual production often characterized by eccentricity and genius. Special topics include the use of traditional materials for contemporary creative writing.

## **CWLT8218**

**4 Credits**

### **Graphic Novels**

The course will focus on recent work by comic book writers and graphic novelists, mostly written within the last 30 years, with two exceptions, the early work of Rodolphe Töpffer (the 19th-century parent of this medium) and the first work by Siegel and Schuster (1938). These two works will be used as a basis for understanding the evolution of this medium and its genres. Students will primarily read complete comic compendia and graphic novels, rather than scattered, single issues or anthologies, focusing on how graphic novelists and comic writers craft both plot and dialogue while operating within a framework which assumes that the text will be indivisibly complemented with images. The writers studied will include, among others, Alan Moore, Brian Michael Bendis, Alison Bechdel, Marjane Satrapi, Marguerite Abouet, Gene Luen Yang and Art Spiegelman.

## **CWLT8220**

**4 Credits**

### **Contemporary American Poetry**

Study of work written within the last 20 years by seven living American poets, focusing on how they create an identifiable voice, a unique poetic language and a poetic universe undeniably their own. Students will read a volume of poetry by each of the featured poets, concentrating particularly on how craft and form generate meaning.



## Criminal Justice (M.A.)

Fairleigh Dickinson University's School of Criminal Justice, Political Science and International Studies offers a Master of Arts in criminal justice. The program is designed to skillfully integrate theory and practice into a holistic, engaging and challenging course of study that provides students with advanced knowledge and understanding of the United States criminal justice system. Designed to position graduates for success, the program focuses on developing appreciable knowledge and understanding of crime and the criminal justice system, as well as developing discernable skill sets and competencies necessary for pursuing and/or advancing one's professional career, emphasizing the importance of critical thinking, problem solving, decision making, effective communications, social research and professional development.

The program's core curriculum provides a foundation in the concepts of social order and control, the legal and philosophical principles of the United States Constitution, the legislation of criminal laws, the theoretical causality of criminal behavior, crime prevention, the treatment and remediation of criminality, the analysis of society's changing response to crime, the development and influence of public policy on the administration of justice and the scientific methods for conducting social research and statistical analysis.

Recognizing student's needs and interests for professional development and acquiring specialized knowledge and understanding, the curriculum provides students the option to select from a wide array of courses in fulfilling 18 of the 36-credit program. Such courses examine the role and influence of politics within the criminal justice system, ethics, public policy, policy analysis, social justice and victimization, risk reduction, comparative criminal justice systems, transnational crime, leadership and emerging issues in crime and justice. Students can also select courses that focus on a host of specializations that include leadership, social service advocacy, learning theory and practice, college instruction and professional development. The final course in the curriculum, CRIM8000 Critical Analysis of Criminal Justice, affords students the opportunity to conduct independent research in areas of

particular interest and application or take a comprehensive exam.

Two areas of particular interest to students is the opportunity to study abroad at Wroxton College, the University's campus in Oxfordshire, England, where students work closely with renowned British criminal justice professionals and academicians. Another feature of the curriculum is its Advanced Internship Program, which gives students the opportunity to gain credit and valuable experience working in the field. The program features approximately 200 different venues within local, state and federal criminal justice agencies, as well as many private and nonprofit organizations that serve and support the criminal justice system.

The 36-credit program can be completed in less than 18 months for full-time students, and between 18–24 months for part-time students. The program is available through traditional, campus-based courses offered in late afternoon and evening hours during the fall, spring and summer semesters. Many courses are also available online.

The program is offered under the auspices of the School of Criminal Justice, Political Science and International Studies, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### For Information

For information, contact Dr. James Kenny, professor of criminal justice and graduate program coordinator, at [kenny@fdu.edu](mailto:kenny@fdu.edu) or (201) 692-2461.

### Admission Requirements

Admission to the program is based on an applicant's demonstrated interest, aptitude and motivation to successfully undertake and complete master's-level studies. This will be determined by the following minimal requirements and indicators:

1. A bachelor's degree from an accredited college or university.
2. Official transcripts from all institutions of higher learning attended.
3. A cumulative undergraduate grade point ratio of at least 3.00 on a 4.00 scale.\*

\*Waivers for applicants who do not meet the grade point ratio or standardized test scores will be considered on an individual basis.

4. Performance on the Graduate Record Examinations (GRE), which may be waived.\*

5. A 250- to 500-word personal essay expressing one's interest for applying to the program.

6. Two letters of recommendation attesting to the applicant's interest and ability to undertake graduate-level studies.

7. Personalized interviews may be considered by the school's Admissions Committee.

8. Applicants under consideration may be required to complete an abbreviated research paper that demonstrates their ability for effective writing.

### Requirements for the Master of Arts Degree

#### Required Courses (18 credits)

	Credits
CRIM6000	
Professional Seminar in Criminal Justice.....	3
CRIM6005	
Advanced Criminological Theory.....	3
CRIM6010	
U.S. Constitution, Public Policy and Criminal Justice.....	3
CRIM6015	
Research Methods in Criminal Justice and Criminology.....	3
CRIM6020	
Statistics and Data Analysis.....	3
CRIM8000	
Critical Analysis of Criminal Justice.....	3
Total.....	18

#### Elective Courses (18 credits)

Choose six course from below:

CRIM7020	
Ethics, Politics and Justice.....	3
CRIM7025	
Comparative Criminal Justice Systems...	3
CRIM7030	
Principles of Leadership.....	3
CRIM7060	
Social Justice Advocacy.....	3
CRIM7065	
Crime, Victimology and Risk Reduction.....	3
CRIM7070	
Contemporary Issues in Crime and Justice.....	3

\*Waivers for applicants who do not meet the grade point ratio or standardized test scores will be considered on an individual basis.

# Criminal Justice

	Credits
CRIM7080 Politics and Policies of Criminal Justice.....	3
CRIM7081 Civil Rights and the Administration of Justice.....	3
CRIM7082 Crime and Punishment.....	3
CRIM7090 Professional Development Seminar.....	3
Total.....	18

## Online Application

To apply online, go to <http://view2.fdu.edu/admissions/graduate-admissions/apply-for-graduate-admission-at-fdu/>.

## Tuition and Financial Aid

Information on tuition costs and any applicable financial support is available by going to <http://www.fdu.edu>.

## Course Offerings

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate department chair.*

## Criminal Justice

*School of Criminal Justice, Political Science and International Studies*

### CRIM6000

3 Credits

#### Professional Seminar in Criminal Justice

This course provides a comprehensive review, critique and analysis of the United States criminal justice system in context to examining the concepts of social order and control, the philosophical underpinnings of the United States Constitution and the influence of public policy. Emphasis will be placed on examining the independent and causal relationships of police and law enforcement, courts and adjudications and the correctional system.

### CRIM6005

3 Credits

#### Advanced Criminological Theory

This course will take a vertically integrative perspective on criminological theory, to include examining crime and crime theory and various forms of criminal behavior. Taking an implicitly systems-theoretical look at crime and delinquency, it will provide tools for determining which theories provide the most explanatory power in specific criminal contexts. The course will also examine criminological thought in areas such as cyber crime, terrorism, human trafficking, environmental crime, hate crimes and other current and thematic emerging issues.

### CRIM6010

3 Credits

#### U.S. Constitution, Public Policy and Criminal Justice

This course examines emerging issues as they influence the United States Constitution, public policy and the criminal justice system. Topics such as criminal procedure, individual rights, gun control, decriminalization of drugs, social justice, crime prevention, juvenile justice, sentencing policies, incarceration and capital punishment will be addressed.

### CRIM6015

3 Credits

#### Research Methods in Criminal Justice and Criminology

This advanced course in social research exposes students to the methods and techniques associated with conducting theoretically based research. It addresses processes associated with identifying and defining problems and developing hypotheses, experimental design, surveys, testing instruments, gathering and analyzing data and preparation of reports.

### CRIM6020

3 Credits

#### Statistics and Data Analysis

This course addresses the basic concepts and methods of statistics applied within criminal justice and social science research. Topics covered include basic statistical methodology; exploratory data techniques; experimental design; sample distributions; interval estimation; inference; comparative analysis by parametric, nonparametric and robust procedures; analysis of variance (one-way); linear and nonlinear regression; analysis of covariance; correlation and regression; and an introduction to statistical analysis using Statistical Package for the Social Sciences (SPSS).

### CRIM7020

3 Credits

#### Ethics, Politics and Justice

This course examines classical and contemporary theories and philosophies relevant to ethical thought and behavior in relationship to the administration of justice and navigating politics within the workplace. Ethical issues confronting criminal-justice practitioners are explored through the use of case studies and critical incidents, and examining appropriate and applicable strategies.

### CRIM7025

3 Credits

#### Comparative Criminal Justice Systems

This course will conduct a comparative analysis between the criminal justice system of the United States with those of other major countries throughout the world. The similarities and differences between the policing, adjudication and penal systems will be discussed. Issues such as alternatives to incarceration, technologies utilized and legal mandates will be examined.

### CRIM7030

3 Credits

#### Principles of Leadership

The objective of this course is to examine the principles, practices and complexities of effective leadership. The course will also examine the skills and competencies needed to be an effective leader. The benefits of effective leadership and the consequences of ineffective leadership in an organization will be studied.

### CRIM7060

3 Credits

#### Social Justice Advocacy

Practitioners in the criminal justice system are often placed in the position of ensuring that their clients have access to services and proper treatment as they move through the system. Working and aspiring probation and parole officers, social workers, victim advocates and others will receive practical guidance in creating access to justice and services for their clients in criminal, social and service-oriented contexts.

### CRIM7065

3 Credits

#### Crime, Victimology and Risk Reduction

This course will focus on crime victims in terms of factors leading up to and consequences of criminal events. It will examine victimization patterns, typologies, resources, consequences, the criminal justice response, restorative justice and legal rights. It also will analyze the dynamics of various violent crimes for warning signs, criminal purpose/selection and strategies to reduce the risk of victimization.

### CRIM7070

3 Credits

#### Contemporary Issues in Crime and Justice

This course provides a critical examination and analysis of contemporary issues related to crime, criminal justice and public policy. Examples of topics include juvenile justice, police operations, sentencing, community corrections, capital punishment, decriminalization of drugs, transnational crime, terrorism, cyber crime and the implications of emerging technologies in the administration of justice.

### CRIM7080

3 Credits

#### Politics and Policies of Criminal Justice

Topics will include the Constitution of the United States and how the safeguards in the Bill of Rights have evolved over time. The course will also focus on how laws and criminal justice policies are formulated, as well as why certain acts are considered serious crimes and others are not. Issues of how money and power affect policies in criminal justice will be examined. Topics of victims' rights, police brutality, court process, sentencing, prisoner treatment and other policy

# Cybersecurity and Information Assurance

matters in the criminal justice system will be reviewed. Prerequisite: CRIM6000 Professional Seminar in Criminal Justice.

## CRIM7081

3 Credits

### **Civil Rights and the Administration of Justice**

This course aims to help students develop a firm understanding of the approaches used by the U.S. Supreme Court to define the boundaries of civil rights and liberties through its interpretation of the United States Constitution. It will examine the nature, application and extent of a special group of protections under the U.S. Constitution, including the freedom of expression, privacy, freedom of religion, equal protection under the laws, due process and the rights of the accused. Prerequisite: CRIM6000 Professional Seminar in Criminal Justice.

## CRIM7082

3 Credits

### **Crime and Punishment**

The U.S. has the highest incarceration rate in the world. This course confronts mass imprisonment and examines the key social forces shaping penal practice in the U.S. such as morality, economics and politics. Topics include prison violence, penal state, overcrowding and the efficacy of penal institutions. In addition, the course encompasses an analysis of the emergence of alternative systems of punishment and control. Prerequisite: CRIM6000 Professional Seminar in Criminal Justice.

## CRIM7085

3 Credits

### **Advanced Internship in Criminal Justice**

The course provides individually designed internships within federal, state and local police/law enforcement agencies, courts and adjudication, corrections and probation, private security, juvenile justice, crime victims' advocacy and child protection. Students develop hands-on experience in all facets of the respective agency that they select. The internship provides the students with insight, experience and an available network of professional colleagues.

## CRIM7090

3 Credits

### **Professional Development Seminar**

This course addresses key thematic areas critical to recognizing and developing one's professional effectiveness. Topics covered include effective communications, emotional and social intelligence, negotiations and conflict management, problem solving, decision making and strategic planning.

## CRIM7800

3 Credits

### **Independent Studies**

Students are afforded the opportunity to conduct independent studies in collaboration with and under the direction of a faculty member after consultation with the school's director.

## CRIM8000

3 Credits

### **Critical Analysis of Criminal Justice**

This course represents a synthetic and critical analysis of key concepts and principles addressed within the criminal justice graduate program. Topics covered include, but are not limited to: social order and control, social contract theory, social justice and crime, statistics and social research, the U.S. Constitution and government, politics and public policy, crime prevention and analysis, criminological theory, victimization, criminal law, police and law enforcement, the courts and adjudication system and correctional system. The course culminates with successful completion of a master's research project or comprehensive examination. Details and requirements for both are addressed at the beginning of the course. Prerequisites: CRIM6000 Professional Seminar in Criminal Justice, CRIM6005 Advanced Criminological Theory, CRIM6010 U.S. Constitution, Public Policy and Criminal Justice, CRIM6015 Research Methods in Criminal Justice and Criminology and CRIM6020 Statistics and Data Analysis.

## Cybersecurity and Information Assurance (M.S.)

Hardly a day goes by without some news on cyberattacks. As the number of cyberattacks keeps increasing every day, clearly more cybersecurity professionals will be needed to plan, implement, upgrade, maintain and monitor security measures to protect the information infrastructure, computer networks and systems and digital data of business organizations and local, state and federal agencies. Consequently, the cybersecurity profession offers excellent career opportunities, outstanding average starting salary, excellent median long-term salary, good job-growth projection and great career fulfillment including protecting the nation's information infrastructure.

Fairleigh Dickinson University is officially designated as a National Center of Academic Excellence in Cyber Defense Education (CAE-CDE) institution by the National Security Agency (NSA) and the Department of Homeland Security (DHS). FDU's Master of Science in cybersecurity and information assurance (CSIA) degree program is created in response to meet the challenges in the field of CSIA. The program prepares its graduates for employment or further advanced study, including doctorates, in this field and other related areas. The program is facilitated and supported by the creation of a state-of-the-art Cyber Defense and Digital Forensics Lab and the recent enhancement of several computer and networking labs.

Students in the program will learn the fundamentals of operating systems, computer networks, cybersecurity, applied cryptography, penetration testing and vulnerability analysis. With the foundational courses as stepping blocks, students move on to take advanced courses in one of the two focus areas: **network security administration** and **secure software development**, satisfying the requirements of CAE-CDE knowledge units of those focus areas as specified by NSA and DHS. In particular, students will learn to establish information security protocols, build firewalls and defend against security intrusions, use encryption and protect information, regulate access to data, establish virus-protection

# Cybersecurity and Information Assurance

systems, implement business continuity and disaster-recovery plans, conduct penetration tests and analyze system vulnerabilities, develop secure software and help resolve information technology (IT) issues related to security. As a culmination of their studies, students are encouraged to work on a project under the supervision of a faculty adviser or to undertake internship to obtain practical work experience.

The program is offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

## Admission Requirements

1. Graduation from an accredited college or university with a satisfactory academic record.

2. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if the applicant enrolls initially as a non-matriculating student and completes 9 graduate credits in CSIA with a minimum cumulative grade point ratio (CGPR) of 3.00 and no grade below C or is a graduate of FDU's computer science, electrical engineering, information technology or closely related programs with an undergraduate CGPR of 3.00 or is a graduate of such programs from other institutions with an undergraduate CGPR of 3.50. This GRE waiver policy is only applicable to applicants who graduated from a regionally accredited college or university in the United States. (The GRE requirement also is waived for applicants who have completed a master's degree from a regionally accredited college or university in the United States.)

3. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

## Requirements for the Master of Science Degree

1. Students admitted to the program may be required to fulfill a set of prerequisite courses, which can be waived based on their academic credentials. They must earn a CGPR of at least 2.75 for the prerequisite courses if required or be subject to dismissal from the program. They may take no more than 6 credits of regular graduate (core or elective) courses before completing all of the prerequisites.

2. Students must successfully complete 30 credits, including 15 credits of core requirements and 15 credits of electives, beyond any required prerequisites. In consultation with an academic adviser, students can choose five courses (15 credits) from a list of approved electives based on their interests and career goals. Alternatively, they are encouraged to concentrate on one of two focus areas, **network security administration** and **secure software development**, each with three courses (9 credits), and to choose two more courses (6 credits) from the list of approved electives. Students must earn a CGPR of at least 2.75 for the 30 credits beyond the prerequisite courses.

## Prerequisite Courses (18 credits)

The prerequisite courses for the M.S. in cybersecurity and information assurance program are:

	Credits
CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
CSCI5555	
Data Structures.....	3
CSCI5565	
Assembly Language	
or	
CSCI3249	
Computer Organization	
or	
EENG2287	
Microprocessor System Design I.....	3

Additional prerequisite courses may be required if the students did not graduate from STEM-related baccalaureate degree programs. STEM refers to science, technology, engineering and mathematics. Prerequisite courses will be determined through faculty review of students' undergraduate transcripts of records.

## Core Requirements (15 credits)

The required core courses for the M.S. in cybersecurity and information assurance program are:

	Credits
CSCI6638	
Operating Systems.....	3
CSCI6731	
Computer Networks.....	3
CSCI6738	
Cybersecurity.....	3
CSCI6740	
Applied Cryptography.....	3
CSCI6870	
Penetration Testing and Vulnerability Analysis.....	3

## Electives (15 credits)

Students are encouraged to take three courses (9 credits) from one of the following two focus areas and two more courses (6 credits) from the list of approved electives as provided below. Alternatively, students can also take any five courses (15 credits) from the approved electives based on their interests and needs.

### Electives for Network Security Administration Focus

CSCI6863	
Supply Chain Security and Systems Certification.....	3
CSCI6869	
Network Security.....	3
CSCI6873	
Firewalls and Intrusion-detection Systems.....	3

### Electives for Secure Software Development Focus

CSCI6620	
Software Engineering.....	3
CSCI6836	
Computer Algorithms.....	3
CSCI6860	
Secure Software Development and Analysis.....	3

### Approved Electives

CSCI6620	
Software Engineering.....	3
CSCI6623	
Database Systems.....	3
CSCI6811	
Advanced Special Projects.....	3
CSCI6836	
Computer Algorithms.....	3
CSCI6860	
Secure Software Development and Analysis.....	3

	Credits
CSCI6863	
Supply Chain Security and Systems Certification.....	3
CSCI6869	
Network Security.....	3
CSCI6873	
Firewalls and Intrusion-detection Systems.....	3
CSCI7783	
Information Security.....	3
CSCI7870	
Linux System Administration.....	3
CSCI8891	
Internship/Work Experience.....	3

## Course Descriptions

See “Course Offerings,” Computer Science pages 98–103 and Management Information Systems pages 166–167.

## Education

### **Education for Certified Teachers (M.A.)**

See this page.

### **Educational Leadership (M.A.)**

See page 121.

### **Learning Disabilities (M.A.)**

See page 122.

### **Mathematical Foundations (M.A.)**

See page 125.

### **Teaching (M.A.T.)**

See page 126.

### **Teaching English as a Second/Foreign Language TESL/TEFL (M.A.)**

See page 129.

These programs are offered under the auspices of the Peter Sammartino School of Education, University College: Arts • Sciences • Professional Studies, Metropolitan Campus. Programs are available at the Florham Campus, Madison, New Jersey; the Metropolitan Campus, Teaneck, New Jersey; and off-site locations, see individual programs for specific locations.

### **Peter Sammartino School of Education**

The Peter Sammartino School of Education offers master’s degrees in various specialties within education, allowing working teachers to further their careers. Persons with a bachelor’s degree but no teaching certification are given the opportunity to earn certification and enter the teaching profession. The School is part of University College: Arts • Sciences • Professional Studies.

## Education for Certified Teachers (M.A.)

The Master of Arts in education for certified teachers (MACT) is a 36-credit program that allows teachers to pursue specializations while attaining their master’s degrees. Each program is unique in that teachers can graduate with an 18- or 21-credit specialization certificate or state certification including the 12 credits leading to a New Jersey Supervisor License. Certified teachers with a New Jersey Standard Teaching License who complete the master’s degree and have the designated approved 12 credits with three years of successful teaching experience will be eligible to apply for the New Jersey Supervisor License. The areas of specialization that a certified teacher can choose from are:

- **Bilingual/Bicultural Education Specialist Certificate** — 12-credit approved New Jersey State Teacher Certification in bilingual/bicultural education as a second certificate, plus 12-credit Supervisor License and 12 credits to complete a master’s degree;
- **English as a Second Language (ESL) FDU Certificate and New Jersey Certification (ESL)** — 18-credit FDU Certificate or 18-credit approved New Jersey State Certification in ESL as a *second* certification, plus 12-credit Supervisor License and 6 credits to complete a master’s degree;
- **Instructional Technology Specialist Certificate (ITC)** — 18-credit FDU Certificate plus 12-credit Supervisor License and 6 credits to complete a master’s degree;
- **Literacy/Reading Specialist (LRS) and New Jersey Reading Specialist Certification** — 18-credit FDU Certificate, an additional 12 credits to complete the 30-credit approved New Jersey Reading Specialist Certification/Endorsement plus 6 credits to complete the master’s degree embedded with the 12-credit Supervisor License.
- **Dual Program in Literacy/Reading and Multisensory Reading** — 18-credit FDU Certificate and additional 18 credits to complete the 36-credit master’s degree. This program includes the 12-credit

# Education • Education for Certified Teachers

Orton-Gillingham Dyslexia Specialist Certificate.

• **Professional Studies Concentration (PROST)** — 36-credit selection from generalist options in all MACT programs with required 3-credit Master's Seminar and may include 12-credit Supervisor License, appropriate for New Jersey Provisional Alternate Route candidates; and

• **Teacher of Students with Disabilities (TSD)** — 21-credit approved New Jersey Certification as a *second* certification with 12-credit Supervisor License and 3-credit Master's Seminar to complete the master's degree.

The M.A. in education for certified teachers is offered under the auspices of the Peter Sammartino School of Education, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey, and is available at the Metropolitan Campus and selected off-site locations and selected community colleges. Cohort groups may be established in school districts with sufficient enrollment and are open to teachers in local districts.

The School had an aggregate pass rate of 99 percent on the HEOA-Title II Reporting for the 2015–2016 academic year. The corresponding statewide pass rate for the same period was 98 percent.

## Program Information

• All programs incorporate standards-based teaching methods that address the Interstate Teacher Assessment and Support Consortium (InTASC), New Jersey Core Curriculum Content Standards (NJCCCS) and the Common Core State Standards.

• An approved 12-credit sequence of courses within the 36-credit M.A. degree will prepare the candidate to apply for a New Jersey Supervisor's License with a complete master's degree and three years of successful teaching experience.

• Instructional technology is integrated into all teaching strategies. Web-based courses and other distance-learning modalities are utilized, as appropriate, to diversify course delivery and model the use of various technologies for instruction.

• The FDU Certificates and the New Jersey Certifications and Endorsements may be taken without completion of the M.A.

• Each of the 18-credit certificate programs are offered in a two-year sequence

of courses. Students take an average of 9 credits per year and can expect to complete the 18-credit certificate portion of the program within a two-year cycle.

• Candidates are accepted for fall, spring and summer semesters. Applicants must specify specialization program or select the professional studies program, a generalist degree.

• There is a one-time application fee of \$40.00 required. This fee may be waived if the candidate meets with an admissions adviser or department faculty member.

• Tuition rate is reduced with no hidden fees.

• Admission to the M.A. in education for certified teachers (MACT) is subject to approval by the School of Education pursuant to the admissions policy for the University that may apply.

• Admission packages are available from the School of Education, (201) 692-2862 on the Metropolitan Campus or from the Graduate Admissions Office, (201) 692-2553.

• For specific program information, contact the School of Education at (201) 692-2862 or email [milton3@fdu.edu](mailto:milton3@fdu.edu).

## Admission and Matriculation

### Admission Process

All candidates who meet the following general criteria will be accepted as pre-matriculated students in the M.A. in education for certified teachers (MACT) program:

1. Application and interview.  
2. Transcripts, official or unofficial, from all undergraduate and graduate institutions showing an undergraduate grade point ratio (GPR) of 3.00; if lower, provisional acceptance until a 3.25 GPR is achieved and maintained in the first 9 credits taken at FDU.

3. Standard Teacher License. (Exception: Provisional Teacher License for candidates enrolled as New Jersey Alternate Route candidates.)

4. Two letters of recommendation from individuals familiar with the candidate's recent performance; one should be from an immediate supervisor.

5. Official transcripts from all undergraduate and graduate institutions.

6. A cumulative GPR of at least 3.25 in the first 9 credits of the M.A. program, which must be maintained at the same level to complete the program.

## Requirements for the Master of Arts Degree

<b>Core Courses (18 credits)</b>	Credits
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction (except in TSD and ESL programs).....	3
EDUC6702	
Curriculum and Instruction: Theory and Practice*.....	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation*.....	3
EDUC6704	
Change: Curriculum Development and Program Improvement*.....	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment*.....	3
EDUC6764	
Master's Seminar: Research in Specialization.....	3

## Specialization Programs (18 credits)

Candidates select from one of the following programs described in detail on the following pages:

- Bilingual/Bicultural Education (BBE) — requires 12 credits
- English as a Second Language (ESL)
- Instructional Technology Specialist (ITS)
- Literacy/Reading Specialist (LRS)
- Professional Studies Concentration (PROST)
- Teacher of Students with Disabilities (TSD) — requires 21 credits

## Bilingual/Bicultural Education (BBE) Specialist Certificate Program

The bilingual/bicultural education programs require teachers who can provide content-specific instruction in an environment that promotes student bilingual/bicultural development. Course work that leads to the bilingual/bicultural education New Jersey teacher endorsement provides certified teachers with the knowledge and skills they need to meet this dual responsibility.

Fairleigh Dickinson University's Bilingual/Bicultural Education Certification Program was developed as a 12-credit con

\*These four courses lead to a New Jersey Supervisor License.

# Education • Education for Certified Teachers

centration covering the essential topics of applied linguistics, language acquisition, biliteracy development, pedagogical theory and teaching methods of content areas in bilingual/bicultural settings. The Bilingual/Bicultural Education teacher certification is not a stand-alone endorsement but must be paired with a standard co-certificate in the subject or grade level to be taught.

## **Bilingual/Bicultural Education Specialist Certificate Program** **Required Courses (12 credits)**

	Credits
EDUC6550	
Methodology in Bilingual/ Bicultural Education.....	3
EDUC6551	
Language Acquisition in Bilingual/ Bicultural Contexts.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6654	
Literacy Development for Second-language Learners.....	3

The 12-credit certification program may be applied toward a 36-credit M.A. in education for certified teachers degree.

## **English as a Second Language (ESL) Specialist Certification Program**

The field of teaching English to speakers of other languages requires highly specialized training. The primary focus of Fairleigh Dickinson University's English as a Second Language Specialist Certification Program is on the language and culture of the United States and effective second-language methodology.

Fairleigh Dickinson's ESL Specialist Certification Program for certified teachers provides an 18-credit concentration that may be applied toward a 36-credit M.A. in education for certified teachers and includes the 18 credits required for a second New Jersey certification as Teacher of ESL.

At the end of the English as a Second Language Specialist Program, teachers will have completed courses having:

- a focus on second-language acquisition, research and methodology, addressing the diverse needs of students, first- and second-language acquisition and development of literacy skills for second-language learners; and
- a concentration on curriculum development and authentic assessment practices aligned with WIDA Standards for ESL

instruction in New Jersey and Common Core State Standards (CCSS); and

- a strong emphasis on field experiences in school settings with second-language learners.

The New Jersey Department of Education requires a demonstration of oral and written language proficiency in English for ESL certification. Students may meet this requirement by taking the Oral Proficiency Interview (OPI) and the Writing Proficiency Test (WPT) in English.

## **Required Courses for a Second New Jersey Certification in ESL (18 credits)**

	Credits
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6631	
Assessment in the Second-language Classroom.....	3
EDUC6654	
Literacy Development for Second-language Learners.....	3
EDUC6661	
The Multicultural Classroom.....	3

## **Instructional Technology Specialist Certificate (ITSC) Program**

The School of Education offers the K–12 Instructional Technology Specialist Certificate (ITSC) Program for educators interested in specializing in the integration of technology throughout the curriculum. Candidates may elect to take only the 18 credits leading to the FDU Certificate and apply these credits to the 36-credit M.A. in education for certified teachers program.

ITSC candidates learn to:

- create cutting-edge curricula featuring seamless technology integration;
- strategically plan for the continuous growth of technology integration in the school and classroom; and
- take a leadership role in the initiation and assessment of new learning strategies which support state and national technology standards.

The ITSC curriculum is designed to accommodate both K–12 teachers as well

as educators who have technology leadership roles in their schools or districts.

An option is available for offering the ITSC off-campus program in school districts with appropriate technology facilities. Special provisions are made to support and enhance K–12 technology initiatives in those districts choosing this option.

## **Instructional Technology Specialist Certificate Program** **Required Courses (18 credits)**

	Credits
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6673	
Integrating Literacy and Technology Across the Curriculum.....	3
EDUC7784	
Multimedia Production.....	3
EDUC7785	
Internet for Educators.....	3
EDUC7790	
Seminar in Instructional Technology.....	3
EDUC7796	
Projects Based on the Web.....	3
EDUC7798	
Special Topics in Instructional Technology.....	3

Note: Other instructional technology courses that are offered may be substituted for a required instructional technology course, with the adviser's approval.

## **Literacy/Reading Specialist (LRS) Certification Program**

This program is designed to develop teachers to become leaders in the field of literacy and reading. This 30-credit Literacy/Reading Specialist program is approved by the New Jersey Department of Education for a second Endorsement/Certification license as a reading specialist with a master's degree and two years of successful teaching. Candidates can take the 6 additional credits to complete the 36-credit M.A. in education for certified teachers including the 12 credits leading to a New Jersey Supervisor License.

A reading specialist is one who conducts in-service training of teachers and administrators, coordinates instruction for individuals or groups of pupils having difficulty learning to read, diagnoses the nature and causes of individuals' difficulties in learning to read, plans developmental programs in reading for pupils, recommends methods and materials to be used in dis-

# Education • Education for Certified Teachers

trict reading programs and contributes to the evaluation of the reading achievement of pupils.

In addition, the candidate with three years of successful teaching may select the four courses leading to a New Jersey Supervisor License.

Finally, for individuals who do not need state endorsement but want to learn more about current literacy research, balanced reading approaches and specific reading strategies, there is an alternative 18-credit FDU Certificate that will provide K–12 classroom teachers with a concentration of courses that will extend their knowledge and skills in language arts, literacy and reading.

## **New Jersey State Literacy/Reading Specialist Certification/Endorsement and Supervisor Certification (36 credits)**

	Credits
EDUC6582	
Distance Learning: Children's Literature.....	3
EDUC6605	
Foundations in Reading I.....	3
EDUC6606	
Foundations in Reading II.....	3
EDUC6607	
Diagnosis of Reading Problems.....	3
EDUC6609	
Supervised Practicum in Reading.....	3
EDUC6666	
Supervised Practicum in Correction of Reading Problems.....	3
EDUC6673	
Integrating Literacy and Technology Across the Curriculum.....	3
EDUC6702	
Curriculum and Instruction: Theory and Practice*.....	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation.....	3
EDUC6704	
Change: Curriculum Development and Program Improvement**.....	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment.....	3

\*Candidates who already hold a master's degree have the option not to take this course to obtain a Supervisor's Certification and, in turn, complete the program in 30 credits.

\*\*Course leads to a New Jersey Supervisor License — 12 credits with a master's degree and three years of teaching.

	Credits
EDUC7674	
Master's Seminar: Research in Specialization (Literacy/Reading).....	3

## **Dual Program in Literacy/Reading and Multisensory Reading**

This 36-credit program is designed for those who have completed, or wish to complete, the 12-credit Orton-Gillingham Dyslexia Specialist Certificate. In this program, candidates will hone their own literacy/reading knowledge by learning what research says about a balanced reading approach, including: 1) phonological, phonemic awareness and the importance of automaticity; 2) selection of appropriate, real literature and leveled texts to motivate, instruct and create lifelong readers; 3) development of specific reading comprehension skills, vocabulary and fluency development; and 4) exploration and use of informal alternative assessment instruments and multiple measures to inform instruction. In addition, students will learn how to assess learners' progress and differentiate instruction based upon each learner's developmental needs by participating in supervised practicum in reading.

*This program does not lead to the New Jersey Department of Education endorsement/certification as a reading specialist.* For individuals who wish to obtain this endorsement, they must take an additional 6 credits. For New Jersey Literacy/Reading Specialist Certification, candidates must have a current standard teacher license, two years of successful teaching experience and a master's degree. For those individuals who wish to obtain a Fairleigh Dickinson University certificate, there is an option to take just the 18 credits required for the certificate.

## **Courses for FDU Literacy/Reading Certificate (18 credits)**

	Credits
EDUC6582	
Distance Learning: Children's Literature.....	3
EDUC6605	
Foundations in Reading I.....	3
EDUC6606	
Foundations in Reading II.....	3
EDUC6607	
Diagnosis of Reading Problems.....	3

	Credits
EDUC6666	
Supervised Practicum in Correction of Reading Problems.....	3
EDUC6673	
Integrating Literacy and Technology Across the Curriculum.....	3

## **Courses for Orton-Gillingham Dyslexia Specialist Certificate (12 credits)**

EDUC6601	
Multisensory Reading I.....	3
EDUC6602	
Multisensory Reading II.....	3
EDUC7603	
Multisensory Reading III.....	3
EDUC7604	
Multisensory Reading IV.....	3

## **Courses for Master of Arts in Education (6 credits)**

EDUC6609	
Supervised Practicum in Reading.....	3
EDUC7674	
Master's Seminar: Research in Specialization (Literacy/Reading).....	3

*For New Jersey State Certification in Reading/Literacy, students must take EDUC6703 Supervision of Instruction: Personnel and Evaluation and EDUC6718 Curriculum/Program Evaluation and Student Assessment for a total of 42 credits.*

**Requirements:** For New Jersey Literacy/Reading Specialist Certification, candidates must have a current standard teacher license, two years of successful teaching experience and a master's degree.

## **Professional Studies Concentration (PROST)**

The professional studies concentration is designed for New Jersey Provisional Teacher candidates and certified teachers who want a generalist master's degree. The New Jersey Provisional Teacher candidates who are in the process of completing the state-required 200 hours of instruction may select from the three identified courses, 9 credits, which parallel the course content. During this time, provisional candidates will be nonmatriculated students and, upon completion of these courses and receipt of a standard teaching certification from the New Jersey Department of Education, the candidates may proceed to elect a sequence of courses from the remaining



# Education • Education for Certified Teachers

21 credits leading to the M.A. in education for certified teachers.

Certified teachers may select from the 18 core courses and 18 credits from the specialization courses listed. This program will allow candidates to match their professional goals with the programs offered in the M.A. in education for certified teachers. The candidates can select from several specializations to fulfill their program requirements.

Embedded within the 36-credit master's degree are the 12 credits leading to a New Jersey Supervisor License with a master's degree and three years of successful teaching.

An adviser will work closely to monitor all candidates' program selections.

The professional studies concentration will allow teachers to develop their educational knowledge and skills to become more effective teachers.

## Professional Studies Concentration Course Requirements (15 credits)

	Credits
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6669	
Advanced Field Placement*.....	3
EDUC6835	
Effective Teaching and Effective Schools*.....	3
EDUC6893	
Evaluation and Measurement in Education*.....	3
EDUC7674	
Master's Seminar: Research in Specialization (required course).....	3

## Supervisor License Option (Some or all of 12 credits below)\*\*

EDUC6702	
Curriculum and Instruction: Theory and Practice***.....	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation***.....	3
EDUC6704	
Change: Curriculum Development and Program Improvement***.....	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment***.....	3

\*Courses provided off-site by the New Jersey State Provisional Training Program.

\*\*Courses for Supervisor License — 12 credits, master's degree plus three years of teaching.

\*\*\*Other courses may be substituted after approval of adviser.

## Alternative Options to 12 credits for Supervisor License\*

	Credits
EDUC6661	
The Multicultural Classroom.....	3
EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders.....	3
EDUC7763	
Human Relations and Conflict Resolution for Educators.....	3
EDUC7785	
Internet for Educators.....	3

## Course Options for Generalist Educational Program (18 credits)

Select 18 credits either from one section below or from several sections.

<i>Literacy/Reading Specialist Options without Certificate or State Endorsement</i>	
EDUC6582	
Distance Learning: Children's Literature.....	3
EDUC6605	
Foundations in Reading I.....	3
EDUC6606	
Foundations in Reading II.....	3
EDUC6673	
Integrating Literacy and Technology Across the Curriculum.....	3
<i>Teacher of Students with Disabilities Options without Certificate or State Endorsement</i>	
EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders.....	3
EDUC6744	
Foundations: Historical, Philosophical and Legal Issues Related to Disabilities.....	3
EDUC6745	
Principles and Practices of Collaboration and Inclusion.....	3
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning.....	3

<i>English as a Second Language Options without Certificate or State Endorsement</i>	
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3

<i>Mathematics Specialist Options without FDU Certificate</i>	
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6631	
Assessment in the Second-language Classroom.....	3

\*Other courses may be substituted after approval of adviser.

	Credits
<i>Instructional Technology Options without FDU Certificate</i>	
EDUC6673	
Integrating Literacy and Technology Across the Curriculum.....	3
EDUC7784	
Multimedia Production.....	3
EDUC7785	
Internet for Educators.....	3
EDUC7796	
Projects Based on the Web.....	3
<i>Mathematics Specialist Options without FDU Certificate</i>	
MATH6507	
World of Mathematics: Number.....	3
MATH6508	
World of Mathematics: Algebra.....	3
MATH6509	
World of Mathematics: Geometry.....	3
MATH6513	
World of Mathematics: Mathematics in Science.....	3
MATH6515	
World of Mathematics: Integrating Technology in Mathematics.....	3
<i>Courses for Second New Jersey Certification</i>	
Select one entire program listed below leading to state certification. These courses may ONLY be taken after first state certification has been granted to the candidate.	
<i>Literacy/Reading Specialist — 30 Credits, Plus Two Years Teaching and Master's Degree</i>	
EDUC6582	
Distance Learning: Children's Literature.....	3
EDUC6605	
Foundations in Reading I.....	3
EDUC6606	
Foundations in Reading II.....	3
EDUC6607	
Diagnosis of Reading Problems.....	3
EDUC6609	
Supervised Practicum in Reading.....	3
EDUC6666	
Supervised Practicum in Correction of Reading Problems.....	3

# Education • Education for Certified Teachers

	Credits
EDUC6673	
Integrating Literacy and Technology Across the Curriculum.....	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation*.....	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment*.....	3
EDUC7674	
Master's Seminar: Research in Specialization (Literacy/Reading).....	3
<i>English as a Second Language —</i>	
<i>18 credits</i>	
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6631	
Assessment in the Second-language Classroom.....	3
EDUC6654	
Literacy Development for Second- language Learners.....	3
EDUC6661	
The Multicultural Classroom.....	3
<i>Teacher of Students with Disabilities —</i>	
<i>21 credits</i>	
EDUC6740	Credits
Introduction to Students with Disabilities and Autistic Spectrum Disorders**.....	3
EDUC6744	
Foundations: Historical, Philosophical and Legal Issues Related to Disabilities.....	3
EDUC6745	
Principles and Practices of Collaboration and Inclusion***.....	3

\*EDUC6740 *Introduction to Students with Disabilities and Autistic Spectrum Disorders* is a prerequisite or corequisite for all courses.

\*\*It is recommended that students complete EDUC6740 *Introduction to Students with Disabilities and Autistic Spectrum Disorders* during the first or second semester of their course work.

\*\*\*EDUC6745 *Principles and Practices of Collaboration and Inclusion* or EDUC6746 *Learning Environment and Effective Management of Teaching and Learning* are prerequisites.

	Credits
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning*.....	3
EDUC6747	
Multisensory Reading Instruction for Students with Reading Disabilities.....	3
EDUC7623	
Diagnosis of Learning Disabilities.....	3
EDUC7624	
Correction of Learning Disabilities.....	3

## Teacher of Students with Disabilities (TSD) Certification (Nondegree Program)

This is a nondegree program for certified, general-education classroom teachers who seek to develop expertise in working with students with exceptionalities in grades K–12. Candidates who successfully complete this program will be eligible for New Jersey Department of Education certification as Teacher of Students with Disabilities. This license is required for teaching students with disabilities in settings such as inclusive classrooms, resource centers and self-contained classrooms.

## M.A. Core Courses (15 credits)

EDUC6702	
Curriculum and Instruction: Theory and Practice**.....	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation**.....	3
EDUC6704	
Change: Curriculum Development and Program Improvement*.....	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment**.....	3
EDUC7674	
Master's Seminar: Research in Specialization.....	3

\*EDUC6745 *Principles and Practices of Collaboration and Inclusion* or EDUC6746 *Learning Environment and Effective Management of Teaching and Learning* are prerequisites.

\*\*EDUC6740 *Introduction to Students with Disabilities and Autistic Spectrum Disorders* is a prerequisite or corequisite for all courses.

## Teacher of Students with Disabilities Courses (21 credits)

	Credits
EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders*.....	3
EDUC6744	
Foundations: Historical, Philosophical and Legal Issues Related to Disabilities.....	3
EDUC6745	
Principles and Practices of Collaboration and Inclusion.....	3
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning.....	3
EDUC6747	
Multisensory Reading Instruction for Students with Reading Disabilities.....	3
EDUC7623	
Diagnosis of Learning Disabilities**.....	3
EDUC7624	
Corrections of Learning Disabilities**.....	3
Total.....	
36	

## Course Descriptions

See “Course Offerings,” pages 130–143.

\*EDUC6740 *Introduction to Students with Disabilities and Autistic Spectrum Disorders* is a prerequisite or corequisite for all courses.

\*\*EDUC6745 *Principles and Practices of Collaboration and Inclusion* or EDUC6746 *Learning Environment and Effective Management of Teaching and Learning* are prerequisites.

## Educational Leadership (M.A.)

The Master of Arts (M.A.) in educational leadership requires a total of 36 credits of specific course work in the field of educational leadership and management. Students in the program will participate in cohort and mixed-study groups as they engage in a multiyear sequence of courses and field experiences that will emphasize the following areas:

- 1) The development of human relations skills to optimize the educational leadership graduate student's ability to interact with teachers, colleagues, parents, students and other members of the school community;
- 2) Knowledge of effective strategies that promote higher student achievement;
- 3) Development of the skills and knowledge for creating a vision for effective schools and engaging the learning-community stakeholders in the process of creating and implementing an educational vision;
- 4) Assumption of the role of a leader in promoting systemic growth and utilizing available resources;
- 5) Development of the management skills required to effectively utilize available resources; and
- 6) Engaging the community and profession in the advocacy of public policy that promotes the success for all students in the learning community.

The program's design and curriculum are based on the demands facing today's schools, with a focus on developing a vision of a school as a community of learners. Graduates of the program develop competencies in the administrative strategies and skills that engage all stakeholders in the decision-making process and promote the true sense of a community of learners. To accomplish these goals, student learning will rely heavily on small-group interaction, simulations and problem-based learning activities. During the second year of the program, students will be able to apply the educational theory learned in formal course work through an intensive field experience in schools of outstanding practitioners.

Completion of the 36-credit M.A. program will qualify students to sit for the PRAXIS Examination in School Leaders

Licensure Assessment (SLLA) and to apply for a **certificate of eligibility** required for appointment as a **principal** in the state of New Jersey. Individuals who have three years of teaching experience, an M.A. and the four-course sequence in supervision and curriculum offered in the program will be eligible to apply for a **supervisor's certificate** under New Jersey Administrative Code requirements.

A **post-master's principal certification program** is offered, see this page.

These programs are offered under the auspices of the Peter Sammartino School of Education, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey. The program is available at the Florham Campus, Madison, New Jersey; the Metropolitan Campus; and satellite campus locations.

### Admission Requirements

#### Admissions Process

All candidates who want to be considered for admission must meet the following criteria:

- 1) Submit a professional portfolio, which includes evidence of:
  - a standard teaching certificate,
  - successful teaching and
  - a writing sample.
- 2) Submit an undergraduate transcript indicating that the student has maintained a cumulative grade point ratio (CGPR) of 2.75. Students who have not maintained a 2.75 CGPR in undergraduate work may be accepted provisionally. Those students will be matriculated if they maintain a 3.25 CGPR through the first 9 credits of the M.A. program.
- 3) Submit two letters of recommendation (one from a supervisor) that address the following:
  - quality of teaching and evidence of commitment to the field of education and
  - potential for leadership.
- 4) Provide evidence of successful completion of PRAXIS and have an appropriate number of years of successful teaching experience.

### Requirements for the Master of Arts Degree

	Credits
EDUC6701	
Leadership in Learning Community and School.....	3
EDUC6702	
Curriculum and Instruction: Theory and Practice*.....	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation*.....	3
EDUC6704	
Change: Curriculum Development and Program Improvement*.....	3
EDUC6706	
Advanced Leadership Seminar.....	3
EDUC6716	
School Finance, Facilities and Scheduling.....	3
EDUC6717	
School Law.....	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment*.....	3
EDUC6720	
Educational Leadership Field-based Internship I.....	3-6
EDUC6721	
Educational Leadership Field-based Internship II.....	3
EDUC6722	
Educational Leadership Field-based Internship III.....	3
EDUC6723	
Final Project: School-based Research.....	3

### Post-master's Principal Certification Program

This 30-credit, 10-course sequence is designed for teachers who hold a master's degree, have at least five years of successful educational experience under a valid New Jersey certificate and wish to take courses solely for the purpose of obtaining a principal's certificate. Students who have a New Jersey supervisor's certificate would need only 18 credits (six courses) and a passing score on the School Leaders Licensure Assessment (SLLA). Evaluation of previous graduate school transcripts must be completed by an adviser, and a special program is planned that will achieve the sequence of courses of instruction required for certification as a principal.

\*Required for Supervisor's Certificate.

# Education • Learning Disabilities

## Requirements (30 credits)

	Credits
EDUC6701	
Leadership in Learning Community and School*	3
EDUC6702	
Curriculum and Instruction: Theory and Practice	3
EDUC6703	
Supervision of Instruction: Personnel and Evaluation	3
EDUC6704	
Change: Curriculum Development and Program Improvement	3
EDUC6706	
Advanced Leadership Seminar*	3
EDUC6716	
School Finance, Facilities and Scheduling	3
EDUC6717	
School Law	3
EDUC6718	
Curriculum/Program Evaluation and Student Assessment	3
EDUC6720	
Educational Leadership Field-based Internship I	3
EDUC6721	
Educational Leadership Field-based Internship II	3
EDUC6722	
Educational Leadership Field-based Internship III	3

## Course Offerings

See "Course Offerings," pages 130–143.

## Learning Disabilities (M.A.)

The following degree and certificate programs in learning disabilities are available at FDU. Each takes into consideration the student's educational background and career goals.

- Master of Arts in Learning Disabilities/Teacher of Students with Disabilities Certification, see this page.
- Teacher of Students with Disabilities Certification, see page 123.
- Master of Arts in Learning Disabilities/Learning Disabilities Teacher Consultant Certification, see page 123.
- Learning Disabilities Teacher Consultant Certification, see page 124.
- Dyslexia Specialist Certificate and other Orton-Gillingham certificate programs, see pages 124–125.

These programs are offered under the auspices of the Peter Sammartino School of Education, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

1. A bachelor's or a master's degree from an accredited college or university with a minimum grade point ratio of 3.00 (out of a possible 4.00) in undergraduate or graduate work. Retention in the program is contingent upon maintaining a 3.25 academic average.
2. For students without a master's degree, submission of the scores of the Graduate Record Examinations (GRE), the Miller Analogy Test or the PRAXIS Examination.
3. Two letters of recommendation.
4. A New Jersey Instructional Certificate is required for students seeking second certification as Teacher of Students with Disabilities or Learning Disabilities Teacher Consultant (LDTC).\*
5. Candidates for LDTC certification also are required to have three years of successful, full-time teaching experience by the end of the program and to have experience teaching special populations.

Applicants who have not completed all requirements for admission to the degree

\*Master's degree programs, as well as special programs of a short-range nature, are available to candidates holding undergraduate or graduate degrees in a related field.

program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

## Master of Arts in Learning Disabilities/Teacher of Students with Disabilities Certification

A 38-credit Master of Arts in learning disabilities is offered for licensed teachers seeking to develop expertise in working with pupils with learning disabilities or other exceptionalities. Teachers who successfully complete this program will be eligible for certification as Teacher of Students with Disabilities, the license required by the state of New Jersey for teaching pupils with learning disabilities or other disabilities in inclusive classrooms, resource centers or self-contained classrooms (see Teacher of Students with Disabilities Certification [nondegree] page 123).

### Requirements

#### Basic Core (12 credits)

	Credits
EDUC6627	
Orientation to School Testing	3
EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders	3
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning	3
EDUC6792	
Assistive Technology for the Inclusive Classroom	3
Total Core	12

#### Specialization (15 credits)

EDUC6744	
Foundations: Historical, Philosophical and Legal Issues Related to Disabilities	3
EDUC6745	
Principles and Practices of Collaboration and Inclusion	3
EDUC6747	
Multisensory Reading Instruction for Students with Reading Disabilities	3
EDUC7623	
Diagnosis of Learning Disabilities*	3
EDUC7624	
Correction of Learning Disabilities*	3

\*EDUC6745 Principles and Practices of Collaboration and Inclusion or EDUC6746 Learning Environment and Effective Management of Teaching and Learning are prerequisites.

# Education • Learning Disabilities

<b>Electives (9 credits)</b>	Credits
EDUC6694	
Introduction to Autism Spectrum Disorders.....	3
EDUC6793	
Education of Students with Moderate to Severe Disabilities.....	3
EDUC6797	
Multisensory Mathematics Instruction for Students with Disabilities.....	3

## **One-credit Electives (2 credits)**

EDUC6612	Reading Comprehension
EDUC6614	Multisensory Mathematics Skills
EDUC6617	Study Skills
EDUC6660	Diagnosing Mathematics Disabilities and Strategies for Remediation
EDUC6668	Understanding Asperger Syndrome
EDUC6715	Updating LDTC Diagnostic Skills
EDUC6737	Phonemic Awareness
EDUC6845	Understanding IQ Testing

Note: EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders is a prerequisite or corequisite for all courses.

## **Teacher of Students with Disabilities Certification (Nondegree Program)**

This is a nondegree program for licensed, regular classroom teachers who seek to develop expertise in working with students with exceptionalities in grades K–12. Teachers who successfully complete this program will be eligible for certification as Teacher of Students with Disabilities, the license required by the state of New Jersey's Department of Education for teaching children with disabilities in settings such as inclusive classrooms, resource centers or self-contained classrooms.

## **Requirements**

Students must complete the following 21 credits.

EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders.....	3

	Credits
EDUC6744	
Foundations: Historical, Philosophical and Legal Issues Related to Disabilities.....	3
EDUC6745	
Principles and Practices of Collaboration and Inclusion.....	3
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning.....	3
EDUC6747	
Multisensory Reading Instruction for Students with Reading Disabilities...	3
EDUC7623	
Diagnosis of Learning Disabilities*.....	3
EDUC7624	
Correction of Learning Disabilities*.....	3

Note: EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders is a prerequisite or corequisite for all courses.

## **Master of Arts in Learning Disabilities/Learning Disabilities Teacher Consultant (LDTC) Certification**

This 38-credit master's degree in learning disabilities is for licensed teachers with experience in special-education settings who wish to develop skills for diagnosing learning difficulties and planning instructional programs for pupils from preschool through grade 12. Teachers with three years of full-time teaching experience with special populations who successfully complete this program will be eligible for certification as Learning Disabilities Teacher Consultant (LDTC). This license is required by the state of New Jersey for serving in the LDTC capacity on a Child Study Team.

## **Requirements**

### **Basic Core (15 credits)**

EDUC6626	
Neurophysiological Basis of Learning Problems.....	3
EDUC6627	
Orientation to School Testing.....	3
EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders.....	3

\*EDUC6745 Principles and Practices of Collaboration and Inclusion or EDUC6746 Learning Environment and Effective Management of Teaching and Learning are prerequisites.

	Credits
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning*.....	3
EDUC6747	
Multisensory Reading Instruction for Students with Reading Disabilities.....	3
	Total.....
	15

## **Specialization (17 credits)**

EDUC6745	
Principles and Practices of Collaboration and Inclusion*.....	3
EDUC7623	
Diagnosis of Learning Disabilities.....	3
EDUC7624	
Correction of Learning Disabilities.....	3
EDUC8623	
Practicum in Diagnostic and Remedial Techniques I**.....	3
EDUC8628	
Practicum in Diagnostic and Remedial Techniques II**.....	3
Clinical Practicum.....	2
	Total.....
	17

## **Electives (6 credits)**

Electives to be chosen from the courses below:

EDUC6660	
Diagnostic Mathematics Disabilities and Strategies for Remediation.....	1
EDUC6668	
Understanding Asperger Syndrome.....	1
EDUC6694	
Introduction to Autism Spectrum Disorders.....	3
EDUC6792	
Assistive Technology for the Inclusive Classroom.....	3
EDUC6793	
Education of Students with Moderate to Severe Disabilities.....	3

\*EDUC6745 Principles and Practices of Collaboration and Inclusion or EDUC6746 Learning Environment and Effective Management of Teaching and Learning are prerequisites.

\*\*A minimum of B+ in both EDUC7623 Diagnosis of Learning Disabilities and EDUC7624 Correction of Learning Disabilities is required for admission to EDUC8623 Practicum in Diagnostic and Remedial Techniques I. A minimum of a B+ in EDUC8623 Practicum in Diagnostic and Remedial Techniques I is required for admission to EDUC8628 Practicum in Diagnostic and Remedial Techniques II.

# Education • Learning Disabilities

	Credits
EDUC6797	
Multisensory Mathematics Instruction for Students with Disabilities.....	3
EDUC6845	
Understanding IQ Testing.....	1
	Total.....6
	Total.....38

Note: It is preferable to complete EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders in the first or second semester of course work.

## Learning Disabilities Teacher Consultant Certification (Nondegree Program)

This is a nondegree program leading to certification as Learning Disabilities Teacher Consultant (LDTTC). It is designed for certified teachers (who hold a Teacher of Students with Disabilities certificate or its equivalent master's degree and have three years of teaching experience with special populations) who wish to develop skills for diagnosing learning difficulties and planning instructional programs for students with disabilities. Students who successfully complete this program will be eligible for certification as Learning Disabilities Teacher Consultant, the certification required by the state of New Jersey's Department of Education for serving in the LDTTC capacity on a Child Study Team.

### Requirements

Students who have a Master of Arts in education degree or a degree in a related field are required to complete graduate course work specified under the basic core and specialization area. Students who have earned the Master of Arts in learning disabilities/Teacher of Students with Disabilities Certification at Fairleigh Dickinson University are required only to take EDUC6626 Neurophysiological Basis of Learning Problems, EDUC8623 Practicum in Diagnostic and Remedial Techniques I and EDUC8628 Practicum in Diagnostic and Remedial Techniques II and to meet the certification requirements for LDTTC.

## Dyslexia Specialist Program

The Dyslexia Specialist Program is tailored for general-education classroom teachers and teachers of special education who wish to develop expertise in Orton-Gillingham — a structured, phonic, rule-based multisensory approach to teaching reading, spelling and handwriting. This program provides teachers with a basic framework within which they can make decisions about adapting instructional sequences to the specific needs of individual students.

### Dyslexia Specialist Certificate Requirements

#### Foundation (13 credits) Credits

Required (7 credits)

EDUC6610	Credits
History of Multisensory Instructional Methods for Students with Learning Disabilities/Dyslexia.....	1
EDUC6616	
Language Acquisition and Language Disorders.....	3
EDUC7623	
Diagnosis of Learning Disabilities.....	3

The remaining 6 credits should be chosen from:

EDUC6626	
Neurophysiological Basis of Learning Problems.....	3
EDUC6740	
Introduction to Students with Disabilities and Autistic Spectrum Disorders.....	3
EDUC6746	
Learning Environment and Effective Management of Teaching and Learning.....	3
	Total..... 13

#### Specialization (12 credits)

EDUC6601	
Multisensory Reading I.....	3
EDUC6602	
Multisensory Reading II.....	3
EDUC7603	
Multisensory Reading III.....	3
EDUC7604	
Multisensory Reading IV.....	3
	Total..... 12

A student must achieve a grade of B+ or better in the clinical component of each multisensory reading course to proceed to the next course.

## Workshops (3 credits)

	Credits
Three 1-credit workshops offered through the Center for Dyslexia Studies must be taken.....	3
	Total.....3

### Electives in Reading (2 credits)

Electives.....	2
	Total.....2
	Total.....30

## Orton-Gillingham Dyslexia Specialist Training Course

The Orton-Gillingham Dyslexia Specialist Training course consists of programs tailored for regular classroom teachers and teachers of special education who wish to develop expertise in the Orton-Gillingham approach to reading instruction. Accredited by the International Multisensory Structured Language Education Council (IMSLEC) and the International Dyslexia Association (IDA), these programs provide teachers with a basic framework within which they can make decisions about adapting instructional sequences in reading to the specific needs of individual students.

The following certificates are offered:

### Orton-Gillingham Teacher (Program Accredited at the IMSLEC Teaching Level)\*

Requirements

EDUC6601	
Multisensory Reading I.....	3
EDUC6602	
Multisensory Reading II.....	3
EDUC7603	
Multisensory Reading III.....	3
EDUC7604	
Multisensory Reading IV.....	3
	Total..... 12

### Orton-Gillingham Teacher Trainer (Program Accredited at the IMSLEC Trainer of Teaching Level)

Requirements

All courses required for Dyslexia Specialist Certificate.....	30
EDUC8609	
Multisensory Reading V.....	3
EDUC8610	
Multisensory Reading VI.....	3
	Total.....36

\*A student must achieve grades of B+ or better in the clinical component of each course to proceed to the next course.

## Orton-Gillingham Therapist (Program Accredited at the IMSLEC Therapy Level)

Requirements	Credits
All courses required for Dyslexia Specialist.....	30
EDUC8612	
Advanced Orton-Gillingham Practicum I.....	3
EDUC8613	
Advanced Orton-Gillingham Practicum II.....	3
Total.....	36

## Orton-Gillingham Therapist Trainer (Program Accredited at the IMSLEC Trainer of Therapy Level)

Requirements	
All courses required for Orton-Gillingham Teacher Trainer program.....	36
EDUC8612	
Advanced Orton-Gillingham Practicum I.....	3
EDUC8613	
Advanced Orton-Gillingham Practicum II.....	3
Total.....	42

## Center for Clinical Teaching

FDU's Center for Clinical Teaching, located on the Metropolitan Campus, provides an on-site setting where students in the Orton-Gillingham Teacher Program can learn and practice the skills of clinical teaching under faculty supervision. Students are trained to provide reading instruction that is individualized to accommodate learners' needs, styles and interests.

At the center, students are taught to monitor learners' progress continuously and adjust instructional plans accordingly. They work to establish supportive relationships with learners to boost self-confidence and improve attitudes toward learning. An inventory of current diagnostic and instructional materials is maintained at the center.

## Course Descriptions

See "Course Offerings," pages 130–143.

## Mathematical Foundations (M.A.)

The M.A. in mathematical foundations is designed for teachers who wish to gain a deeper insight into the nature, fundamentals and history of mathematics. The program is specifically designed for elementary, middle-school and special-education teachers seeking to meet the New Jersey state requirements to teach mathematics at the middle-school level and to upgrade their mathematical skills. The courses focus on upper-primary and middle-school mathematics and may not be an appropriate option for those with an undergraduate degree in mathematics.

**Online Course Delivery:** FDU offers New Jersey's only 100 percent online graduate mathematics degree for educators. The online course format lets students pursue their studies at their convenience, offering convenient access for adult learners. There is no residency requirement for the online program.

The program's competitive tuition and fee rate is comparable to that of a public university. No additional tests are required for admission.

## Admission Requirements

1. A baccalaureate degree in any subject area from an accredited college or university.
2. All official transcripts of undergraduate degrees and graduate courses/degrees.
3. Two letters of recommendation.
4. Copy or proof of teaching certification.

## Requirements for the Master of Arts Degree

	Credits
MATH6507	
World of Mathematics: Number.....	3
MATH6508	
World of Mathematics: Algebra.....	3
MATH6509	
World of Mathematics: Geometry.....	3
MATH6512	
World of Mathematics: Seminar.....	3
MATH6513	
World of Mathematics: Mathematics in Science.....	3
MATH6515	
World of Mathematics: Integrating Technology in Mathematics.....	3

Credits

MATH6516	
World of Mathematics: Data Analysis and Probability.....	3
MATH6517	
World of Mathematics: Applications in the Real World.....	3

## Elective Courses (9 credits)

With the approval of the student's academic adviser, elective courses may be selected from graduate offerings in science, education, psychology, computer science or mathematics.

## Course Descriptions

See "Course Offerings," pages 130–143.

## Teaching — Master of Arts in Teaching (M.A.T.)\*

The Master of Arts in Teaching (M.A.T.) program is a graduate program in teacher preparation for the individual who has a baccalaureate degree in the liberal arts or sciences and a desire to enter the teaching profession. This program was designed to build upon a sound undergraduate academic foundation, as well as the student's other educational and work-related experiences to provide an efficient path to state teacher licensure. The program is rigorous in its curriculum and expectations, yet flexible in its scheduling to ensure optimum benefit to the graduate student who typically must balance formal course work with other demands.

This program is offered under the auspices of the Peter Sammartino School of Education, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey. This program is offered at the Metropolitan Campus, Teaneck, New Jersey, and the Florham Campus, Madison, New Jersey. In addition, this program is offered at the following community colleges: Rowan College at Gloucester County (previously Gloucester County College), Sewell, New Jersey; and Cumberland County College, Vineland, New Jersey.

The Master of Arts in Teaching (M.A.T.) program offers New Jersey state-approved teaching certification programs in:

- Preschool to grade 3, see page 127;
- Elementary education (grades K–6), see page 127;
- Secondary education content area (grades K–12) in English, social studies, mathematics, art, biological sciences, chemistry, physics, earth science, physical science, see page 127.

All graduate credits earned in teacher certification programs can be applied to a Master of Arts in Teaching (M.A.T.) degree.

Students may choose between two M.A.T. program models (the Apprenticeship Teaching Model, this page, and the

Practicum Model, see page 128), each of which is designed to enable a student to meet state eligibility requirements for teacher certification in elementary or K–12 content areas after completing the required graduate courses. Students may complete eligibility requirements for state certification with either program option without completing the M.A.T. degree, which requires a total of 36 credits. Upon completion of teacher certification eligibility requirements (see this page), students are eligible for full-time paid employment as elementary or secondary teachers and must successfully complete two full years of successful teaching to obtain permanent certification.

Persons out of college for some time, who seek a teaching career, as well as recent graduates, may apply. Students who cannot attend full time may study part time and complete the program not later than five years from the initial registration.

### For Information

For further information, contact the Fairleigh Dickinson University Peter Sammartino School of Education at the location nearest you:

Metropolitan Campus  
1000 River Road  
Teaneck, New Jersey 07666  
(201) 692-2862

Florham Campus  
285 Madison Avenue  
Madison, New Jersey 07940  
(973) 443-8385

Community College Partnership  
Program  
1000 River Road  
Teaneck, New Jersey 07666  
(201) 692-7310

### New Jersey Teacher Certification

There are two avenues of earning state certification: the Certificate of Eligibility with Advanced Standing (CEAS) and the Certificate of Eligibility (CE). Both require two provisional years of teaching. Upon successful completion of the provisional years, the state issues the Standard (lifelong) certification.

In New Jersey, the State Department of Education grants certificates of eligibility for teacher certification. Please check the NJDOE website for minimum requirements to obtain a Certificate of Eligibility.

### Certificate of Eligibility with Advanced Standing

The Certificate of Eligibility with Advanced Standing (CEAS) will be issued to students who successfully complete their programs, pass the edTPA and are recommended by Fairleigh Dickinson University for certification. The CEAS is valid for the lifetime of its holder. It authorizes the holder to seek and accept offers of employment in New Jersey public schools. New Jersey has reciprocity with other states to accept the CEAS as evidence of completion of an approved college education program. Students must undergo two induction years before receiving a standard certificate.

### Provisional Certificate

The Provisional Certificate will be issued to students who receive and accept documented offers of employment from districts that comply with induction requirements.

### Standard Certificate

The Standard Certificate will be issued to those students who serve for two years under the Provisional Certificate and who are recommended as “approved” by their school principal based on evaluations of the provisionally certified teacher’s classroom performance, conducted by the principal and other certified evaluators.

### Apprenticeship Teaching Model

The M.A.T. Apprenticeship Teaching Model requires 22–23 credits for a Certificate of Eligibility with Advanced Standing. In fall 2018, additional credits will be required.

To obtain a Certificate of Eligibility with Advanced Standing in preschool–grade 3, elementary education or secondary education, the following requirements must be met:

- Successful completion of the required credits in the M.A.T. program (additional credits in fall 2018);
- A passing score on the state-required Praxis I Core Academic Skills Exam;
- A passing score on the state-required appropriate Praxis II exam; and
- Submission of an edTPA portfolio (starting fall 2018 a passing score on the edTPA is required).

New Jersey Teacher Certification becomes permanent after two full years of

*\*Fairleigh Dickinson University’s Peter Sammartino School of Education had an Aggregate Pass Rate of 99 percent on the HEOA-Title II reporting for the 2015–2016 academic year. The corresponding statewide pass rate for the same period was 98 percent.*



# Education • Teaching — Master of Arts in Teaching

successful teaching with a support team. Students may go on to earn the M.A.T. degree (total of 36 credits) by completing additional credits.

## The Apprenticeship Model:

The required program of study for each certification area consists of the following courses.

### Preschool Through Grade 3

#### Required Courses for Certification\*

	Credits
EDUC6575	
Apprenticeship Teaching.....	6
EDUC6818	
Language Development and	
Literacy I.....	3
EDUC6824	
Teaching Laboratory and	
Field Experience I.....	1
EDUC6825	
Apprenticeship Teaching Seminar.....	2
EDUC6828	
Teaching Laboratory and	
Field Experience II.....	1
EDUC6851	
Child Development from Birth	
to Age Eight**.....	3
EDUC6852	
P-3 Curriculum and Assessment.....	4
EDUC6853	
Family and Community in Education.....	3
	Total.....23

#### Additional Required Courses for Completion of M.A.T.

EDUC6584	
Computers as a Teacher's Aid:	
Curriculum and Instruction.....	3
EDUC6820	
Problem-based Strategies for	
Elementary Mathematics.....	3
EDUC7812	
Final Project.....	2-3
	Total....8-9

Electives (3-4 credits)

Total Credits Required for Graduation..... 36

\*Starting in fall 2018, the minimum required credits for initial certification will increase with the addition of EDUC6585 Advanced Clinical Practice (2 credits) and EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders (3 credits). All candidates will be required to pass the edTPA to obtain certification.

\*\*EDUC6584 Child and Adolescent Development may be substituted for EDUC6851 Child Development from Birth to Age Eight.

### Elementary Education

#### Required Courses for Certification\*

	Credits
EDUC6575	
Apprenticeship Teaching.....	6
EDUC6818	
Language Development and	
Literacy I.....	3
EDUC6820	
Problem-based Strategies for	
Elementary Mathematics.....	3
EDUC6824	
Teaching Laboratory and	
Field Experience I.....	1
EDUC6825	
Apprenticeship Teaching Seminar.....	2
EDUC6828	
Teaching Laboratory and	
Field Experience II.....	1
EDUC6835	
Effective Teaching and	
Effective Schools.....	3
EDUC6893	
Evaluation and Measurement	
in Education.....	3
	Total.....22

#### Additional Required Courses for Completion of M.A.T.

EDUC6584	
Computers as a Teacher's Aid:	
Curriculum and Instruction.....	3
EDUC6819	
Language Development and	
Literacy II.....	3
EDUC7812	
Final Project.....	2
	Total.....8

#### Education Electives/Courses in Discipline (6 credits)

Total Credits Required for Graduation..... 36

### Secondary Education (Art, Biological Science, Chemistry, Earth Science, English, Mathematics, Physical Science, Physics and Social Studies)

#### Required Courses for Certification\*

EDUC6575	
Apprenticeship Teaching.....	6
EDUC6818	
Language Development and	
Literacy I.....	3

\*Starting in fall 2018, the minimum required credits for initial certification will increase with the addition of EDUC6585 Advanced Clinical Practice (2 credits) and EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders (3 credits). All candidates will be required to pass the edTPA to obtain certification.

	Credits
EDUC6820	
Problem-based Strategies for	
Elementary Mathematics.....	3
EDUC6824	
Teaching Laboratory and	
Field Experience I.....	1
EDUC6825	
Apprenticeship Teaching Seminar.....	2
EDUC6828	
Teaching Laboratory and	
Field Experience II.....	1
EDUC6835	
Effective Teaching and	
Effective Schools.....	3
EDUC6893	
Evaluation and Measurement	
in Education.....	3
	Total.....22

#### Additional Required Courses for Completion of M.A.T.

Appropriate methods course in discipline (EDUC) secondary only which includes: EDUC6562

Standards-based Curriculum and Methodology: Secondary English or

EDUC6563  
Standards-based Curriculum and Methodology: World Languages or

EDUC6566  
Standards-based Curriculum and Methodology: Secondary Science or

EDUC6568  
Standards-based Curriculum and Methodology: Secondary Social Studies or

EDUC6569  
Standards-based Curriculum and Methodology: Visual Arts or

EDUC6570  
Standards-based Curriculum and Methodology: Secondary Mathematics.....
 3 |

EDUC6584  
Computers as a Teacher's Aid: Curriculum and Instruction.....
 3 |

EDUC7812  
Final Project.....
 2 |

Total.....8

#### Education Electives/Courses in Discipline (6 credits)

Total Credits Required for Graduation..... 36

# Education • Teaching — Master of Arts in Teaching

## English as a Second Language

### Required Courses for Certification\*

	Credits
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6575	
Apprenticeship Teaching.....	6
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6631	
Assessment in the Second- language Classroom.....	3
EDUC6654	
Literacy Development for Second-language Learners.....	3
EDUC6661	
The Multicultural Classroom.....	3
EDUC6824	
Teaching Laboratory and Field Experience I.....	1
EDUC6825	
Apprenticeship Teaching Seminar.....	2
EDUC6828	
Teaching Laboratory and Field Experience II.....	1
EDUC6835	
Effective Teaching and Effective Schools.....	3
	<b>Total.....</b>

### Additional Required Courses for Completion of M.A.T.

EDUC7812	
Final Project.....	2
	<b>Total.....</b>

### Education Electives/Courses in Discipline (6 credits)

Total Credits Required for Graduation..... 36

## Practicum Model

The M.A.T. Practicum Model is a six- to eight-week accelerated and concentrated graduate student-teaching experience for those who have had previous teaching experience in a class but are not certified; it leads to a Certificate of Eligibility. Please see a School of Education adviser for more information about this model.

## Admission and Matriculation Requirements

Admission to the M.A.T. program occurs after a formal application is submitted and program entrance requirements are fulfilled. All teaching candidates must maintain a cumulative grade point ratio (CGPR) of at least 3.00 in their course work to be certified.

1. Applicants must hold a bachelor's degree from an accredited college or university.
2. Applicants must have an undergraduate CGPR of at least 3.00 on a 4.00 scale.
3. Applicants for subject-specific certification (secondary education) must have obtained a 30-credit concentration in the area of certification.
4. Applicants of Preschool–Grade 3 and Elementary Education certifications must have obtained 60 credits in liberal arts or sciences.
5. Applicants must have passed the Praxis I Core Academic Skills Exam in reading, writing and mathematics. Students may be exempt from taking this test if they meet the minimum required scores on the SAT, ACT or GRE. Please see an adviser to obtain those scores. An applicant may be admitted conditionally and allowed to take 9 credits until they pass the Core Academic Skills Exam.

6. Applicants are required to take the Praxis II in the content area of their certification before admission to the program. Students are admitted conditionally and allowed to take 9 credits until they pass the appropriate Praxis II test.
7. Applicants must have a personal interview with an adviser or program director prior to registration for any courses.
8. Applicants for English as a Second Language (E.S.L.) must take the Oral Proficiency Interview (OPI) and the Writing Proficiency Test (WPT) in English. Applicants for world languages must pass the OPI in the language for which they seek certification.

## Requirements for a Master of Arts in Teaching Degree First Certification Program in Teaching English as a Second Language

Degree candidates must successfully complete 36 credits, of which 33 are taken in courses required by the New Jersey Administrative Code for teacher certification.

## Courses Required for Certification (33 credits)

	Credits
<i>Apprenticeship Model</i>	
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6575	
Apprenticeship Teaching.....	6
EDUC6583	
Advanced Clinical Practice.....	2
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6631	
Assessment in the Second- language Classroom.....	3
EDUC6654	
Literacy Development for Second-language Learners.....	3
EDUC6661	
The Multicultural Classroom.....	3
EDUC6824	
Teaching Laboratory and Field Experience I.....	1
EDUC6825	
Apprenticeship Teaching Seminar.....	2
EDUC6828	
Teaching Laboratory and Field Experience II.....	1
EDUC6835	
Effective Teaching and Effective Schools.....	3

## Course Required for Graduation (3 credits)

EDUC7812	
Final Project.....	3

\*Starting in fall 2018, the minimum required credits for initial certification will increase with the addition of EDUC6583 Advanced Clinical Practice (2 credits) and EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders (3 credits). All candidates will be required to pass the edTPA to obtain certification.

# Education • Teaching English as a Second/ Foreign Language

## Requirements for Master of Arts in Teaching Degree Certification Program: Middle School Endorsement

Those individuals desiring to teach on the middle-school level (5, 6, 7 and 8) must qualify for elementary-school certification with subject-matter specialization. In order to do so, the following requirements must be met, according to N.J.A.C. 6A:9.2:

1. Hold an elementary school Certificate of Eligibility (CE), Certificate of Eligibility with Advanced Standing (CEAS) or standard certificate with an elementary-school endorsement;
2. Complete a course in adolescent development;
3. Pass the appropriate Middle School PRAXIS test in content-area specialization for middle school;
4. Complete 15 credits in the subject fields of mathematics, science, social studies and language arts/literacy; and
5. Secondary-education candidates may also secure a middle-school endorsement in a content area other than their initial certification by:
  - i. Passing the appropriate PRAXIS II in the content area for middle school,
  - ii. Taking a course in adolescent development and
  - iii. Completing a minimum of 15 credits in the content area (can be included in undergraduate courses).

## Requirements for a Master of Arts in Teaching Degree Certification Program in Teacher of Students with Disabilities

The program requires all courses for initial certification in an area above and the following 21 credits:

- EDUC6740 Introduction to Students with Learning Disabilities and Autistic Spectrum Disorders\*
- EDUC6744 Foundations: Historical, Philosophical and Legal Issues Related to Disabilities
- EDUC6745 Principles and Practices of Collaboration and Inclusion

\*EDUC6740 Introduction to Students with Learning Disabilities and Autistic Spectrum Disorders is a prerequisite for all courses.

- EDUC6746 Learning Environment and Effective Management of Teaching and Learning
- EDUC6747 Multisensory Reading Instruction for Students with Reading Disabilities
- EDUC7623 Diagnosis of Learning Disabilities\*
- EDUC7624 Correction of Learning Disabilities\*
- EDUC7812 Final Project\*\*

## Course Descriptions

See "Course Offerings," pages 130–143.

\*EDUC6745 Principles and Practices of Collaboration and Inclusion and EDUC6746 Learning Environment and Effective Management of Teaching and Learning are prerequisites.

\*\*EDUC7812 Final Project is required to complete the 45-credit M.A.T./Teacher of Students with Disabilities certification program.

## Teaching English as a Second/ Foreign Language (TESL/TEFL) (M.A.)

The master of arts degree in teaching English as a second/foreign language (TESL/TEFL) is designed for (a) international students who want to teach English in their own countries; and (b) domestic\* students who want a master's degree to teach English as a second language or as a foreign language, but do not seek New Jersey certification.

This degree program gives students the opportunity to explore:

- dimensions of language instruction and curriculum development,
- the relation of language to culture,
- assessment and alternative assessment in second-language instruction,
- techniques for addressing ethnic diversity
- second-language instruction through content areas and
- technology in language instruction.

For further information, contact the Peter Sammartino School of Education, Fairleigh Dickinson University, Metropolitan Campus, 1000 River Road, Teaneck, New Jersey, 07666-1914 at (201) 692-2079.

This program is offered under the auspices of the Peter Sammartino School of Education, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

## Admission Requirements

### International Students

1. A bachelor's degree from an accredited college or university.
2. TOEFL score of 550 (paper-based), 213 (computer-based) or 79 (internet-based) or better.
3. Two letters of recommendation.

### Domestic Students

1. A bachelor's degree from an accredited college or university.
2. Two letters of recommendation.

\*U.S. citizens and legal residents.

# Education • Course Offerings

## Requirements for the Master of Arts Degree

This program requires 22 credits selected from foundation courses and 9 credits selected from approved electives. A 2-credit research project related to language instruction is required as the culminating exercise, for a total of 33 credits for the master of arts degree.

## Required Courses (22 credits)

	Credits
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6635	
Clinical Practice in Language Instruction.....	4
EDUC6650	
Behavioral Science for Teachers: Language and Culture in the Classroom	
or	
EDUC6649	
Introduction to United States Culture...	3
EDUC6654	
Literacy Development for Second-language Learners.....	3
EDUC6661	
The Multicultural Classroom.....	3

## Approved Electives (9 credits)

### Final Requirement (2 credits)

EDUC7812	
Final Project.....	2
	Total.....33

## TESL/TEFL Specialist Certification Program

The Peter Sammartino School of Education offers an 18-credit TESL/TEFL (Teaching English as a Second/Foreign Language) Specialist Certificate for those who wish to earn a certificate without completing a master of arts degree. The program offers a strong 18-credit specialization in linguistics, language teaching, language proficiency and U.S. culture. Note: The TESL/TEFL Specialist Certificate is not a New Jersey state teaching certificate.

## Required Courses (18 credits)

	Credits
EDUC6565	
Second Language Acquisition: Methods and Curriculum.....	3
EDUC6574	
Applied Linguistics for Language Teachers.....	3
EDUC6584	
Computers as a Teacher's Aid: Curriculum and Instruction.....	3
EDUC6650	
Behavioral Science for Teachers: Language and Culture in the Classroom	
or	
EDUC6649	
Introduction to United States Culture...	3
EDUC6654	
Literacy Development for Second- language Learners.....	3
EDUC6661	
The Multicultural Classroom.....	3

## Course Descriptions

See "Course Offerings," pages 130–143.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director.

### Education

Peter Sammartino School of Education

#### EDUC6500 3 Credits

##### Special Topics in Education

This course will focus on special topics especially designed to enhance graduate study in education. Topics may vary each time this course is offered.

#### EDUC6550 3 Credits

##### Methodology in Bilingual/Bicultural Education

This course introduces students to current principles and methods of K–12 bilingual/bicultural education against the backdrop of its historical, legal and societal foundations. Through course readings, classroom activities, projects and field experiences, students build their competence to design bilingual/bicultural education methodology that is student-centered and culturally responsive. Particular attention is given to the development of academic language in bilingual/bicultural environments.

#### EDUC6551 3 Credits

##### Language Acquisition in Bilingual/Bicultural Contexts

This course introduces students to current theories of language acquisition in bilingual/bicultural contexts. It explores current understandings of language development for emerging bilingual/bicultural individuals in K–12 educational settings.

#### EDUC6561 6 Credits

##### Instructional Theory and Practice

Practicum consists of six to seven weeks school-teaching experience preceded by orientation and classroom observations. The practicum experience prepares teaching candidates in state-prescribed studies under supervision of a master-teacher and professional support team members for provisional teaching certification.  
*Spring, Summer*

#### EDUC6562 3 Credits

##### Standards-based Curriculum and Methodology: Secondary English

This course integrates research into effective teaching of English language and literature. Students learn different instructional strategies to enhance the teaching of English/language arts. State and national standards such as the New

Jersey Student Learning Standards will be addressed through curriculum development and assessment.

## EDUC6563

3 Credits

### **Standards-based Curriculum and Methodology: World Languages**

Standards-based instructional and assessment practices are introduced in this course utilizing the New Jersey Student Learning Standards and the Standards for Foreign Language Learning for the 21st Century (ACTFL Standards). The effective implementation of these standards will be demonstrated through the development of model lessons, unit plans and authentic assessment practices including use of rubrics and student portfolios.

## EDUC6565

3 Credits

### **Second Language Acquisition: Methods and Curriculum**

This course is designed to offer the student the opportunity to explore various methods, techniques and approaches to the teaching of a second language. Knowledge derived from the linguistic sciences about the nature of language and how it is learned will serve as the criteria of evaluation when examining various approaches. The information acquired from this endeavor will serve as a foundation for using a method that is eclectic in nature and considers both the cognitive and affective needs of second-language learners.

## EDUC6566

3 Credits

### **Standards-based Curriculum and Methodology: Secondary Science**

This course integrates research into effective teaching of science. Students learn different instructional strategies to enhance the teaching of science. State and national standards such as the New Jersey Student Learning Standards and the Next Generation Science Standards will be addressed through curriculum development and assessment.

## EDUC6568

3 Credits

### **Standards-based Curriculum and Methodology: Secondary Social Studies**

This course integrates research into effective teaching of social studies. Students learn different instructional strategies to enhance the teaching of social studies. State and national standards such as the New Jersey Student Learning Standards will be addressed through curriculum development and assessment.

## EDUC6569

3 Credits

### **Standards-based Curriculum and Methodology: Visual Arts**

This course integrates recent research into effective teaching practices in the visual arts. Students learn different instructional strategies to enhance the teaching of art for grade levels K–12. National and state standards such as the New Jersey Student Learning Standards will be addressed through curriculum development and assessment. Students will develop visual-art learning units with relevant teaching-support materials organized around specific art concepts and modes of inquiry, produce assessment instruments for the evaluation of art programs and student art products and engage in the review and analysis of art-education literature for research.

## EDUC6570

3 Credits

### **Standards-based Curriculum and Methodology: Secondary Mathematics**

This course integrates research into effective teaching of mathematics. Students learn different instructional strategies to enhance the teaching of mathematics. State and national standards such as the New Jersey Student Learning Standards will be addressed through curriculum development and assessment.

## EDUC6571

2 Credits

### **Clinical Teaching Internship and Seminar I**

First-semester teaching interns undergo clinical supervision by a college faculty member with the support of a school-based professional support team. Observations are followed by critique sessions. Consequently, first-semester teachers attend three seminars where problems arising in professional practice are addressed. Prerequisite: EDUC6561 Instructional Theory and Practice.

## EDUC6572

2 Credits

### **Clinical Teaching Internship and Seminar II**

Second-semester teaching interns undergo clinical supervision by a college faculty member with the support of a school-based professional support team. Observations are followed by critique sessions. Concurrently, the second-semester teachers attend three seminars where problems arising in professional practice are addressed. Prerequisite: EDUC6561 Instructional Theory and Practice.

## EDUC6575

3 Credits

### **Comparative Phonology for Language Teachers**

This course focuses on the phonology of American English in comparison with European, Asian and other languages. Students will examine implications and methodologies for teaching pronunciation. Initial reading/writing instruction in a second/foreign language is addressed through the introduction of the transfer from phoneme to grapheme.

## EDUC6574

3 Credits

### **Applied Linguistics for Language Teachers**

This course examines knowledge derived from linguistic sciences about the nature of language, how it is acquired and the practical application of linguistic knowledge to the teaching of a second language. The lexicon and grammar of American English in comparison with other languages and resultant implications for teaching both in a second/foreign language are the foci of this course.

## EDUC6575

6 Credits

### **Apprenticeship Teaching**

This full-semester student teaching experience is offered in the spring or fall following completion of field experiences and prescribed courses. This experience exposes the preservice teacher to the functions of teaching under the mentorship of a cooperating teacher and clinical supervision of a School of Education faculty member. The responsibilities of the student teacher increase during the apprenticeship until she/he is conducting the class with full teaching responsibilities. Note: Students must submit passing score on PRAXIS exam prior to registration.

## EDUC6576

2 Credits

### **Second Language Acquisition: Internship I**

First-year teachers undergo clinical supervision by a college faculty member with the support of a school-based professional team. Each observation is followed by a post-observation critique session. Concurrently, the first-year teachers attend three seminars each semester where problems arising in professional practice are addressed. Prerequisite: EDUC6561 Instructional Theory and Practice.

## EDUC6577

1–2 Credits

### **Second Language Acquisition: Internship II**

First-year teachers undergo clinical supervision by a college faculty member with the support of a school-based professional team. Each observation is followed by a post-observation critique session. Concurrently, the first-year teachers

# Education • Course Offerings

---

attend three seminars each semester where problems arising in professional practice are addressed. Prerequisite: EDUC6561 Instructional Theory and Practice.

## EDUC6578

4 Credits

### Assistantship

Assistant teachers are placed in the classroom under the supervision of a mentor teacher for six to eight weeks. They also undergo clinical supervision by a University faculty member. Each observation is followed by a post-observation critique session. Concurrently, teaching assistants attend three seminars each semester where problems arising in professional practice are addressed. Prerequisite: EDUC6561 Instructional Theory and Practice.

## EDUC6580

3 Credits

### Discourse Analysis for Language Teachers

This course surveys the applications of discourse analysis to the field of education. Students are apprenticed into the concepts and techniques of discourse analysis through a combination of assigned readings, in-class discussions and practical-application assignments. The course is designed primarily with current and future language educators in mind but is of value to all education-related fields.

## EDUC6582

3 Credits

### Distance Learning: Children's Literature

This online course emphasizes how to use children's literature in the classroom. Teachers learn how to integrate children's literature into the curriculum of all subjects and across all grade levels. Students learn how to use technology to enrich the study of children's literature.

## EDUC6585

2 Credits

### Advanced Clinical Practice

Guided observation and clinical experience of 125 hours in an educational setting. Program assessment and design. Supervised practical experiences in the classroom, increasing in intensity and duration. Orientation to the certification-required portfolio to be submitted at the completion of student teaching and required videotaping of classroom experiences. Intense preparation and analysis of acceptable lesson planning, instruction and engagement of students and assessment of student learning.

## EDUC6584

3 Credits

### Computers as a Teacher's Aid: Curriculum and Instruction

The computer is treated as a foundational tool integrated into a teacher's daily professional work and classroom activities. Topics covered

include the authoring and use of standard software packages and the initiation and development of a professional electronic portfolio site for use both in current graduate studies and professional school-based activities.

## EDUC6586

1 Credit

### Neurodevelopmental/Medical Conditions Associated with Learning Disabilities

The course will cover medical conditions such as low-birth weight, premature birth, Attention Deficit Hyperactivity Disorder (ADHD), lead poisoning, etc., that affect learning in the school-age child. Prerequisite: EDUC6740 Introduction to Students with Disabilities and Autistic Spectrum Disorders.

## EDUC6587

1 Credit

### Smartboards in the Classroom

This course will provide the basics on how to use the Smartboard in the classroom. It will cover how to access resources to increase interactivity in the classroom and utilize the tools available to enhance the curriculum.

## EDUC6590

1 Credit

### Teaching and Learning with iPad

The aim of this course is to help students understand and acquire the skills to use the iPad mobile device in an educational setting. An emphasis on hands-on activities and the sharing of relevant strategies will be the focus of this course. Students will be guided through the use of a range of applications considered essential for educators. Strategies focus on creativity, writing, image-processing, mind-mapping, virtual whiteboards, productivity and organization.

## EDUC6591

1 Credit

### Web 2.0 Tools and Educational Applications

The course will explore current Web 2.0 community, presentation, formative assessment and multimedia tools and their applications in the classroom.

## EDUC6592

1 Credit

### Cloud Computing and Social Media

This course will cover what cloud computing is and explore free applications such as Google tools. It will explore how social media can be used in the classroom.

## EDUC6600

3 Credits

### Technology in the Science Classroom

Use of computers and technology as applied to the operation of an elementary science classroom. Includes interfacing for data sensing with probes, selected software and hardware accessories.

## EDUC6601

3 Credits

### Multisensory Reading I

An introduction to teaching beginning reading, spelling and handwriting (up to fourth-grade level), focusing on the Orton-Gillingham approach to teaching basic language skills. Teachers plan, present and evaluate instructional sequences for students with dyslexia. Consists of lectures followed by supervised practicum in which teachers provide individual Orton-Gillingham-based instruction to students with dyslexia. Also includes group seminars and individual conferences between teacher and practicum supervisor.

*Fall, Spring, Summer*

## EDUC6602

3 Credits

### Multisensory Reading II

Continuation of training in the Orton-Gillingham techniques taught in EDUC6601 Multisensory Reading I. Includes testing procedures and data collection to evaluate student growth and effectiveness of instructional approach. Consists of lectures, supervised practicum, group seminars and individual conferences as described for EDUC6601 Multisensory Reading I. Prerequisite: B+ or better grade in clinical component of EDUC6601 Multisensory Reading I.

*Fall, Spring, Summer*

## EDUC6605

3 Credits

### Foundations in Reading I

Recent research and findings in language development and literacy and their application in elementary education are the focus of this course. Literacy skills in reading and language arts across grade levels also are included.

## EDUC6606

3 Credits

### Foundations in Reading II

Research and findings in language development and literacy and applications in social studies and science in the elementary and secondary schools are the focus of this course. Literacy across the curriculum also is emphasized.

## EDUC6607

3 Credits

### Diagnosis of Reading Problems

This course includes a systematic study of the selection, administration and interpretation of formal and informal techniques and instruments used to assess phonological and phonemic awareness, word recognition, vocabulary development and reading comprehension. Students practice writing reports of reading evaluations and state-required Individual Student Improvement Plans (ISIPs). Prerequisites: EDUC6605 Foundations in Reading I and EDUC6606 Foundations in Reading II.

## EDUC6608

3 Credits

### **Correction of Reading Problems**

This course includes survey research of reading instructional approaches, programs and materials that have been proven to work with the struggling reader. Effective classroom practices as well as clinical settings, including reading recovery, will be reviewed. Emphasis is placed on interpretation of test data as bases for planning Individual Student Improvement Plans (ISIPs) including establishment of goals and objectives and selection of appropriate strategies and materials.

## EDUC6609

3 Credits

### **Supervised Practicum in Reading**

This course places teachers with a mentor/University clinical teaching supervisor in a classroom/school or University clinical reading program for 45 hours of supervised clinical experience in which the knowledge and skills from previous course work will be reinforced and extended. The reading program may be part of an after-school or summer-school program operated by a university or school. A University clinical teaching supervisor will observe the participants and provide support and mentoring. Prerequisites: EDUC6607 Diagnosis of Reading Problems and EDUC6666 Supervised Practicum in Correction of Reading Problems.

## EDUC6610

1 Credit

### **History of Multisensory Instructional Methods for Students with Learning Disabilities/Dyslexia**

A historical perspective of multisensory teaching techniques in the areas of reading, spelling and writing. Various curricula are compared and contrasted.

## EDUC6611

1 Credit

### **Advanced Language Structure**

Sessions review topics in advanced alphabetic orthography (including roots and suffixes) and methodology for teaching upper-level language skills (including error analysis). Presentation of case histories, exercises in formulating advanced lesson plans and a survey of curriculum materials are included.

## EDUC6612

1 Credit

### **Reading Comprehension**

Presents a direct, systematic, multisensory approach for teaching reading comprehension to students. Training in concepts and skills necessary for students to gather and organize information from factual, fictional and procedural types of reading materials is provided.

## EDUC6613

1 Credit

### **Written Expression**

Techniques are explored for teaching written expression in a structured format to the student with learning disabilities/dyslexia. Includes an introduction to the writing process, as well as the production of expository writing pieces and proofreading/editing skills.

## EDUC6614

1 Credit

### **Multisensory Mathematics Skills**

Presents multisensory techniques for teaching basic mathematics concepts and computation to students with learning disabilities/dyscalculia. Topics include the acquisition of basic mathematics facts, word problems, fractions, decimals and percentages.

## EDUC6615

1 Credit

### **The Computer as a Teaching Aid**

Introduces classroom and special-education teachers to the use of computers. Includes a review of commercially available software programs, criteria for evaluation and selection and methods for integrating computer software and traditional instruction. (Dyslexia Specialist program course)

## EDUC6616

3 Credits

### **Language Acquisition and Language Disorders**

An introduction to language development. The relationship of oral language to written language. The identification of language disability and language-based approaches to the remediation of literacy deficits.

## EDUC6617

1 Credit

### **Study Skills**

Techniques are reviewed for teaching students with learning disabilities/dyslexia how to study effectively for content mastery. Topics include acquisition of critical-thinking skills, vocabulary development, organization of time and materials, test-taking, memory and note-taking strategies.

## EDUC6618

1 Credit

### **Students with Learning Disabilities: Social and Emotional Needs**

Students will survey contemporary research regarding the social and emotional issues in relation to students with learning disabilities, including dyslexia. Techniques, variables and research, as well as theories supporting the development and maintenance of positive self-regard and other proactive aspects of working with students with learning disabilities are addressed.

## EDUC6619

1 Credit

### **Multisensory Approach to Teaching in the Content Areas**

Tailored to meet the needs of subject-area middle school and secondary teachers, this course emphasizes vocabulary development, comprehension and study skills as they relate to reading in English, social studies, history and science.

## EDUC6620

3 Credits

### **Introductory Course in Dyslexia**

Critical issues regarding individuals with dyslexia are explored in this course, including its definition, current research, legal rights, general classroom strategies and accommodations. Includes the study of diagnostic approaches for identifying dyslexia and related disorders. An overview and history of Orton-Gillingham as the preferred method for remediating students with dyslexia also are featured.

## EDUC6624

1-6 Credits

### **Orton-Gillingham Topics**

Study of one particular topic regarding dyslexia or one particular treatment of individuals with dyslexia using the Orton-Gillingham approach. Course may be repeated, but with different topics.

## EDUC6626

3 Credits

### **Neurophysiological Basis of Learning Problems**

Introduction to the anatomy and physiology of the human nervous system. Emphasis on sensorimotor and higher-order functions and dysfunctions basic to understanding school learning problems and the effects of exceptionalities on the atypical learner.

## EDUC6627

3 Credits

### **Orientation to School Testing**

Surveys tests used to evaluate students' performances. Includes study of test-construction criteria, methods for assessing students' progress and evaluation of teaching effectiveness.

## EDUC6631

3 Credits

### **Assessment in the Second-language Classroom**

This course provides the theoretical as well as the practical bases for the study, analysis and creation of appropriate strategies to evaluate language acquisition. Practical procedures and theoretical issues relevant to the measurement and evaluation of language proficiency will allow teachers of English as a Second Language (E.S.L.), English as a Foreign Language (E.F.L.) and World Languages to understand and apply the techniques required for the assessment of language learning in the classroom.

# Education • Course Offerings

---

EDUC6635

4 Credits

## **Clinical Practice in Language Instruction**

Field participation in a variety of language-teaching settings. Opportunity for guided observation, demonstration and micro-teaching with clinical analysis.

EDUC6636

1 Credit

## **Phonology, Reading and Spelling**

Participants will learn the sound system of English, how children's processing of the sound system governs early spelling and reading development and how phonological skills can be enhanced through direct, informed teaching.

EDUC6639

1 Credit

## **Incorporating Children's Literature into Orton-Gillingham Program**

This course will focus on how to maximize the use of literature when using an Orton-Gillingham program in grades K-8. Emphasis will be placed on 1) how to find literature that correlates with a child's level of decoding and comprehension, 2) how to look at readability levels through Orton lenses and 3) how to infuse fluency practice into appropriate literature.

EDUC6641

1 Credit

## **Orton-Gillingham for Resource Center Teaching Workshop**

Teachers will explore techniques for using the Orton-Gillingham approach in reading, spelling and handwriting instruction for individuals or small groups within the resource center or the inclusive classroom. Coordination with regular classroom curriculum also will be covered.

EDUC6643

1 Credit

## **Fluency: A Bridge to Comprehension**

This course will focus on two essential components of effective reading instruction. The theoretical basis, related strategies and critical connections between fluency and comprehension will be addressed.

EDUC6648

1-6 Credits

## **Assistive Technology for Students with Dyslexia**

Overview of strategies to provide assistive technology for students with dyslexia. Presentation of major apps, electronic tools and software for students' use in compensating for reading, writing, spelling and organizational difficulties. Hands-on experience in implementing programs and selecting appropriate strategies for individual students. The course may be repeated but with different topics.

EDUC6649

3 Credits

## **Introduction to United States Culture**

Analysis of major patterns of American culture in contrast with other cultures based on observations, readings and field research. This course is intended for international students in the Master of Arts in teaching English as a second/foreign language (TESL/TEFL) program only.

EDUC6650

3 Credits

## **Behavioral Science for Teachers: Language and Culture in the Classroom**

This course examines human culture as a general phenomenon and the human capacity for culture as the major mechanism that renders the individual capable of internalizing various types of educational messages. Students will explore the relationship between language and culture with implications for materials selection and curriculum development.

EDUC6651

3 Credits

## **Effective Reading Instruction**

An introduction to current theory, strategies and practices designed to meet the reading and language arts needs of students of varying abilities and cultural and linguistic backgrounds. Students will acquire a knowledge of techniques and materials used in the development of reading and language-arts skills.

EDUC6654

3 Credits

## **Literacy Development for Second-language Learners**

This course explores the process of acquisition of literacy skills in a second language. Reading theories and second-language acquisition theories, as well as transferability of literacy skills from L1 to L2, will be reviewed. The impact of these theories on instructional practices will be emphasized.

EDUC6658

3 Credits

## **Science, Technology and Society**

The impact of science as a way of knowing and a component of western culture and technological advancement on society. Historical and philosophical perspectives on the role of science in culture. New directions for scientific literacy, reasoning and problem-solving skills.

EDUC6660

1 Credit

## **Diagnosing Mathematics Disabilities and Strategies for Remediation**

Overview of diagnostic techniques used to diagnose mathematics disabilities in the areas of calculation, word problems and automatically of basic problems. Introduction of strategies to address weaknesses in identified areas.

EDUC6661

3 Credits

## **The Multicultural Classroom**

This course focuses on understanding how biases at the institutional, individual and societal levels impact the educational context and academic achievement of all students, and covers different teaching strategies on topics related to cultural differences with respect to race, ethnic class, gender, sexual orientation, religion and English-language learners in schools. Current topics such as the achievement gap and bullying are addressed.

EDUC6662

2 Credits

## **Behavioral Science for Teachers: The Learning Process**

Examination of the physiological bases and psychological theories of learning, including cultural, cognitive and behaviorist theories as applied to instructional and behavioral classroom management.

EDUC6666

3 Credits

## **Supervised Practicum in Correction of Reading Problems**

This 45-hour course places candidates with a collaborating teacher and a University clinical teaching supervisor in a clinical reading setting for a minimum of 30 hours of supervised clinical practicum experiences, in which the knowledge and skills from previous course work will be reinforced and extended. A University clinical supervisor will observe the candidates, interview the collaborating teacher and provide support and mentoring. Prerequisite: EDUC6607 Diagnosis of Reading Problems.

EDUC6667

3 Credits

## **A Behavioral Science: An Introduction to Multicultural Studies**

This course examines the historical and contemporary goals, assumptions and strategies of multicultural education. Through the use of critical pedagogy, students in the course will apply a multicultural analysis to historical events from the inception of the United States through the time of reconstruction to the Industrial Revolution through the Great Depression and World War II to contemporary America. Particular attention will be paid to state and federal legislation. The course is intended to prepare teachers to effectively apply theories of equity to their classroom and teaching practice by familiarizing them with the dynamics of oppression at different points in American history as well as in the different levels of contemporary American society.

EDUC6668

1 Credit

## **Understanding Asperger Syndrome**

Asperger Syndrome is a pervasive developmental disorder which is characterized by significant dif-



faculty in social interactions as well as restricted and often unusual patterns of interest. This course will provide an examination of the incidence of Asperger Syndrome (AS) among school-age children, the characteristics of students with AS, the challenges they present to educators and ways with which to assist them in the school setting.

## EDUC6669

3 Credits

### **Advanced Field Placement**

Clinical supervision by a college faculty member with the support of a school-based professional support team. Observations are followed by critique sessions. For those students enrolled in M.A. in education for certified teachers or teachers only. This course runs for two semesters.

## EDUC6671

3 Credits

### **Teachers as Researchers and Educational Leaders**

This course focuses on developing and enhancing the skills of the in-service teacher as a professional, instructional expert and educational leader. Topics include human relations, organizational behavior, effective communication, leadership development, action research, school improvement planning, curriculum development and use of technology to enhance instruction and facilitate school effectiveness.

## EDUC6672

3 Credits

### **Curriculum Development for Diverse Learners**

Students learn the principles of curriculum development and evaluation for diverse populations. Students choose specific grade levels K–12 and learn how to select and develop curricular materials that address diverse learners' needs. Students learn how to incorporate content standards such as the New Jersey Core Curriculum Content Standards and national standards into curricular materials. This course is aligned with the New Jersey Professional Standards for Teachers, and students learn how instructional staff should be trained to comply with them.

## EDUC6673

3 Credits

### **Integrating Literacy and Technology Across the Curriculum**

Techniques are examined which promote the integration of literacy and technology across the curriculum. Teachers explore the definition of literacy based on state standards and develop examples of effective technology-integration literacy lessons. Emphasis is placed on using the internet to explore and share specific instructional strategies resulting in a curriculum project presented as part of the teacher's web folio site.

## EDUC6675

3 Credits

### **Gender Issues in Education**

This course examines heterosexism and homophobia in K–12 schools. It considers the historical, legal, social and political trends that have affected schools' ability to address these issues; examines connections among heterosexism, homophobia and sexism; and explores the specific concerns of lesbian, gay and bisexual students, parents and educators in the classroom and school society.

## EDUC6676

3 Credits

### **Language, Culture and the Community**

This course will focus on the strong connection between language and culture, including non-verbal communication, humor, formal and informal language. Cultural differences related to family structures, celebrations, food, religions and educational systems will be discussed. The contributions of various cultural groups with an emphasis on the most commonly taught languages in grades K–12 will be incorporated in the course. Further emphasis will be placed on the ways culture can be introduced in the world-language class and how members of the community representing these cultures can enrich the classroom experience.

## EDUC6688

3 Credits

### **Integrating Technology in the Second-language Classroom**

The incorporation of technology tools in the second-language classroom will be explored and modeled in this course. Activities will include the use of multimedia equipment and materials for developing listening, speaking and viewing skills. The importance of providing comprehensible input will be part of these demonstrations. The use of the internet to access world-languages resources and research other countries and cultures and the use of email for communication with other countries also will be emphasized. Software and various multimedia applications designed to enhance world-language instruction will be reviewed and explored.

## EDUC6694

3 Credits

### **Introduction to Autism Spectrum Disorders**

This course will present a comprehensive overview of the characteristics of children and adults on the autism spectrum, including autism disorders, Asperger Syndrome (disorder) and Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS). Through study and project-based learning, students will compare/contrast the accepted methodologies used to support and instruct children and adults with autism.

## EDUC6701

3 Credits

### **Leadership in Learning Community and School**

Students will study the theoretical and conceptual basis of organizational leadership, with emphasis placed on contemporary theories and applications for successful leaders. Students will examine the roles of school leaders and what they must think about and be able to do to be effective under conditions of change. Emphasis will be placed on self-reflection and analysis of personal strengths and weaknesses as a future school leader.

## EDUC6702

3 Credits

### **Curriculum and Instruction: Theory and Practice**

Students will study and analyze the historic and philosophic roots of contemporary curriculum theory and development. New Jersey Core Curriculum Content Standards and alignment will be addressed in this course, and the implication on New Jersey Administrative Code requirements on program, assessment and graduation requirements.

## EDUC6703

3 Credits

### **Supervision of Instruction: Personnel and Evaluation**

Students will study and analyze the various models of supervision and evaluation with a special emphasis on the development of the skills necessary to promote effective instruction in the classroom. Formative and summative staff evaluation strategies, as well as effective coaching and mentoring techniques necessary for success in a diverse school community, will be investigated. The implication of the New Jersey Administrative Code requirements on professional behavior, student growth objectives, student growth percentiles, PARCC testing and school-wide improvement of program and state assessment of pupil performance will be reviewed.

## EDUC6704

3 Credits

### **Change: Curriculum Development and Program Improvement**

Students will examine current research on educational change and collaborative strategies for increasing communication and engaging stakeholders in the change process. A primary focus of the course is to provide students with the skills needed in assessing the school culture; developing a vision and plan for school improvement. The course will focus on several change models and strategies, strategic planning and the communication of the change process within the learning community.

# Education • Course Offerings

## EDUC6706

3 Credits

### **Advanced Leadership Seminar**

The seminar is designed as a problem-based course that focuses on current educational problems that incorporate the behaviors informed by the Interstate School Leaders Licensure Consortium (ISLLC) Standards and New Jersey Professional Standards for School Leaders (NJPSSL). Students will develop skills related to building leadership capacity in themselves and others by working in professional work groups focused on finding solutions to educational problems that have no defined solution set. Prerequisites: EDUC6701 Leadership in Learning Community and School, EDUC6702 Curriculum and Instruction: Theory and Practice, EDUC6703 Supervision of Instruction: Personnel and Evaluation and EDUC6704 Change: Curriculum Development and Program Improvement.

## EDUC6715

1 Credit

### **Updating LDTC Diagnostic Skills**

This course will focus on an introduction of recently updated standardized tests frequently used by learning disability teacher consultants (LDTCs). Emphasis will be placed on administration, interpretation and inclusion of results into report writing. Prerequisites: EDUC7623 Diagnosis of Learning Disabilities and EDUC7624 Correction of Learning Disabilities.

## EDUC6716

3 Credits

### **School Finance, Facilities and Scheduling**

This course will focus on the principal as an instructional leader and manager of the educational enterprise. The course curriculum is structured to assist future school leaders in acquiring the knowledge and skills necessary to ensure that the management of the school educational program, facility and its resources produces a safe, efficient and effective learning environment for the success of all students. The concepts learned during this course will be applied during the concurrent full-year, field-based internship.

## EDUC6717

3 Credits

### **School Law**

This course is structured to assist future school leaders in acquiring the knowledge and skills necessary to ensure that the school educational program, facility and its resources produce a safe, efficient and effective learning environment for the success of all students. The course focuses on law related to education, legislation and court decisions that may impact the rights and responsibilities of administrators, teachers, students and parents. Specific attention is given to New Jersey statutes, administrative code and administrative decisions affecting the school community.

## EDUC6718

3 Credits

### **Curriculum/Program Evaluation and Student Assessment**

This course focuses on basic measurement concepts, the role of measurement in education, construction of teacher-made tests and other classroom assessments, interpretation of standardized tests and fundamental descriptive statistics for evaluating student performance, school-improvement efforts and various designs for process and outcome evaluation of curricula. In addition, the course will provide a comprehensive understanding of the purposes and the logic of various testing programs, including classroom testing and state and national testing programs. Data analysis of New Jersey State-wide Tests that measure student performance will be used to assist in developing skills in data-based decision making that lead to the construction of school improvement plans and determining school goals for professional development and instructional emphasis.

## EDUC6720

3–6 Credits

### **Educational Leadership Field-based Internship I**

This first phase of a school-based internship is part of a 9-credit course sequence focusing on school leadership and management activities with an experienced practitioner in school leadership. The participants in the internship program enroll in three consecutive semesters (summer, fall and spring) during the second year of the M.A. in educational leadership program to complete 120 hours of field experience with an assigned mentor and adviser.

## EDUC6721

3 Credits

### **Educational Leadership Field-based Internship II**

This second course in a sequence of three courses dedicated to the field-based internship is part of a 9-credit course sequence focusing on school leadership and management activities with an experienced practitioner in school leadership. The participants in the internship program enroll in three consecutive semesters (summer, fall and spring) during the second year of the M.A. in educational leadership program. Students will have an opportunity to apply their learning in an authentic school setting while working with a current school administrator who also serves as a mentor for the educational leadership program. Prerequisite: EDUC6720 Educational Leadership Field-based Internship I.

## EDUC6722

3 Credits

### **Educational Leadership Field-based Internship III**

This third course in a sequence of three courses dedicated to the field-based internship is part of a 9-credit course sequence focusing on school

leadership and management activities with an experienced practitioner in school leadership. The participants in the internship program enroll in three consecutive semesters (summer, fall and spring) during the second year of the M.A. in educational leadership program. Students will have an opportunity to apply their learning in an authentic school setting while working with a current school administrator who also serves as a mentor for the educational leadership program. Prerequisites: EDUC6720 Educational Leadership Field-based Internship I and EDUC6721 Educational Leadership Field-based Internship II.

## EDUC6725

3 Credits

### **Final Project: School-based Research**

This course emphasizes the supervisor's and principal's roles in conducting school-based research as a means of school improvement and professional development. Research-based strategies will be used to develop an instructional plan focused on school improvement and student achievement.

## EDUC6732

2 Credits

### **Project Read: Phonics**

Systematic phonics using multisensory strategies. The sequence of concepts and skills from awareness, sound/symbol correspondence, syllabication and, ultimately, context. Designed for primary-level students but basic for any age person at a beginning level.

## EDUC6733

3 Credits

### **The Oral Language Reading Connection**

An examination of the nature of oral-language problems and their impact on upper-level reading skills. Differentiating instructional strategies to align with oral-language profiles of students with reading disabilities.

## EDUC6735

3 Credits

### **Orton-Gillingham Resources for Administrators**

Understanding dyslexia and the characteristics of students who benefit from the Orton-Gillingham approach. Content and strategies of Orton-Gillingham lessons. Administrative procedures including scheduling, program and teacher evaluation and creating professional development. Serves as a resource for teachers and parents.

## EDUC6736

0–2 Credits

### **Literacy Topics**

Study of literacy topic(s). The course can be taken again but specific topics may not be repeated.

EDUC6737

1 Credit

### **Phonemic Awareness**

Theoretical framework and research. Developmental stages and related tasks. Assessment as a basis for individualized instruction. Guidelines for selection of published materials and teacher-made materials.

EDUC6740

3 Credits

### **Introduction to Students with Disabilities and Autistic Spectrum Disorders**

Overview of normal growth and development as a basis to identify developmental delays and learning differences. Characteristics of different disabilities and their effects on how children learn. Review of federal, state and local regulations and their effects on local policies, procedures and placement. Transition planning, resources and assistive technology to enhance the performance of students with disabilities and autistic spectrum disorders.

EDUC6741

1 Credit

### **Response to Intervention (RTI): Strategies for Struggling Readers**

Presentation of screenings/assessments, strategies and program options to enhance and monitor reading achievement within the multi-tier RTI model.

EDUC6742

2 Credits

### **Innovations in Effective Teaching in Special Education**

An analysis of the literature on studies of teacher effectiveness and their implications for teaching students with learning disabilities. Methods for reading and interpreting research reports in educational journals are covered.

EDUC6743

3 Credits

### **Introduction to Students with Disabilities in School and Community**

Introduction to the student with disabilities. Overview of normal growth and development as a basis to identify developmental delays and learning differences. Characteristics of different disabilities and their effects on how children learn. Review of federal, state and local regulations and their effect on local policies, procedures and placement. Transition planning, resources and assistive technology to enhance the performance of students with disabilities.

EDUC6744

3 Credits

### **Foundations: Historical, Philosophical and Legal Issues Related to Disabilities**

Foundations of special-education practice. Learning environments that are culturally

responsive. Ethical responsibility of special educators to advocate for the highest quality of life potential for students with exceptional needs. Special educators' role in the healing process.

EDUC6745

3 Credits

### **Principles and Practices of Collaboration and Inclusion**

This course addresses the prerequisite knowledge and skill set necessary to create collaborative teaching/learning environments essential for inclusion. Students will examine effective teaching practices for whole-class instruction and the adaptations and modification necessary to meet the needs of students with high- and low-incidence disabilities. Students will learn strategies that prompt acquisition and application of core curriculum competencies.

EDUC6746

3 Credits

### **Learning Environment and Effective Management of Teaching and Learning**

Review of psychological, social and emotional characteristics of individuals with learning disabilities. Exploration of teacher attitudes and behaviors that influence behavior of students with diverse learning needs. Classroom management theories and strategies for individuals with learning disabilities. Collection and interpretation of performance data to develop behavior management plans for individuals with learning disabilities.

EDUC6747

3 Credits

### **Multisensory Reading Instruction for Students with Reading Disabilities**

Causes, characteristics and intervention for students with reading disabilities with special emphasis on students with dyslexia. Strategies and related materials for assessing and instructing students in phonological awareness, word attack, word recognition, fluency, spelling, vocabulary and comprehension.

EDUC6749

1 Credit

### **Syntax: Its Role in Writing and Comprehension**

Syntax, the arrangement of words within a sentence, plays an important role in a student's reading comprehension and written expression. Syntax and various ways to teach it will be covered in this course.

EDUC6750

3 Credits

### **Teaching in an Inclusive Classroom**

The focus of this course will include identifying differing ways of learning of individuals with exceptional learning needs including those from culturally diverse backgrounds. Strategies for addressing these differences, methods for ensuring

individual academic success in various settings and the use of research-supported methods for academic and nonacademic instruction of individuals with learning disabilities will be addressed. Topics will include collaborating with families, professional and community agencies in culturally responsive ways; assistive technology; and language issues impacting student learning.

EDUC6752

1 Credit

### **K-4 Literature for Struggling Readers**

The focus of this course will include finding appropriate and exciting literature for the struggling reader, using picture books effectively for listening comprehension and vocabulary instruction and analyzing traits of literature beneficial to children with dyslexia.

EDUC6753

2 Credits

### **Written Expression Practicum**

Supervised practice teaching written expression and syntax to individual students and small groups. Includes experience with managing peer revising, sharing written pieces and conducting brainstorming sessions for the struggling writer.

EDUC6772

1 Credit

### **Technology to Support Reading and Writing Instruction**

This course explores assistive technology tools that enhance reading and writing instruction, for compensation or remediation. It highlights understanding of devices such as iPads, Chromebooks, laptops, Google Apps for Education, iOS apps and effective web tools.

EDUC6777

3 Credits

### **English Language Education: Grammar for Teachers of English and E.S.L.**

This course examines grammatical theories underlying the teaching of English to native and non-native English speakers. All language skills — listening, speaking, reading and writing — are addressed.

EDUC6778

3 Credits

### **Methods ELL Content Areas**

This course focuses on educational approaches that synthesize language-learning objectives with content-area objectives. Informed by the findings of current research, the course surveys the variety of ways K-12 programs tie together language and content instruction. Course assignments are designed to provide students with practical training in the design and implementation of lesson plans that integrate both language and content objectives. Special attention is given to the SIOP (Sheltered Instruction Observation Protocol) and CALLA (Cognitive

# Education • Course Offerings

---

Academic Language Learning Approach) models. This course is appropriate for all students in education programs, regardless of their area of intended certification.

**EDUC6780**

**1 Credit**

### **Using Technology to Enhance Learning for Students with Dyslexia**

Overview and application of new technologies and discussion of their applications for students with dyslexia. Discussion of technological tools to permit nonprint alternatives for student learning. Demonstration of tools to help students make web research more efficient. Approaches to evaluating website content.

**EDUC6784**

**1 Credit**

### **Developing Metacognitive Skills**

Presents a standard format of instruction to help students develop reading-comprehension strategies. Demonstrates listening comprehension, transitional metacognition and guided metacognition lessons. Provides predesigned lessons that extend throughout the curriculum.

**EDUC6792**

**3 Credits**

### **Assistive Technology for the Inclusive Classroom**

This course introduces teacher candidates to technologies that enhance the learning of all students. Assistive technology will be explored to increase access to the general-education classroom. Strategies and technologies to address diverse learning needs will be introduced.

**EDUC6793**

**3 Credits**

### **Education of Students with Moderate to Severe Disabilities**

This course examines major historical trends, legal mandates and current philosophical issues influencing the education of students with moderate/severe disabilities. Students will develop knowledge regarding the learning, communication, behavioral, social and physical characteristics of these students and the implications of these characteristics on program planning. Evidence-based practices for modifying curriculum, aligning instruction to the general education curriculum, designing and supporting instruction in general education programs and facilitating social skill development will be emphasized. Students will develop the knowledge and skills related to the use of augmentative and assistive technology, community-based instruction, positive-behavior supports, transition planning and home-school collaboration.

**EDUC6795**

**3 Credits**

### **Teaching Strategies for the Secondary/Post-secondary Students in Learning Disabilities**

Training to instruct secondary and post-secondary students in the use of learning strategies. Instruction on integrating technology-based accommodations into content-based teaching. Includes a hands-on practicum with college-bound students with learning disabilities.

**EDUC6797**

**3 Credits**

### **Multisensory Mathematics Instruction for Students with Disabilities**

Causes, characteristics and intervention for students with mathematics disabilities. Strategies and instructional materials for assessing and instructing students in calculations, word problems and fluency.

**EDUC6804**

**3 Credits**

### **Integrating Science/Mathematics/Technology in the Classroom**

Utilizing a project-based approach, preservice and in-service teachers will become familiar with an integrated approach for the delivery of science and mathematics using technology tools. In-depth understanding of the appropriate use of technology (i.e., MBL[s], sensors and probes, robotics, LEGO/LOGO) in and out of a classroom setting to deliver science and mathematics content aligned with New Jersey Core Curriculum Content Standards (NJCCCS).

**EDUC6806**

**3 Credits**

### **Language Development Through Mathematics/Science**

Student-centered mathematics and science instruction can be harnessed to enhance first- and second-language acquisition on the part of language minority students. Underlying theory of language acquisition will be reviewed along with a presentation of methodologies for teaching language through mathematics and science. Students will be called upon to apply theory and strategies learned to the production of instructional resources and experiences that encompass course teachings.

**EDUC6810**

**3 Credits**

### **Schools, Communities and Substance Abuse**

One of eight courses required for substance abuse coordinator certification, this course addresses curriculum issues, models of implementation for programs to prevent substance abuse, school policies and methods of implementing effective programs as well as historical context from which current mandates have arisen.

**EDUC6818**

**3 Credits**

### **Language Development and Literacy I**

Recent research and findings in language development and literacy and its application in elementary education will be the focus of this course. Literacy skills in reading and language arts across grade levels for students with varying abilities and cultural and linguistic backgrounds will be included.

**EDUC6819**

**3 Credits**

### **Language Development and Literacy II**

Recent research and findings in language development and literacy and applications in social studies and science in the elementary school will be the focus of this course. Literacy across the curriculum will be emphasized.

**EDUC6820**

**3 Credits**

### **Problem-based Strategies for Elementary Mathematics**

Recent findings in critical thinking, quantitative reasoning and problem solving as they apply to all elementary subjects and grades is the focus of course content. Special emphasis is given to mathematical problem solving using manipulative materials.

**EDUC6824**

**1 Credit**

### **Teaching Laboratory and Field Experience I**

Guided observation and clinical analysis in an education setting. Program assessment and design. Supervised practical experiences in the classroom, increasing in intensity and duration.

**EDUC6825**

**2 Credits**

### **Apprenticeship Teaching Seminar**

The seminar will provide an opportunity to review current theories and practices in education as they directly relate to the students' teaching experiences. This course is taken as a corequisite with EDUC6575 Apprenticeship Teaching. Corequisite: EDUC6575 Apprenticeship Teaching.

**EDUC6827**

**1 Credit**

### **Field Project Seminar**

Seminar concentrating on observations and experiences in the field. Emphasis on adapting theory to classroom practice with various age groups.

**EDUC6828**

**1 Credit**

### **Teaching Laboratory and Field Experience II**

Guided observation and clinical analysis in an educational setting. Program assessment and

# Education • Course Offerings

design. Supervised practical experiences in the classroom, increasing in intensity and duration. Prerequisite: EDUC6824 Teaching Laboratory and Field Experience I.

## EDUC6829

1 Credit

### Teaching Laboratory and Field Experience III

Guided observation and clinical analysis in educational settings. Program assessment and design. Supervised practical experiences in the classroom, increasing in intensity and duration. Prerequisite: EDUC6828 Teaching Laboratory and Field Experience II.

## EDUC6835

3 Credits

### Effective Teaching and Effective Schools

Students will acquire and demonstrate skills in effective teaching for students with varying abilities and cultural and linguistic backgrounds. Essential skills as identified by the New Jersey Department of Education for beginning teachers will be emphasized. Presentations of research findings, demonstrations of essential teaching skills by faculty, microteaching, peer coaching and audiovisual instructional materials will be used to impart skills. Students also will acquire a thorough knowledge of effective school management and operations that relate to successful classroom instruction.

## EDUC6845

1 Credit

### Understanding IQ Testing

This course for teachers, reading specialists and learning consultants will provide a comprehensive review of the Wechsler Intelligence Scales as a basis for understanding diagnosis, remediation and strategy instruction for students with learning disabilities, particularly students with dyslexia.

## EDUC6849

1-3 Credits

### Advanced Special Project

Students are supervised while working with children in the field, using materials and methods studied in the academic section of the courses in diagnosis and correction of learning disabilities and remediation in basic school subjects. Each credit hour represents 30 hours of fieldwork.

## EDUC6851

3 Credits

### Child Development from Birth to Age 8

This course is designed to foster the understanding of the development and learning of children from birth through age eight. It examines the current information concerning the development of the child through the various stages of childhood. Educators will gain knowledge based

on the growth, development and learning of children from birth through eight years old. The class will explore the crucial role that communities, families and teachers play in the lives of young children. Students will engage in observations of children at various ages to gain a deeper knowledge of the integration of theory of child development into practice.

## EDUC6852

4 Credits

### P-3 Curriculum and Assessment

This course examines the current literature on developmentally appropriate curriculum, classroom management and assessment for the Pre-K through third-grade classrooms.

## EDUC6853

3 Credits

### Family and Community in Education

This course examines the current research on parent, school and community influences on children's lives. It addresses effective family-engagement activities in classrooms, schools and communities. Educators will gain more knowledge and skills to work collaboratively to work with families. Contemporary issues of bullying, diverse family lifestyles, social media and children with differing abilities will be explored.

## EDUC6854

3 Credits

### Child and Adolescent Development

This course is designed to foster the understanding of the development and learning of children from birth through adolescence. It examines the current information concerning the development of the child through the various stages of childhood and adolescence. The class will explore the crucial role that communities, families and teachers play in the lives of children. Students will engage in observations of children at various ages to gain a deeper knowledge of the integration of theory of child development into practice.

## EDUC6862

1 Credit

### Project Read: Reading Comprehension (Report Form)

This course presents the Report Form section of the reading comprehension strand of the Project Read program. It teaches students how to collect, organize and analyze information from expository text (report form).

## EDUC6864

1 Credit

### The Montessori Approach to Learning

Overview of Montessori methods for teaching oral and written language, as well as mathematics in preschool through grade 12.

## EDUC6870

3 Credits

### Standards-based Strategy: Elementary Science

In-depth program on teaching science to elementary school children through a hands-on, process-oriented and problem-solving approach. Lesson design, management of the students and materials, safety and cross-curricular teaching are integral to the instruction activities in the life and physical sciences.

## EDUC6871

3 Credits

### Seminar: Practice of Elementary Science Education

Analysis of the design and construction of instructional units; application of research in cooperative learning, learning styles, effective teaching and peer coaching in clinical practice of elementary science.

## EDUC6880

1 Credit

### Teaching Vocabulary to Students with Learning Disabilities

Current research on vocabulary-development strategies for enhancing reading comprehension and word choice in writing for students with learning disabilities. Application for instruction in inclusion and special-education classrooms.

## EDUC6895

3 Credits

### Evaluation and Measurement in Education

This course emphasizes the use of multiple methods to assess student learning in K-12 classrooms; development and assessment of portfolios and performance-based tasks; and objective and standardized tests. Analysis of assessment information and self-/peer assessments to enhance teaching and address individual student-learning needs is integral to the course. Strategies for evaluation and grading and the use of rubrics are addressed. Emphasis is placed on standards-based instruction and assessment using the New Jersey Core Curriculum Content Standards and statewide assessments as reference points.

## EDUC6910

3 Credits

### Race, Immigration and Education in Contemporary America (1960s to the Present)

This course focuses on contemporary America (1960s to the present) through the analysis of key historical events in America such as the civil rights movement. Specifically, the course examines post-1965 immigration patterns and other current issues, events and themes related to contemporary America such as globalism and transnationalism. The reshaping of America's racial geography is explored. One of the primary objectives of this class is for students to understand that historical cohorts of different ethnic

# Education • Course Offerings

groups have parallel experiences of Americanization. From this realization can grow a greater understanding of and ability to cross American racial/ethnic lines and focus on the needs and experiences of the newest Americans, particularly in the educational context.

## EDUC6912

3 Credits

### **Sociology of Multicultural Identity Development**

This course is designed to equip educators with appropriate skills and knowledge for the effective teaching of culturally and socioeconomically different students. The course focuses on multicultural cognitive and psychosocial development as it bears on teaching and learning within different social and cultural populations (gender, race, ethnicity, sexual orientation) and contexts (homes, schools). It examines research related to the identity development of racial/ethnic minority students and to the societal and school experiences of these students. While special attention is given to ethnic and racial identity development of African-American, Latino/a and Asian-American students, identity development of Caucasian-American students will also be discussed.

## EDUC6914

3 Credits

### **Developing Multicultural Curricula**

This course is designed to help teachers better understand the school's role in the multicultural education of students and acquire the insights, understandings and skills needed to design and implement curricular and instructional strategies that reflect ethnic diversity. Topics include philosophy and principles of multicultural education; racial and cultural influences on education; the impact of teaching and learning on instruction and assessment; alternative assessment theories; and the relationship of instruction to classroom management. This course is designed to help educators identify content and materials, devise methods for incorporating multicultural content into regular K–12 social studies, language arts and humanities curricula. Prerequisite: EDUC6661 The Multicultural Classroom.

## EDUC6916

3 Credits

### **Foundations of Modern America: African-Americans**

The course briefly reviews the post-Civil War to pre-civil-rights-era history of African-Americans, with a particular focus on education; examines the goals, achievements and legacies of the modern civil rights movement; and evaluates progress and changes in African-American social, political and economic status during the last quarter of the 20th century. By applying critical thinking skills to competing views of historical and current events, students explore the impact and meaning of these developments for African-American students and their teachers.

## EDUC6918

3 Credits

### **Foundations of Modern America: Asian-Americans**

This course answers the questions: Who are Asian-Americans? What has been their role in American history? By applying critical-thinking techniques to competing views of historical and current events, the course explores issues of ethnic identity development, religion, gender and sexuality, language, Americanization and the sociopolitical climate as they affect Asian-Americans. The class will focus on second-generation Asian-Americans whose families arrived in the United States in 1965 as immigrants and refugees. The Asian-American experience and the factors affecting it — including the civil rights and women's movements, immigration patterns and policy and the current War on Terrorism — will be used to examine the role of cultural heritage in how one views oneself, one's ethnic group(s) and the dominant culture.

## EDUC6920

3 Credits

### **Foundations of Modern America: Latino/a**

This course presents a sociohistorical and cultural analysis of the diversity within Latino/a groups, particularly as represented in educational settings. In this context, the class examines global, political, economic and social changes in the 20th century, including rapid population growth, increasing urbanization and globalization. Applying critical thinking skills and historical analysis, the class explores how all these factors affect the goals, achievements and legacies of Latinos/as in the United States today. This course will prepare educators to respond to the diversity within Latino/a groups by developing an awareness of the relationships among different Latino/a groups — including the different demographics, linguistic factors and sociological perspectives among Latinos/as.

## EDUC6921

1 Credit

### **Clinical Teaching Internship and Seminar III**

Second-year teaching candidates undergo clinical supervision by a college supervisor who is a member of a school-based professional support team. Observations are followed by critique sessions; problems arising in professional practice are addressed. Prerequisites: EDUC6571 Clinical Teaching Internship and Seminar I and EDUC6572 Clinical Teaching Internship and Seminar II.

## EDUC6922

1 Credit

### **Clinical Teaching Internship and Seminar IV**

Second-year teaching candidates undergo clinical supervision by a college supervisor who is a member of a school-based professional support

team. Observations are followed by critique sessions; problems arising in professional practice are addressed. Prerequisites: EDUC6571 Clinical Teaching Internship and Seminar I, EDUC6572 Clinical Teaching Internship and Seminar II and EDUC6921 Clinical Teaching Internship and Seminar III.

## EDUC7603

3 Credits

### **Multisensory Reading III**

Focuses on skills for teaching upper-level language skills (fourth-grade level and above) involved in teaching reading, spelling and handwriting, using the Orton-Gillingham approach. Topics include roots, prefixes and suffixes. Consists of lecture followed by supervised practicum in which teachers are assigned upper-level students with dyslexia. Group seminars and individual conferences between teacher and supervisor also are included. Prerequisite: B+ or better grade in the clinical component of EDUC6602 Multisensory Reading II. *Fall, Spring, Summer*

## EDUC7604

3 Credits

### **Multisensory Reading IV**

Continuation of training in the Orton-Gillingham techniques taught in EDUC7603 Multisensory Reading III, with continued study of upper-level language skills. Consists of lecture, supervised practicum, group seminars and individual conference between teacher and supervisor, as described in EDUC7603 Multisensory Reading III. Prerequisite: B+ or better grade in the clinical component of EDUC7603 Multisensory Reading III. *Fall, Spring, Summer*

## EDUC7620

1–2 Credits

### **Diagnosis of Dyslexia**

Advanced study of diagnosis of individuals with dyslexia. Integrates current research, theory and assessment approach. Prerequisite: New Jersey Learning Disabilities Teacher Consultant (LDTC) Certification or equivalent.

## EDUC7623

3 Credits

### **Diagnosis of Learning Disabilities**

Research on characteristics, uses, advantages and limitations of formal and informal assessment techniques and instruments used to assess educational strengths and weaknesses. Students will learn how to gather background information, select assessment measures, interpret results and practice writing learning evaluations and Individual Education Plans (IEPs) based on evaluation results. Prerequisites: EDUC6740 Introduction to Students with Disabilities or EDUC6745 Introduction to Students with Disabilities in School and Community and Autistic Spectrum Disorders and EDUC6745 Principles and Practices of Collaboration and Inclusion or

# Education • Course Offerings

EDUC6746 Learning Environment and Effective Management of Teaching and Learning.

## EDUC7624 3 Credits

### **Correction of Learning Disabilities**

Selection, adaptation and use of research-based instructional strategies and materials to plan and modify the curriculum for students with learning disabilities in remedial and replacement settings. Interpretation of formal and informal test data as the basis for planning Individualized Education Programs (IEPs), including writing goals and objectives and selecting appropriate strategies and materials to facilitate maintenance and generalization of learning across environments. Prerequisites: EDUC6740 Introduction to Students with Disabilities or EDUC6743 Introduction to Students with Disabilities in School and Community and Autistic Spectrum Disorders and EDUC6745 Principles and Practices of Collaboration and Inclusion or EDUC6746 Learning Environment and Effective Management of Teaching and Learning.

## EDUC7674

2-3 Credits

### **Master's Seminar: Research in Specialization**

This course serves as a capstone experience that extends and reinforces the teachers' knowledge, skills and competencies related to professional and educational practice through research and completion of a culminating project in their relevant area of specialization. The course reviews research methodologies and various research models. The teacher will prepare a research study on a topic/problem of his/her choice (subject to approval by an adviser) under the direction of a mentor. The teacher will be required to submit a written report and action plan in an approved format, subject to approval of the mentor in accordance with School of Education policy. (Only for M.A. in education for certified teachers students.)

## EDUC7675

2 Credits

### **Master's Seminar in Early Childhood Education**

This course reviews research methodologies in early childhood education. The student will choose a research topic and write a written report in an approved format under the guidance of a mentor. It will be a culminating research project in the area of early childhood education.

## EDUC7718

2 Credits

### **Final Project: Second Language Acquisition**

Application of linguistic and pedagogical knowledge in the development of one or two units of language study rooted in appropriate New Jersey Core Curriculum Content Standards as well as

appropriate language standards (either New Jersey English Language Proficiency Standards or Standards for Foreign Language Learning in the 21st Century) for age/grade level cited and for the target language addressed.

## EDUC7721

3 Credits

### **Philosophy of Education**

An introduction to educational philosophy, emphasizing modern theories and their origins, development and application to present problems. *Fall, Spring, Summer*

## EDUC7723

3 Credits

### **Principles of Curriculum Construction**

Emphasis on recent curriculum materials and evaluation of planning process. Procedures in supervision, design and implementation of innovative curriculum. Implications for public education of recent curriculum trends.

## EDUC7763

3 Credits

### **Human Relations and Conflict Resolution for Educators**

This course provides a theoretical and practical framework for decision making, social problem solving, conflict resolution and mediation in the classroom and school environment for both students and adults. The theoretical knowledge base emphasizes the sociological and psychological aspects of human behavior. Varied learning activities will develop skills and techniques that address preventative measures to minimize conflict and mediate conflict situations when they occur. The course emphasizes conflict-resolution strategies as an intervention, and learning experiences that promote development of character and social responsibility, productive social interactions and collaboration.

## EDUC7779

1-3 Credits

### **Computer-based Programming for Gifted Children**

This course is designed to introduce regular classroom teachers, teachers of the gifted and talented and supervisors to the use of computers in instructing gifted children. Review of existing software and techniques, planning and integration with traditional instruction.

## EDUC7782

3 Credits

### **Technology in the Reading/Writing Process**

This course examines how technology can support the reading and writing process in the classroom. Basic research in the field is covered. Word processing and software programs are examined. The impact of technology on the reading/writing process will be examined and discussed.

## EDUC7785

3 Credits

### **Telecommunications and Distance Learning**

This course examines two-way interactive television to present courses to remote locations via fiber-optic networks. Emphasis is on using this technology to deliver courses and learning techniques that increase interactivity. Distance-learning programs such as Blackboard will be introduced. Students will be asked to create a lesson using Blackboard.

## EDUC7784

3 Credits

### **Multimedia Production**

Techniques for the application of visual, audio and animation file formats to curriculum activities are explored. Teachers use a professional multimedia-authoring tool to design and author an interactive curriculum module for use in the classroom which is designed for placement and curriculum delivery within the teacher's web folio site. Prerequisite: EDUC7785 Internet for Educators.

## EDUC7785

3 Credits

### **Internet for Educators**

The internet is treated as a dynamic curriculum delivery, authoring and collaborative medium. Teachers use professional web-authoring tools to design and author the structure of a comprehensive shell for their web-based folio site. Design principles are emphasized which support regular use of the site in classroom and school activities. Prerequisite/Corequisite: EDUC6584 Computers as a Teacher's Aid: Curriculum and Instruction.

## EDUC7786

3 Credits

### **Technology in the Social Science/Humanities Classroom**

This course focuses on integrating computers and technology into the social sciences/humanities classroom. New products will be evaluated and model school districts using technology in social studies and English classrooms will be reviewed, along with strategies to use technology in the classroom. Students will create many different projects they can use in a social studies or English classroom.

## EDUC7790

3 Credits

### **Seminar in Instructional Technology**

Research and techniques in the field of instructional technology are explored in a seminar setting. Topics investigated include state and district technology plans and the implications of national policy initiatives. A research project is presented as part of the teacher's web folio site. Prerequisite: EDUC7784 Multimedia Production.

# Education • Course Offerings

---

## EDUC7795

3 Credits

### **Advanced Internet for Educators**

This is an advanced internet course which will build upon knowledge of how to design a web page using more advanced tools. It will continue to explore how the internet can be a valuable classroom resource for educators. Prerequisite: EDUC7785 Internet for Educators.  
*Fall, Spring, Summer*

## EDUC7796

3 Credits

### **Projects Based on the Web**

A major multimedia module featuring interactive content and incorporating techniques and work from the instructional technology program is authored as a capstone project for the teacher's web folio site. Prerequisite: EDUC7784 Multimedia Production.

## EDUC7797

3 Credits

### **Technology in Visual/Performing Arts**

Explores the exciting role computers can take in bringing the visual and music arts alive in the classroom. Students develop their own visual and music projects which model classroom activities that might be used to support New Jersey Core Curriculum Content Standards. No prerequisite "arts literacy" or "art background" are required. Prerequisite: EDUC6584 Computers as a Teacher's Aid: Curriculum and Instruction.

## EDUC7798

3 Credits

### **Special Topics in Instructional Technology**

Current issues related to the growing movement toward technologies which support schoolwide networking are emphasized. Topics focus on current technology trends and developing strategic plans for change and technology implementation strategies for schools and districts. A module is authored as part of the teacher's web folio site. Prerequisite: EDUC7785 Internet for Educators.

## EDUC7810

1-3 Credits

### **Advanced Special Projects: Field Experiences**

Guided observation and clinical analysis in an educational setting. Program assessment and design. May be taken with EDUC7811 Research in Curriculum Development, in preparation for EDUC7812 Final Project.

## EDUC7811

1 Credit

### **Research in Curriculum Development**

Survey of literature in curriculum followed by development of a research project in a specific discipline.

## EDUC7812

2-3 Credits

### **Final Project**

The fundamentals of educational research and the link between theory and practice are explored. Students develop a research proposal that is specific to their needs and interests as practitioners. This course explores the fundamentals of educational research, its value and the links between educational research and practice. Students will conduct a survey of the literature on a selected topic and use higher-order thinking skills to develop a research question or series of questions and research proposal. Signature of adviser required.

## EDUC7813

3 Credits

### **Applied Field Project**

Applied field project as culmination of program of study. Project to be related to elementary-, secondary- or college-level instruction.

## EDUC8609

3 Credits

### **Multisensory Reading V**

Techniques for teacher training and supervision of the Orton-Gillingham approach to instruction are offered. Students plan, present and evaluate training sessions. Includes supervision in providing instruction and feedback to individuals in training. Prerequisite: EDUC7604 Multisensory Reading IV.

## EDUC8610

3 Credits

### **Multisensory Reading VI**

Techniques for teacher training and supervision of the Orton-Gillingham approach to instruction are offered. Students plan, present and evaluate training sessions for teachers who are enrolled in EDUC7603 Multisensory Reading III and EDUC7604 Multisensory Reading IV. Includes supervision in providing instruction and feedback to individuals in training. Prerequisite: EDUC8609 Multisensory Reading V.

## EDUC8612

3 Credits

### **Advanced Orton-Gillingham Practicum I**

Focuses on provision of comprehensive instruction, including decoding, encoding, written expression, reading comprehension and study skills using multisensory strategies. Consists primarily of a supervised practicum working with students with dyslexia. Prerequisite: EDUC7604 Multisensory Reading IV.

## EDUC8613

3 Credits

### **Advanced Orton-Gillingham Practicum II**

A continuation of the training provided in EDUC8612 Advanced Orton-Gillingham Prac-

ticum I and includes training in syntax and written-expression instruction. Consists of lectures and a supervised practicum working with students with dyslexia.

## EDUC8614

3 Credits

### **Orton-Gillingham Internship**

Applied field experience in private practice, schools or clinical settings to meet hours required for the Orton-Gillingham Therapist Certificate. Instruction using the Orton-Gillingham approach is tailored to the individual/group and includes decoding, encoding, fluency, handwriting, vocabulary, comprehension, narrative and expository writing. The course includes 10 of the observations required for certification at the therapy level. Prerequisite: EDUC8612 Advanced Orton-Gillingham Practicum I and EDUC8613 Advanced Orton-Gillingham Practicum II.

## EDUC8623

3 Credits

### **Practicum in Diagnostic and Remedial Techniques I**

Students administer tests, analyze results and interview parents and teachers of children with learning problems. Includes a 45-hour supervised practicum and problem-solving seminar. Prerequisites: A B+ or better grade in EDUC7623 Diagnosis of Learning Disabilities and in EDUC7624 Correction of Learning Disabilities.

*Fall*

## EDUC8628

3 Credits

### **Practicum in Diagnostic and Remedial Techniques II**

Emphasizes the development and implementation of detailed educational plans to remediate learning problems of children. Includes a 45-hour supervised practicum and problem-solving seminar. Prerequisite: A B+ or better grade in EDUC8623 Practicum in Diagnostic and Remedial Techniques I.

*Fall or Spring*

## *French*

### FREN5101

3 Credits

#### **French I**

Conversational introduction to French. In addition, basic reading selections, including cultural material, will lead to oral and written reports.

### FREN5102

3 Credits

#### **French II**

Continuation of intensive conversation in French. French literary texts as a basis for advanced oral and written reports. French culture presented from a linguistic perspective.



# Education for Certified Teachers • Educational Leadership

---

## German

**GERM5101**

3 Credits

### German I

Conversational introduction to German. In addition, basic reading selections, including cultural material, will lead to oral and written reports.

**GERM5102**

3 Credits

### German II

Continuation of intensive conversation in German. German literary texts as a basis for advanced oral and written reports. German culture presented from a linguistic perspective.

## Mathematics

**MATH6507**

3 Credits

### World of Mathematics: Number

Investigations of numbers utilizing a physical modeling, problem-solving approach to show its development and use.

**MATH6508**

3 Credits

### World of Mathematics: Algebra

An investigation of algebra through a hands-on, process-oriented, problem-solving approach.

**MATH6509**

3 Credits

### World of Mathematics: Geometry

An investigation of the world through geometry and its application via a hands-on, process-oriented, problem-solving approach.

**MATH6512**

3 Credits

### World of Mathematics: Seminar

The practice of mathematics and the analysis of the impact of mathematics on the world in its use and understanding. Numeracy, with its many facets, will draw students to aspects of how mathematics is understood by people.

**MATH6513**

3 Credits

### World of Mathematics: Mathematics in Science

An investigation of the role of mathematics in the fields of biology, chemistry, earth science and physics with an emphasis on the meaning and interpretation of data and statistics and its relevance to the real world.

**MATH6514**

3 Credits

### World of Mathematics: Discrete Mathematics

An investigation into the deeper understanding of topics from discrete mathematics such as counting methods, graph theory, trees, net-

works, Pascal's Triangle, the binomial theorem, sequences, set theory and recursion and problem-solving techniques.

**MATH6515**

3 Credits

### World of Mathematics: Integrating Technology in Mathematics

An introduction to some of the technology used in the practice of mathematics. Topics covered include graphic calculators, computer algebra systems, mathematics on the worldwide web and other appropriate applications.

**MATH6516**

3 Credits

### World of Mathematics: Data Analysis and Probability

This course is designed to explore topics from probability and statistics tools in the problem-solving process. Investigations will center on the basics of collection, summarization and interpretation of data and the fundamental ideas of probability.

**MATH6517**

3 Credits

### World of Mathematics: Applications in the Real World

This course is designed to explore how mathematics is applied in real-world scenarios. The course will emphasize real-world problem solving using 21st-century tools and giving students a better understanding of how mathematics functions.

**MATH6600**

3 Credits

### Advanced Special Projects

Studies in the area of mathematical foundations.

**MATH6630**

0-3 Credits

### Special Topics in Mathematics Education

A study of topics of current interest in mathematics education.

## Education for Certified Teachers (M.A.)

See Education, page 115.

---

## Educational Leadership (M.A.)

See Education, page 121.

# Electrical Engineering

## Electrical Engineering (M.S.E.E.)

Electrical engineering is one of the most dynamic areas of modern technology. The graduate program in electrical engineering provides students with broad scientific knowledge, current information about technological advancement, exposure to modern mathematical techniques and the ability to formulate and meet objectives that are necessary in the successful practice of electrical engineering. Numerical analysis and computer-aided design methods are used in all courses where relevant. The courses are updated frequently to keep pace with new technological developments and to meet the needs of the industry.

**Online M.S.E.E. Option:** This program is also available through the internet with the same admission requirements, academic standards and evaluation processes as the traditional classroom program. Lecture notes are posted weekly on the program's website ([www.fdu.edu/onlinemsee](http://www.fdu.edu/onlinemsee)). Homework assignments also are provided regularly to determine student performance. Assignments may be submitted by mail, email or fax. Ongoing communications and guidance via the electronic forum, email, fax and telephone are provided by the faculty. The M.S.E.E. program can be completed entirely online or in combination with traditional classroom instruction.

The program, on-campus or online, is offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

1. A Bachelor of Science degree in electrical engineering from an accredited university. Students with a Bachelor of Science degree in science, engineering (other than electrical) or technology may be admitted if they complete undergraduate prerequisites determined by the school.
2. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if the applicant enrolls initially as a nonmatriculating student and completes 9 graduate

credits in electrical engineering with a minimum grade point ratio (GPR) of 3.00 and no grade below C or is a Fairleigh Dickinson University electrical engineering graduate with an undergraduate GPR of 3.00 or is a non-Fairleigh Dickinson University electrical engineering graduate with an undergraduate GPR of 3.50. This GRE waiver policy is only applicable to applicants who graduated from a regionally accredited college or university in the United States. (The GRE requirement also is waived for applicants who have completed a master's degree from a regionally accredited college or university in the United States.)

### 3. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

### Requirements for the Master of Science in Electrical Engineering Degree

Students must earn a total of 30 credits with a grade point ratio of at least 2.75. All courses are 3 credits.

#### Core Requirements (15 credits)

	Credits
EENG6633	
Digital Signal Processing.....	3
EENG6747	
Digital Communications.....	3
EENG7701	
Logic System Design.....	3
EENG7709	
Embedded Systems.....	3
EENG7725	
Automatic Control Systems I.....	3

#### Specialization Elective Courses (9 credits)

Select three courses from the areas of specialization shown. Any course may be selected, although it is recommended that they are in the same area.

##### Digital Signal Processing and Communications Specialization

EENG6629	
Random Processes in Communications.....	3
EENG7738	
Wireless Communication.....	3
EENG7748	
Advanced Digital Communications.....	3

	Credits
EENG7753	
Applications of Digital Signal Processing.....	3
EENG7773	
Digital Image Processing.....	3
EENG7852	
Digital Signal Processing with C and DSP Processors.....	3
<i>Computers Specialization</i>	
EENG6610	
Computer-aided Analysis and Design....	3
EENG7702	
Microprocessor Design.....	3
EENG7707	
Neural Networks and Fuzzy Logic Systems.....	3
EENG7737	
Computer Communication Networks....	3
EENG7773	
Digital Image Processing.....	3
<i>Devices and Systems Specialization</i>	
EENG6601	
Linear Systems I.....	3
EENG6610	
Computer-aided Analysis and Design....	3
EENG7706	
Robotics Engineering.....	3
EENG7715	
Integrated Circuit Devices.....	3
EENG7755	
VLSI Systems (Digital).....	3
EENG7775	
Optics.....	3
EENG7830	
Special Topics in Electrical Engineering (Power Systems).....	3

#### Additional Elective Courses (6 credits)

Electives may include any graduate electrical engineering courses. Students have the option of registering for a 3-credit internship after completing 18 graduate credits. A 6-credit thesis option is also available in consultation with electrical engineering faculty. Courses in other technical programs such as computer science may be taken with adviser permission.

#### Telecommunications and Networking Certificate

Admissions requirements and requirements for the certificate are provided in the Computer Science section (page 98).

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the school.

## Electrical Engineering

Lee Gildart and Oswald Haase School of Computer Sciences and Engineering

EENG6601

3 Credits

### Linear Systems I

State equations, time domain solutions, matrix functions, Laplace solutions, discrete time state equations and solutions, z-transforms, z domain solutions, controllability and observability of linear systems.

EENG6602

3 Credits

### Linear Systems II

Time varying systems, sampled systems, bilateral Laplace transforms, real and complex convolution integrals, distributed parameter systems. Prerequisite: EENG6601 Linear Systems I.

EENG6606

3 Credits

### Electromagnetic Radiation and Transmission

Transmission lines, waveguides, antennas, wave propagation in anisotropic media.

EENG6610

3 Credits

### Computer-aided Analysis and Design

Study of simulation packages for engineering problem solving. Transient and steady-state analysis of passive circuits. Signal processing, circuit and system modeling. Digital circuit and system simulation.

EENG6629

3 Credits

### Random Processes in Communications

Probability and random variables. Random processes and spectral analysis. Modulation, introduction to noise and linear systems with random input.

EENG6633

3 Credits

### Digital Signal Processing

Discrete-time signal and systems, z-transform, discrete-time Fourier transform, discrete Fourier transform, fast Fourier transform, circular convolution, block convolution, basic and advanced filter structures, design of finite impulse response and infinite impulse response filters, applications, introduction to DSP processors.

EENG6747

3 Credits

### Digital Communications

Source coding, channel capacity and coding, error-detection and error-correction codes, communication signals and systems, optimum receiver, digital-signal detection and performance, digital modulation.

EENG7701

3 Credits

### Logic System Design

Review of combinational and sequential logic. Memory and programmable logic. Register transfer and computer operations. Control logic design. Computer instructions. CPU design. Input/Output and communication. Memory-management hardware. Prerequisite: undergraduate course in logic design.

EENG7702

3 Credits

### Microprocessor Design

This course covers 80x86 instruction set architecture: registers, memory organization, data types and instructions: assembly language programming, relation between high-level language and assembly language and the impact on performance and code size; application optimization and tuning, evolution of 80x86 microarchitecture from 80386 through Pentium 4: CISC, RISC, VLIW, execution pipeline and pipelining; issues affecting performance: data and control dependencies, cache, simple and complex instructions, static and dynamic scheduling, parallel instruction execution. Prerequisite: EENG7701 Logic System Design.

EENG7703

3 Credits

### Computer Applications in Engineering

Use of computers for design, analysis, control and decision. Engineering applications in circuits electronics, signal processing and numerical analysis. Use of systems interfaces such as assembly-language subroutines, memory video displays, ports and interrupts.

EENG7704

3 Credits

### Computer-based Instrumentation

Fundamentals of data acquisition and instrument control. Applied instrumentation automation. Analysis and modeling tools.

EENG7706

3 Credits

### Robotics Engineering

Introduction, robot kinematics, system modeling, control and motion, vision, manufacturing system applications.

EENG7707

3 Credits

### Neural Networks and Fuzzy Logic Systems

Structure of neural network and fuzzy logic systems with applications in signal processing, pattern recognition, process control and optimization. Topics include learning algorithms, perceptron learning rule, adaptive linear neurons, back propagation training, pattern association, competitive neural nets, fuzzy sets and algebra, fuzzy digital devices and control systems, design of fuzzy systems, neuro fuzzy systems and MATLAB simulation.

EENG7708

3 Credits

### Itanium Processor Application Architecture

A thorough study of the application software architecture of the Itanium processor. Data types, organization of data and code in memory, register set, instruction set architecture and parallel instruction dispersal mechanism. Prediction, speculation, parallel compares, software pipelining and fused floating-point multiply divide.

EENG7709

3 Credits

### Embedded Systems

Introduces system hardware and firmware design for embedded applications. Hardware Design Language (HDL)-based combinational and sequential logic design. Software modeling and embedded C-program development. Real-time operating system (RTOS) and task management. Top-down design methodology using a processor-based development platform. Prerequisite: EENG7701 Logic System Design or equivalent background.

EENG7711, EENG7712

6 Credits (3 Credits Each Semester)

### Active Circuits Analysis and Design I, II

BJT and FET circuits, transistor amplifier frequency response, wide-banding, tuned amplifiers, oscillators, feedback amplifiers, operational amplifiers, linear wave-shaping circuits, logic circuits, multivibrators, sweep circuits, synchronization.

EENG7715

3 Credits

### Integrated Circuit Devices

Solid-state physics (review); pn junctions in integrated circuits. Bipolar junction transistors. Ebers-Moll model. Field-effect transistors. Integrated-circuit fabrication.

# Electrical Engineering

---

EENG7725

3 Credits

## Automatic Control Systems I

Analysis and design of both continuous and digital control systems. Stability criteria, frequency response, state variable method. Digital filtering.

EENG7732

3 Credits

## Statistical Communication Theory

Signal detection in noise. Hypothesis testing and likelihood ratio. Estimation. Kalman filtering. Prerequisite: EENG6629 Random Processes in Communications.

EENG7734

3 Credits

## Engineering Applications in Medicine

A seminar-type course, surveying current advances in the field of biomedical engineering, including artificial organs, automated instrumentation, noninvasive diagnostic techniques such as ultrasonics and computerized axial tomography.

EENG7735

3 Credits

## Biomedical Instrumentation Design

Signal processing, transducers, microcomputers in medical instrumentation, cardiac monitors, ultrasonic scanning, medical-imaging systems, electrical safety.

EENG7736

3 Credits

## Microwave and Optical Communications

Microwave and optical sources. Modulation techniques for microwave and optical frequencies. Transmission media, atmosphere, waveguides, antennas and optical fibers. Design of microwave and optical transmitters and receivers. Prerequisite: EENG6606 Electromagnetic Radiation and Transmission.

EENG7737

3 Credits

## Computer Communication Networks

Data transmission and encoding, multiplexing, circuit and packet switching, error detection and correction, switching systems, bridging, IP, routing concepts and forwarding, quality of service, traffic shaping and policing, foundations of cryptography and network security.

EENG7738

3 Credits

## Wireless Communication

Cellular concept. System architectures. Mobile-radio propagation characteristics. Modulation techniques. Diversity. Multiple-access methods. Wireless systems and standards. Channel equalization.

EENG7748

3 Credits

## Advanced Digital Communications

Signal-space concept and signal design. Fading channels. Diversity and multiple-antenna systems. Multicarrier modulation. Spread spectrum. Multi-user communication.

EENG7749

3 Credits

## Telecommunications Engineering

Signals and channels. Modulation, transmission and noise. Analog and digital telephone systems. Transmission lines and antennas. Packet switching. Satellite and mobile communications.

EENG7753

3 Credits

## Applications of Digital Signal Processing

Applications of multirate signal processing, applications of adaptive signal processing, speech processing and coding, random signals, linear prediction and optimum filters, power spectrum estimation, DSP processor architecture, implementation of FIR, IIR and adaptive filters on a DSP processor. Prerequisite: EENG6633 Digital Signal Processing or permission of the instructor.

EENG7755

3 Credits

## VLSI Systems

Introduction to microelectronics. MOS Logic families. Memories. Logic design with ROMs. Computer-aided design, simulation and analysis.

EENG7757

3 Credits

## Coding Theory

Communication and coding. Properties of codes. Efficiency and redundancy. Fundamental algebra. Linear block codes. Binary cyclic codes. Error trapping decoding. BCH and convolutional codes.

EENG7758

3 Credits

## Introduction to Digital Transmission

Analog telecommunications networks. Digital networks. Voice digitization. Digital transmission and multiplexing. Digital switching. Network synchronization.

EENG7773

3 Credits

## Digital Image Processing

A treatment of the techniques used in image enhancement and restoration. Topics will include image modeling and geometry, image transforms, FFT, histogram modification, spatial and frequency domain filtering, image encoding. Some discussion of pattern recognition will be included.

EENG7774

3 Credits

## Optical Signal Processing

Optical techniques applied to signal processing. Particular emphasis given to Fourier processing and Fourier plane filtering. Acousto-optical signals. Prerequisite: course in linear systems or permission of the instructor.

EENG7775

3 Credits

## Optics

Maxwell's Equations and propagation of light. Diffraction, interference, polarization and birefringence. Coherent and incoherent light. Interaction of light with matter, spontaneous and stimulated emission. Optical properties of metals, semiconductors, insulators and crystals. Thin films and multilayer dielectric and metal-dielectric filters. Light sources including lasers, optical systems, electro-optical effects and fiber optics. Prerequisites: undergraduate courses in optics and electromagnetic theory.

EENG7776

3 Credits

## Lasers

The spectra of atoms, molecules, liquids and solids. Cavity modes, interaction of radiation and atoms, black body radiation. Inversion, laser threshold and conditions for laser operation. Steady state and pulsed lasers including gas, ion, solid state, semiconductor and dye lasers. Q-switching, mode locking and very short pulse operation. Application of lasers. Prerequisites: undergraduate courses in optics and electromagnetic theory or permission of the instructor.

EENG7777

3 Credits

## Infrared Optics

Optical phenomena in the infrared and far-infrared/submillimeter regions of the spectrum. Topics include infrared-radiation sources, detectors, interferometers and resolution considerations, diffraction grating and Fourier transform spectrometers. Infrared imaging, two-lens systems, optical materials, aberrations, matrix method for laser cavities and imaging systems. Radiometry, atmospheric effects, uniaxial crystals and their use as electro-optical devices. Prerequisites: undergraduate courses in optics and electromagnetic theory or permission of the instructor.

EENG7778

3 Credits

## Electro-optical Properties of Materials

Material properties of matter as needed for optical and electro-optical applications. Optical properties of dielectrics, metals and semiconductors; dispersion theory. Transmittance, reflectance and absorptance of light. Light mod-

## Electronic Commerce (M.S.)

The goal of the program is to provide graduate education that imparts a coherent body of managerial and technological knowledge centering on e-commerce. Graduates will acquire the educational background necessary to become performing e-commerce professionals, as well as obtain a solid foundation for lifelong learning necessary in a field that is certain to evolve very rapidly.

The total number of credits to be taken will be 42: of these, 18 are required courses, 12 are elective courses and 12 are prerequisites (some of which may be waived).

This program is offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

1. Graduation from an accredited college or university with a satisfactory academic record.
2. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if the applicant enrolls initially as a nonmatriculating student and completes 9 graduate credits in computer science with a minimum grade point ratio (GPR) of 3.00 and no grade below C or is a Fairleigh Dickinson University computer science graduate and has an undergraduate GPR of 3.00 or is a non-Fairleigh Dickinson University computer science graduate and has an undergraduate GPR of 3.50. This GRE-waiver policy is only applicable to applicants who graduated from a regionally accredited college or university in the United States. The GRE requirement also is waived for applicants who have completed a master's degree.

3. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

ulation; Kerr, Pockels and Faraday effects. Light sources, display devices and photodetectors. Fiber-optic waveguides and optical communication system. Prerequisites: undergraduate courses in electromagnetic theory, optics and modern physics.

### EENG7779

3 Credits

#### Optical Imaging

A discussion of the principles and techniques needed to design and analyze optical imaging systems. Topics will include paraxial system layout, stops and pupils, geometric and wavefront aberration theory and resolution of imaging system. Computer design exercises will be an integral part of the course. Prerequisite: an optics course or permission of the instructor.

### EENG7780

3 Credits

#### Current Topics in Optics

An in-depth study of one or more current topics of importance in optical research. The problem to be treated will be selected to meet the needs and interest of the class.

### EENG7803, EENG7804

6 Credits (3 Credits Each Semester)

#### Research and Thesis

A program of selected research, tailored to the interest and capabilities of the individual student, under the guidance of a school graduate adviser.

### EENG7810, EENG7811

1–3 Credits Each Semester

#### Advanced Special Projects: Electrical Engineering

Studies in an area of electrical engineering.

### EENG7820

3 Credits

#### Electrical Engineering Seminar

Research in recent developments in electrical engineering. Presentations of seminars by members of the faculty and students.

### EENG7830–EENG7870

1–3 Credits Each Semester

#### Special Topics in Electrical Engineering

Topics of current interest in electrical engineering. Consult the electrical engineering department for details.

### EENG7850

3 Credits

#### Adaptive Signal Processing

Adaptive signal processing, stationary processes and models, spectrum analysis, Wiener filters, Method of Steepest Descent, Least-Mean-Square algorithm, frequency-domain adaptive filters, adaptive FIR filters, adaptive IIR filters, applications. Prerequisite: EENG6633 Digital Signal Processing or permission of the instructor.

### EENG7851

3 Credits

#### Multirate Systems and Filter Banks

Discrete-time systems, digital filters, multirate systems, maximally decimated filter banks, paraunitary perfect reconstruction filter banks, linear phase reconstruction QMF banks, cosine modulated filter banks, Wavelet transform and its relation to multirate filter bank, applications. Prerequisite: EENG6633 Digital Signal Processing or permission of the instructor.

### EENG7852

3 Credits

#### Digital Signal Processing with C and DSP Processors

DSP programmable processors, analog-to-digital signal conversion, C language, TMS320C6X architecture, instruction set and assembly language, DSP development tools, interrupt data processing, fixed-point and floating-point processors, code optimization, circular buffering, frame processing, applications. Prerequisite: EENG6633 Digital Signal Processing or permission of the instructor.

### EENG8891

1–3 Credits

#### Internship/Work Experience

Provides on-the-job education and training in the concepts presented in the graduate electrical engineering curriculum. Students must submit, for the school's approval, a proposal from the employer detailing the nature of the intended work. Weekly contact must be maintained with the student's adviser to confirm the quality of the work experience. A report at the conclusion of the working experience is required, detailing the educational and training aspects of the job. Prerequisite: completion of 18 graduate electrical engineering credits.

*Fall, Spring, Summer*

# Electronic Commerce

## Requirements for the Master of Science Degree

1. Students must complete 42 credits in approved graduate courses. The 42 credits are distributed as follows: 12 credits of prerequisite courses, 18 credits of core requirements and 12 credits of elective courses. Students with a background in the field may reduce the number of required courses by having some or all of the prerequisite courses waived. In any event, a minimum of 30 credits will be required for the degree. Requests for waivers must be made in writing prior to the beginning of the first semester.

2. Students must earn a cumulative grade point ratio (CGPR) of at least 2.75 for the prerequisite courses, if required, or be subject to dismissal from the program. Students may take no more than 6 credits of core or elective courses before completing all of the prerequisites.

3. Students must earn a CGPR of 2.75 for the 30 credits beyond the prerequisite courses.

## Prerequisite Courses (12 credits)

The following courses will be waived for qualified students:

	Credits
ACCT5012	
Financial Accounting: End-User Applications.....	2
CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
ECON5012	
Economic Analysis.....	2
MKTG5012	
Marketing Principles.....	2

## Required Courses (18 credits)

CSCI6623	
Database Systems.....	3
CSCI6720	
Management Information Systems.....	3
CSCI6731	
Computer Networks.....	3
CSCI6758	
Electronic Commerce.....	3
CSCI6844	
Programming for the Internet.....	3
CSCI7795	
Building Electronic Commerce Systems.....	3

## E-commerce Electives (12 credits)

12 credits (four courses) are to be selected from the courses listed below. However, students have the option of registering for a 3-credit internship (which counts as one elective course) after completing 18 graduate credits.

	Credits
CSCI6638	
Operating Systems.....	3
CSCI6732	
Local Area Networks.....	3
CSCI6810	
Java and the Internet.....	3
CSCI6820	
J2EE Programming.....	3
CSCI6882	
Data Warehouse and Data Mining.....	3
CSCI7727	
Development of MIS 1: Project Management and Systems Analysis...	3
CSCI7781	
Advanced Database Systems.....	3
CSCI7791	
Information Systems for Competitive Advantage.....	3

## E-commerce Certificate

The certificate program in electronic commerce provides individuals with expertise in both the business and technological sides of e-commerce: doing business on the internet. The program participants will learn successful market structures and business models, as well as internet programming on the client and the server sides.

## Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

## Requirements for Certificate in E-commerce

18 credits (six courses) are to be chosen from the following:

CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
CSCI6735	
Client-server Computing.....	3
CSCI6758	
Electronic Commerce.....	3

	Credits
CSCI6810	
Java and the Internet.....	3
CSCI6844	
Programming for the Internet.....	3
CSCI7795	
Building Electronic Commerce Systems.....	3
Students must satisfy the prerequisites of the courses that they will take.	
<b>Academic Credits:</b> Courses with numbers 6000 or higher completed through this certificate program can be credited toward the M.S. in electronic commerce program. Other courses may be substituted with prior approval of the student's academic adviser.	

## Course Descriptions

See "Course Offerings," Computer Science, pages 98–103, and Management Information Systems, pages 166–167.

# English for Professional Success • Executive Programs • Finance • Forensic Psychology • General/Theoretical Psychology

---

## English for Professional Success

Programs in Language, Culture and Professional Advancement (PLCPA) offers courses in English for Specific Purposes (ESP) for international students and any interested domestic students. These courses are called English for Professional Success (EPS), and they have taken the place of English as a Second Language (ESL) courses since fall 2006. The EPS courses have a dual purpose: to ensure the academic as well as professional success of international students. Students will be exposed to the different genres of academic and professional discourse in their different fields of study.

### Placement Testing

While students may have achieved the TOEFL or other proof of English-proficiency score required for admission, further development in English proficiency may be necessary to support academic achievement and to ensure effective progress in the students' chosen academic program. All incoming graduate international students, unless exempt from testing, *must* be tested for placement during the orientation session. New international students should not assume that they are exempt from this English test even though they have had many years of English education in their home countries or abroad. Students will be placed into or exempted from taking an EPS course based on the result of their placement test.

Graduate students who are placed into an EPS course must take the lecture and corequisite lab and will be charged a fee upon registration. Since fall 2007 and spring 2008, respectively, graduate students who were placed into an EPS course and who matriculated into a University College: Arts • Sciences • Professional Studies or into a Silberman College of Business degree program were required to take the EPS lecture and corequisite lab. Since fall 2011, all the remaining colleges on both New Jersey campuses (Maxwell Becton College of Arts and Sciences and Anthony J. Petrocelli College of Continuing Studies) have been required to take the EPS lecture and corequisite lab.

### English for Professional Success (EPS) Courses

Students will take only one EPS course. However, to exit the program, a student must meet the learning objectives set by the curriculum. Students who fail to meet the minimum standards required to pass the course will have to repeat it. Upon exiting the program, graduate students do not need to take any other English or writing courses unless required by their own department. The credits for the EPS5109 course is not figured into the grade point ratio for graduate students but remain as a permanent record on the students' transcript.

The courses offered are:

	Credits
EPS5109, EPS5119	
English for Occupational Purposes; English for Academic Purposes ( <i>required</i> ).....	3
EPS5201	
English for Professional Success: Global Exchange — New York City as a Classroom ( <i>optional</i> ).....	3

### Course Offerings

*Courses offered fall, spring, summer and/or winter are so noted. To determine availability of courses not so designated, please check with the unit.*

#### English for Professional Success Programs in Language, Culture and Professional Advancement

EPS5109, EPS5119

3 Credits

Lecture 2.5 hours; Laboratory 1.5 hours  
**English for Occupational Purposes;**

**English for Academic Purposes**

English language for academic and professional and academic success. (*Required*)

EPS5201

3 Credits

**English for Professional Success: Global Exchange — New York City as a Classroom**

Perceived through the prisms of cultural ethnography and the significance of everyday experiences, this course will utilize New York City as a resource and a classroom to study cross-cultural understandings and misunderstandings. Students will study the multicultural aspects of the city in the context of modern life and situate their findings within a historical context. In addition to studying cross-cultural issues in context, students will be improving their academic language skills while exploring topics of interest through a variety of activities and assignments. (*Optional*)

*Experiential learning fees*

## Executive Programs

The University offers programs designed for executives in a specific field.

### Management (M.B.A.) for Executives — General Management

See page 68.

### Management (M.B.A.) for Executives — Health Sector Management

See page 68.

---

## Finance (M.B.A.)

See Business, Finance, page 63.

---

## Forensic Psychology (M.A.)

See Psychology, Forensic Psychology pages 213–215.

---

## General/Theoretical Psychology (M.A.)

See Psychology, General/Theoretical Psychology, pages 216–217.

## Health Science (M.H.S.)

The Master of Health Science (M.H.S.) is a 31–33 credit blended degree program (combining online and in-person course work) designed with four tracks allowing students unique opportunities for career development and advancement. The 33-credit Gateway to Professional Studies program can be completed in as little as one year, while all concentrations can be completed on a self-paced schedule that suits the needs of working professionals and seeking career advancement.

The first track in the M.H.S. is the **Gateway to Professional Studies (GPS)**, which has a curriculum that includes foundational courses that will provide an interdisciplinary background in biomedical sciences that can be used as an advanced preparation for professional schools including medical, dental, veterinary and pharmacy schools. In addition, there are three tracks that provide the opportunity for specialization in **clinical research administration, regulatory science and health informatics**. All students obtaining the M.H.S. will complete a health science core consisting of course work around the legal, ethical, managerial and public-health issues facing all aspects of health care.

Following completion of the core curriculum, students will have the option to pursue one of the four distinct tracks available.

The Gateway to Professional Studies track is a diverse mix of courses that will be taught online, blended and face-to-face and is intended to further prepare students for professional school. Students within this track will complete course work in biochemistry, pharmacology, communication skills, histology, anatomy, physiology and other relevant topics of study.

The other three specially designed tracks provide focused expertise in the areas of clinical research administration, regulatory science or health informatics. Students in these specialized tracks will complete the initial health science core prior to moving into more advanced and specialized course work in preparation for future careers in the pharmaceutical industry, regulatory affairs, health outcomes and health-care delivery.

Courses in these tracks will be offered in person, with options for online and

hybrid course models being introduced as appropriate.

### Summary

The growth of employment opportunities within the health sciences has been marked and dramatic over the last decade, and projections indicate exponential growth for these areas by the year 2020. Careers in this area have both high earning potential and significant opportunity for growth, making these fields desirable for students. Many organizations involved in the pharmaceutical industry, health care delivery and health science-related fields place significant value on graduates with the knowledge and skills that are translational across traditional boundaries in health care. These four M.H.S. programs equip students with tangible skills that will provide them with opportunities for employment in areas that are growing much faster than the rate at which graduates can be produced.

The Master of Health Science program in clinical research, regulatory science and health informatics also address the filling of a void that few educational institutions have addressed. Some local graduate programs provide some content within this area of study, though they are not designed to create specializations to serve particular areas of health care. The emphasis this program places on prescription-drug use, in conjunction with its affiliation with the School of Pharmacy and Health Sciences, provides unique opportunities for synergy and collaboration between the students and faculty.

The area of clinical research is a fast-growing and rapidly changing environment. Not only are there increasing needs for evidence to address the safety and efficacy of new medical technologies, but there is also a demand from payers for evidence as it relates to effectiveness and efficiency. Professional career opportunities in this area seem to be increasing at a faster rate than ever before, with the advent of new biotechnology corporations that are emerging throughout the world and existing corporations continually pushing forward into new areas of advanced research. In fact, the Bureau of Labor Statistics projects a 40 percent increase in demand for medical scientists within this area of work from the period 2008–2018. A critical need for scientists with the ability to conduct rigorous, ethically grounded and cred-

ible research will continue to grow into the future.

Regulatory-science specialists are also in high demand, and the New Jersey area has greater opportunity than ever before due to the influx of biotechnology and small-market pharmaceutical companies engaged in the development of new products. These entities are constantly in need of experts who can navigate the complex regulatory pathways toward product approval. This career, chosen as one of *CNNMoney* magazine's "Best Jobs," has a projected job-growth rate of 25 percent. Opportunities for employment will be bolstered by a master's degree in this area, as very few programs educate and train students to attain this skill set.

The area of health informatics has been identified by the Bureau of Labor Statistics as one of the 20 fastest-growing occupations in the United States. More than 35,000 new jobs are expected by 2018, and the implementation of electronic health records technology indicates that the need for specialists trained with this skill set will be even greater than these projections predict. Coupling existing health career-related experience with that of a health informatics specialist creates opportunity for students in any and every area of health care across this continuum.

These four M.H.S. tracks are described more completely on the following pages.

### Requirements for the Master of Health Science Degree

1. All graduate M.H.S. students are required to complete the program within five years. Applications for extension are subject to departmental approval.
2. For the Gateway to Professional Studies Track, students are required to maintain a minimum overall grade point ratio (GPR) of 3.00 and must not earn more than one C-level grade (C or C+) throughout graduate course work. If a student takes any course twice without achieving the equivalent of a B or higher, he/she will be subject to dismissal. Students who earn less than B- or one F grade will be subject to dismissal.
3. See specific tracks for requirements, **Gateway to Professional Studies** page 151, **regulatory science** page 151, **clinical research administration** page 152 and **health informatics** page 153.



## Gateway to Professional Studies Track

*NOTE: Enrollment in this program is currently offered only at FDU's Florham Campus in Madison, New Jersey. Applications are processed on a rolling admissions basis.*

The primary goal of this degree track will be to transform students on the cusp of admission into professional school into more competitive and prepared applicants for subsequent admission into health-profession programs. During this one-year intensive track, students will work on broadening their educational horizons within the biomedical sciences to assist with their application to professional school or to better prepare them for employment in the biomedical industry.

The M.H.S. basic track is 33 credits and is designed for students who have completed their bachelor's degree in chemistry, biochemistry, biology, pharmacy or a related field and who plan to attend professional school including medical, dental, veterinary and pharmacy.

This Gateway to Professional Studies (GPS) will enhance the student's application portfolio and will make the student more competitive for admission into professional school. If professional school is not desired, then this GPS track will provide the student with a solid background for a career in biomedical sciences, business and management, science teaching and pharmaceutical sales.

Upon completion of this track, students will be able to:

- Demonstrate an understanding of the role of values/ethics in human services and conduct themselves according to the appropriate professional ethics in the workplace and/or professional program.
- Demonstrate an understanding of the role of drug design, discovery and development in the health professions and the impact these things have on the individual and on public health.
- Demonstrate master's-level skills in professional writing and program planning and management.
- Demonstrate a strong knowledge base specifically in the areas of anatomy, physiology and biochemistry.

Graduates who achieve these objectives will be better prepared to apply to (or reapply to) professional schools with a more competitive portfolio. If subsequent admission is not desired or achieved, then this course of study could also be used as

increased general preparation and training for employment and or advancement in the pharmaceutical or biotechnology industry.

This program is offered under the auspices of the department of chemistry and pharmaceutical science, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admissions Criteria

Students in each of the specialized tracks will be considered for admission based upon the following criteria:

1. A science baccalaureate degree with a minimum science grade point ratio (GPR) of 3.00 is required in any one of the following areas: chemistry, biochemistry, biology, pharmacy or related science field.
2. Students with a bachelor's degree in a different field will have the option of showing transcript evidence of successful completion of the following course work with a grade of B or higher in each course: General Chemistry I and II and Lab, Organic Chemistry I and II and Lab, Physics I and II and Lab, Biochemistry, General Biology I and II and Lab, Anatomy and Physiology I and II and Credits Lab, Calculus I, Statistics.

3. Students are expected to have an overall undergraduate GPR of 3.00. (For the Gateway to Professional Studies track, there is some flexibility concerning the 3.00 GPR requirements. For example, students who fall below the required GPR but with above-average scores on the MCAT, DAT, PCAT or GRE may be eligible for consideration.)

#### The application package must include:

1. A completed FDU Graduate Admissions Application;
2. Official undergraduate and graduate transcripts from all colleges and universities attended;
3. Two letters of recommendation (from a professor, employer or professional in the field familiar with the student's strengths and abilities);
4. Official test scores from one of the following standardized exams: MCAT, PCAT, DAT or GRE (if applicable);
5. Personal statement; and
6. Résumé or curriculum vitae.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a conditional/probationary or nondegree basis.

## Required Courses (33 credits)

### Health Sciences Courses (Core) – GPS Track

	Credits
HSCI6200	
Ethics of Health Care Research.....	3
HSCI6250	
Psychology for the Medical Sciences.....	3
HSCI7302	
Epidemiology and Study Design	
Evaluation.....	3
HSCI7401	
Biostatistics.....	3
HSCI8806	
Project Management.....	3

### GPS Requirements

BIOL6891	
Histology.....	3
BIOL6892	
Human Physiology.....	3
BIOL6893	
Human Anatomy.....	3
CHEM6663	
Introductory Medicinal Chemistry.....	3
CHEM6685	
Pharmacology.....	3
CHEM6781	
Biochemistry.....	3
CHEM7500	
Technical and Scientific Writing.....	3

## Regulatory Science Track

The M.H.S. regulatory science track is a 31-credit program (inclusive of the 10 hours of required M.H.S. core credits) designed for preprofessional students who are seeking further specialization in regulatory sciences and for working health care professionals who are looking to enhance their standing within this growing and evolving field of study. Educational programming will provide students with a working understanding of regulatory history and theory, federal and state regulatory structures relevant to health care products and professional practices, regulatory compliance methods in the health care industry, health care product patent-licensing processes and the common research methods used in supporting product-licensing applications.

The primary goal of this degree program will be to prepare students for taking on significant roles within government agencies, pharmaceutical and biotechnological industries and health care provider organizations, as well as in other sectors of the health care industry where compliance and

# Health Science

regulation are crucial. The program will allow students to develop a comprehensive understanding of the protocols, procedures, statistical analysis, assessment or risk/benefit, documentation and legal and ethical concerns that play a critical role in the day-to-day responsibilities of the field.

Upon completion of this program, students will be able to:

- Demonstrate the constituent elements of federal and state regulations of health-care delivery and manufacture and distribution of pharmaceuticals and biologics in the U.S.

- Compare and contrast the governmental regulatory approaches for manufacture and distribution of pharmaceuticals and biologics in the U.S., Canada, Europe, South America and Asia.

- Generate statistical analyses and reports acceptable to governmental regulatory agencies in the U.S., Canada and Europe.

- Evaluate regulatory applications for new products or professional practices against applicable regulations, standards and guidances.

- Discern the moral, legal, ethical and financial implications of research data or licensing applications for specific pharmaceutical or biological products.

- Detect legal and regulatory requirements that can pose harm to patients and undue disruption to health care operations.

- Identify conflicting regulations at local, state and federal levels and evaluate ways to reconcile them for affected constituencies.

- Identify gaps in regulatory processes for particular health care products and services and propose policy solutions.

Graduates who achieve these objectives will be prepared to assume responsibilities requiring competencies associated with Level I and Level II of the Regulatory Science Professional Development Framework produced by the Regulatory Science Professional Society. Because most of the graduates of this program will have formal education in pharmacy or other health care professions, they will bring added dimensions to the knowledge and skills they acquired in regulatory sciences. Graduates will find rewarding career opportunities in health care provider organizations, health care consultancies, health care research and manufacturing industries, insurance providers, pharmacy benefit managers and state and federal government agencies.

This program is offered under the auspices of the FDU School of Pharmacy and Health Sciences, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

## Admissions Criteria

1. A bachelor of science degree with a minimum grade point ratio of 3.00 is recommended.

2. The GRE is recommended but not required. Other standardized tests such as PCAT, MCAT and DAT may be considered as well.

### The application package must include:

1. A completed FDU Graduate Admissions Application;
2. Official undergraduate and graduate transcripts from all colleges and universities attended;

3. Two letters of recommendation (from a professor, employer or professional in the field familiar with the student's strengths and abilities);

4. Official test scores from one of the following standardized exams: GRE, PCAT, MCAT or DAT (if applicable);

5. Personal statement; and

6. Résumé or curriculum vitae.

Applicants who have not completed all the requirements for admission to the degree program may be permitted to enroll in classes for credit on a conditional/probationary or nondegree basis.

## Required Courses (31 credits)

### Health Sciences Regulatory Science Core

	Credits
HSCI7301	
Biostatistics.....	2
HSCI7302	
Epidemiology and Study Design	
Evaluation.....	3
HSCI8806	
Project Management.....	3
HSCI8811	
Ethics of Health Care Research.....	2
PHAR6601	
Health Care Systems and Policy.....	3

### Regulatory Science Requirements

HSCI7810	
Clinical Trial Design and	
Regulatory Requirements.....	3
HSCI8810	
Medical and Clinical Report Writing.....	3

	Credits
HSCI8822	
U.S. Regulatory New Drug	
Application and Submission	
and Dossier Preparation.....	3
REGS7104	
Regulatory Affairs Capstone.....	3
REGS8812	
Clinical Trial Research	
Administration.....	3
REGS8821	
Regulatory Compliance for	
Pharmaceuticals.....	3

## Clinical Research Administration Track

The M.H.S. in clinical research administration is a 31-credit program (inclusive of the 10 hours of required M.H.S. core credits) that will produce graduates with a wide array of knowledge encompassing various approaches to evidence generation, translation and application. Objectives for the clinical research track are drawn from competencies established by the Agency for Healthcare Research and Quality (AHRQ) for clinical research. Upon completion of the program students will be able to:

- Discern the knowledge and skill sets available from clinical research approaches needed to address specific health care issues and problems.

- Synthesize meaningful, relevant and important research questions that address important health care and public health problems that can be informed by systematic reviews of the literature, needs assessment and relevant theory and concepts.

- Select appropriate interventional, quasi-experimental or observational study designs to address specific clinical research questions.

- Collect primary health and health care data obtained by survey, qualitative or mixed methods, as well as assemble and integrate secondary data from existing public and private sources.

- Defend the ethical and responsible design, implementation and analysis of specific clinical research programs.

- Select the appropriate analytical methods to clarify associations between variables and to discern causal inferences.

- Design, construct and deliver written and verbal communication about the findings and implications of particular clinical research programs for both professional and lay audiences.

Many of the graduates will likely also have Pharm.D. degrees or degrees in other clinical or life sciences to bring a knowledge and understanding in therapeutics and health-care delivery to their clinical research course of studies. Graduates will be highly skilled, marketable scientists who can apply their knowledge and skills in an array of health care areas conducting or benefiting from clinical research.

This program is offered under the auspices of the FDU School of Pharmacy and Health Sciences, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admissions Criteria

1. A bachelor of science degree with a minimum grade point ratio of 3.00 is recommended.

2. The GRE is recommended but not required. Other standardized tests such as PCAT, MCAT and DAT may be considered as well.

#### The application package must include:

1. A completed FDU Graduate Admissions Application;
2. Official undergraduate and graduate transcripts from all colleges and universities attended;
3. Two letters of recommendation (from a professor, employer or professional in the field familiar with the student's strengths and abilities);
4. Official test scores from one of the following standardized exams: GRE, PCAT, MCAT or DAT (if applicable);
5. Personal statement; and
6. Résumé or curriculum vitae.

Applicants who have not completed all the requirements for admission to the degree program may be permitted to enroll in classes for credit on a conditional/probationary or nondegree basis.

### Required Courses (31 credits)

#### Health Sciences Clinical Research Administration Core

	Credits
HSCI7301	
Biostatistics.....	2
HSCI7302	
Epidemiology and Study Design	
Evaluation.....	3
HSCI8806	
Project Management.....	3
HSCI8811	
Ethics of Health Care Research.....	2

	Credits
PHAR6601	
Health Care Systems and Policy.....	3

#### Clinical Research Administration Requirements

CLIN7104	
Clinical Research Administration	
Capstone.....	3
CLIN8812	
Clinical Trial Research	
Administration.....	3
CLIN8821	
Regulatory Compliance for	
Pharmaceuticals.....	3
HSCI7810	
Clinical Trial Design and	
Regulatory Requirements.....	3
HSCI8810	
Medical and Clinical Report	
Writing.....	3
HSCI8822	
U.S. Regulatory New Drug	
Application and Submission	
and Dossier Preparation.....	3

#### Health Informatics Track

The M.H.S. health informatics track is a 31-credit program (inclusive of the 10 hours of required M.H.S. core credits) that will prepare students for a wide range of roles in health informatics, particularly as these roles involve the use of prescription drugs and biologics. Some of these roles will include, but will not be limited, to: assessing health-information technology needs in health-care delivery systems; developing decision support tools at point of care; generating and managing capital and operating information technology budgets; developing, deploying and maintaining information technology hardware and software; assessing and improving information technology performance; and managing information technology workforce and partnerships.

Upon completion of the program students will be able to:

- Describe significant health information technology advances that have occurred in the last decades and include both the benefits and harm they have brought.
- Identify key attributes and metrics surrounding successful technology deployment and operation.
- Evaluate workflow in a variety of health-care delivery settings and develop information-technology solutions where improvements are possible.

• Develop and manage information-technology acquisition plans including technical requirements and contracting elements.

• Build and maintain operating environments in health-care delivery settings that can support selected health technology.

• Apply informatics standards to new and existing health informatics systems and processes.

• Apply human factors and hazard-analysis techniques to the development and deployment of health-information technologies within health-care delivery settings.

This program is offered under the auspices of the FDU School of Pharmacy and Health Sciences, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admissions Criteria

1. A bachelor of science degree with a minimum grade point ratio of 3.00 is recommended.

2. The GRE is recommended but not required. Other standardized tests such as PCAT, MCAT and DAT may be considered as well.

#### The application package must include:

1. A completed FDU Graduate Admissions Application;
2. Official undergraduate and graduate transcripts from all colleges and universities attended;
3. Two letters of recommendation (from a professor, employer or professional in the field familiar with the student's strengths and abilities);
4. Official test scores from one of the following standardized exams: GRE, PCAT, MCAT or DAT (if applicable);
5. Personal statement; and
6. Résumé or curriculum vitae.

Applicants who have not completed all the requirements for admission to the degree program may be permitted to enroll in classes for credit on a conditional/probationary or nondegree basis.

### Required Courses (31 credits)

#### Health Sciences Health Informatics Core

	Credits
HSCI7301	
Biostatistics.....	2
HSCI7302	
Epidemiology and Study Design	
Evaluation.....	3

# Health Science

	Credits
HSCI8806 Project Management or	
HSCI8403 Introduction to Lean Six Sigma.....	3
HSCI8811 Ethics of Health Care Research.....	2
PHAR6601 Health Care Systems and Policy.....	3
<b>Health Informatics Requirements</b>	
HINF7106 Health Informatics Capstone.....	3
HINF7801 Informatics and Information Systems....	3
HINF8802 Health Information Exchange and Security.....	3
HINF8803 Electronic Medical Records Management.....	3
HINF8804 Computational Modeling and Data Management.....	3
HNIF8807 Human Factors in Informatics.....	3

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate department chair.

## Health Science

Department of Chemistry and  
Pharmaceutical Science and School of  
Pharmacy and Health Sciences

### BIOL6891

3 Credits

#### Histology

This course is designed for students to learn more about the organization of the cells of the body into tissues, organs and organ systems. Students will learn to correlate the structure of these cells, tissues and organs with their functions in the human body. Students will become familiar with examining images of stained sections of human tissue and identifying key elements distinguishing one tissue from another. Examples of diseased tissue, for example cancerous tissues, will be compared to normal tissues as well. (Equivalent to HSCI6891 Histology.)

### BIOL6892

3 Credits

#### Human Physiology

This course provides the student with a high level of understanding of the physiological basis of the human body. The essential concepts of

physiology and mechanisms of body function are presented at various levels of organization, ranging from cellular and molecular to tissue and organ system levels. Emphasis is placed on understanding the integrated regulation of various body processes among the major systems. Cardiovascular, respiratory, urinary, endocrine and reproductive systems will be covered. (Equivalent to HSCI6892 Human Physiology.)

### BIOL6893

3 Credits

#### Human Anatomy

The knowledge of human variability and susceptibility to disease begins with a thorough introduction to the basic structure of the human body that occurs in this course. The goals of the course are: to introduce the fundamental organization and structure of the human body and to begin the process of clinical observation by attention to detail and honing of observational skills. (Equivalent to HSCI6893 Human Anatomy.)

### CHEM6663

3 Credits

#### Introductory Medicinal Chemistry

Based on all branches of chemistry, but especially organic chemistry, the focus of this course is on improving a drug's therapeutic effect while minimizing its undesirable side effects. (Equivalent to HSCI6663 Medicinal Chemistry.)

### CHEM6685

3 Credits

#### Pharmacology

A study of drugs, their history, sources, physical and chemical properties, compounding, biochemical and physiological effects, mechanism of action, absorption, distribution in the body and therapeutic uses. (Equivalent to HSCI6685 Pharmacology.)

### CHEM6781

3 Credits

#### Biochemistry

Based on the chemistry of substances of biological significance, structures and mechanisms of hydrolytic and respiratory enzymes, biosyntheses of proteins, bio-oxidations and molecular structures of complex molecules. (Equivalent to HSCI6781 Biochemistry for the Medical Sciences.)

### CHEM7500

3 Credits

#### Technical and Scientific Writing

This course is an introduction to learning the written and oral communication of technical information. Assignments include writing and presenting proposals, reports, standard operating procedures, technical papers and documentation. (Equivalent to HSCI7500 Technical and Scientific Writing.)

### CLIN7104

3 Credits

#### Clinical Research Capstone

This course is a hands-on, practice-based course that provides an intensive research experience alongside a trained professional within the clinical research framework. Students will be expected to participate in an active, engaging experience that provides insight into the role of the clinical researcher within the hospital and health system, pharmaceutical, biotechnology, device or other related environment.

### CLIN8812

3 Credits

#### Clinical Trial Research Administration

This course provides a focused overview on the logistic and operational factors in conducting and completing a clinical research study. This includes discussion on the responsibilities and relationships for each of the professionals and parties involved in bringing the study from conceptualization through implementation and into the phase of data evaluation and report writing.

### CLIN8821

3 Credits

#### Regulatory Compliance for Pharmaceuticals

This course will review the regulatory pathways for drugs, biologics, biosimilars, medical devices and other pharmaceutical and biotechnology areas of relevance. Discussions on compliance strategies, risks and processes within each framework will provide insight onto the challenges (financial, ethical and procedural) facing each industry and area.

### HINF7106

3 Credits

#### Health Informatics Capstone

This course is a hands-on, practice-based course that provides an intensive research experience alongside a trained professional within the health informatics framework. Students will be expected to participate in an active, engaging experience that provides insight into the role of informatics within the hospital and health system, pharmaceutical, biotechnology or other related environment.

### HINF7801

3 Credits

#### Informatics and Information Systems

This course provides an overview of the practical components of health care information systems, including an introduction to the capture, storage and processing of electronic medical records, the changing dynamics of health information technology and the impact of technology, security and regulation on the transfer and storage of health information.

## HINF8405

3 Credits

### Introduction to Lean Six Sigma

This course introduces pharmacy students to the concepts and methods of Lean Six Sigma (LSS). LSS is a method that relies on effective teamwork to improve performance by decreasing waste and creating a lean enterprise. A framework of both Lean and Six Sigma tools will be covered providing a roadmap and diagnosis for workflow improvements and reduction in variability. The skills learned in this class will build capabilities that can help improve workflow and reduce errors in the pharmacy setting and organize processing in the pharmaceutical industry.

## HINF8802

3 Credits

### Health Information Exchange and Security

This course will provide an overview of the methods, issues and challenges surrounding the transmission, storage and preservation of health information data, including an overview of the regulatory processes that oversee exchange and security of medical information (i.e., HIPAA, Joint Commission) and a discussion on the concerns around disclosure, accountability and liability involving storage and transmission of data.

## HINF8805

3 Credits

### Electronic Medical Records Management

An introductory overview of computer-based medical record systems, including introductions to data entry and processing, health-systems standards and regulations, data modeling, ethical and legal concerns, visualization and output of data and other topics involved in the management and processing of medical data.

## HINF8804

3 Credits

### Computational Modeling and Data Management

This course provides an overview of the systems and databases used within a health care information system, including database architecture, reporting and querying, data optimization.

## HINF8805

3 Credits

### System Management and Planning

This course provides an overview of the challenges and strategies of management within health care organizations and discusses the roles that informatics and information systems play in providing necessary data, information and organization to each of the major components within the organization. Discussion on how to be an effective leader and manager, and how to provide valued insight and information to document cost savings, efficiency, projected

and increased return on investment and potential organizational adjustments and improvements will take place.

## HINF8807

3 Credits

### Human Factors in Informatics

Human factors is a behavioral science with applications in almost every field, including ergonomics, software design, medical-device development and health care. By definition, this discipline is concerned with the interaction between humans and the systems with which they perform work. Increasingly, the processes that health care workers navigate are technologically laced and data-driven. This presents a perfect area for the expert informaticists to liaise. This course will investigate how people interact with technology and data. Through comprehensive study, future informaticists will identify how best to apply technology to health-care processes, how to manage change, best practices in data exposition and useful instructional design techniques. While the bulk of this course deals with how people interact with technology, it will also explore how programmatic reporting of outcomes influences the technologies and actions we take in health care. A focused exploration of mortality, readmissions and preventable harm will complement the practical use of technology students will be learning in other courses in informatics sequence.

## HSCI6200

3 Credits

### Ethics of Health Care Research

The student will examine the ethical issues that confront all aspects of health care.

## HSCI6250

3 Credits

### Psychology for the Medical Sciences

This course is designed to help preprofessional graduate students understand the mutually interactive roles of psychological/neuropsychological and biomedical processes. It will examine the theory and research on the neurobiological and psychological foundations of psychological health, wellness and psychopathology. Topics will include research methods, biological, sociocultural and psychological factors in human functioning, as well as psychiatric diagnostic classifications.

## HSCI6665

3 Credits

### Medicinal Chemistry

Based on all branches of chemistry, but especially organic chemistry, the focus of this course is on improving a drug's therapeutic effect while minimizing the undesirable side effects. (Equivalent to CHEM6665 Introductory Medicinal Chemistry.)

## HSCI6685

3 Credits

### Pharmacology

A study of drugs, their history, sources, physical and chemical properties, compounding, biochemical and physiological effects, mechanism of action, absorption, distribution in the body and therapeutic uses. (Equivalent to CHEM6685 Pharmacology.)

## HSCI6781

3 Credits

### Biochemistry for the Medical Sciences

Based on the chemistry of substances of biological significance, structures and mechanisms of hydrolytic and respiratory enzymes, biosynthesis of proteins, bio-oxidations and molecular structures of complex molecules. (Equivalent to CHEM6781 Biochemistry.)

## HSCI6833

3 Credits

### Special Topics Chemistry: Drugs of Abuse

Knowledge of the varieties of illegal drugs, history, mechanism of action, their toxic effects and tissue damage and an understanding of the basic drug action and pharmacological methods (selectivity, dose-response, affinity, potency, intrinsic activity, binding, absorption, distribution, tolerance, dependence, half-life, metabolism, clearance excretion, adverse reactions, lethality and drug interactions).

## HSCI6891

3 Credits

### Histology

This course is designed for students to learn more about the organization of the cells of the body into tissues, organs and organ systems. Students will learn to correlate the structure of these cells, tissues and organs with their function in the human body. They will become familiar with examining images of stained sections of human tissue and identifying key elements distinguishing one tissue from another. Examples of diseased tissue, for example cancerous tissues, will be compared to normal tissues as well. (Equivalent to BIOL6891 Histology.)

## HSCI6892

3 Credits

### Human Physiology

This course provides the student with a high level of understanding of the physiological basis of the human body. The essential concepts of physiology and mechanisms of body function are presented at various levels of organization, ranging from cellular and molecular to tissue and organ system levels. Emphasis is placed on understanding the integrated regulation of various body processes among the major systems. Cardiovascular, respiratory, urinary, endocrine and reproductive systems will be covered. (Equivalent to BIOL6892 Human Physiology.)

# Health Science

---

## HSCI6893

3 Credits

### Human Anatomy

The knowledge of human variability and susceptibility to disease begin with a thorough introduction to the basic structure of the human body that occurs in this course. The goals of the course are to introduce the fundamental organization and structure of the human body and to begin the process of clinical observation by attention to detail and honing of observation skills. (Equivalent to BIOL6893 Human Anatomy.)

## HSCI7302

3 Credits

### Epidemiology and Study Design Evaluation

This course is designed to introduce students to basic concepts of epidemiology and study designs used in the evaluation of health care technologies. Epidemiological terminology such as risk, hazard, odds and relative risk ratios will be introduced. Further, this course will include critical evaluation of evidence-based medical literature and identification of sources of bias in published medical literature.

## HSCI7401

3 Credits

### Biostatistics

A comprehensive survey of the theoretical and practical aspects of descriptive and inferential statistical procedures — z tests, t tests, analysis of variance, correlation and regression analysis and nonparametrics. Emphasis is on why and when to use the various procedures as well as on the interpretation of statistical results.

## HSCI7500

3 Credits

### Technical and Scientific Writing

Introduction to learning the written and oral communication of technical information. Assignments include writing and presenting proposals, reports, standard operating procedures, technical papers and documentation. (Equivalent to CHEM7500 Technical and Scientific Writing.)

## HSCI7731

3 Credits

### Introduction to Health Systems and Policy

This course presents an integrated overview of traditional and contemporary approaches to financing and organizing the provision of health services in the United States. The course traces the evolution of the health care delivery system, with special attention given to the interplay between political, legal and socioethical dynamics in the formation of health policy at the federal and state levels of government. (Equivalent to PADM7731 Introduction to Health Systems and Policy.)

## HSCI7771

3 Credits

### Advanced Organic Synthesis

Modern synthetic techniques and procedures, emphasizing the theoretical background of the procedures and preparing the student for advanced research. (Equivalent to CHEM4371 Organic Synthesis and CHEM7771 Advanced Organic Synthesis.)

## HSCI7810

3 Credits

### Clinical Trial Design and Regulatory Requirements

This course covers the principles of clinical-trial design, including determination and evaluation of study objectives; commonly used methodologies of study design; and the ethical, legal, statistical, sociological and epidemiological considerations that play a role in the design of clinical protocols.

## HSCI8403

3 Credits

### Introduction to Lean Six Sigma

This course introduces pharmacy students to the concepts and methods of Lean Six Sigma (LSS). LSS is a method that relies on effective teamwork to improve performance by decreasing waste and creating a lean enterprise. A framework of both Lean and Six Sigma tools will be covered providing a roadmap and diagnosis for workflow improvements and reduction in variability. The skills learned in this class will build capabilities that can help improve workflow and reduce errors in the pharmacy setting and organize processing in the pharmaceutical industry.

## HSCI8806

3 Credits

### Project Management

The purpose of this course is to integrate the essential components of project planning and management with health care information systems for health care leaders. The course will outline the process for developing, implementing and evaluating project plans as well as integration of communication and project life-cycle theory.

## HSCI8810

3 Credits

### Medical and Clinical Report Writing

This course provides a basic overview of the necessary means of communication for the clinical research professional, including methods for documentation, presentation of data and reporting of results. Focused attention will be paid to developing approaches for communication that allows for effective information transfer to a broad and diverse set of audiences, including patients, physicians, nurses, pharmacists, researchers and the general public.

## HSCI8811

2 Credits

### Ethics of Health Care Research

The student will examine the ethical issues that confront health care providers and patients. The medical, scientific, moral and socioeconomic bases of these issues and the decision-making process that providers and patients engage in are analyzed. Topics include informed consent, the role of institutional review boards, euthanasia and the allocation of scarce resources. Corequisite: PHRM8802 Health Information Exchange and Security, PHRM8812 Clinical Trial Research Administration or PHRM8821 Regulatory Compliance for Pharmaceuticals. Note: only for students in Master of Health Science.

## HSCI8822

3 Credits

### U.S. Regulatory New Drug Applications and Submission and Dossier Preparation

This course will review steps and consideration in preparing a New Drug Application (NDA) submission to the U.S. Food and Drug Administration (FDA). Students will become knowledgeable on terminology used in NDA submission process in an electronic (e) Common Technical Document (CTD) format, Extensive Markup Language (XML) backbone, portable document format (PDF) file, structured product labeling format (SPL) for U.S. package-insert labeling, what area and statistical analysis systems (SAS) transport files. The course will provide a fundamental understanding of the different types of NDAs to file for under Section 505 of the Federal Food and Drug and Cosmetic Act for marketing authorization in the United States and describe the components and essential documents necessary for inclusion in an NDA submission. Students will learn how to consider key sections and data within the U.S. NDA submission for consideration of global regulatory submissions outside of the U.S. by using the CTD format and International Conference on Harmonization (ICH) principles

## PADM7731

3 Credits

### Introduction to Health Systems and Policy

This course presents an integrated overview of traditional and contemporary approaches to financing and organizing the provision of health services in the United States. The course traces the evolution of the health care delivery system, with special attention given to the interplay between political, legal and socioethical dynamics in the formation of health policy at the federal and state levels of government. (Equivalent to HSCI7731 Introduction to Health Systems and Policy.)

## Homeland Security (M.S.)

The Master of Science (M.S.) in homeland security degree was offered beginning in January 2008. It is the first graduate degree in homeland security offered in the state of New Jersey.

The M.S. in homeland security program is a 36-credit off-campus and online graduate program which focuses on practical and theoretical aspects of enforcing and ensuring homeland security. The curriculum provides three areas of study that provide master's-level studies for nontraditional students already involved in homeland security. In addition, the program encourages the development of high-quality, applied research for practitioners in the field of homeland security. The degree is particularly suited for working adults who are interested in enhancing their credentials.

The M.S. in homeland security degree offers concentrations in: **homeland security — terrorism and security studies; homeland security — emergency management; and homeland security leadership.** Students who complete six courses in a particular area of concentration will be awarded a certificate that signifies completion of that course of study.

Courses in the M.S. program are offered in person and online. The online program is designed to meet the needs of police, firefighters, first responders, military personnel and others who are unable to attend classes in person because of their work demands. Students have the ability to take courses in a specialization that focuses on their specific areas of responsibility. The online program is offered in an asynchronous mode, which fits the work schedules of many in government and the emergency services community.

The M.S. in homeland security program is designed for individuals who are working in the field of homeland security. Events throughout the world have increased those employed in the discipline, and new demands in the jobs have required students to increase their level of education.

This program is offered under the auspices of the School of Administrative Science, Anthony J. Petrocelli College of Continuing Studies, at the Florham Campus, Madison, New Jersey; at the Metropolitan Campus, Teaneck, New Jersey; and locations throughout New Jersey.

### PHAR6601

3 Credits

#### **Health Care Systems and Policy**

This course provides a comprehensive overview of the structure and operations of the United States health care delivery system. Major forces and trends that are likely to shape the external environment and linkages among industry stakeholders are identified and examined. Fundamentals of health care economics, financing, reimbursement, quality assurance and political policymaking are discussed with due regard for social and ethical implications. The spectrum of life sciences is considered in relation to the continuum of health care delivery. Students will prepare a position paper that applies course concepts to a contemporary issue of relevance to their specific career interests.

### REGS7104

3 Credits

#### **Regulatory Affairs Capstone**

This course is a hands-on, practice-based course that provides an intensive research experience alongside a trained professional within the regulatory science framework. Students will be expected to participate in an active, engaging experience that provides insight into the role of the regulatory professional within the pharmaceutical, biotechnology, device or other health-related environment.

### REGS7106

3 Credits

#### **Health Informatics Capstone**

This course is a hands-on, practice-based course that provides an intensive research experience alongside a trained professional within the health informatics framework. Students will be expected to participate in an active, engaging experience that provides insight into the role of informatics within the hospital and health system, pharmaceutical, biotechnology or other related environment.

### REGS8812

3 Credits

#### **Clinical Trial Research Administration**

This course provides a focused overview on the logistic and operational factors in conducting and completing a clinical research study. This includes discussion on the responsibilities and relationships for each of the professionals and parties involved in bringing the study from conceptualization through implementation and into the phase of data evaluation and report writing.

### REGS8821

3 Credits

#### **Regulatory Compliance for Pharmaceuticals**

This course will review the regulatory pathways for drugs, biologics, biosimilars, medical devices and other pharmaceutical and biotechnology areas of relevance. Discussions on compliance strategies, risks and processes within each framework will provide insight onto the challenges (financial, ethical and procedural) facing each industry and area.

### REGS8822

3 Credits

#### **U.S. Regulatory New Drug Application and Submission and Dossier Preparation**

This course will address the necessary data collection, clinical procedures, protocols and preparatory steps necessary for the successful filing of regulatory documents. This will include discussions on expectations, filing procedures and other processes within both the FDA and other international frameworks.

# Homeland Security

## Admission Requirements

Candidates for admission to the Master of Science in homeland security degree must be highly motivated individuals who have work experience in the area of homeland security as well as a bachelor's degree from an accredited institution with at least a cumulative grade point ratio of 3.00. Care will be taken to ensure a diversity of philosophies and academic backgrounds in the classes.

Students seeking admission to the program will have to submit:

- 1) A completed application;
- 2) Transcripts from all previous undergraduate, graduate and post-graduate studies;
- 3) A written statement of 1,000 words on current job responsibilities, duties and management philosophy; and
- 4) Three letters of recommendation, including from at least two former instructors/professors.

There is no Graduate Record Examinations (GRE) or Graduate Management Admission Test (GMAT) requirement although there is a requirement for Test of English as a Foreign Language (TOEFL) scores for international students.

## Requirements for the Master of Science Degree

1. Completion of a minimum of 36 graduate credits.
2. Cumulative grade point ratio of 3.00 for the degree program of study.
3. Cumulative grade point ratio of 3.00 in the core curriculum.
4. Minimum of 30 credits completed at Fairleigh Dickinson University.
5. Maximum of six years to complete the master's degree requirements.

Up to six credits of graduate course work may be transferred from another college or university if completed within the six-year period. Courses submitted for transfer credit will be reviewed and evaluated by the director of the Master of Science in homeland security program. In assessing requests for transfer credits, the M.S. in homeland security faculty may require students to complete additional course work to update knowledge and skills to meet master's degree requirements.

The following are the specific program requirements for the master's degree. These curriculum areas and credit-distribution requirements are designed to provide students with flexibility in planning a pro-

gram of study within a focused framework of professional development.

It is important to note that since homeland security is such a broad area with many different components, a number of areas of specialization are being proposed. The four required courses (MSHS7601 Homeland Security and Constitutional Issues; MSHS7602 Research and Policy Analysis; MSHS7603 Weapons of Mass Destruction/Terrorism Awareness; and MSHS7604 Strategic Planning, Implementation and Evaluation, the capstone course) are M.S. in homeland security courses and account for 12 credits of the 36-credit program. To satisfactorily complete an area of specialization, the students must complete an additional 18 credits of the program in the area of specialization. The remaining six credits for the degree requirements can be chosen electives taken from other M.S. in homeland security courses. No more than six credits will be waived for previous experience that is equivalent to any course offering.

Each course will have a standardized syllabus with specific learning outcomes. Textbooks will be selected for each class based on content relative to the topics by the faculty in concert with the administrators of the program. Each course will have at least one required textbook. The nature of the courses also mandates the use of case studies that will link the practical application with theory.

### A. Required Courses

All students enrolled in the M.S. in homeland security program must complete the following:

- MSHS7601 Homeland Security and Constitutional Issues  
MSHS7602 Research and Policy Analysis  
MSHS7603 Weapons of Mass Destruction/Terrorism Awareness  
MSHS7604 Strategic Planning, Implementation and Evaluation (capstone and thesis)

### B. Areas of Specialization

The diversity of homeland security responsibilities requires various areas of specialization. The initial program includes the areas of specializations with their respective courses as follows:

#### *Homeland Security — Terrorism and Security Studies (any six courses)*

- MSHS6601 Terrorism Issues and Implications

- MSHS6602 Computer and Network Security  
MSHS6603 Cyber Forensics Issues and Impacts  
MSHS6604 Assessing Internal and External Threats  
MSHS6605 Preparing for Catastrophic Emergencies  
MSHS6606 Historical Perspectives of Terrorism  
MSHS6607 Border Security: Policies, Actions and Implications  
MSHS6608 Terrorism and Disaster Management  
MSHS6609 The Face of Terror  
MSHS6610 Bio-terrorism Preparedness and Response

#### *Homeland Security — Emergency Management (any six courses)*

- MSHS6611 Emergency Management  
MSHS6612 GIS in Emergency Management  
MSHS6613 Organizational Planning for Emergency Situations  
MSHS6614 Effective Risk Analysis  
MSHS6615 Managing Responses to Environmental Emergencies  
MSHS6616 Stress Awareness and Management  
MSHS6617 Sociological Effects of Disasters  
MSHS6618 Emergency Management Policies, Analysis and Implications

#### *Homeland Security Leadership (any six courses)*

- MSHS6619 Collaborative Leadership  
MSHS6620 Organizational Leadership  
MSHS6621 Human Resource Management  
MSHS6622 Effective Team Building  
MSHS6623 Implementing Organizational Change  
MSHS6624 Effective Decision Making for Organizations  
MSHS6625 Organizational Communication  
MSHS6626 Resolving Conflict in Organizations  
MSHS6627 Values and Ethics for Decision Making

Additional courses will be developed in concert with appropriate faculty at the University.

Note: Students who successfully complete an area of specialization will also receive a graduate certificate in the appropriate program.



## Graduate Certificate Programs

Students who successfully complete an area of specialization will also receive a graduate certificate in the appropriate program.

### Homeland Security — Emergency Management

This 18-credit, six-course certificate focuses on the area of emergency management. Homeland security requires that the first-responder community and citizens develop the capability to prepare for, protect against, respond to, recover from and mitigate all hazards that may impact anytime and anywhere. The field of emergency management is a broad area of study, which includes natural disasters, accidents or acts of terrorism.

### Homeland Security Leadership

This 18-credit, six-course certificate focuses on the critical area of leadership in homeland security. Leadership is essential for successfully carrying out programs or tasks. This certificate is designed to meet the personal and professional development goals of those individuals in the broad field of homeland security, such as first responders, law enforcement, emergency management, various security personnel, health and hospital workers and the military.

### Homeland Security — Terrorism and Security Studies

This 18-credit, six-course certificate focuses on terrorism and security studies. The Post-9/11 world has made many sectors of the public, private and not-for-profit sectors involved in preventing and combating terrorism as they try to ensure a safe and secure nation. The knowledge provides both historical and current information to add to the knowledge of various threats posed by terrorist organizations, whether domestic or international, and to provide organizations to prepare for the risks associated with such activities.

## Course Offerings

### Homeland Security

School of Administrative Science

#### Required Courses

MSHS7601

3 Credits

#### Homeland Security and Constitutional Issues

This required course provides an overview of constitutional issues, statutes and case law that

govern homeland security professionals at the local, state and federal levels. Social, ethical and political implications of actions intended to preserve the safety and security of the citizens are studied in relationship to the legal constraints placed on the systems. This course will utilize case studies.

MSHS7602

3 Credits

#### Research and Policy Analysis

This required course is designed to develop critical-thinking skills that students need for completion of their academic work as well as in their professional lives. The course will assist students in understanding the research process, develop a research question, assess relevant literature to support the research, select and use an appropriate research methodology, conduct the research and evaluate the results. The end result will be a well-written research report.

MSHS7603

3 Credits

#### Weapons of Mass Destruction/Terrorism Awareness

This required course will explore the use of weapons of mass destruction (WMD) and the link to terrorist activities. Included in the course are: definitions of effects of nuclear, chemical, biological and radiological weapons; types and characteristics of biological- and chemical-warfare agents; potential modes of nuclear and radiological terrorism; use of improvised nuclear devices (INDs) and radiological dispersal devices (RDDs); Large Vehicle Borne Improvised Explosive Devices (VBIEDs); the motivations, capabilities, techniques and practices of terrorist groups to acquire and use WMD; and the use and attempted use of WMD against countries by internal and external groups.

MSHS7604

3 Credits

#### Strategic Planning, Implementation and Evaluation

This required course will link strategic planning with strategic management. This is the capstone course of the program and requires the completion of a thesis. Strategic planning links the vision, mission and guiding principles with the internal and external environment in which the organization exists. The course will explore security formulation, the drivers of homeland security issues for the historical and emergency issues and the results of such policies. Organizations need to understand how strategic plans are implemented and then reviewed and evaluated as part of a continuous improvement process.

#### Areas of Specialization

MSHS6601

3 Credits

#### Terrorism Issues and Implications

This course will investigate the concepts, ideologies, goals, strategies, tactics and methods

used by terrorist groups in the current and historical perspectives. The terrorists' motives and their actions will be studied in relation to historic and current national and international policies. Terrorist organizations will be studied based on their specific criteria to better understand their influence on other nations. Also included will be the concepts of the media and terrorism, law and terrorism, the military response to terrorism, counterterrorism and antiterrorism approaches and governmental responses to terrorism as well as how the intelligence community categorizes and prioritizes resources to target groups and issues.

MSHS6602

3 Credits

#### Computer and Network Security

This course will investigate advanced topics in computer security and forensics. Included are topics such as cryptography, automatic-intrusion detection, firewalls, vulnerability scanning and advanced pattern matching as well as statistical techniques.

MSHS6603

3 Credits

#### Cyber Forensics Issues and Impacts

This course will investigate cyber terrorism and cyber crime, and how these differ from computer security. Technological advancements that are on the cutting edge present opportunities for terrorists, and it is necessary to explore the current domestic and international policies relative to critical infrastructure protection and methods for addressing issues.

MSHS6604

3 Credits

#### Assessing Internal and External Threats

This course will investigate the usefulness of threat assessment in various contexts, such as the workplace, infrastructure protection and public safety. Included in the course will be basic methods for examining vulnerabilities to attack, evaluating capacities of the potential attackers as well as their motivations and the role of the intelligence community in these actions. The course will link strategic analysis with priority setting and accountability.

MSHS6605

3 Credits

#### Preparing for Catastrophic Emergencies

This course will investigate a wide range of natural and manmade disasters, and develop appropriate plans for mitigating the problems. Natural disasters include a wide range of issues from outbreak of diseases, floods, earthquakes, fires and tornados. Manmade disasters include emergencies such as chemical spills, nuclear incidents, terrorist threats, transportation accidents and power outages.

# Homeland Security

---

**MSHS6606**

**3 Credits**

## **Historical Perspectives of Terrorism**

This course will examine the social basis of fear and terrorism and the related consequences on society. Factors such as race/ethnicity, class, religion, politics, local and international policies and gender will be studied in the historical context of terrorism. Case studies will include terrorist techniques that have been used in the past.

**MSHS6607**

**3 Credits**

## **Border Security: Policies, Actions and Implications**

Immigration policies and terrorism threats have increased the focus on national borders. This course will investigate issues relative to border security — from economic security to social and cultural integration or separation. The costs of attempting to maintain a secure border are discussed as are the implications of border security on free-trade agreements.

**MSHS6608**

**3 Credits**

## **Terrorism and Disaster Management**

This course will focus on planning and preparing for terrorist acts as well as the area of disasters. It also focuses on the legal and ethical issues that surround planning for acts of terrorism or disasters and a study of the National Response Plan and its implications. The need for and how to develop interagency collaborative agreements from civilian, military and governmental entities will be explored.

**MSHS6609**

**3 Credits**

## **The Face of Terror**

This course will examine various characteristics of terrorism — from left-wing terrorism to nationalist terrorism to religious terrorism to group dynamics to secret societies and cults and charismatic leadership. Also included are identification of underground terrorist cells, both domestic and foreign, state-supported and non-state-supported, as well as methods for dealing with the separate groups.

**MSHS6610**

**3 Credits**

## **Bio-terrorism Preparedness and Response**

This course will investigate options to address the threat of a biological attack. Options for identifying a bio-attack and potential responses for addressing these issues will be included in the course. Case studies of actual incidents will be included in the course.

**MSHS6611**

**3 Credits**

## **Emergency Management**

This course will explore the nature and rationale for emergency-management policies and proc-

esses. Included will be preparedness for natural and manmade hazards, optional strategies for dealing with such issues, appropriate planning modalities, public awareness techniques to assist in the process and stakeholder communication. Legal and ethical issues that impact emergency management also will be studied.

**MSHS6612**

**3 Credits**

## **GIS in Emergency Management**

This course will provide an introduction to the basic concepts of geographic information systems (GIS) as well as their application to specific issues.

**MSHS6613**

**3 Credits**

## **Organizational Planning for Emergency Situations**

This course will provide an overview of planning and management principles that can be utilized to address operational issues when an emergency situation arises as well as how to resume operations once the emergency is over. The course will also focus on how to minimize the impact of disasters on business operations.

**MSHS6614**

**3 Credits**

## **Effective Risk Analysis**

This course will examine the natural and man-made disasters from a risk-assessment perspective. Development of plans to prepare for each type of disaster as well as control processes will be part of the course work.

**MSHS6615**

**3 Credits**

## **Managing Responses to Environmental Emergencies**

This course will examine the theory and practices in terms of incident-command systems and emergency operating centers.

**MSHS6616**

**3 Credits**

## **Stress Awareness and Management**

Stress is part of everyone's life, but in emergency situations, stressors may adversely impact the individual as well as those being served. Leaders need to be aware of the impact of stress on the individual's ability to perform at peak levels as well as the ability to make the best decisions. This course will investigate stressors and how these factors can be mitigated.

**MSHS6617**

**3 Credits**

## **Sociological Effects of Disasters**

This course will explore how various populations respond to the various phases of disasters. Included in the course are: response to warnings, reaction to evacuation orders and civilian disobedience to orders as well as the development of strategies for the organization, individuals and groups.

**MSHS6618**

**3 Credits**

## **Emergency Management Policies, Analysis and Implications**

This course will investigate management of complex emergency-management operations using incident-management systems. The role of the emergency-management operation centers as well as current policies in reacting to disasters will be explored. Case studies of emergency-management policies and their implications will be analyzed to determine areas in need of improvement.

**MSHS6619**

**3 Credits**

## **Collaborative Leadership**

This course will investigate the concept of leadership exhibited by a group that is acting collaboratively to resolve issues that all feel must be addressed. Since the collaborative process ensures that all people that are affected by the decision are part of the process, the course will explore how power is shared in the process and how leadership is developed.

**MSHS6620**

**3 Credits**

## **Organizational Leadership**

This course will investigate examples of past and present leadership models. The moral framework for leadership and decision making in organizations will provide the basis for exploring current organizational leadership models as well as assisting the students in assessing their own leadership roles.

**MSHS6621**

**3 Credits**

## **Human Resource Management**

This course addresses the challenges of managing human capital in organizations focusing on homeland security. Current issues in recruiting, selecting and moving individuals through the organization will be studied. In addition, team building, problem solving, decision making and human resource-planning skills will be explored as will the leadership skills of mentoring, advising, counseling and disciplining individuals in the organization.

**MSHS6622**

**3 Credits**

## **Effective Team Building**

As organizations move to empower employees to work in a team setting with a high degree of autonomy, it is necessary to develop high-performance teams. This course investigates what makes teams effective. Various methodologies that have resulted in exceptional teams and team results will be studied.

**MSHS6623**

**3 Credits**

### **Implementing Organizational Change**

This course will explore the issues of resistance to change and obstacles to change in relationship to organizations. Theories relative to change will be studied in terms of the restructuring process, leadership roles and the settings in which the work is done.

**MSHS6624**

**3 Credits**

### **Effective Decision Making for Organizations**

This course explores the process for effective decision making using decision analysis theory, appropriate mathematical processes, evaluating inputs for applicability and applicable quantitative and qualitative methods. The course will utilize “what if” challenges and will consider individual and organizational preferences as well as environmental certainty and uncertainty.

**MSHS6625**

**3 Credits**

### **Organizational Communication**

An introduction to communication in organizations includes relevant theories, leadership, diversity, teamwork and ethics. Included in the course are definitions of organizational culture, leadership, teamwork, diversity, ethics and informal and formal communication as well as how they influence and impact organizational communication. The course will also investigate organizational communication systems and their relevant theories as well as comparing and contrasting the major theories.

**MSHS6626**

**3 Credits**

### **Resolving Conflict in Organizations**

This course will investigate the sources of conflict in organizations, the sources of such conflict and various modalities for resolving these conflicts. Conflict in organizations can be manifested in various ways, such as interpersonal conflict, intragroup conflict, intergroup conflict and interorganizational conflict. Resolving conflict includes compromise, collaboration, negotiation and addressing individual sources of conflict.

**MSHS6627**

**3 Credits**

### **Values and Ethics for Decision Making**

Personal and organizational ethics and values guide decision making. There are times when two or more ethical principles are in conflict. This course will explore how to maximize the basic elements that form the context for ethical decision making.

## **Hospitality Management Studies (M.S.)**

The hospitality field currently ranks as the third largest industry in the United States, and by the end of the second decade of the new millennium, employment experts predict it will be the top-ranked industry in the world.

The International School of Hospitality and Tourism Management (ISHTM) is located in the third-largest hospitality destination in the world. Combined with eastern Pennsylvania and Atlantic City, N.J., this geographic area becomes the largest hospitality destination in the world. ISHTM is the oldest four-year school offering degrees in the area of hospitality management in the New York metropolitan region. Founded in 1942 as one of the University's original programs, it is the only program of its kind in New Jersey.

Since February 2015, ISHTM has been ranked sixth out of 300 hospitality programs nationally in [TheBestSchools.org](http://TheBestSchools.org). Keeping company at the top are Cornell and Michigan State Universities and the University of Nevada at Las Vegas. Rankings for each school are based on criteria including academic quality, awards, reputation, rankings, facilities and internship opportunities. ISHTM was also rated by *The Princeton Review's The Gourman Report of Graduate Programs* as one of the top four-year hospitality management programs in the United States.

The Master of Science degree in hospitality management studies, which consists of 33 credits, is structured to meet the educational needs of adult learners working as managers, entrepreneurs, educators or other professionals in the hospitality industry. It is designed to provide an educational alternative for working professionals with an academically rigorous, yet flexible, program of study that meets the requirements for a professional master's degree. For working adults seeking to upgrade their professional skills to enhance their careers, the degree program increases analytical, managerial and leadership competencies and provides graduates with the requisite preparation for career advancement in various hospitality-related professional areas.

The program offers students the opportunity to complete degree requirements by taking course work at the Metropolitan Campus, Teaneck, New Jersey; the Florham

Campus, Madison, New Jersey; or by combining course work at various off-campus sites with selections from the broader array of courses that are regularly available at the University's campuses. Courses also are offered in Atlantic City, N.J.; in Parsippany, N.J., at the Wyndham Worldwide Corporation; in Jersey City, N.J.; and in West Windsor, N.J.

This program is offered under the auspices of the International School of Hospitality and Tourism Management, Anthony J. Petrocelli College of Continuing Studies, at the Florham Campus, Madison, New Jersey, and the Metropolitan Campus, Teaneck, New Jersey; various locations throughout New Jersey; at the FDU Vancouver Campus, British Columbia, Canada; and in Wroxton College, Oxfordshire, England.

### **Admission Requirements**

Candidates for admission to the Master of Science in hospitality management studies degree program could be managers, business owners or educators or hold other professional positions related to the hospitality industry. The credentials required for admission as a matriculated student include the following:

1. A graduate application for admission and nonrefundable application fee.
2. A bachelor's degree from an accredited college or university with a minimum cumulative grade point ratio (CGPR) of 2.75. (Applicants with a CGPR of less than 2.75 may be admitted as prematriculated students on probation.)
3. Official transcripts from all colleges and universities previously attended.
4. English-language proficiency, both written and verbal.
5. Industry work experience preferred (applicants without industry work experience may be required to take foundation courses HRTM6100 Hospitality Operations Management and HRTM6200 Tourism Destination Management upon evaluation).
6. Personal statement of 400 words explaining reasons for pursuing hospitality graduate studies.
7. Personal interview with a graduate program adviser.

Additional classes may be required as a prerequisite for acceptance into the program. Applicants who are unable to provide official documents at the time of enrollment may register as nonmatriculated or nondegree students with the approval of a graduate faculty adviser.

# Hospitality Management Studies

## Prerequisite Program for Non-hospitality Majors

Foundation courses are required course work for students with non-hospitality degrees and limited or no prior hospitality work experience and are taken as free elective credit subjects. HRTM6100 Hospitality Operations Management and HRTM6200 Tourism Destination Management should not be taken by students with degrees in hospitality or tourism, or with prior hospitality work experience.

The below foundation courses are required for students with non-hospitality degrees and are taken as free elective credit subjects.

	Credits
HRTM6100 Hospitality Operations Management*... 3	
HRTM6200 Tourism Destination Management*..... 3	

## Requirements for the Master of Science Degree

1. Completion of a minimum of 33 graduate credits.
2. Cumulative grade point ratio of 3.00 for the degree program of study.
3. Cumulative grade point ratio of 3.00 in the core curriculum.
4. Minimum of 30 credits completed at Fairleigh Dickinson University.
5. Maximum of six years to complete the master's degree requirements.

Up to three credits of graduate course work may be transferred from another college or university if completed within the six-year period. Courses submitted for transfer credit will be reviewed and evaluated by the director of the International School of Hospitality and Tourism Management. In assessing requests for transfer credits, the ISHTM faculty may require students to complete additional course work to update knowledge and skills to meet master's degree requirements.

## Course Requirements (33 credits)

### Required Hospitality Management Courses (9 credits)

	Credits
HRTM7715 Special Project**..... 0	

	Credits
HRTM7751 Research Methodology I*..... 3	
HRTM7752 Research Methodology II**..... 3	
HRTM7753 Graduate Capstone***..... 3	
Total..... 9	

### Supporting Hospitality Management Courses (18 credits)

HRTM7708 Organizational Communication and Conflict Management..... 3	
HRTM7710 Current Concepts in Leadership..... 3	
HRTM7713 Financial Management..... 3	
HRTM7714 Advanced Human Resource Management..... 3	
HRTM7716 Service Management..... 3	
HRTM7734 Global Marketing..... 3	
Total..... 18	

### Free Electives (6 credits)

This area is to be chosen by students with approval from an adviser.

Total..... 6  
Total Program..... 33

Graduate students have seven years to complete all of the course work requirements of the M.S. degree including the Special Project.

## Course Offerings

### Hospitality Management Studies

*International School of Hospitality and Tourism Management*

### Foundation Courses for Non-hospitality Majors

**HRTM6100**  
3 Credits

#### Hospitality Operations Management

This course must be taken in the first semester as a free-elective credit subject. Topics reviewed will include hospitality operations management, food and beverage management and managerial accounting. Students must develop a comprehensive business plan for a hospitality project that integrates these key areas to successfully complete the requirements for this course.

**HRTM6200**  
3 Credits

#### Tourism Destination Management

This course must be taken in the first semester as the second of the free-elective course work subjects. Topics reviewed will include tourism, sales and marketing and human resource management. Case studies of various global destination marketing organizations will be analyzed and discussed. The term project will consist of planning and developing a tourism destination management project for a chosen city in Canada or in the United States.

### Required Hospitality Management Core Courses

**HRTM7715**  
3 Credits

#### Special Project\*

This course provides an interactive, culminating learning project that focuses on an area related to the hospitality industry chosen by the student in line with the student's area of professional interest.

**HRTM7751**  
3 Credits

#### Research Methodology I

An introduction to graduate studies with heavy emphasis on referencing and citations in APA style and research. Quantitative and qualitative research studies are explored, discussed in depth and critiqued. A comprehensive research proposal is the goal of this course.

**HRTM7752**  
3 Credits

#### Research Methodology II

This is a required course designated to supplement HRTM7751 Research Methodology I that should be taken after 18 credits have been earned in the graduate program. Students will apply the research methodologies introduced in this course to create a special project research proposal. Prerequisite: HRTM7751 Research Methodology I.

**HRTM7753**  
3 Credits

#### Graduate Capstone

This class is designed to be a capstone course to the master's degree in hospitality management studies program. Students will draw on all previously taken courses in a "real-world" application toward their particular area of interest. Prerequisite: to be taken after 25 credits have been completed.

\*Must be taken in the first semester.

\*\*\$500 recurring semester fee until completed.

\*Must be taken in the first or second semester.

\*\*Taken after completing 18 credits.

\*\*\*Taken after completing 24 credits.

\*\$500 recurring semester fee until completed.

# Hospitality Management Studies

## Supporting Hospitality Management Courses

HRTM7708

3 Credits

### Organizational Communication and Conflict Management

Overview of theories and models of communication, examination of barriers to effective communication and techniques for improving interpersonal, group and organizational communications. Conflict resolution is studied on the individual, group and organizational levels.

HRTM7710

3 Credits

### Current Concepts in Leadership

Examines key theories of leadership and motivation as applied to hospitality operations; emphasis on analysis of leadership behaviors, managerial action and new servant-leadership strategies.

HRTM7713

3 Credits

### Financial Management

Review of the current cost-control strategies used to manage food-service and lodging operations including all functional areas (food and labor costs, facility maintenance and engineering, marketing, etc.).

HRTM7714

3 Credits

### Advanced Human Resource Management

Advanced human resources management for hospitality professionals. This course reviews the essential functions within human resources, including selection and retention, performance and evaluation systems, training and employee development, recruitment and succession planning, compensation, employee reward systems, employment-related laws, collective bargaining agreements, diversity and communication.

HRTM7716

3 Credits

### Service Management

Review of current service theories and strategies used to provide total guest satisfaction in all customer contact areas; includes methods for measuring guest satisfaction and total quality management applications.

HRTM7734

3 Credits

### Global Marketing

This course provides an overview of advanced marketing strategies oriented to North American and global markets. Cultural contexts will be explored to the extent of their impact on strategy, and best practices will be reviewed. The following topics will be reviewed: strategic planning, pricing practices, international marketing, global distribution systems and advertising.

## Free Electives

HRTM7717

3 Credits

### Discovering the World of Wine

This course provides an advanced analysis of various topics related to wine. These include history, production, service and distribution. Open to nonhospitality majors.

*Fee*

HRTM7718

0–3 Credits

### Advanced Global Seminar

An eight-day trip to either Switzerland or Italy, which will include lectures by European university professors and hotel and restaurant managers on European management, environmental issues and culinary arts.

*Fee*

HRTM7722

3 Credits

### Advanced Human Resource Management

This course is designed to develop critical-thinking, analysis, decision-making and management skills related to the needs of graduate students interested in a focus in hospitality human resource management. Group and individual projects, case studies and presentation technologies will be utilized.

HRTM7723

3 Credits

### Hospitality Education Practicum

For students with education as their area of concentration in the M.S. in hospitality management studies program only. Students will shadow an International School of Hospitality and Tourism Management-certified hospitality educator (CHE) for a semester, and assist and observe the learning-facilitation process. A report of the experience and what learning-facilitation skills were observed and learned during the semester is due at the end of the term as well as a session-by-session journal kept by the student. Prerequisite: certified hospitality educator (CHE) training class.

HRTM7725

3 Credits

### Curriculum and Instruction for the Hospitality Educator

The emphasis of this course will be on the relationship between models in all phases of the curriculum in the hotel, restaurant and tourism industry. Curriculum design, content and integration incorporated with technology will be the focus for the individual who will have a career in the hospitality field.

HRTM7726

3 Credits

### Educational Organization for the Hospitality Educator

The emphasis of this course will be to explore, model and practice Multiple Intelligence Theory,

Learning Styles Theory, cooperative grouping, teaming techniques and other organizational patterns that will prepare the individual for presentations, teaching and working in the hospitality industry. The organizational models covered will serve as a guide for access to the hospitality industry in marketing, education and all the facets of hospitality careers.

HRTM7728

3 Credits

### Graduate Internship

This practice training is set to provide students who do not have extensive professional experience in the area of practice chosen with some field experience. A letter from the employer must be provided. Prerequisite: completion of 27 credits in hospitality management.

HRTM7731

3 Credits

### Seminar in Gaming/Casino Management

Practices and problems of casino management including security, control, entertainment, taxation, economic impact, mathematics of casino games, regulation and control and accounting are studied. Project is required.

HRTM7732

3 Credits

### Hospitality Law — Legal Issues in Hospitality

Provides the student with a review of the laws applicable to the operation of hospitality enterprises. The course of study includes a review of contracts, the uniform commercial code, torts law, franchise law and a review of the current legislation and case law relative to hospitality enterprises.

HRTM7736

3 Credits

### Accounting for Hospitality Managers and Administrators

This course focuses on the concepts and tools pertinent to making financial decisions in hospitality businesses. The student will acquire an understanding of financial statements, ratio analysis, pricing structure, cash management and working capital. In addition, students will develop the skill sets necessary to analyze and explain critical financial concepts, trends and results.

HRTM7737

3 Credits

### Global Tourism Development

This course will examine global financial institutions' perception of tourism as a foreign exchange generator for developing countries. Principles and philosophies of tourism and its impact on local cultures and economies will be examined. Nature tourism/ecotourism will also be examined.

# Industrial/Organizational Psychology • International Business • Learning Disabilities

---

HRTM7740

3 Credits

## **Advanced New Venture Management**

This is an entrepreneurial course that is designed for graduate students in the hospitality field. The course will teach the fundamental concepts of how to start and run a successful hospitality business, including the development of business plans, financial projections, valuation analysis, capital raising and legal and tax reviews. It also will focus on how to identify the market to customers as well as learn how to pitch the business plan and negotiate with banks and investors.

HRTM7742

3 Credits

## **International Tourism**

This course will explore tourism as generator of foreign exchange for developing countries and how it contributes to economic development. How sustainable tourism can help economic development in developing countries will also be explored as well as economic relationship between developed and developing countries and the role tourism plays in this relationship.

HRTM7745

3 Credits

## **International Tourism Study Internship**

Students must successfully plan and execute — under International School of Hospitality and Tourism Management faculty member supervision — all travel arrangements for a study-abroad program at FDU. This internship requires students to travel with the group for which they planned all arrangements.

HRTM7746

3 Credits

## **Entrepreneurship and You**

An introduction to the basic components involved in establishing and operating one's own business in the hospitality/tourism industry. Topics include how to create a concept and product, how to develop a business plan, pricing, product development, advertising, distribution, logistics, market research, sales, banking (letters of credit) and organizational skills. With a hands-on approach, the course will provide students with the tools needed to succeed in establishing and running their businesses.

HRTM7748

3 Credits

## **Developing a Sustainability Mindset in Hospitality and Tourism**

Developing the sustainability mindset through exercises and dialogue. This course will introduce the three pillars of sustainability mindset: the whole systems perspective, the innovative thinking and the being orientation. Students will identify an area of personal passion that is relevant and significant to them and develop plans to take restorative action. This will give students

an opportunity to convert the course experience into an opportunity to make a difference in the world.

HRTM7749

3 Credits

## **Best Practices in Human Resource Management**

The course provides an in-depth review of human resource management practices, with a case-study review of best practices across a wide variety of industries. Students will learn about the human resource functions and activities common in well-run companies and the critical role this function plays in the hospitality industry.

HRTM7750

3 Credits

## **Project Management in the Service Sector**

The course focuses on the practices and processes utilized to manage complex organizational projects. The class provides students with a strategic-system perspective on the management of projects utilizing modern project management tools and techniques.

HRTM7997

3 Credits

## **Communications for the Casino-industry Professional**

This course will help casino-industry professionals improve their communication skills. The course will first focus on writing, including essays, letters, memos and reports. Second, oral communication and public and private speaking will be emphasized. Finally, the course will consider the unique problems of communicating effectively in the casino industry, including language and communication problems unique to the culture of gambling.

HRTM7998

3 Credits

## **History of Casino Gaming**

This course will familiarize students in the gaming hospitality industry with the historical development of gaming. This will help industry professionals not only by increasing their knowledge of information about their chosen field, but by giving them a better perspective on how and why the industry evolved as it did. It will provide students with an accurate picture of current developments in the casino industry throughout the nation.

HRTM7999

3 Credits

## **Casinos' Social and Economic Approach**

Introduction to casino operations and management with a social and economic approach. Emphasis on the multiplying effects that casinos have on communities and social problems.

*Fall, Spring*

---

## Industrial/Organizational Psychology (M.A.)

See Psychology, Industrial/Organizational Psychology, pages 204–206.

---

## International Business (M.B.A.)

See Business, International Business, page 63.

---

## Learning Disabilities (M.A.)

See Education, Learning Disabilities, page 123.

---

# Management • Management for Executives • Management Information Systems

## Management (M.B.A.)

See Business, Management, page 63.

## Management (M.B.A.) for Executives — General Management

See Business, Management (M.B.A.) for Executives — General Management, page 68.

## Management (M.B.A.) for Executives — Health Sector Management

See Business, Management (M.B.A.) for Executives — Health Sector Management, page 68.

## Management Information Systems (M.S.)

The graduate program in management information systems is designed for present and future managers and developers of organizational information systems. Relying on computers and telecommunications networks, these systems are a source of operational efficiency, managerial effectiveness and corporate strategic advantage. The program combines learning how to use and develop information system technology with instruction in business, management and organizations.

Classes normally are scheduled during the late afternoon and evening in order to meet the needs of currently employed students.

This program is offered under the auspices of the Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

Selected courses offered for credit toward the M.S. in management information systems also are available on the Florham Campus, Madison, New Jersey.

### Admission Requirements

1. Graduation from an accredited college or university with a satisfactory academic record.
2. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years. The GRE may be waived if the applicant enrolls initially as a nonmatriculating student and completes 9 graduate credits in computer science with a minimum cumulative grade point ratio (CGPR) of 3.00 on a 4.00 scale and no grade below C or is a Fairleigh Dickinson University computer science graduate and has an undergraduate CGPR of 3.00 or is a non-Fairleigh Dickinson University computer science graduate and has an undergraduate CGPR of 3.50. This GRE-waiver policy is only applicable to applicants who graduated from a regionally accredited college or university in the United States. (The GRE requirement also is waived for applicants who have completed a master's degree.)

Applicants who have not completed all requirements for admission to the degree

program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

### Requirements for the Master of Science Degree

1. Students must complete 30 credits of courses including topics in computer architecture, database systems, management, systems design, implementation and maintenance and electronic commerce.

2. Students who do not have an undergraduate degree in MIS or a cognate area, or demonstrably equivalent knowledge will take up to 12 credits of prerequisite courses. They must earn a cumulative grade point ratio of at least 2.75 for the prerequisite courses taken. Students who wish to be exempted from these courses must apply in writing to the school before the beginning of their first semester in the program.

3. Students must earn a cumulative grade point ratio of at least 2.75 for the 30 credits beyond the prerequisite courses.

### Prerequisite Courses (12 credits)

The prerequisite courses for the M.S. in management information systems are:

	Credits
ACCT5012	
Financial Accounting: End-User Applications.....	2
CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
ECON5012	
Economic Analysis.....	2
MKTG5012	
Marketing Principles.....	2

### Required Courses (18 credits)

CSCI6603	
Computer Architecture.....	3
CSCI6623	
Database Systems.....	3
CSCI6720	
Management Information Systems.....	3
CSCI6758	
Electronic Commerce.....	3
CSCI7727	
Development of MIS 1: Project Management and Systems Analysis.....	3
CSCI7791	
Information Systems for Competitive Advantage.....	3

# Management Information Systems

## Elective Courses (12 credits)

Students must select four electives from the list below. However, students have the option of registering for a 3-credit internship (which counts as one elective course) after completing 18 graduate credits. At the discretion of the school and consistent with the program objectives, other information-technology and business-oriented courses may be added to the elective list.

	Credits
CSCI6638	
Operating Systems.....	3
CSCI6731	
Computer Networks.....	3
CSCI6733	
Decision Support Systems.....	3
CSCI6734	
Expert Systems.....	3
CSCI6735	
Client-server Computing.....	3
CSCI6751	
Artificial Intelligence.....	3
CSCI6810	
Java and the Internet.....	3
CSCI6844	
Programming for the Internet.....	3
CSCI7728	
Development of MIS 2: Systems Design, Implementation and Maintenance.....	3
CSCI7781	
Advanced Database Systems.....	3
CSCI7785	
Distributed Database Systems.....	3
CSCI7795	
Building Electronic Commerce Systems.....	3

## Management Information Systems Certificate

The certificate program in management information systems provides individuals with a broad knowledge base to assist organizations in pursuing information technology-based competitive advantage in a rapidly changing global economy.

### Admission Requirements

Admission to the certificate program requires a baccalaureate degree from a regionally accredited college or university with a satisfactory academic record.

## Requirements for Certificate in Management Information Systems

18 credits (six courses) are to be chosen from the following:

	Credits
CSCI5525	
Introduction to Computer Science.....	3
CSCI6623	
Database Systems.....	3
CSCI6720	
Management Information Systems.....	3
CSCI6731	
Computer Networks.....	3
CSCI6758	
Electronic Commerce.....	3
CSCI7727	
Development of MIS 1: Project Management and Systems Analysis.....	3
CSCI7791	
Information Systems for Competitive Advantage.....	3

Students must satisfy the prerequisites of the courses that they will take.

**Academic Credits:** Courses with numbers 6000 or higher completed through this certificate program can be credited toward the **M.S. in management information systems** program. Other courses may be substituted with prior approval of the student's academic adviser.

### Course Offerings

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the school. See also "Course Offerings," Computer Science, pages 98–103.*

## Management Information Systems Lee Gildart and Oswald Haase School of Computer Sciences and Engineering

### CSCI5525 3 Credits

**Introduction to Computer Science**  
Introduction to computer hardware and software, interactions and tradeoffs. Essentials of computer organization and arithmetic, assemblers, I/O devices, operating systems and files. May be taken with CSCI5505 Introduction to Computer Programming or CSCI5550 Business Programming Techniques and Data Structures (management information systems course).  
*Fall*

### CSCI5550 3 Credits

#### Business Programming Techniques and Data Structures

Methodical development of limited-size programs with the use of a procedural language (Visual Basic). Fundamental data structures: arrays, records, lists and trees. Sorting and searching. Stress on structured development techniques, systems development life cycle, with an introduction to prototyping and program maintenance. Laboratory.

### CSCI5551 3 Credits

#### Mathematics for Computer Science and MIS

Introduction to basic mathematical concepts and how they relate to computer science; formal logic, set theory, functions, relations, Boolean algebra, graph theory and combinatorics.  
*Fall*

### CSCI6731 3 Credits

#### Computer Networks

Introduction to the theory and practice of computer networking. Network design and analysis, elementary queueing theory. Network protocols, elementary queueing theory. Network protocols, Functions of the layers of ISO reference model, including routing, flow control, error control, sequencing and addressing. Prerequisite: CSCI5525 Introduction to Computer Science.  
*Fall*

### CSCI6733 3 Credits

#### Decision Support Systems

Characteristics of decision support systems (DSS) within the MIS framework. Requirements for effective DSS. Normative and behavioral theories of decision making. Dialog, database and model management. Classes of models. DSS development: tools and methodologies. Laboratory. Prerequisite: CSCI6720 Management Information Systems.

### CSCI6750 3 Credits

#### Advanced Quantitative Analysis

Mathematical programming techniques and optimization methods. Goal, integer, nonlinear and dynamic programming. Regression analysis for planning and forecasting. Construction of models with the use of a modeling language. Laboratory. Prerequisite: CSCI5551 Mathematics for Computer Science and MIS.

### CSCI7727 3 Credits

#### Development of MIS 1: Project Management and Systems Analysis

Techniques of information system project management, cost/benefit analysis, development time and cost estimation. Organization of the development process: detailed discussion and



use of systems development life cycle with prototyping. Systems documentation. Students will perform feasibility study and structured systems analysis of an online application system, as well as develop a moderate-size prototype for it. Project will use a computer-aided software engineering tool. Laboratory. Prerequisite: CSCI6720 Management Information Systems. Note: This course does not carry credit for computer science majors.

## **CSCI7728**

**3 Credits**

### **Development of MIS 2: Systems Design, Implementation and Maintenance**

Structured software design, structured programming and multilevel testing. Team implementation of an online system. Complete documentation package for the system will be prepared. Regression tests will be developed. Maintenance of the system, including its documentation, is to be performed by modifying one of its major functional capabilities. Laboratory. Prerequisite: CSCI7727 Development of MIS 1: Project Management and Systems Analysis.

## **CSCI7791**

**3 Credits**

### **Information Systems for Competitive Advantage**

Use of information technology as a strategic weapon. Forces, strategies and tactics in competitive markets. Value chain analysis of strategic opportunities for use of information systems. Organizational requirements for success with strategic use of information technology. Integration of MIS planning with corporate planning. Changes in industry structure due to strategic information system use. Case studies. Prerequisites: ACCT5012 Financial Accounting: End-User Applications and CSCI7727 Development of MIS 1: Project Management and Systems Analysis.

## **Marketing (M.B.A.)**

See Business, Marketing, page 64.

---

## **Mathematical Foundations (M.A.)**

See Education, Mathematical Foundations, page 125.

## **Medical Technology (M.S.)**

This program is offered under the auspices of the Henry P. Becton School of Nursing and Allied Health, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### **Admission Requirements**

1. Graduation from an accredited college or university.
  2. Grade point ratio (GPR) of 3.00 or higher.
  3. Bachelor of Science in medical technology or in biology.
  4. Twelve- to 15-month clinical training program in the undergraduate curriculum.
  5. Registration as medical technologist of the American Society for Clinical Pathology and two years of clinical experience. (The latter may be completed concurrently with course work, in which case full matriculation for the degree is not permitted until the two full years of experience are presented.)
  6. Undergraduate courses in statistics (inferential and descriptive).
  7. Three letters of recommendation (academic/professional).
  8. An essay on one of two topics: "Why did you choose graduate education?" or "What do you plan to do with your master of science degree?"
- Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

### **Requirements for the Master of Science Degree**

1. Satisfactory completion of a minimum of 35 credits consisting of 12 credits of biology/chemistry; 6 credits of computer science; 6 credits of administration or business courses; 5 credits of research, including a research project; and 6 credits of Clinical Practicum.
2. Upon admission to the M.S. in medical technology program, a student is required to meet with the associate director of allied health from the School of Nursing and Allied Health to discuss a program plan suitable to his or her interests.

# Medical Technology

## Required Courses

### Biology/Chemistry Credits

Select 12 credits from the following:

BIOL6240, BIOL6241	
Molecular Cell Biology (Lecture and Laboratory).....	4
BIOL6705	
Advances in Cell Biology.....	3
BIOL6724	
Human Genetics.....	3
BIOL6733	
Enzymology.....	3
BIOL6761, BIOL6661	
Advanced Microbiology (Lecture and Laboratory).....	4
CHEM6525	
Physical Chemistry.....	3
CHEM6529	
Microtoxicology and Biochemistry.....	3
CHEM6673	
Physical Organic Chemistry.....	3
CHEM6781	
Biochemistry.....	3

### Computer Science

Select 6 credits from the following:

CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
CSCI6720	
Management Information Systems.....	3
NURS6640	
Clinical Nursing Information Systems and Applications.....	3

### Administration/Business

Select 6 credits from the following:

MGMT5012	
Foundations of Management.....	2
PADM6602	
Budgeting and Finance.....	3
PADM6604	
Human Resources Management.....	3
PADM7731	
Introduction to Health Systems and Policy.....	3

### Introduction to Research

NURS7701	
Advanced Research and Evidence-based Practice.....	3

### Research Seminar

NURS7752	
Master Project Seminar.....	2

### Clinical Practicum (I, II, III)

MEDT6623		Credits
Clinical Practicum I.....	2	
MEDT7725		
Clinical Practicum II.....	2	
MEDT7731		
Clinical Practicum III.....	2	
	Total.....	35

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the school.

For Biology, Chemistry, Computer Science, Engineering and Business courses see "Course Offerings" under the respective majors.

## Medical Technology

Henry P. Becton School of Nursing and Allied Health

### BIOL5306

3 Credits

#### Immunology

A study of the structure and function of the molecular and cellular components of the immune system, genetic bases of immune responses, normal and pathological responses, tumor immunology, transplantation and immunological techniques. Prerequisites: BIOL1251, BIOL1253 General Biology I; BIOL1252, BIOL1254 General Biology II; BIOL2210 Genetics; BIOL2211 Laboratory: Genetics; CHEM2261 Organic Chemistry I; CHEM2263 Organic Chemistry Laboratory I; and CHEM3281 Biochemistry I.

### BIOL6705

3 Credits

#### Advances in Cell Biology

Molecular organization of cell. Internal membranes and synthesis of macromolecules. The cell nucleus and cell division. Control of cell cycle. Cytoskeleton and cell-cell adhesion. The extra cellular matrix and signal transduction. Fall, Spring

### BIOL6721

3 Credits

#### Advances in Molecular Genetics

Classical mechanisms of recombination in prokaryote; transposition; genetic engineering; isolation and sequencing of DNA; restriction mapping; plasmid vectors; DNA cloning; molecular hybridization; regulation of genetic expression. Mutagenicity and carcinogenicity. Proteomic research: genome to proteome. Applications in research, medicine and agriculture. Prerequisites: BIOL2210, BIOL2211 Genetics. Fall, Spring

### BIOL6733

3 Credits

#### Enzymology

Enzyme sources and purification, structure, kinetics and mechanisms. Sequencing and characterization, biocatalysis, control of enzyme activity, clinical aspects of enzymology and applications in biotechnology. Use of protein data banks and molecular modeling. Spring

### BIOL6767

3 Credits

#### Microbiology and Infectious Diseases

The biology of infectious agents, establishment of infectious diseases and strategies to study microbial and viral pathogens. The biological basis for antimicrobial and antiviral actions. Other topics emphasized are constitutive and induced defenses of the body, microbial subversion of host defenses and bacterial toxins.

### MEDT6623

2 Credits

#### Clinical Practicum I

Supervised experience in the clinical chemistry laboratory will provide students with the opportunity to analyze constituents from blood, urine, spinal fluid and other body fluids. Advanced instrumentation, preventative maintenance, quality-control and assurance procedures, application of theoretical information and technical competence will be emphasized. Students also will obtain additional experience in specimen collection, processing and management.

### MEDT7701

3 Credits

#### Advanced Research

The advancement of knowledge in medical technology through research is explored. Critical analysis of selected concepts using related literature is conducted and applied to the research process. Quantitative statistical procedures and qualitative methods are examined for their appropriate use in research design. Research in medical technology and allied health is evaluated for utilization in practice cognizant of ethical issues. Prerequisite: background in statistics.

### MEDT7725

2 Credits

#### Clinical Practicum II

Students will obtain practical experience in hematology, hemostasis and urine and body-fluid analysis under direct supervision at various clinical sites. Correlation of theoretical studies with current practice, automation, troubleshooting, problem-solving, National Committee on Clinical Laboratory Standards (NCCLS) and College of American Pathologists (CAP) guidelines, accreditation requirements and technical competence will be emphasized. Prerequisite: MEDT6623 Clinical Practicum I.

## MEDT7751

2 Credits

### Clinical Practicum III

Under supervision, students will observe and perform isolation, identification and susceptibility-testing procedures in microbiology. Students will gain experience in correlating theoretical knowledge with clinical practice, ensuring quality through performance and interpretation of quality-control procedures and addressing administrative and management issues of specimen acceptability, work flow, method assessment and appropriate use of interpretive guidelines. Prerequisite: MEDT7725 Clinical Practicum II.

## MEDT7752

2 Credits

### Research Seminar

The development and presentation of scholarly projects guided by faculty in selected areas of practice, administration and research. Prerequisite: MEDT7701 Advanced Research.

## Nursing (M.S.N.)

The graduate curriculum in nursing is designed to serve those who desire to study advanced nursing rooted in explicit nursing knowledge as a guide to various roles.

The Master of Science in Nursing (M.S.N.) program prepares individuals as nurse practitioners for primary care, forensic nurses, nurse information systems specialists or as nurse educators and nurse administrators.

Advanced scholarship takes place within the context of nursing as a discipline and profession and is the guiding theme of all activities encompassed within the learning environment.

This program is offered under the auspices of the Henry P. Becton School of Nursing and Allied Health, University College: Arts • Sciences • Professional Studies, at the Metropolitan Campus, Teaneck, New Jersey, and the Florham Campus, Madison, New Jersey.

### Admission Requirements

1. Graduation from an accredited B.S.N. program.
2. Undergraduate grade point ratio (GPR) of 3.00 or higher.
3. Registered nurse licensure in New Jersey.
4. Proficiency in spoken and written English.
5. Undergraduate prerequisites, including courses in health assessment, statistics and nursing research.
6. A personal interview may be required.
7. A minimum of one year of clinical nursing experience.
8. Two letters of recommendation.

### Clinical Tracks

- Adult Gerontology Nurse Practitioner\* (30 credits)
- Adult Gerontology Nurse Practitioner — Education or Administration Focus (39 credits)
- Adult Gerontology Nurse Practitioner — Forensic Focus (42 credits)
- Family Nurse Practitioner (37 credits)
- Family Psychiatric/Mental Health Nurse Practitioner\* (42 credits)

\*Offered at both the Metropolitan Campus in Teaneck, New Jersey, and at the Florham Campus in Madison, New Jersey.

### Nonclinical Tracks

- Nursing Administration (33 credits)
- Nursing Education (33 credits)
- Nursing Information Systems (32 credits)

### Post-Master's Certificate Programs

Individuals holding an M.S.N. degree may earn a Post-M.S.N. graduate certificate in gerontology nurse practitioner, family nurse practitioner, family psychiatric/mental health nurse practitioner, nursing education and nursing information systems.

- Adult Gerontology Nurse Practitioner (24 credits)
- Family Nurse Practitioner (24 credits)
- Family Psychiatric/Mental Health Nurse Practitioner (24 credits)
- Nursing Education (24 credits)
- Nursing Administration (24 credits)
- Nursing Information Systems (24 credits)

Upon completion of the adult gerontology nurse practitioner, family nurse practitioner and family psychiatric/mental health nurse practitioner programs, the graduate is eligible for the Advanced Practice Nurse (APN) Certification Examination.

### Adult Gerontology Nurse Practitioner

Graduates of the adult gerontology nurse practitioner program will be qualified to diagnose and treat clients with a wide variety of illnesses. Students graduate with an M.S.N. degree and are eligible to take the adult-gerontology nurse practitioner certification exam (AANP or ANCC) to become certified in the field.

### Required Core Courses (8 credits)

	Credits
NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence- based Practice.....	3
NURS7752	
Master Project Seminar.....	2

### Advanced Nursing Practice Courses (22 credits)

NURS6615	
Advanced Pharmacology.....	3
NURS6620	
Advanced Health Assessment Theory....	2

# Nursing

	Credits
NURS6621	
Advanced Health Assessment Practicum.....	2
NURS6682	
Primary Care of the Adult Gerontology I – Theory.....	3
NURS6683	
Primary Care of the Adult Gerontology I – Practicum.....	1
NURS7702	
Advanced Pathophysiology.....	3
NURS7735	
Advanced Adult Gerontology II Theory.....	3
NURS7736	
Advanced Adult Gerontology II Practicum.....	1
NURS7759	
Primary Care of the Adult Gerontology III – Theory.....	3
NURS7760	
Primary Care of the Adult Gerontology III – Practicum.....	1

## Adult Gerontology Nurse Practitioner — Education or Administration Focus

Graduates of the adult-gerontology nurse practitioner program will be qualified to diagnose and treat clients with a wide variety of illnesses. Students graduate with an advanced practice nursing (A.P.N.) degree and are eligible to take the adult nurse practitioner certification exam (AANP or ANCC) to become certified in the field. Students select a role specialization in education or administration (9 credits).

### Required Core Courses (8 credits)

NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

### Advanced Nursing Practice Courses (22 credits)

NURS6615	
Advanced Pharmacology.....	3
NURS6620	
Advanced Health Assessment Theory....	2
NURS6621	
Advanced Health Assessment Practicum.....	2

	Credits
NURS6682	
Primary Care of the Adult Gerontology I – Theory.....	3
NURS6683	
Primary Care of the Adult Gerontology I – Practicum.....	1
NURS7702	
Advanced Pathophysiology.....	3
NURS7735	
Advanced Adult Gerontology II Theory.....	3
NURS7736	
Advanced Adult Gerontology II Practicum.....	1
NURS7759	
Primary Care of the Adult Gerontology III – Theory.....	3
NURS7760	
Primary Care of the Adult Gerontology III – Practicum.....	1
	Total..... 30

### Role Specialization (9 credits)

**Education courses:** curriculum development; measurement and evaluation; educational theory/teaching strategies.

**Administration courses:** public and non-profit management; human resources management; budgeting and finance.

Total..... 39

### Adult Gerontology Nurse Practitioner — Forensic Focus

As a forensic nurse, graduates will focus on meeting the needs of victims and perpetrators of crimes, applying scientific nursing knowledge to the delivery of care for survivors of traumatic injury, victims of violence or death investigations. The nurse may specialize in such areas as domestic violence, child and elder abuse and emergency trauma. The forensic nurse may also be involved in conducting crime-scene investigations or giving courtroom testimony.

### Required Core Courses (8 credits)

NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

### Advanced Nursing Practice Courses (22 credits)

NURS6615	
Advanced Pharmacology.....	3

	Credits
NURS6620	
Advanced Health Assessment Theory....	2
NURS6621	
Advanced Health Assessment Practicum.....	2
NURS6682	
Primary Care of the Adult Gerontology I – Theory.....	3
NURS6683	
Primary Care of the Adult Gerontology I – Practicum.....	1
NURS7702	
Advanced Pathophysiology.....	3
NURS7735	
Advanced Adult Gerontology II Theory.....	3
NURS7736	
Advanced Adult Gerontology II Practicum.....	1
NURS7759	
Primary Care of the Adult Gerontology III – Theory.....	3
NURS7760	
Primary Care of the Adult Gerontology III – Practicum.....	1

### Forensic Nursing Specialization (12 credits)

Courses for the forensic nursing specialization will be selected each semester from the offerings of the School of Psychology and the School of Criminal Justice, Political Science and International Studies graduate courses in forensics, see below for examples.

CRIM6005	
Advanced Criminological Theory.....	3
CRIM7020	
Ethics, Politics and Justice.....	3
CRIM7065	
Crime, Victimology and Risk Reduction.....	3
PSYC6231	
Psychological Bases of Criminal Behavior.....	3
	Total..... 42

### Family Nurse Practitioner

Graduates of the family nurse practitioner program will be qualified to diagnose and treat clients across the lifespan with a wide variety of illnesses. Students graduate with an advanced practice nursing M.S.N. degree and are eligible to take the family nurse practitioner certification exam (AANP or ANCC) to become certified in the field.

## Required Core Courses (8 credits)

	Credits
NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

## Advanced Nursing Practice Courses (29 credits)

NURS6615	
Advanced Pharmacology.....	3
NURS6620	
Advanced Health Assessment Theory....	2
NURS6621	
Advanced Health Assessment Practicum.....	2
NURS6682	
Primary Care of the Adult Gerontology I – Theory.....	3
NURS6683	
Primary Care of the Adult Gerontology I – Practicum.....	1
NURS7702	
Advanced Pathophysiology.....	3
NURS7735	
Advanced Adult Gerontology II Theory.....	3
NURS7736	
Advanced Adult Gerontology II Practicum.....	1
NURS7794	
Family Care I Pediatrics.....	3
NURS7795	
Family Primary Care I Practicum.....	1
NURS7810	
Family Primary Care II Theory.....	3
NURS7811	
Family Primary Care II Practicum.....	1
NURS7812	
Family Systems.....	3

## Family Psychiatric/Mental Health Nurse Practitioner

As a family psychiatric/mental health nurse practitioner, graduates will be qualified to diagnose and treat clients with a wide variety of mental illnesses. Students graduate with an advanced practice nursing (A.P.N.) degree and are eligible to take the family psychiatric/mental health nurse practitioner exam (ANCC) to become certified in the field.

## Required Core Courses (8 credits)

	Credits
NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

## Advanced Nursing Practice Courses (34 credits)

NURS6501	
Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents.....	3
NURS6502	
Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents.....	2
NURS6503	
Advanced Psychiatric/Mental Health Nursing Theory II: Adults.....	3
NURS6504	
Advanced Psychiatric/Mental Health Nursing Practicum II: Adults.....	2
NURS6505	
Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics.....	3
NURS6506	
Advanced Psychiatric/Mental Health Nursing Practicum III: Geriatrics.....	2
NURS6615	
Advanced Pharmacology.....	3
NURS6620	
Advanced Health Assessment Theory....	2
NURS6621	
Advanced Health Assessment Practicum.....	2
NURS6701	
Psychopharmacology.....	3
NURS7702	
Advanced Pathophysiology.....	3
NURS7812	
Family Systems.....	3
NURS7815	
Advanced Practice Nursing Role Development.....	3
Total.....	42

## Nursing Administration

The master of science in nursing administration program is designed to prepare leaders of administrative teams in hospi-

tals, clinics or other health care organizations who will influence and implement institutional policies during this period of health care reform, restructuring and changes affecting patient outcomes. Students who completed another master's degree cannot transfer any courses to complete this master's degree.

## Required Courses

### Nursing Core Courses (8 credits)

	Credits
NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

### Advanced Nursing Courses (10 credits)

NURS7718	
Administrative Practicum.....	4
NURS7771	
Seminar in Nursing Education.....	3
NURS8002	
Health Care Delivery Systems and Public Policy.....	3

### Nursing Information Systems Courses (6 credits)

NURS6640	
Clinical Nursing Information Systems and Applications.....	3
NURS7741	
Project Management.....	3

### Master of Administrative Science or M.B.A. Courses (9 credits)

MADS6600	
Theory and Practice of Administration.....	3
or	
MGMT5012	
Foundations of Management.....	2
MADS6601	
Financial Administration.....	3
or	
FIN5012	
Principles of Finance.....	2
MADS6606	
Administrative Leadership in Complex Organizations.....	3
or	
MGMT6012	
Organizational Behavior and Leadership.....	2
Total.....	32

# Nursing

## Nursing Education

The nurse educator M.S.N. program prepares nurses as teachers in collegiate programs, in associate or bachelor's degree nursing education. Students acquire knowledge and skills in teaching that enable them to work effectively with students, patients and consumers. Students complete a preceptored practicum that is individually tailored to student goals and exposes them to all aspects of the faculty academic and clinical teaching role.

### Required Core Courses (8 credits)

	Credits
NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

### Advanced Nursing Education Courses (25 credits)

NURS6615	
Advanced Pharmacology.....	3
NURS7702	
Advanced Pathophysiology.....	3
NURS7705	
Educational and Learning Theory.....	3
NURS7706	
Teaching Strategies for the Learning Environment.....	3
NURS7713	
Curriculum Development and Theory.....	3
NURS7714	
Outcomes Assessment.....	3
NURS7717	
Teaching Practicum.....	4
NURS7771	
Seminar in Nursing Education.....	3
Total.....	33

## Nursing Information Systems

The nursing information systems specialist is able to integrate computer science, information science and nursing science to assist in the management and process of nursing data, information and knowledge to support evidence-based practice and to improve the delivery of nursing care.

### Required Core Courses (8 credits)

NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3

	Credits
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7752	
Master Project Seminar.....	2

### Nursing Information Systems Specialization (12 credits)

NURS6640	
Clinical Nursing Information Systems and Applications.....	3
NURS7740	
Nursing Informatics Role.....	3
NURS7741	
Project Management.....	3
NURS7745	
Practicum in Nursing Informatics.....	3

### Support Courses (9 credits)

Select three courses from the following:	
CSCI5505	
Introduction to Computer Programming.....	3
CSCI5525	
Introduction to Computer Science.....	3
CSCI6720	
Management Information Systems*.....	3
CSCI6733	
Decision Support Systems**.....	3

### Elective Courses (3 credits)

Select one course from the following:	
NURS7705	
Educational and Learning Theory.....	3
NURS7746	
Nursing Informatics Practicum II.....	3
Total.....	32

## Post-Master's Certificate Program

The Post-Master's Certificate Program allows nurses who have a master's degree in nursing from an NLN/CCNE-accredited program to pursue further post-graduate study in APRN (Advanced Practice Nursing) in adult gerontology, family, family psychiatric/mental health, forensic and nonclinical areas in education and nursing information systems.

### Admissions Criteria

1. Master's degree in nursing from an NLN/CCNE-accredited program.
2. Grade point ratio (GPR) of 3.00.
3. Current New Jersey registered nurse (RN) license or eligibility for RN licensure in New Jersey.

\*Prerequisite is CSCI5525 Introduction to Computer Science.

\*\*Prerequisite is CSCI6720 Management Information Systems.

## Adult Gerontology Nurse Practitioner Post-Master's Certificate

The adult gerontology nurse practitioner post-master's certificate program includes didactic and clinical experiences that focus on the primary-care needs of the adult-gerontology population.

Designed for M.S.N.-prepared nurses who are interested in becoming adult gerontology nurse practitioners, graduates are eligible for national certification.

### Required Courses (24 credits)

	Credits
NURS6615	
Advanced Pharmacology*.....	3
NURS6620	
Advanced Health Assessment Theory**.....	2
NURS6621	
Advanced Health Assessment Practicum**.....	2
NURS6682	
Primary Care of the Adult Gerontology I Theory.....	3
NURS6683	
Primary Care of the Adult Gerontology I Practicum.....	1
NURS7702	
Advanced Pathophysiology**.....	3
NURS7735	
Advanced Adult Gerontology II Theory.....	3
NURS7736	
Advanced Adult Gerontology II Practicum.....	1
NURS7759	
Primary Care of the Adult Gerontology III Theory.....	3
NURS7760	
Primary Care of the Adult Gerontology III Practicum.....	1
NURS7813	
APN Practicum.....	2-10
Total credits required are determined on an individual basis after gap analysis of prior education and certification.	
Total clinical hours: 550 hours	

\*NURS6615 Advanced Pharmacology must have been taken within three years of entry into the program.

\*\*NURS6620 Advanced Health Assessment Theory, NURS6621 Advanced Health Assessment Practicum and NURS7702 Advanced Pathophysiology must have been completed within five years of entry into the program.

## Family Nurse Practitioner Post-Master's Certificate

The family nurse practitioner post-master's certificate program includes didactic and clinical experiences that focus on the primary-care needs of families and communities.

Designed for M.S.N.-prepared nurses who are interested in becoming nurse practitioners, graduates are eligible for national certification.

### Required Courses (24 credits)

	Credits
NURS6615	
Advanced Pharmacology*.....	3
NURS6620	
Advanced Health Assessment Theory**.....	2
NURS6621	
Advanced Health Assessment Practicum**.....	2
NURS6682	
Primary Care of the Adult Gerontology I Theory.....	3
NURS6683	
Primary Care of the Adult Gerontology I Practicum.....	1
NURS7702	
Advanced Pathophysiology**.....	3
NURS7735	
Advanced Adult Gerontology II Theory.....	3
NURS7736	
Advanced Adult Gerontology II Practicum.....	1
NURS7794	
Family Primary Care I Pediatrics.....	3
NURS7795	
Family Primary Care I Practicum.....	1
NURS7810	
Family Primary Care II Theory.....	3
NURS7811	
Family Primary Care II Practicum.....	1
NURS7812	
Family Systems.....	3
NURS7813	
APN Practicum.....	2-10
Total credits required are determined on an individual basis after gap analysis of	

\*NURS6615 Advanced Pharmacology must have been taken within three years of entry into the program.

\*\*NURS6620 Advanced Health Assessment Theory, NURS6621 Advanced Health Assessment Practicum and NURS7702 Advanced Pathophysiology must have been completed within five years of entry into the program.

prior education and certification. If the student is not a nurse practitioner, he or she must complete NURS6682 Primary Care of the Adult Gerontology I – Theory and NURS6683 Primary Care of the Adult Gerontology I – Theory and NURS7735 Advanced Adult Gerontology II Theory or NURS7736 Advanced Adult Gerontology II Practicum as well as NURS7794 Family Primary Care I and NURS7810, NURS7811 Family Primary Care II.

Total clinical hours: 640 hours to be completed in the program.

## Family Psychiatric/Mental Health Nurse Practitioner Post-Master's Certificate

Upon completion of the family psychiatric and mental health advanced practice certificate program, students are eligible for family psychiatric and mental health nurse practitioner certification through the American Nurses Credentialing Center (ANCC).

### Required Courses (24 credits)

	Credits
NURS6501	
Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents.....	3
NURS6502	
Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents.....	2
NURS6503	
Advanced Psychiatric/Mental Health Nursing Theory II: Adults.....	3
NURS6504	
Advanced Psychiatric/Mental Health Nursing Practicum II: Adults.....	2
NURS6505	
Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics.....	3
NURS6506	
Advanced Psychiatric/Mental Health Nursing Practicum III: Geriatrics.....	2
NURS6701	
Psychopharmacology.....	3
NURS7812	
Family Systems.....	3

NURS7815

Advanced Practice Nursing Role Development..... 3  
Total credits required are determined on an individual basis after gap analysis of prior education and certification.  
Total clinical hours: 555 hours to be completed in the program.

## Accelerated D.N.P. Programs

The Henry P. Becton School of Nursing and Allied Health offers the following accelerated D.N.P. programs:

- Pre-baccalaureate Nursing to D.N.P. (109 credits and 1,565 clinical hours)
- Post-baccalaureate Nursing to D.N.P. (58 credits and 1,065 clinical hours)
- Postmaster's D.N.P. (36 credits and 500 residency hours)

For information go to Accelerated D.N.P. Programs, pages 180-181.

## For Information

For more information, contact Dr. Boas Yu, associate director of graduate nursing programs, at (201) 692-2881 or boas\_yu@fdu.edu.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the school.

## Nursing

Henry P. Becton School of Nursing and Allied Health

NURS6501

3 Credits

### Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents

The focus of this course is on children and adolescents with acute and chronic mental illnesses. Interventions emphasize music therapy; play therapy; cognitive-behavior therapy; individual, family and group therapy; and residential, day and hospital treatment. Biologically based management is also addressed. Assessments and differential diagnoses are emphasized and the use of reliable and valid measurement instruments is taught. Knowledge from nursing science, psychotherapies, biological therapies and evidence-based research provide the basis for culturally competent psychiatric advance-practice nursing care to this population. Prerequisites: NURS6615 Advanced Pharmacology, NURS6620 Advanced Health Assessment Theory and NURS6621 Advanced Health Assessment Practicum. Corequisite: NURS6502

Credits

Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents.

## NURS6502

2 Credits

### **Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents**

Students will apply knowledge from NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents in providing direct care in the clinical arena to children and adolescents with acute and chronic mental illnesses. Students will carry a caseload of patients under the direct guidance of an experienced preceptor who will be certified as a family psychiatric nurse practitioner or child and adolescent psychiatrist. Weekly supervision sessions with faculty enhance students' developing clinical competence. care to this population. Prerequisites: NURS6615 Advanced Pharmacology, NURS6620 Advanced Health Assessment Theory and NURS6621 Advanced Health Assessment Practicum. Corequisite: NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents.

## NURS6503

3 Credits

### **Advanced Psychiatric/Mental Health Nursing Theory II: Adults**

The focus of this course is on adults with acute and chronic mental illnesses. Interventions emphasize one-on-one interaction from a variety of therapeutic modalities such as short-term psychotherapy, biologically based management and cognitive-behavior therapy. Group and family therapy are explored as treatment modalities. Assessments and differential diagnoses are emphasized and the use of reliable and valid measurement instruments is addressed. Knowledge from nursing science; individual, group and family theory; and evidence-based research provide the basis for culturally competent psychiatric advance-practice nursing care to this adult population. Prerequisites: NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents; NURS6502 Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents; and NURS6701 Psychopharmacology. Corequisite: NURS6504 Advanced Psychiatric/Mental Health Nursing Practicum II: Adults.

## NURS6504

2 Credits

### **Advanced Psychiatric/Mental Health Nursing Practicum II: Adults**

Students will apply knowledge from NURS6503 Advanced Psychiatric/Mental Health Nursing Theory II: Adults in providing direct care in the clinical arena to adults with acute and chronic mental illnesses. Students will carry a caseload of patients under the direct guidance of an experienced preceptor who will be certified as a nurse practitioner or psychiatrist. Weekly supervision sessions with faculty enhance students' developing clinical competence. Prerequisites: NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents; NURS6502 Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents; and NURS6503 Advanced Psychiatric/Mental Health Nursing Theory II: Adults. Corequisite: NURS6505 Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics.

rienced preceptor who will be certified as a nurse practitioner or psychiatrist. Weekly supervision sessions with faculty enhance students' developing clinical competence. Prerequisites: NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents; NURS6502 Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents; and NURS6701 Psychopharmacology. Corequisite: NURS6503 Advanced Psychiatric/Mental Health Nursing Theory II: Adults.

## NURS6505

3 Credits

### **Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics**

The focus of this course is on geriatric patients with acute and chronic mental illnesses. Psychotherapeutic and biologically based therapies that are unique to this population will be addressed. Assessments and differential diagnoses are emphasized and the use of reliable and valid measurement instruments is taught. Knowledge from nursing science; individual, group and family theory; and evidence-based research provide the basis for culturally competent psychiatric advance-practice nursing care to this geriatric population. Prerequisites: NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents; NURS6502 Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents; NURS6503 Advanced Psychiatric/Mental Health Nursing Theory II: Adults; and NURS6504 Advanced Psychiatric/Mental Health Nursing Practicum II: Adults. Corequisite: NURS6506 Advanced Psychiatric/Mental Health Nursing Practicum III: Geriatrics.

## NURS6506

2 Credits

### **Advanced Psychiatric/Mental Health Nursing Practicum III: Geriatrics**

Students will apply knowledge from NURS6505 Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics in providing direct care in the clinical arena to geriatric patients with acute and chronic mental illnesses. Students will carry a caseload of patients under the direct guidance of an experienced preceptor who will be certified as a nurse practitioner or psychiatrist. Weekly supervision sessions with faculty enhance students' developing clinical competence. Prerequisites: NURS6501 Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents; NURS6502 Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents; NURS6503 Advanced Psychiatric/Mental Health Nursing Theory II: Adults; and NURS6504 Advanced Psychiatric/Mental Health Nursing Practicum II: Adults. Corequisite: NURS6505 Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics.

## NURS6600

3 Credits

### **Introduction to Advanced Nursing: Philosophies and Theories**

Philosophies of science, nursing theories and conceptual models will be analyzed as guides to nursing education, administration, research and practice.

## NURS6615

3 Credits

### **Advanced Pharmacology**

Examines legal implications, pharmacologic action and the monitoring of drug-therapy responses of clients needing various classifications of drugs in the management of health conditions. Prerequisites: NURS6620 Advanced Health Assessment Theory, NURS6621 Advanced Health Assessment Practicum and NURS7702 Advanced Pathophysiology.

## NURS6620

2 Credits

### **Advanced Health Assessment Theory**

This course will focus on the comprehensive health assessment of culturally diverse adult clients. Using a system's approach, the student will synthesize and analyze data relative to the health promotion of the adult population. The course will address the health-assessment needs of select populations across the life span of the adult. Ethical and legal implications of health assessment will be addressed. Prerequisite: NURS7702 Advanced Pathophysiology. Corequisite: NURS6621 Advanced Health Assessment Practicum.

## NURS6621

2 Credits

### **Advanced Health Assessment Practicum**

Utilizing theoretical foundations, the student will perform a comprehensive health assessment across the adult life cycle. The student's clinical skills will be validated by faculty and expert preceptor(s) in supervised clinical settings that provide the student with opportunities to practice cognitive and psychomotor skills necessary to begin the advanced practice role. Prerequisite: NURS7702 Advanced Pathophysiology. Corequisite: NURS6620 Advanced Health Assessment Theory.

## NURS6640

3 Credits

### **Clinical Nursing Information Systems and Applications**

This course examines the role and practice of informatics nurse specialists, which includes studying the development, implementation and evaluation of applications, tools, processes and systems that assist nurses with the management of data in taking care of patients and supporting the practice of nursing. The course focuses on assessing, adapting, integrating and evaluating informatic applications to nursing in both the clinical and nonclinical domain.



## NURS6682

3 Credits

### **Primary Care of the Adult Gerontology I – Theory**

This course will introduce the student to the health care management of adult-geriatric clients in the primary-care setting, utilizing Quality and Safety Education For Nurses (QSEN) in developing competencies in the knowledge, skills and attitudes necessary to continuously improve outcomes within the primary-care setting. Students will identify and treat common deviations in health. Using a systems approach, this course will examine those alterations in health which are frequently encountered and managed by adult nurse practitioners in primary health care settings. All aspects of the health maintenance and disease management are emphasized, including but not limited to, disease-lifestyle modifications, nutritional needs, pharmacotherapy, client education, rehabilitation and evaluation of treatment plans.

## NURS6683

1 Credit

### **Primary Care of the Adult Gerontology I Practicum**

This course introduces the student to clinical practice as an advanced practice nurse. Students will work with an approved preceptor in an actual clinical setting where they will begin to deliver primary care to adult-gerontology patients. They are expected to apply theory learned in didactic course to patient-management problems. Students are expected to initiate care which involves diagnosis, treatment and management of common illness and deviations from health for an adult and aged population. Students are also expected to promote health maintenance for culturally diverse populations ranging from late adolescence to geriatric clients.

## NURS6701

3 Credits

### **Psychopharmacology**

This course provides students with a foundation in providing pharmacotherapy for clients with psychiatric disorders. The neurobiological changes underlying psychopathology are emphasized as the basis for prescribing decisions and management. The central importance of caring within a therapeutic rapport provides the philosophic stance from which students are encouraged to develop their unique prescribing practice. Prerequisites: NURS6615 Advanced Pharmacology, NURS6620 Advanced Health Assessment Theory, NURS6621 Advanced Health Assessment Practicum and NURS7702 Advanced Pathophysiology.

## NURS6702

3 Credits

### **Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses**

This course assists students to become proficient in mental health and psychiatric assessment consistent with advanced nursing practice for health promotion, restoration and rehabilitation. Students practice advanced mental health evaluation techniques including individual assessments, laboratory tests, diagnostic studies and interpretation and documentation of the findings. Differential diagnosis from/with common physical health deviations is a hallmark of the course. Corequisite: NURS6703 Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses Practicum.

## NURS6703

2 Credits

### **Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses Practicum**

The student applies theoretical foundations by conducting comprehensive mental health assessments of adults. Clinical practice is provided under the supervision of faculty and expert preceptor(s) who validate the student's competence to begin advanced practice in psychiatric nursing. Prerequisites: NURS6615 Advanced Pharmacology, NURS6620 Advanced Health Assessment Theory and NURS6621 Advanced Health Assessment Practicum. Corequisite: NURS6702 Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses.

## NURS6801

3 Credits

### **Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics**

This course is focused on implementing principles for psychiatric advanced practice nursing. Knowledge from nursing science and related fields is used to assess, diagnose and treat clients with psychiatric/mental health problems. Wellness and the promotion of mental health, treatment of clients with acute mental illnesses and the prevention of further psychiatric morbidity or disability are emphasized. The context of caring is explored relative to client circumstances, resources and issues in the delivery of mental health services to individuals. Nursing research findings are applied to emphasize the link between psychotherapeutic process and outcomes which form the evidence base for psychiatric health care. Prerequisites: NURS6702 Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses, NURS6703 Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses Practicum and NURS7702 Advanced Pathophysiology. Corequisites: NURS6701 Psychopharmacology and NURS6802 Advanced

Psychiatric/Mental Health Nursing II: Individual Therapeutics Practicum.

## NURS6802

2 Credits

### **Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics Practicum**

Students apply knowledge from NURS6801 Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics to the care of acute and chronically mentally ill adults in varied psychiatric settings with the guidance of an individual preceptor in the clinical agency. Weekly supervised sessions with course faculty enhance students' developing clinical competency by encouraging self-reflection, refinement of interviewing skills, integrating primary-care concern and collaborating with colleagues. Therapeutic use of self is an essential and integral aspect of this course. Prerequisites: NURS6702 Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses, NURS6703 Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses Practicum and NURS7702 Advanced Pathophysiology. Corequisites: NURS6701 Psychopharmacology and NURS6801 Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics.

## NURS6810

3 Credits

### **Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics**

This course is focused on principles used by psychiatric advanced practice nurses to optimize group and family functioning. Knowledge from nursing science, group and family theories and research is synthesized to provide an evidence base for psychiatric advanced practice nursing. Special emphasis is placed on the ethnically diverse emotional processes experienced by groups or families. Students engage client groups and families in therapeutic relationships to change biological, psychological and/or social functioning in order to promote optimal health and/or the fullest realization of human potential. Prerequisites: NURS6701 Psychopharmacology, NURS6801 Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics and NURS6802 Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics Practicum. Corequisite: NURS6811 Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics Practicum.

## NURS6811

2 Credits

### **Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics Practicum**

Students apply knowledge from NURS6810 Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics to the care of groups and families experiencing the challenge of mental illness and dysfunction. Stu-

dents continue to carry a caseload of individual adult clients under the guidance of (an) experienced preceptor(s) in one or more clinical agencies. Weekly supervised sessions with course faculty enhance students' developing clinical competence by facilitating consultation with advanced practice nurse peers and experts in related disciplines. Dealing with psychiatric emergencies, enhancing cultural competence and integrating theoretical formulations are imperatives in this course. Prerequisites: NURS6801 Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics and NURS6802 Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics Practicum. Corequisite: NURS6810 Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics.

## **NURS7701**

**3 Credits**

### **Advanced Research and Evidence-based Practice**

The advancement of nursing knowledge through development and research is explored. Critical analysis of selected concepts using nursing and related literature is conducted and applied to the research process. Quantitative statistical procedures and qualitative methods are examined for their appropriate use in research design. Nursing research is evaluated for utilization in advanced practice cognizant of ethical issues. Prerequisite/Corequisite: NURS6600 Introduction to Advanced Nursing: Philosophies and Theories.

## **NURS7702**

**3 Credits**

### **Advanced Pathophysiology**

This course critically analyzes theories and research from the biological and social sciences and the humanities which explain/predict human responses to health and illness. The focus of this course is interventions that promote health, prevent disease, ameliorate pathological responses and foster quality of life.

## **NURS7703**

**0 Credits**

### **Advanced Educator Role Seminar I**

This course provides the opportunity for students to discuss pertinent issues, challenges and innovations in nursing education in the 21st century. The course also provides a forum for discussion of mentoring activities and exploration of the teaching associate (TA) role. Students will be supported during initial assimilation into the TA role.

## **NURS7704**

**0 Credits**

### **Advanced Educator Role Seminar II**

This course provides the opportunity for students to discuss pertinent issues, challenges and innovations in nursing education in the 21st century. The course also provides a forum for

discussion of mentoring activities and exploration of the teaching associate (TA) role. Students will be supported during initial assimilation into the TA role. Prerequisite: NURS7703 Advanced Educator Role Seminar I.

## **NURS7705**

**3 Credits**

### **Educational and Learning Theory**

This course provides an overview of philosophies of education and examines teaching-learning processes for the nurse as educator. Emphasis is placed on the adult learner. Components of critical thinking and contexts for learning are explored. The bases for educational evaluation are appraised. Selected theories from the social sciences are analyzed for appropriateness to nursing education and advanced practice.

## **NURS7706**

**3 Credits**

### **Teaching Strategies for the Learning Environment**

To facilitate active learning, the educator must be able to identify the needs of the learner, as well as strategies that will involve the learner as a lively participant in the learning environment. In this course, traditional and contemporary teaching approaches will be evaluated for use with diverse populations of learners in various settings: classroom, community, health care facilities and clients' homes.

## **NURS7708**

**0 Credits**

### **Advanced Educator Role Seminar III**

This seminar follows a cohort model and must be taken in sequence. It continues to provide the opportunity for students to discuss pertinent issues, challenges and innovations in nursing education in the 21st century. The course also provides a forum for discussion of mentoring activities and exploration of the teaching role. Students will continue to develop their teaching portfolios. Prerequisites: NURS7703 Advanced Educator Role Seminar I and NURS7704 Advanced Educator Role Seminar II.

## **NURS7709**

**0 Credits**

### **Advanced Educator Role Seminar IV**

This seminar follows a cohort model and must be taken in sequence. It continues to provide the opportunity for students to discuss pertinent issues, challenges and innovations in nursing education in the 21st century. The course also provides a forum for discussion of mentoring activities and exploration of the teaching role. Students will refine and complete their teaching portfolios. Prerequisites: NURS7703 Advanced Educator Role Seminar I, NURS7704 Advanced Educator Role Seminar II and NURS7708 Advanced Educator Role Seminar III.

## **NURS7713**

**3 Credits**

### **Curriculum Development and Theory**

This course provides opportunities for learners to explore all that is encompassed by the educational term curriculum. From the initial work by Ralph Tyler to current theories and frameworks, learners will be guided through the application of these essentials to the creation of dynamic curricula. The major project for this course is the development of curricula for use in academic settings, staff development in clinical settings or client education necessary to improve or restore health. Corequisite: NURS7705 Educational and Learning Theory.

*Fall, Spring*

## **NURS7714**

**3 Credits**

### **Outcomes Assessment**

This course provides opportunities for learners to explore methods of evaluation for use in teaching settings. Traditional and contemporary teaching approaches will be evaluated for use with identified populations of learners. The learner will identify, analyze and apply general theories of evaluation specific to individual performance, curriculum and staff development and continuing-education programs in nursing. Discussion of the process of accreditation and its role for quality assurance within nursing education will be highlighted. Prerequisites: NURS7705 Educational and Learning Theory and NURS7713 Curriculum Development and Theory. Corequisite: NURS7706 Teaching Strategies for the Learning Environment.

## **NURS7717**

**4 Credits**

### **Teaching Practicum**

This is the capstone course in the nursing education track. Learners will identify a nurse educator they would like to work with for the semester. During this experience, learners will participate in and assume many responsibilities associated with being an educator: teaching didactic, clinical in various settings, committee work and evaluation. Learners will meet every other week for a seminar with their peers to share experiences.

## **NURS7718**

**4 Credits**

### **Administrative Practicum**

This course allows students to apply administrative theories, research and planning in the role of the nurse administrator. Students will be placed with a nurse administrator preceptor in a nursing or health facility. The students are expected to participate in multiple aspects of the nurse administrator role. Prerequisites: NURS6600 Introduction to Advanced Nursing: Philosophies and Theories, NURS6640 Clinical Nursing Information Systems and Applications, NURS7701 Advanced Research and Evidence-

based Practice, NURS7752 Master Project Seminar and NURS7771 Seminar in Nursing Education.

## NURS7735

3 Credits

### Advanced Adult Gerontology II Theory

This course will continue to examine, assess, diagnose and treat alterations in health which are frequently encountered and managed by adult-gerontology nurse practitioners using a systems approach. The student will also utilize QSEN (Quality and Safety Education for Nurses) to improve patient outcomes in the adult-geriatric population.

## NURS7736

1-2 Credits

### Advanced Adult Gerontology II Practicum

This course continues to focus on the application of theory to practice in a primary care setting for the adult-gerontology population. Students will work with an approved preceptor in an actual clinical setting where they will continue to deliver primary care to adult and geriatric patients. Students are expected to apply theory learned in the didactic course to patient to manage health problems. Students are expected to diagnose, treat and manage common illnesses and deviations from healthy for an adult aged population. Students are also expected to promote health maintenance including those from culturally diverse populations.

## NURS7740

3 Credits

### Nursing Informatics Role

This course builds upon the knowledge and skills of informatics nurse specialists obtained in the prerequisite course(s). Students will cover, in more depth, various alternative roles available to the informatics nurse, emphasizing consulting and education in various nonhospital-based situations. The course focuses on assessing, adapting, integrating and evaluating informatics applications to nursing for use in broad-based situations. Prerequisite: NURS6640 Clinical Nursing Information Systems and Applications.

## NURS7741

3 Credits

### Project Management

The purpose of this course is to integrate the essential components of project planning and management with health care information systems for nursing leaders. The course will outline the process for developing, implementing and evaluating project plans as well the integration of communication and project life-cycle theory. Prerequisites: NURS6640 Clinical Nursing Information Systems and Applications and NURS7740 Nursing Informatics Role. (Equivalent to PHRM8806 Project Management.

## NURS7745

3 Credits

### Practicum in Nursing Informatics

Practical experience in selected agencies allows students to develop skills needed for implementation and evaluation of clinical and management information systems in nursing and health care.

## NURS7746

3 Credits

### Nursing Informatics Practicum II

This practicum builds upon the knowledge and skills of informatics that nurse specialists acquired in NURS7745 Practicum in Nursing Informatics. Students will enhance their practical experience in selected agencies. The practicum will allow students to further develop skills necessary for system implementation in nursing and health care applications.

## NURS7752

2 Credits

### Master Project Seminar

Learners further develop the evidence-based project proposal started in NURS7701 Advanced Research and Evidence-based Practice. In addition, learners will have hands-on experience with a statistical analysis software (e.g. SPSS) using "dummy" data. Learners will meet periodically with their classmates and their mentors to complete the implementation and evaluation phases of the project.

## NURS7757

3 Credits

### Primary Care III

Expanding on the principles of assessment, diagnosis and therapeutics, this course prepares an adult-gerontology nurse practitioner to formulate differential diagnoses based on the presenting client's chief complaint. Approached in this manner, the practitioner is prepared for the reality of health care management. The entire course is taught using case studies and anecdotes from actual clinical experiences and moves the student through symptom analysis, physical findings, diagnostic workup, management and follow-up. Prerequisite: NURS7735 Advanced Adult Gerontology Theory. Corequisite: NURS7758 Primary Care III Practicum.

## NURS7758

1 Credit

### Primary Care III Practicum

This clinical course requires that the student practice 16-hour weeks for 16 weeks in a primary-care facility that serves a medically diverse adult gerontology clientele. All clinical experiences will be supervised by expert preceptors who, along with the faculty instructor, will continually evaluate student performance. This course serves as a transition vehicle for future independent practice. Thus the student is supervised by a mentor, but is encouraged to assume the role of the adult gerontology nurse practitioner more autonomously. Prerequisite: NURS7735 Advanced Adult Gerontology Theo-

ry. Corequisite: NURS7760 Primary Care of the Adult Gerontology III Practicum.

## NURS7759

3 Credits

### Primary Care of the Adult Gerontology III - Theory

This course will continue to present the principles of disease management of adult-gerontology clients in the primary-care setting. Role development of the advanced practice nurse will be integrated throughout the course. Students are expected to apply the QSEN (Quality and Safety Education for Nurses) principles and competencies in their role as advanced practice nurses in the primary-care setting. Multi-dimensions of disease states frequently encountered and competently managed by advanced practice nurses will be discussed. Prerequisite: NURS7735 Primary Care of the Adult Gerontology II - Theory. Corequisite: NURS7760 Primary Care of the Adult Gerontology III Practicum.

## NURS7760

1 Credit

### Primary Care of the Adult Gerontology III Practicum

Students are expected to apply their advanced practice nursing role in conducting health promotion, assessing, making clinical decisions and managing the care of adult-gerontology clients in consultation with appropriate providers in the clinical setting. Preceptorships will be arranged in the varied adult-gerontology-focused setting. Prerequisite: NURS7736 Primary Care of the Adult Gerontology II Practicum. Corequisite: NURS7759 Primary Care of the Adult Gerontology III - Theory.

## NURS7762

3 Credits

### Forensic Science Technology

This course provides a brief overview of scientific crime detection and more detailed discussion of techniques for case management and documentation, the concept of proof, the impact of emergent technology on the investigative process, interacting with victims and witnesses and interviewing suspects. The process of forensic case management and the role of the forensic nurse will be examined. Particular emphasis may be placed on the investigation of particular types of crimes, for example, homicides, sex offenses, child abuse and hate crimes.

## NURS7763

3 Credits

### Criminal Law and Forensics

This course studies how social diversity and inequality shape the way criminal behavior is defined and controlled through the application of the criminal law and criminal justice system. Attention is given to the disparity of criminal offending, victimization and criminal-justice processing across demographic groups as well as explanations for observed disparities. The

course also explores subordinate group members as criminal justice professionals.

**NURS7765**

**3 Credits**

### **Violence, Ethics and Human Rights Issues**

This course provides an introduction to psychological issues relating to understanding, assessing and managing criminal and other abnormal behavior. An overview of mental disorders and their relationship to criminality and violence is provided. Topics include sanity, psychopathy, criminal profiling, serial killers, stalking, women who kill and threat assessment.

**NURS7771**

**3 Credits**

### **Seminar in Nursing Education**

This course provides the opportunity for the students to discuss pertinent issues, challenges and innovations in nursing education in the 21st century. Discussion will be guided by faculty mentors. Prerequisite: NURS7717 Teaching Practicum.

**NURS7794**

**3 Credits**

### **Family Primary Care I Pediatrics**

This course is designed to introduce the family nurse practitioner student to the primary care of infants, children and adolescents. Course content includes information related to principles of health promotion, disease prevention and assessment and management of common primary health care problems in diverse pediatric populations. Content is presented within a family-centered and developmental perspective and includes content related to advanced pathophysiology, research and psychosocial factors. Cultural factors as they relate to health care needs will be examined.

**NURS7795**

**1 Credit**

### **Family Primary Care I Practicum**

This course provides students with clinical experience as primary health care givers in various clinical settings under the supervision of faculty and preceptors in the nursing management of infants, children, adolescents and families. In this practicum, students apply advanced knowledge of normal physiology, pathophysiology and psychosocial concepts of nursing care of children. 120 hours of clinical required.

**NURS7810**

**3 Credits**

### **Family Primary Care II Theory**

This course is designed to introduce the family nurse practitioner student to the health care issues of women. Critical analysis of clinical strategies and interventions in health promotion, health maintenance and disease prevention, routine prenatal care in uncomplicated pregnancies and assessment and management of common health problems in the primary care of women

will be studied. This course builds upon the knowledge of the health care of women in the primary care of adult's theory and practicum courses. Content related to principles of pharmacology, pathophysiology and cultural issues is integrated throughout the course. Health-education methodologies and counseling strategies pertinent to women will be explored and intervention strategies developed. Focus is on health promotion, disease prevention and the clinical management and referral of common, recurring health problems of women.

**NURS7811**

**1 Credit**

### **Family Primary Care II Practicum**

In the women's health course practicum, students apply advanced knowledge of normal physiology, pathophysiology and psychosocial concepts to nursing care of women across the life span. This practicum includes specific components of advanced nursing practice from self-directed clinical experience with expert professional nurse/physician preceptors in a variety of settings. Students must complete 120 preceptored clinical hours in the primary care of women.

**NURS7812**

**3 Credits**

### **Family Systems**

The purpose of this course is to broaden the students' understanding of the family unit from a systems perspective. Characteristics and functions of families and their relationship to health and illness will be analyzed. Major theoretical perspectives affecting family functioning will be evaluated.

**NURS7813**

**3 Credits**

### **APN Practicum**

This course is a preceptored Advanced Practice Nurse (APN) practicum in the primary care of individuals and families. Completion of the practicum is required in order to be eligible for certification as an APN. Prerequisites: all primary care courses.

**NURS7815**

**3 Credits**

### **Advanced Practice Nursing Role Development**

This course assists the students in preparing for the role of advanced practice nurse. Students will focus on the role from a historical perspective and evaluate social, economic and political factors that have contributed to its evolution. Variables that contribute to the practice environment are explored. Ethical, legal and business acumen are examined. Prerequisites: All primary-care courses.

*For course description of CSCI-prefixed courses, see "Course Offerings," pages 99–103 and 166–167. For description of EENG7704 Computer-based Instrumentation, see page 145.*

## Nursing Practice (D.N.P.)

The Doctor of Nursing Practice (D.N.P.) degree program educates nurses for the highest level of clinically expert practice, including sophisticated diagnostic and treatment competencies. These competencies, combined with a focus on health promotion, disease prevention and health education, prepare D.N.P.s for leadership-practice roles on the front line of their profession. Recognizing that advanced-practice preparation requires education at the doctoral level, this program provides intra- and interdisciplinary collaboration in both the education and practice settings.

The 36-credit program offers clinical leadership and organizational leadership tracks. The clinical leadership track prepares advanced practice nurses (APNs) for leadership in practice and the organizational leadership track prepares graduates for leadership positions in organizational systems. The curriculum consists of **24 credits of core requirements** and **12 credits of specialty courses**. The residency requirement of 500 hours offers students the opportunity to work closely with mentors on projects that will demonstrate expanded practice and mastery of D.N.P. competencies. Full-time students may complete the program in two years; part-time students' completion is dependent on their course load each semester. All students must complete the program within five years.

Graduates of the program will be prepared as nurse executives in either a health care system or an educational system. Based on this preparation, D.N.P. graduates will assume roles as independent practitioners, senior clinical faculty members in a college or university, nursing administrators in a variety of health care organizations, deans or department chairs of schools of nursing or nursing leaders in various organizational settings.

This program is offered under the auspices of the Henry P. Becton School of Nursing and Allied Health, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### **Admission Requirements**

1. For the **organizational leadership (indirect) track**, a master's degree in nursing from a Commission on Collegiate Nursing Education (CCNE)- or National League for

Nursing (NLN)- accredited program and current licensure as a registered nurse (RN).

2. For the **clinical leadership (direct track)**, a master's degree in nursing with advanced practice specialty from a CCNE/ NLN-accredited program, current licensure as an RN and advanced practice nurse and relevant experience in advanced practice.

3. Grade point ratio of 3.50.

4. Interview and completion of a writing sample.

5. Three letters of recommendation attesting to the applicant's academic ability and potential for doctoral study.

## Requirements for the Doctor of Nursing Practice Degree

### Core Courses (24 credits)

	Credits
NURS8000	
Research I: Research Methodology.....	3
NURS8001	
Applied Statistics.....	3
NURS8002	
Health Care Delivery Systems and Public Policy.....	3
NURS8003	
Health Disparities: Social, Ethical, Legal Issues.....	3
NURS8004	
Research II: Evidence-based Research....	3
NURS8007	
Scientific Basis for D.N.P. Practice.....	3
NURS8008	
Information Systems for Health Care....	3
NURS8009	
Global Health: Epidemiology and Genomics.....	3
	Total.....24

### Specialty Tracks (12 credits)

#### Clinical Leadership Track

Graduates of the clinical leadership track are prepared to demonstrate practice expertise, specialized knowledge, expanded responsibility and accountability in the care and management of individuals, families and aggregates in the community. The D.N.P. is prepared to be a leader in the formation of therapeutic partnerships and interdisciplinary collaborations to facilitate informed decision making, positive lifestyle change and appropriate self-care. In addition to direct care, D.N.P. graduates use their understanding of the practice context

to document practice trends, identify potential systemic changes and make improvements in the care of their particular patient population in the systems within which they practice. Roles of D.N.P. clinical-leadership track graduates include: expert practitioner in various health care settings and independent practice; consultant/role model in complex care management; and designer and director of evidence-based projects.

#### Specialty Courses (12 credits)

Didactic content of these courses will be the same for clinical leadership and organizational leadership students. Application will be specialized for clinical leadership and organizational leadership students.

	Credits
NURS8010	
Health Quality Assessment and Outcomes.....	3
NURS8011	
Leadership/Organizational Analysis.....	3
NURS8012	
D.N.P. Role Development and Entrepreneurship.....	3
NURS8013	
Residency I.....	1
NURS8014	
Residency II.....	1
NURS8015	
Capstone Project Advisement.....	1
NURS8320	
Continuous D.N.P. Matriculation*.....	1
	Total.....12
	Total Program.....36

#### Organizational Leadership Track

Graduates of the organizational leadership track are prepared to conduct comprehensive organizational, systems and/or community assessments to identify aggregate health or system needs; work with diverse stakeholders for inter- or intraorganizational achievement of health-related organizational goals; and design client-centered delivery systems or policy-level delivery models.

D.N.P. graduates of the organizational leadership track will be prepared as leaders in one of the following areas: management and administration, health care entrepreneurship or education.

\*Students who are not actively registered for any course must register for NURS8320 Continuous D.N.P. Matriculation.

#### Specialty Courses (12 credits)

Didactic content of these courses will be the same for clinical leadership and organizational leadership students. Application will be specialized for clinical leadership and organizational leadership students.

	Credits
NURS8010	
Health Quality Assessment and Outcomes.....	3
NURS8011	
Leadership/Organizational Analysis.....	3
NURS8012	
D.N.P. Role Development and Entrepreneurship.....	3
NURS8013	
Residency I.....	1
NURS8014	
Residency II.....	1
NURS8015	
Capstone Project Advisement.....	1
NURS8320	
Continuous D.N.P. Matriculation*.....	1
	Total.....12
	Total Program.....36

#### Bridge Program to the D.N.P.

The Henry P. Becton School of Nursing and Allied Health offers a bridge program to the D.N.P. for nurses who have a master's degree in a field other than nursing who would like to pursue the D.N.P. degree.

#### Admission Criteria

1. Bachelor of Science in nursing from a CCNE-/NLN-accredited program;
2. Current licensure as a registered nurse; and
3. A master's degree in a field other than nursing.

#### Requirements

The bridge program consists of three courses (9 credits).

NURS6600	
Introduction to Advanced Nursing: Philosophies and Theories.....	3
NURS7701	
Advanced Research and Evidence-based Practice.....	3
NURS7771	
Seminar in Nursing Education.....	3

Upon successful completion of the above courses, the student is automatically admitted to the indirect track of the D.N.P. program.

\*Students who are not actively registered for any course must register for NURS8320 Continuous D.N.P. Matriculation

# Nursing Practice

## Accelerated D.N.P. Programs

The Henry P. Becton School of Nursing and Allied Health offers the following accelerated D.N.P. programs:

- Pre-baccalaureate Nursing to D.N.P. (109 credits and 1,565 clinical hours)
- Post-baccalaureate Nursing to D.N.P. (58 credits and 1,065 clinical hours)
- Postmaster's D.N.P. (36 credits and 500 residency hours)

## Admission Requirements

Completion of a baccalaureate degree in fields other than nursing and the following academic prerequisites on a college level with a minimum grade of B:

- Human Anatomy and Physiology\* (8 credits, with lab),
- General Chemistry\* (4 credits, with lab) — Introductory Chemistry is not accepted;
- Microbiology\* (4 credits, with lab)
- Statistics (3 credits) — Course must include inferential and descriptive statistics
- Microeconomics or Macroeconomics\*\* (3 credits);
- Bioethics/Medical Ethics\*\* (3 credits)

## Pre-Baccalaureate Nursing to D.N.P. (ABSN–D.N.P.) with Gerontology Focus (109 credits and 1,565 clinical hours)

### Required Courses (51 credits)

	Credits
NURS2003	
Fundamentals of Nursing I.....	3
NURS2004	
Fundamentals of Nursing II.....	3
NURS2005	
Professional Communication	
Skills: Individual, Family	
and Groups.....	3
NURS2007	
Pharmacotherapeutics.....	3
NURS3300	
Medical-Surgical Nursing I.....	5
NURS3310	
Psychiatric Nursing.....	5
NURS3320	
Women's Health Nursing.....	5
NURS3340	
Nursing Care of the Child and Family....	5

\*Must have been taken within the last five years.

\*\*Required prerequisite for one-year program; taken as corequisite for two-year program only.

	Credits
NURS4410	
Community Health Nursing.....	5
NURS4420	
Health Care Management.....	3
NURS4430	
Nursing Research.....	3
NURS4440	
Medical-Surgical Nursing II.....	8

After completing above courses, students take the R.N. licensure exam.

### M.S.N. Courses (22 credits)

NURS6615	
Advanced Pharmacology.....	3
NURS6620, NURS6621	
Advanced Health Assessment	
Practicum.....	4
NURS6682, NURS86683	
Primary Care of the Adult	
Gerontology I	
(Lecture and Clinical).....	4
NURS7702	
Advanced Pathophysiology.....	3
NURS7735, NURS7736	
Advanced Adult Gerontology II	
(Lecture and Clinical).....	4
NURS7759, NURS7760	
Primary Care of the Adult	
Gerontology III	
(Lecture and Clinical).....	4

After completing above courses, students take the APN exam.

### D.N.P. Courses (36 credits)

NURS8000	
Research I: Research Methodology.....	3
NURS8001	
Applied Statistics.....	3
NURS8002	
Health Care Delivery Systems	
and Public Policy.....	3
NURS8003	
Health Disparities: Social,	
Ethical, Legal Issues.....	3
NURS8004	
Research II: Evidence-based	
Research.....	3
NURS8007	
Scientific Basis for D.N.P. Practice.....	3
NURS8008	
Information Systems for Health Care....	3
NURS8009	
Global Health: Epidemiology	
and Genomics.....	3
NURS8010	
Health Quality Assessment and	
Outcomes.....	3
NURS8011	
Leadership/Organizationazl Analysis....	3

	Credits
NURS8012	
D.N.P. Role Development and	
Entrepreneurship.....	3
NURS8013	
Residency I.....	2
NURS8015	
Capstone Project Advisement.....	1

## Post-Baccalaureate Nursing to D.N.P. (M.S.N.–D.N.P.) (58 credits and 1,065 clinical hours)

### M.S.N. Courses (22 credits)

NURS6615	
Advanced Pharmacology.....	3
NURS6620, NURS6621	
Advanced Health Assessment	
Practicum.....	4
NURS6682, NURS86683	
Primary Care of the Adult	
Gerontology I	
(Lecture and Clinical).....	4
NURS7702	
Advanced Pathophysiology.....	3
NURS7735, NURS7736	
Advanced Adult Gerontology II	
(Lecture and Clinical).....	4
NURS7759, NURS7760	
Primary Care of the Adult	
Gerontology III	
(Lecture and Clinical).....	4

After completing above courses, students take the APN exam.

### D.N.P. Courses (36 credits)

NURS8000	
Research I: Research Methodology.....	3
NURS8001	
Applied Statistics.....	3
NURS8002	
Health Care Delivery Systems	
and Public Policy.....	3
NURS8003	
Health Disparities: Social,	
Ethical, Legal Issues.....	3
NURS8004	
Research II: Evidence-based	
Research.....	3
NURS8007	
Scientific Basis for D.N.P. Practice.....	3
NURS8008	
Information Systems for Health Care....	3
NURS8009	
Global Health: Epidemiology	
and Genomics.....	3
NURS8010	
Health Quality Assessment and	
Outcomes.....	3

	Credits
NURS8011	
Leadership/Organizational Analysis.....	3
NURS8012	
D.N.P. Role Development and Entrepreneurship.....	3
NURS8013	
Residency I.....	2
NURS8015	
Capstone Project Advisement.....	1

**Post-master's D.N.P.  
(36 credits and 500 residency  
hours)**

**D.N.P. Courses (36 credits)**

NURS8000	
Research I: Research Methodology.....	3
NURS8001	
Applied Statistics.....	3
NURS8002	
Health Care Delivery Systems and Public Policy.....	3
NURS8003	
Health Disparities: Social, Ethical, Legal Issues.....	3
NURS8004	
Research II: Evidence-based Research.....	3
NURS8007	
Scientific Basis for D.N.P. Practice.....	3
NURS8008	
Information Systems for Health Care....	3
NURS8009	
Global Health: Epidemiology and Genomics.....	3
NURS8010	
Health Quality Assessment and Outcomes.....	3
NURS8011	
Leadership/Organizational Analysis.....	3
NURS8012	
D.N.P. Role Development and Entrepreneurship.....	3
NURS8013	
Residency I.....	2
NURS8015	
Capstone Project Advisement.....	1

**Course Offerings**

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the school.*

**Nursing Practice**

*Henry P. Becton School of Nursing and Allied Health*

**NURS8000**

**3 Credits**

**Research I: Research Methodology**

This course focuses on the principles and conduct of research in the health care profession. Emphasis is on techniques for the control of variables, data analysis and interpretation of results. Students will do an in-depth analysis of the interrelationship of theoretical frameworks, design, sample selection, data-collection instruments and data-analysis techniques. Content is discussed in terms of clinical-nursing research problems and application to clinical settings. Prerequisite: NURS8001 Applied Statistics.

**NURS8001**

**3 Credits**

**Applied Statistics**

This class is designed as an accelerated course to demonstrate applied statistical procedures in medical/nursing contexts. Students will analyze medical/nursing research using major statistical techniques. At the completion of this course, students will be able to identify experimental variables, understand and apply terminology, eyeball-estimate the descriptive and inferential statistics appropriate for data sets, determine which inferential statistics, if any, should be applied to analyze a data set, evaluate data using appropriate statistical tools, calculate all statistical tests and interpret findings.

**NURS8002**

**3 Credits**

**Health Care Delivery Systems and Public Policy**

The course is an overview of trends in the delivery, financing and organization of health services in the United States. The American health care is analyzed and compared with health care services of other countries. Approaches to managing quality, access and costs are considered in the context of their social and ethical implications. Government policymaking is reviewed to form the foundations for discussing the political economy of health-services delivery.

**NURS8003**

**3 Credits**

**Health Disparities: Social, Ethical, Legal Issues**

This course explores the concepts of health disparities and social justice with particular attention to the structural causes of historical and

contemporary inequalities as they relate to race and socioeconomic status. Methods of calculating different measures of health disparity will be analyzed, and strategies for creating equality in access to health care will be explored. The course will also examine legal and ethical issues affecting health care.

**NURS8004**

**3 Credits**

**Research II: Evidence-based Research**

Emphasis in this course is placed on methods for designing evidence-based studies and processes for obtaining and evaluating findings as scientific evidence for practice. Students will design projects to address emerging clinical problems. Methods to develop best practices and practice guidelines and to facilitate the evaluation of systems of care that will improve patient safety and outcomes will be explored.

**NURS8007**

**3 Credits**

**Scientific Basis for D.N.P. Practice**

The focus is on biophysical, nursing, psychosocial and organizational sciences as the basis for the highest level of nursing practice, research and health care delivery. The emphasis in this course is on translation and utilization of theory to D.N.P. nursing practice and research. Knowledge from the biophysical, psychosocial and organizational sciences are analyzed and evaluated for application to nursing research and practice.

**NURS8008**

**3 Credits**

**Information Systems for Health Care**

The course focuses on the application of information technology (IT) and information systems (IS) to improve health care effectiveness. It explores IS/IT concepts, models and frameworks that enhance decisions regarding implementation, planning and evaluation of information systems for use in health care. The course provides the student with the information to evaluate and utilize information technology and systems to support and improve nursing and health care systems.

**NURS8009**

**3 Credits**

**Global Health: Epidemiology and Genomics**

This course focuses on the principles of epidemiology and genomics and their effects on global health promotion and disease prevention in aggregates. Global health issues and their impact on individuals and communities will be explored and analyzed. Environmental health concepts, emerging infectious diseases and emergency preparedness are included. Prerequisites: NURS8001 Applied Statistics and NURS8003 Health Disparities: Social, Ethical, Legal Issues.

# Pharmaceutical Management Studies

---

## NURS8010

3 Credits

### **Health Quality Assessment and Outcomes**

This course examines leadership issues and the role of the nurse executive in quality management. The development of quality standards and benchmarking and the design and implementation of quality initiatives will be examined. The processes for collecting and analyzing appropriate data for management decisions will be discussed. Prerequisite: NURS8001 Applied Statistics. Corequisite: NURS8000 Research I: Research Methodology.

## NURS8011

3 Credits

### **Leadership/Organizational Analysis**

The emphasis is placed on developing the leadership competencies of the D.N.P. student. The role of the D.N.P. as a clinical and organizational leader will be explored. Organizational and change theories will be discussed and applied to organizational and clinical problems. The student will gain an understanding of grant writing as a tool for facilitating organizational change. Fifty hours of the residency will be completed in this course. Prerequisites: NURS8000 Research I: Research Methodology, NURS8004 Research II: Evidence-based Research and NURS8007 Scientific Basis for D.N.P. Practice.

## NURS8012

3 Credits

### **D.N.P. Role Development and Entrepreneurship**

This course provides an understanding of the theory and processes related to the making of decisions that determine the direction and success of the organization. Students will gain an understanding of strategic management and organizational design concepts, theories and techniques in order to illuminate the processes of strategy making and implementation. In addition, this course will enable students to gain insight into the concept of entrepreneurship, its importance for an organization and the challenges associated with it. Case analysis and a business plan will be used to apply theories and processes learned in the course. Prerequisite: NURS8011 Leadership/Organizational Analysis.

## NURS8013

1 Credit

### **Residency I**

Building on the planned residency experiences of NURS8011 Leadership/Organizational Analysis and under the mentorship of a doctorally prepared preceptor, students immerse themselves in the role of clinical or organizational leader. Individual contracts will be developed. Residency placements are made dependent on current experiences and students' goals. Students are required to complete 150 hours in NURS8013 Residency I. Prerequisites: all D.N.P. core and specialty courses.

## NURS8014

1 Credit

### **Residency II**

Building on the residency experiences of NURS8013 Residency I and under the mentorship of a doctorally prepared preceptor, students complete the residency requirements and the D.N.P. portfolio. Students are required to complete 150 hours in NURS8014 Residency II. Prerequisites: all D.N.P. core and specialty courses.

## NURS8015

1 Credit

### **Capstone Project Advisement**

The evidence-based project is a faculty-guided experience that provides evidence of critical thinking and aims to improve outcomes in clinical and organizational settings. Prerequisites: NURS8013 Residency I and NURS8014 Residency II.

## NURS8320

1 Credit

### **Continuous D.N.P. Matriculation\***

Students enrolled in the D.N.P. program who are not actively taking any courses must be registered in the Continuous D.N.P. Matriculation course. This course provides the opportunity for students' continued use of various University facilities, i.e. libraries, recreation facilities and advisement.

## Pharmaceutical Management Studies (M.B.A.)

See Business, Pharmaceutical Management Studies, page 64.

---

\*Students who are not actively registered for any course must register for NURS8320 Continuous D.N.P. Matriculation.



## Pharmacy (Pharm.D.)

The School of Pharmacy and Health Sciences has developed a program and curriculum that looks to prepare students to serve as leaders across the continuum of health care and beyond. From the foundational course work of the first semesters through the final practice experiences of the fourth professional year, students will be challenged to think, lead, implement, communicate and advocate as they expand the borders of pharmacy practice. Through the use of active-learning strategies, technology and enhanced programming including the option to pursue dual degrees, students will be provided with diverse options to prepare for opportunities inside and beyond the traditional realms of pharmacy practice.

The first-year curriculum has been designed to build a solid foundational understanding of the biological, chemical, ethical, professional and communicational aspects of pharmacy. Students will focus on gaining a core of knowledge that will prepare them for their first pharmacy practice experience, to be conducted during the first professional summer at a community setting. During the first professional year, students will also be provided insight and exposure to the expanding horizons of pharmacy, allowing them to begin to contemplate their selection of a dual-degree pathway. Qualified students will be able to select this option of study following their first year in the program, provided they have met both the minimum grade point ratio standards set forth by the School of Pharmacy and Health Sciences and the admissions standards set forth by the master's degree program.

During the second professional year, students will have the opportunity to probe deeper into all areas of pharmacy, both from the clinical and physical aspects as well as the patient-care focus. Students will cover expansive units in integrated pharmacotherapy where they will cover all therapeutic aspects of major organ systems while simultaneously learning about the pharmaceutical techniques of drug preparation and delivery. Students will begin elective course work within their areas of interest, either for the purposes of beginning their dual-degree curriculum or simply for the purpose of broadening horizons and learning more about areas related to

the practice of pharmacy. During either the winter or summer intersessions, students will complete their second introductory practice experience within a hospital or hospital-related institutional setting.

The third professional year provides students with the ability to tie together and interconnect all of the concepts learned throughout the prior semesters. With a series of overview courses that provide a holistic view of pharmacy, students will be able to make connections between all of their classroom, laboratory and practice experiences. Students will continue their pursuit of elective course work toward the completion of their master's level of study, while simultaneously completing the necessary final courses in preparation for their advanced practice experiences. Students will gain an additional point of experience through their third introductory practice experience, geared toward a patient-care experience that aligns with their interests and course of study. Courses in epidemiology, pharmacogenomics, pharmacoeconomics and outcomes and a course on the global mission of pharmacists are innovative courses that will expand the perspectives of pharmacy students beyond a traditional course structure. The expectation is that students will gain a familiarity and understanding of these significant areas that are so vital to understanding health care and the changing role of the pharmacist inside the health sciences.

The focus on the fourth professional year is the completion of nine advanced pharmacy practice experience (APPE) courses, exposing students to the wide range of options and roles for pharmacists within direct patient care, advocacy, management, public health and other areas.

This program is offered under the auspices of the School of Pharmacy and Health Sciences, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### Admission Requirements

#### General Requirements Overview

Prior to matriculation, applicants to the the FDU School of Pharmacy and Health Sciences should complete 90 semester hours of course work at any regionally accredited college or university, including the following required courses:

- 8 semester hours of general biology (with laboratory)

- 8 semester hours of anatomy and physiology (with laboratory)
- 8 semester hours of general chemistry (with laboratory)
- 8 semester hours of organic chemistry (with laboratory)
- 8 semester hours of physics (with laboratory)
- 3 semester hours of biochemistry
- 3 semester hours of calculus
- 3 semester hours of applied statistics
- 3 semester hours of speech or professional communication
- 3 semester hours of macroeconomics or microeconomics
- 3 semester hours of English composition

#### Standardized Testing

The Graduate Record Examinations (GRE) or Pharmacy College Admissions Test (PCAT) are accepted for consideration of admission to the School of Pharmacy and Health Sciences. A student with a bachelor's degree from within undergraduate programs at FDU are exempted from a standardized testing requirement if he or she has completed a 3.30 grade point ratio (GPR) or higher and no prerequisite course grade lower than a B-. Students with a bachelor's degree applying from other institutions are exempted from this requirement if they have a minimum GPR of 3.50 and no prerequisite course grade lower than a B-.

#### Letters of Recommendation

Three letters of recommendation (two academic references, at least one from a science professor, and the third from a personal reference, who is not a relative). A pharmacist is highly recommended but not required.

#### Academic Integrity

Students applying to the School of Pharmacy and Health Sciences must sign an affidavit of integrity, stating that all supporting portfolio or written materials submitted for application is the student's original work. Any evidence of plagiarism or academic dishonesty will result in denial of admission or removal from the program and forfeiture of any student status, tuition or fees paid while enrolled within the program.

#### Technical Standards

For detailed information about the technical standards and requirements, visit

# Pharmacy

the School of Pharmacy and Health Sciences' website at [www.fdu.edu/pharmacy](http://www.fdu.edu/pharmacy).

## ACPE Accreditation Status

Fairleigh Dickinson University School of Pharmacy and Health Sciences' Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60603; phone: (312) 664-3575; fax: (312) 664-4652; website: [www.acpe-accredit.org](http://www.acpe-accredit.org).

## FDU School of Pharmacy and Health Sciences Outcomes

- Provide patient-centered care.
  - a) Formulate a patient-centered pharmaceutical care plan (new or revised) in collaboration with other health care professionals, patients and/or their caregivers.
  - b) Prepare and dispense medication(s) prescribed (or recommended) as part of the patient's care plan.
  - c) Communicate and collaborate with prescribers, patients, caregivers and other involved health care providers to engender a team approach to patient care.
- Provide population-based care by developing population-specific, evidence-based, disease-management programs.
- Manage human, physical, medical, information and technological resources.
  - a) Describe and demonstrate appropriate utilization of management principles and use of health care resources in the American health care system.
  - b) Manage pharmacy operations, including personnel, and optimize physical and technological resources to fulfill the practice mission.
- Manage medication distribution, control and use systems and optimize technological resources to fulfill the practice mission.
- Assure the availability of effective, quality health and disease-prevention services.
  - a) Communicate and collaborate with health care providers and health policy decision makers to engender a team approach to public health.
- Develop public health policy by developing strategic efforts to collaborate with policy makers, payers, members of the community, health providers and other stakeholders and decision-makers to promote public health and resolve public health problems.
- Maintain professional competency in providing pharmaceutical care, managing medication-use systems and understanding various public health care needs and pro-

viding appropriate disease-prevention services by committing oneself to being an independent, self-initiated lifelong learner.

- Carry out duties in accordance with legal, ethical, social, economic and professional guidelines.

## Requirements for the Pharm.D. Degree

### 1st Year

#### Foundations in Pharmacy Education

<i>Fall Semester</i>	Credits
PHRM6100	
Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics.....	4
PHRM6101	
Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.....	3
PHRM6201	
Pharmaceutics I: Physical Pharmacy.....	3
PHRM6211	
Pharmaceutical Calculations I.....	1
PHRM6301	
Medical Communication and Technical Writing.....	2
PHRM6321	
Pharmacy Practice Law.....	2
PHRM6401	
Professional Pharmacy Practice I: Health Care Delivery.....	3
PHRM6700	
Beyond the Curriculum: Foundations in Pharmacy Education (1).....	0
	Total..... 18
<i>Spring Semester</i>	
PHRM6102	
Integrated Pharmacotherapy II: Gastrointestinal.....	3
PHRM6103	
Integrated Pharmacotherapy III: Dermatology, Over-the-Counter Remedies and Self Care.....	3
PHRM6104	
Integrated Pharmacotherapy IV: Cardiology.....	4
PHRM6111	
Integrated Pharmacotherapy II-IV: Conceptual Connections and Patient Care.....	2
PHRM6202	
Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/ Pharmacokinetics.....	2

	Credits
PHRM6212	
Pharmaceutical Calculations II.....	1
PHRM6402	
Professional Pharmacy Practice II: Communication in Health Care.....	2
PHRM6701	
Beyond the Curriculum: Foundations in Pharmacy Education (2).....	1
	Total..... 18

### Completed in June, July or August

PHRM6501	
Introductory Pharmacy Practice Experience (IPPE) I: Community.....	4

### 2nd Year

#### Expanding Horizons

#### Fall Semester

PHRM7105	
Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology.....	4
PHRM7106	
Integrated Pharmacotherapy VI: Infectious Disease.....	4
PHRM7111	
Integrated Pharmacotherapy V-VI: Conceptual Connections and Patient Care.....	2
PHRM7201	
Pharmaceutics III: Dosage Form and Drug Delivery Systems	
2PHRM7301	
Biostatistics.....	2
PHRM7401	
Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology.....	2
PHRM7700	
Beyond the Curriculum: Expanding Horizons (1).....	0
Elective.....	3
	Total..... 19

#### Spring Semester

PHRM7107	
Integrated Pharmacotherapy VII: Pulmonary, Eye, Ear, Nose and Throat.....	3
PHRM7108	
Integrated Pharmacotherapy VIII: Endocrine, Urinary Tract, Renal and Reproductive Health.....	4
PHRM7112	
Integrated Pharmacotherapy VII-VIII: Conceptual Connections and Patient Care.....	2

	Credits		Credits		Credits
PHRM7202		PHRM8701		PHRM9208	
Pharmaceutics IV: Sterile		Beyond the Curriculum/		Advanced Pharmacy Practice	
Products and Biopharmaceuticals.....	2	Preparing Practitioners (2).....	1	Experience (APPE) V: Elective –	
PHRM7302		Electives.....	9	Medication Therapy	
Epidemiology and Study Design		Total.....	19	Management II.....	5
Evaluation.....	3			PHRM9209	
PHRM7701		<b>4th Year</b>		Advanced Pharmacy Practice	
Beyond the Curriculum:		<b>Core Advanced Pharmacy Practice</b>		Experience (APPE) V: Elective –	
Expanding Horizons (2).....	1	<b>Experiences</b>		HIV/AIDS I.....	5
Elective.....	3	PHRM9101		PHRM9210	
Total.....	18	Advanced Pharmacy Practice		Advanced Pharmacy Practice	
<b>Completed in January, June, July or</b>		Experience (APPE) I: Community.....	5	Experience (APPE) V: Elective –	
<b>August</b>		PHRM9102		HIV/AIDS II.....	5
PHRM7501		Advanced Pharmacy Practice		PHRM9211	
Introductory Pharmacy Practice		Experience (APPE) II: Institutional...5		Advanced Pharmacy Practice	
Experience (IPPE) II: Institutional....	4	PHRM9103		Experience (APPE) V: Elective –	
		Advanced Pharmacy Practice		Home Infusion I.....	5
		Experience (APPE) III:		PHRM9212	
		Ambulatory Care.....	5	Advanced Pharmacy Practice	
		PHRM9104		Experience (APPE) V: Elective –	
		Advanced Pharmacy Practice		Home Infusion II.....	5
		Experience (APPE) IV: Acute Care... 5		PHRM9301	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Hospital Practice I.....	5
				PHRM9302	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Hospital Practice II.....	5
				PHRM9303	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Acute Care I.....	5
				PHRM9304	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Acute Care II.....	5
				PHRM9305	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Long Term Care I.....	5
				PHRM9306	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Long Term Care II.....	5
				PHRM9307	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Infectious Disease I.....	5
				PHRM9308	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Infectious Disease II.....	5
				PHRM9309	
				Advanced Pharmacy Practice	
				Experience (APPE) VI: Elective –	
				Oncology I.....	5

# Pharmacy

	Credits		Credits		Credits
PHRM9310		PHRM9403		PHRM9508	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Advanced Pharmacy Practice	
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		Experience (APPE) VIII:	
Oncology II.....	5	Medication Safety I.....	5	Elective – Marketing II.....	5
PHRM9311		PHRM9404		PHRM9509	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Advanced Pharmacy Practice	
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		Experience (APPE) VIII:	
Critical Care I.....	5	Medication Safety II.....	5	Elective – Patient Advocacy I.....	5
PHRM9312		PHRM9405		PHRM9510	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Advanced Pharmacy Practice	
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		Experience (APPE) VIII:	
Critical Care II.....	5	Managed Care I.....	5	Elective – Patient Advocacy II.....	5
PHRM9313		PHRM9406		PHRM9511	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Advanced Pharmacy Practice	
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		Experience (APPE) VIII:	
Cardiology I.....	5	Managed Care II.....	5	Elective – Health Care	
PHRM9314		PHRM9407		Organization Management I.....	5
Advanced Pharmacy Practice		Advanced Pharmacy Practice		PHRM9512	
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		Advanced Pharmacy Practice	
Cardiology II.....	5	Specialty Pharmacy I.....	5	Experience (APPE) VIII:	
PHRM9315		PHRM9408		Elective – Health Care	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Organization Management II.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		PHRM9513	
Behavioral Health I.....	5	Specialty Pharmacy II.....	5	Advanced Pharmacy Practice	
PHRM9316		PHRM9409		Experience (APPE) VIII:	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Elective – Informatics I.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		PHRM9514	
Behavioral Health II.....	5	Medical Device/Patient Safety I.....	5	Advanced Pharmacy Practice	
PHRM9317		PHRM9410		Experience (APPE) VIII:	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Elective – Informatics II.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VII: Elective –		PHRM9515	
Transitions of Care I.....	5	Medical Device/Patient Safety II.....	5	Advanced Pharmacy Practice	
PHRM9318		PHRM9501		Experience (APPE) VIII:	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Elective – Management I.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VIII:		PHRM9516	
Transitions of Care II.....	5	Elective – Public Health I.....	5	Advanced Pharmacy Practice	
PHRM9319		PHRM9502		Experience (APPE) VIII:	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Elective – Management II.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VIII:		PHRM9517	
Nutrition Support I.....	5	Elective – Public Health II.....	5	Advanced Pharmacy Practice	
PHRM9320		PHRM9503		Experience (APPE) VIII:	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Elective – Regulatory I.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VIII:		PHRM9518	
Nutrition Support II.....	5	Elective – Industry I.....	5	Advanced Pharmacy Practice	
PHRM9321		PHRM9504		Experience (APPE) VIII:	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		Elective – Regulatory II.....	5
Experience (APPE) VI: Elective –		Experience (APPE) VIII:		Total.....	40
Emergency Medicine I.....	5	Elective – Industry II.....	5		
PHRM9322		PHRM9505		<b>Course Offerings</b>	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		<i>Courses offered fall, spring and/or summer are</i>	
Experience (APPE) VI: Elective –		Experience (APPE) VIII:		<i>so noted. To determine availability of courses</i>	
Emergency Medicine II.....	5	Elective – Research I.....	5	<i>not so designated, please check with appropriate</i>	
PHRM9401		PHRM9506		<i>school director.</i>	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		<b>PHRM6100</b>	
Experience (APPE) VII: Elective –		Experience (APPE) VIII:		<b>4 Credits</b>	
Drug Information I.....	5	Elective – Research II.....	5	<b>Foundations in Pharmaceutical</b>	
PHRM9402		PHRM9507		<b>Science: Pharmacology, Medicinal</b>	
Advanced Pharmacy Practice		Advanced Pharmacy Practice		<b>Chemistry, Pharmacokinetics</b>	
Experience (APPE) VII: Elective –		Experience (APPE) VIII:		This survey course covers several fundamental	
Drug Information II.....	5	Elective – Marketing I.....	5	concepts required for understanding pharma-	

cotherapy. Pharmacology is the unified study of the properties of chemicals and living organisms and all aspects of their interaction. Medicinal chemistry will address a chemically oriented introduction to pharmacology and therapeutics, focusing on structure, pharmacophores and drug activity. The class emphasizes familiarity with drug structures and properties and an understanding of how the chemical structures and physicochemical properties of representative drugs determine their molecular mechanisms of action. The pharmacokinetics component will address how the body impacts drugs. These lectures will focus on a mathematical understanding of drug concentrations, pharmacological activity and therapy. Concepts of toxicology and toxicokinetics will also be introduced in acute and chronic settings. Corequisite: PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

## PHRM6101

3 Credits

### **Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care**

Integrated pharmacotherapy courses combine biological sciences, human systems and clinical sciences. As one of the two foundation courses, this course lays the foundation of subsequent integrated pharmacotherapy modules by providing students with the overview of biochemistry, human anatomy and physiology, human immune system and microbiology. Students are also introduced to genetics and molecular diagnostics, which will be revisited in their third year. Corequisite: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics.

## PHRM6102

3 Credits

### **Integrated Pharmacotherapy II: Gastrointestinal**

This is the second integrated pharmacotherapy module focusing on the gastrointestinal system. This course integrates basic principles of biochemistry, anatomy and physiology, pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of gastrointestinal diseases (gastroesophageal reflux, peptic ulcer, inflammatory bowel disease, nausea and vomiting, diarrhea, constipation and irritable bowel disease, cirrhosis, drug-induced gastrointestinal disease, pancreatitis, gallbladder and viral hepatitis). Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions are discussed, as are the materials and methods used to prepare and administer the appropriate treatment. Cases and examples are used to provide the students

with the skills to solve problems related to gastrointestinal diseases in an active learning environment. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

## PHRM6103

3 Credits

### **Integrated Pharmacotherapy III: Dermatology, Over-the-Counter Remedies and Self Care**

This is the third integrated pharmacotherapy module focusing on over-the-counter products, dermatology and self care. This course integrates basic principles of biochemistry, anatomy and physiology, pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of these areas (herbal/dietary supplements, fluids/nutrition, pain, common cold/flu, dermatology, otic care, oral care and ophthalmic care, smoking cessation, obesity, sleep disorders, reproductive and genital disorders). Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions are discussed, as are the materials and methods used to prepare and administer the appropriate treatment. Cases and examples are used to provide the students with the skills to solve problems related to the use of over-the-counter and self-care medications and dermatological diseases in an active learning environment. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM6111 Integrated Pharmacotherapy II-IV: Conceptual Connections and Patient Care.

## PHRM6104

4 Credits

### **Integrated Pharmacotherapy IV: Cardiology**

This is the fourth integrated pharmacotherapy module focusing on the cardiovascular system. This course integrates basic principles of biochemistry, anatomy and physiology, pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of cardiovascular diseases. Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions are discussed, as are the materials and methods used to prepare and administer the appropriate treatment. Cases and examples are used to provide the students with the skills to solve problems related to cardiovascular diseases in an active learning environment.

Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM6111 Integrated Pharmacotherapy II-IV: Conceptual Connections and Patient Care.

## PHRM6111

2 Credits

### **Integrated Pharmacotherapy II-IV: Conceptual Connections and Patient Care**

This course ties in the contents learned in Integrated Pharmacotherapy II-IV in a case-based, active-learning fashion. While Integrated Pharmacotherapy II-IV prepare students with clinical knowledge and skill set, this course is designed to provide hands-on experience of patient interaction and assessment, triage and referral and treatment formulation and recommendation. Students will practice and become competent in patient-assessment skills system-by-system, learn effective counseling techniques with regards to drug administration, familiarize themselves with New Jersey prescription regulations and acquire skills in dosing calculation, all of which are commonly encountered in community practice. Real-life cases involving self-care, gastrointestinal and cardiovascular diseases will require students to think critically in every step of the care: presentation, history-taking, assessment, treatment formulation and administration and monitoring for efficacy and toxicity. Students will be introduced to various formats of patient documentation. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisites: PHRM6102 Integrated Pharmacotherapy II: Gastrointestinal; PHRM6103 Integrated Pharmacotherapy III: Dermatology, Over-the-Counter Remedies and Self Care; and PHRM6104 Integrated Pharmacotherapy IV: Cardiology.

## PHRM6201

3 Credits

### **Pharmaceutics I: Physical Pharmacy**

This is the first of three courses in the pharmaceuticals series. This course introduces students to basic concepts (e.g., solubility, permeability, stability, etc.) in physical pharmacy and pharmaceutical sciences, and covers gas and solution properties, non-electrolyte and electrolyte solutions, pharmaceutical solids, dissolution and drug release. Mastering the basic concepts will provide the students with a sound foundation in pharmaceutical-product development (dosage forms and drug-delivery systems) as well as pharmacy practice.

# Pharmacy

---

## PHRM6202

2 Credits

### **Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/ Pharmacokinetics**

This is the second course in the pharmaceutics series focusing on oral dosage forms. This course is designed and taught using an integrated approach, covering various topics in pharmaceutics (oral dosage forms), biopharmaceutics and pharmacokinetics. The students will learn not only the fundamental aspects of oral dosage forms (solutions, suspensions and solids), but also the biopharmaceutic and pharmacokinetic aspects of oral dosage forms related to drug absorption and evaluation. The course also integrates the application of basic pharmacokinetic principles to special populations and disease states. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6201 Pharmaceutics I: Physical Pharmacy.

## PHRM6211

1 Credit

### **Pharmaceutical Calculations I**

This course is the first part of the two-semester pharmaceutical calculations series. Accurately performing pharmaceutical calculations is a critical skill in providing patient care in every pharmacy-practice setting. This course introduces students to basic concepts and skills involved in pharmaceutical calculations. The focus of this course is on basic mathematical principles and their application to pharmaceutical calculations in pharmacy practice. The topics include correct interpretation of prescription and medical orders, pharmaceutical measurements, various expressions of concentration and strength, electrolyte and isotonic solutions.

## PHRM6212

1 Credit

### **Pharmaceutical Calculations II**

This course is the second part of pharmaceutical calculations and focuses on specific calculation skills that are important to practicing pharmacists. The students have the opportunity to apply the basic concepts and calculation skills gained in PHRM6211 Pharmaceutical Calculations I to dose and clinical calculation, IV and parenteral solutions and calculations involved in extemporaneous compounding. Prerequisite: PHRM6211 Pharmaceutical Calculations I.

## PHRM6501

2 Credits

### **Medical Communication and Technical Writing**

This course is designed to introduce pharmacy students to the concepts and methods of technical and professional communication utilized in different areas of health care. Development of professional documents including cover letters, personal statements and curriculum vitae utilized in pharmacy practice and required for stu-

dent pharmacist e-portfolios is a specific focus. Additionally, oral communication skills including assembling presentation materials critical to successfully delivering a professional oral presentation to an audience will be developed. Lastly, students will be introduced to key medical terminology used throughout health care.

## PHRM6321

2 Credits

### **Pharmacy Practice Law**

This course is designed to provide pharmacy students with the basic purposes pharmacy law serves, and to prepare them to comply with laws, regulations and ethical standards in their professional and personal lives. The course will feature in-depth reading of texts and case studies, case presentations, short papers and exams.

## PHRM6401

3 Credits

### **Professional Pharmacy Practice I: Health Care Delivery**

This course provides foundational knowledge necessary to understand the organization of the health care system and health care delivery in the United States. The various roles played by pharmacists in the U.S. are also presented. Selected international health care systems are covered for comparison purposes. A definition of health care is developed; U.S. health care financing and health economics are introduced; legislative initiatives, such as the Affordable Care Act, and alternative health care models such as the medical home are presented. The implications for both health care delivery and the evolution of the pharmacy profession with these emerging initiatives are explored. The efficient and safe use of health care and pharmaceutical resources to achieve better patient clinical outcomes and improved quality of life in a financial environment where resources are limited is a central theme. Related to this, the U.S. drug-approval process and the pharmaceutical industry are described. The increasing use of informatics and computer-based systems, including electronic medical records and databases, in pharmacy practice is described as well. Multidisciplinary aspects of health care are examined and multiple factors important to the contemporary practice of pharmacy are explored including the social, legal/regulatory, economic, public health, professional and patient-care implications of pharmacy practice. The role of the pharmacist as a member of an interprofessional team of health care professionals is introduced.

## PHRM6402

2 Credits

### **Professional Pharmacy Practice II: Communication in Health Care**

The Communication in Health Care course develops students' nonwritten professional communication skills. The course focuses on developing oral and nonverbal communications skills, an appreciation of different cultural approaches

to health care (cultural competency) and health literacy in patient care as well as communication within interprofessional teams. Communication strategies for gathering information from patients, providing information and verifying understanding will be reviewed. Interprofessional communication approaches for fostering relationships with other health care professionals will be explored. This course is designed to help students gain the skills required to effectively communicate with all individuals involved in delivering and receiving health care such as patients, physicians, nurses and family members. Prerequisites: PHRM6301 Medical Communication and Technical Writing and PHRM6401 Professional Pharmacy Practice I: Health Care Delivery.

## PHRM6501

4 Credits

### **Introductory Pharmacy Practice Experience (IPPE) I: Community**

This introductory experience is an experiential-education course enabling the student to integrate classroom knowledge with practical pharmacy experience through exposing students to the patient care, administrative, distributive and overall practice of contemporary community pharmacy. Students will be placed at an IPPE I site for four weeks totaling 32 hours per week for a final total of 128 hours experience (IPPE). The student pharmacist will observe and participate with pharmacists, fellow pharmacy students, if applicable, and other health care professionals in the provision of direct patient care. The student will become familiar with essential elements surrounding the dispensing of prescriptions including, but not limited to, interpreting a patient profile, transcribing an oral prescription, preparing a prescription label and patient counseling, in order to assist the pharmacist in dispensing prescriptions. The student pharmacist will observe and participate in assisting patients in selection of nonprescription (over-the-counter) products, monitoring devices and durable medical equipment. This course may require students to participate in an online learning component, reflective sessions in the School of Pharmacy and Health Sciences and completion of a service learning project as assigned. This course prepares students to acquire critical-thinking competencies enabling them to continually build their knowledge across the curriculum as they progress and engage in subsequent experiential-practice experiences. Prerequisite: successful completion of first year of courses.

## PHRM6700

0 Credits

### **Beyond the Curriculum: Foundations in Pharmacy Education (1)**

A great deal of education happens outside of the formal course work. In this course, students will have an opportunity to engage in programs to learn more about the emerging areas of pharma-

cy in order to gain a deeper understanding of the evolving roles of pharmacists and the areas in which they can practice. This course will serve as a platform for students to network with industry and educational leaders to begin to develop their personal and professional networks as they prepare for their future roles in pharmacy.

## **PHRM6701**

**1 Credit**

### **Beyond the Curriculum: Foundations in Pharmacy Education (2)**

A great deal of education happens outside of the formal course work. In this course, students will have an opportunity to engage in programs to learn more about the emerging areas of pharmacy in order to gain a deeper understanding of the evolving roles of pharmacists and the areas in which they can practice. This course will serve as a platform for students to network with industry and educational leaders to begin to develop their personal and professional networks as they prepare for their future roles in pharmacy.

## **PHRM7105**

**4 Credits**

### **Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology**

This is the fifth integrated pharmacotherapy module focusing on the nervous system. This course integrates basic principles of biochemistry, anatomy and physiology, pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of neurological and psychiatric diseases. Basic principles and knowledge about anesthesiology will also be introduced. Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions are discussed, as are the materials and methods used to prepare and administer the appropriate treatment. Cases and examples are used to provide the students the skills to solve problems related to neurologic and psychiatric diseases in an active learning environment. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM7111 Integrated Pharmacotherapy V–VI: Conceptual Connections and Patient Care.

## **PHRM7106**

**4 Credits**

### **Integrated Pharmacotherapy VI: Infectious Disease**

This course relates to pharmacotherapeutics and the treatment of infectious diseases and aims to integrate key concepts from medicinal

chemistry, pharmacology, anatomy and physiology, pathology, clinical chemistry for infectious disease topics important to the clinical setting. Ideally, at the end of this course the student will be able to: identify likely pathogens responsible for a particular infectious-disease process; select the appropriate antibiotic(s) to provide antimicrobial coverage for these possible pathogens; select alternative antibiotics should they become necessary; and identify appropriate actions to monitor for efficacy and toxicity. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM7111 Integrated Pharmacotherapy V–VI: Conceptual Connections and Patient Care.

## **PHRM7107**

**3 Credits**

### **Integrated Pharmacotherapy VII: Pulmonary, Eye, Ear, Nose and Throat**

This course provides students with an integrated approach to understanding principles and solving problems of pulmonary disorders and diseases of the eye, ear, nose and throat. The biochemistry, anatomy and physiology, pathophysiology, medicinal chemistry, pharmacology, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of these disorders will be discussed. Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions will be discussed, as will the materials and methods used to prepare and administer the appropriate treatment. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM7112 Integrated Pharmacotherapy VII–VIII: Conceptual Connections and Patient Care.

## **PHRM7108**

**4 Credits**

### **Integrated Pharmacotherapy VIII: Endocrine, Urinary Tract, Renal and Reproductive Health**

This is the eighth integrated pharmacotherapy module focusing on the endocrine, urinary tract, renal and reproductive health systems. This course integrates basic principles of biochemistry, anatomy and physiology, pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of diseases of these systems. Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions are discussed, as are the materials and methods used to prepare and administer the appropriate

treatment. Cases and examples are used to provide the students with the skills to solve problems related to endocrine, urinary-tract, renal and reproductive system diseases in an active learning environment. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM7112 Integrated Pharmacotherapy VII–VIII: Conceptual Connections and Patient Care.

## **PHRM7111**

**2 Credits**

### **Integrated Pharmacotherapy V–VI: Conceptual Connections and Patient Care**

This course ties in the contents learned in Integrated Pharmacotherapy V–VI in a case-based, active-learning fashion. While Integrated Pharmacotherapy V–VI prepare students with clinical knowledge and skill set, this course is designed to provide hands-on experience of patient interaction and assessment, triage and referral and treatment formulation and recommendation. Students will practice and become competent in patient-assessment skills system-by-system, learn effective counseling techniques with regards to drug administration, familiarize themselves with New Jersey prescription regulations and acquire skills in dosing calculations, all of which are commonly encountered in pharmacy practice. Real-life cases involving infectious, neurologic and psychiatric diseases will require students to think critically in every step of the care: presentation, history-taking, assessment, treatment formulation and administration and monitoring for efficacy and toxicity. Students will be certified by the American Pharmacist's Association Medication Therapy Management Program. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisites: PHRM7105 Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology and PHRM7106 Integrated Pharmacotherapy VI: Infectious Disease.

## **PHRM7112**

**2 Credits**

### **Integrated Pharmacotherapy VII–VIII: Conceptual Connections and Patient Care**

This course ties in the contents learned in Integrated Pharmacotherapy VII–VIII in a case-based, active-learning fashion. While Integrated Pharmacotherapy VII–VIII prepare students with clinical knowledge and skill set, this course is designed to provide hands-on experience of patient interaction and assessment, triage and referral and treatment formulation and recom-

# Pharmacy

mendation. Students will practice and become competent in patient-assessment skills system-by-system, learn effective counseling techniques with regards to drug administration, familiarize themselves with New Jersey prescription regulations and acquire skills in dosing calculations, all of which are commonly encountered in pharmacy practice. Real-life cases involving renal diseases, endocrine diseases, pulmonary diseases, ophthalmic diseases, otic diseases and reproductive health will require students to think critically in every step of the care: presentation, history-taking, assessment, treatment formulation and administration and monitoring for efficacy and toxicity. Students will be certified by the American Pharmacist's Association Diabetes Care Program. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisites: PHRM7107 Integrated Pharmacotherapy VII: Pulmonary, Eye, Ear, Nose and Throat and PHRM7108 Integrated Pharmacotherapy VIII: Endocrine, Urinary Tract, Renal and Reproductive Health.

## PHRM7121

3 Credits

### Clinical Toxicology

The course is designed to give the student an overview of the management of the poisoned patient or one suffering from select drug-induced diseases. The student will become familiar with general principles in managing the poisoned patient, recognize toxidromes and understand the role of the pharmacist in managing a poisoned patient and the role of the local poison center. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I – An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

## PHRM7122

3 Credits

### Natural Medicines

This elective course will introduce students to in-depth concepts of pharmacology of natural medicines as well as specific disease states which can be treated with natural medicines. Overall philosophy of utilizing natural medicine in Western cultures will be discussed. In addition, alternative therapeutic modalities such as acupuncture, homeopathy and others will be reviewed.

## PHRM7201

2 Credits

### Pharmaceutics III: Dosage Form and Drug Delivery Systems

This course includes a didactic section and a compounding lab. The didactic lectures cover

drug-dosage forms and drug-delivery systems commonly used in modern medicine. The emphasis is placed on understanding the basic physicochemical and biopharmaceutical principles underlining each dosage form and delivery system. The students will learn the proper use, administration and storage of various drug-dosage forms and delivery systems. The laboratory session provides the students with hands-on experience in extemporaneous product compounding. In the compounding lab, the students will have the opportunity to apply the basic concepts and calculation skills to extemporaneous compounding. The students will prepare various compounding products including syrup, suspension, ointment, gel, capsule and suppository. Prerequisites: PHRM6201 Pharmaceutics I: Physical Pharmacy and PHRM6202 Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/Pharmacokinetics.

## PHRM7202

2 Credits

### Pharmaceutics IV: Sterile Products and Biopharmaceutics

This is the last of the three-course series in pharmaceutics. Building upon basic concepts and calculation skills acquired in PHRM6201 Pharmaceutics I: Physical Pharmacy, PHRM6202 Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/Pharmacokinetics, PHRM6211 Pharmaceutical Calculations I and PHRM6212 Pharmaceutical Calculations II, students will have the opportunity to apply the knowledge and skills to various sterile products including (parenteral, ophthalmic, nasal and irrigation solutions). Biologics products (monoclonal antibody, vaccines and adjuvants) are also included. The course also covers various routes of administration, sterile-product preparation and quality standards. The course is accompanied by a laboratory session, which provides the students with hands-on experience in sterile-product compounding. Prerequisites: PHRM6201 Pharmaceutics I: Physical Pharmacy, PHRM6202 Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/Pharmacokinetics, PHRM6211 Pharmaceutical Calculations I and PHRM6212 Pharmaceutical Calculations II.

## PHRM7301

2 Credits

### Biostatistics

This two-credit course introduces pharmacy students to the concepts and methods of biostatistics. Descriptive statistics, inferential statistics, hypothesis testing will be covered. Simple regression techniques used in evaluating pharmacologic therapies in populations will be discussed. The skills learned in this course build the quantitative foundations that students will apply to evaluate the biomedical literature and assess its applicability to their patients.

## PHRM7302

3 Credits

### Epidemiology and Study Design Evaluation

This course is designed to introduce students to basic concepts of epidemiology and study designs used in the evaluation of health care technologies. Epidemiological terminology such as risk, hazard, odds and relative-risk ratios will be introduced. Further, this course will include critical evaluation of evidence-based medical literature and identification of sources of bias in published medical literature. Prerequisites: PHRM7301 Biostatistics and PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology.

## PHRM7321

3 Credits

### History of Pharmacy

This course reviews the history of the profession of pharmacy. Two main focuses will be 1) the evolution of pharmacy as a distinct patient-care profession throughout ancient history and the Middle Ages and 2) the growth and expansion of pharmacy as a profession in the United States from colonization in the 17th century to present-day trends in pharmacy practice that will shape the future of the profession.

## PHRM7322

3 Credits

### Drugs of Abuse

This course reviews the history, pathophysiology, epidemiology and societal aspects of the phenomenon of drug abuse and addiction. Two main focuses will be 1) drug addiction as a recognizable disease and its impact on the patient, their caregivers and the health care system and the 2) pathopharmacology of all abused compounds including illegal and prescription drugs as well as emerging designer drugs. Corequisite: PHRM7112 Integrated Pharmacotherapy VII–VIII: Conceptual Connections and Patient Care.

## PHRM7323

3 Credits

### Substance Abuse Treatment Research: Clinical Implications for Pharmacists

This advanced course covers several fundamental concepts required for understanding substance abuse and addiction research. It provides a comprehensive overview of the chemistry and advanced pharmacology of the most common substances of abuse. The second half of the course will cover issues related to diversity in substance-abuse research treatments and the clinical applications. Current research studies on addiction treatments and the role of the pharmacist, as an integral part of the health care team, will be explored. Students will also be introduced to current measures in place for the curbing and prevention of substance abuse from a research perspective. Concepts will also be



introduced in acute and chronic settings.

Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM7302 Epidemiology and Study Design Evaluation.

## PHRM7401

2 Credits

### **Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology**

This two-credit course focuses on the essential sources of drug information, pharmaceutical informatics and toxicology. It introduces the use of health-information technology in delivering health care. Topics covered include primary, secondary and tertiary sources of drug information; medication safety; an introduction to the use of drug monographs and the role of electronic medical records; e-prescribing; and computerized physician-order entry in pharmacy practice. This course provides an overview of the basic principles of toxicology and poisoning and discusses the identification and management of most commonly encountered toxicities. Prerequisite: PHRM6301 Medical Communication and Technical Writing.

## PHRM7402

3 Credits

### **Practical Politics and Pharmacy**

This elective course is designed to be interactive. Students will be introduced to the legislative process in order to develop effective advocacy skills on behalf of the profession. Students in this course will be responsible for being familiar with current pharmacy and related issues by reading professional journals, state and national association legislative updates, relevant newspaper articles, up-to-date bill listings and activities on relevant state and federal issues and utilize the internet as a navigational tool to become informed about and facile with the legislative issues directly affecting the profession. Students will learn the backgrounds of their representatives through state and federal rosters and engage them in discourse.

## PHRM7410

3 Credits

### **Service Learning: Culturally Competent Approach to Low-income Families and Homeless Populations**

In this course, students will have the opportunity to engage in a semester-long service commitment focused on the low-income and homeless populations. They will work alongside community partners to develop a foundational understanding of the organization's goals and outcomes in relation to their roles as volunteers. In this team-focused experience, the students will gain an appreciation for both the organization and indi-

vidual team member's roles and responsibilities in a community setting. They will communicate with members of the local underserved population through in-person, hands-on interaction, during which students will not only share their knowledge and opinions, but learn the importance of respecting and valuing the knowledge of others. While working in collaboration with other classmates and professionals, students will understand the impact an engaging, values-based and patient-centered team can have on a community. Through class participation, reflection and guided discussions, students will explore and gain a deeper understanding of the potential impact in relation to health disparities, poverty and the medically underserved.

## PHRM7411

3 Credits

### **Service Learning: Culturally Competent Approach to Pediatric Populations**

In this course, students will have the opportunity to engage in a semester-long service commitment focused on the health and well-being of pediatric populations. They will work alongside an organization located in Kissimmee, Fla., to develop a foundational understanding of the organization's goals and outcomes in relation to their roles as volunteers. In this team-focused experience, the students will gain an appreciation for both the organization and individual team member's roles and responsibilities in a community setting. They will communicate with members of the pediatric population through in-person, hands-on interaction, during which students will not only share their knowledge and opinions, but learn the importance of respecting and valuing the knowledge of others. While working in collaboration with other classmates and professionals, students will understand the impact an engaging, values-based and patient-centered team can have on a community. Through class participation, reflection and guided discussions, students will explore and gain a deeper understanding of the potential impact in relation to pediatric populations, caregiver responsibility and community organizations.

## PHRM7412

3 Credits

### **Service Learning: Culturally Competent Approach to Geriatric Populations**

A service-learning based elective course open to P2 and P3 students. In this course students will have the opportunity to engage in a semester-long service commitment focused on the health and well-being of the geriatric population. They will work alongside a community partner to develop a foundational understanding of the organization's goals and outcomes in relation to their roles as volunteers. In this team-focused experience, the students will gain an appreciation for both the organization and individual team member's roles and responsibilities in a community setting. They will communicate with members of the geriatric population through in-person,

hands-on interaction, during which students will not only share their knowledge and opinions, but learn the importance of respecting and valuing the knowledge of others. While working in collaboration with other classmates and professionals, students will understand the impact an engaging, values-based and patient-centered team can have on a community. Through class participation, reflection and guided discussions, students will explore and gain a deeper understanding of the potential impact in relation to geriatric population, caregiver responsibility and community organizations.

## PHRM7501

4 Credits

### **Introductory Pharmacy Practice Experience (IPPE) II: Institutional**

This hospital practice-experience course will develop students' awareness, knowledge and skills in various aspects of hospital-pharmacy practice and the roles and responsibilities of the pharmacists as a generalist and overseer of pharmacy management and therapeutic operations in a hospital setting. Introduction of the principles of medication-therapy management as the responsibility of the pharmacists and current topics in health care will be introduced enabling students to tangibly integrate classroom knowledge with hospital-pharmacy practice policies and procedures. Students will be placed at a site for 32 hours each week for four weeks acquiring knowledge across the curriculum as they engage in hospital health-system experiences that promote quality pharmacy operations and services, which optimize patient outcomes and promote patient safety.

## PHRM7700

0 Credits

### **Beyond the Curriculum: Expanding Horizons (1)**

A great deal of education happens outside of the formal course work. In this course, students will have an opportunity to engage in programs to learn more about the emerging areas of pharmacy in order to gain a deeper understanding of the evolving roles of pharmacists and the areas in which they can practice. This course will serve as a platform for students to network with industry and educational leaders to begin to develop their personal and professional networks as they prepare for their future roles in pharmacy. Prerequisites/Corequisites: PHRM6700 Beyond the Curriculum: Foundations in Pharmacy Education (1) and PHRM6701 Beyond the Curriculum: Foundations in Pharmacy Education (2).

## PHRM7701

1 Credit

### **Beyond the Curriculum: Expanding Horizons (2)**

A great deal of education happens outside of the formal course work. In this course, students will have an opportunity to engage in programs to

# Pharmacy

---

learn more about the emerging areas of pharmacy in order to gain a deeper understanding of the evolving roles of pharmacists and the areas in which they can practice. This course will serve as a platform for students to network with industry and educational leaders to begin to develop their personal and professional networks as they prepare for their future roles in pharmacy. Prerequisites/Corequisites: PHRM6700 Beyond the Curriculum: Foundations in Pharmacy Education (1) and PHRM6701 Beyond the Curriculum: Foundations in Pharmacy Education (2).

## PHRM7801

3 Credits

### Informatics and Information Systems

This course provides an overview of the practical components of health care information systems, including an introduction to the capture, storage and processing of electronic medical records, the changing dynamics of the health information technology and the impact of technology, security and regulation on the transfer and storage of health information.

## PHRM7810

3 Credits

### Clinical Trial Design and Regulatory Requirements

This course covers the principles of clinical-trial design, including determination and evaluation of study objectives, commonly used methodologies of study design and the ethical, legal, statistical, sociological and epidemiological considerations that play a role in design of clinical protocols.

## PHRM8109

3 Credits

### Integrated Pharmacotherapy IX: Autoimmune Diseases, Rare Diseases and Special Populations

This is the ninth integrated pharmacotherapy module focusing on autoimmune, rare and special-population diseases and medication management. This course integrates basic principles of biochemistry, anatomy and physiology, pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of diseases of these systems. Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions are discussed, as are the materials and methods used to prepare and administer the appropriate treatment. Cases and examples are used to provide the students with the skills to solve problems related to autoimmune, rare and special-population diseases in an active learning environment. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

Corequisite: PHRM8111 Integrated Pharmacotherapy IX-X: Conceptual Connections and Patient Care.

## PHRM8110

3 Credits

### Integrated Pharmacotherapy X: Hematology and Oncology

This course provides students with an integrated approach to understand the principles of and solve problems related to oncology in an active, learning-based environment. The biochemistry, anatomy and physiology, pathophysiology, medicinal chemistry, pharmacology, pharmacokinetics, clinical chemistry and pharmacotherapy related to the presentation and management of oncologic diseases will be discussed. Physicochemical and biological principles of dosage forms and drug-delivery strategies used to treat these conditions will be discussed, as will the materials and methods used to prepare and administer appropriate treatments. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequisite: PHRM8111 Integrated Pharmacotherapy IX-X: Conceptual Connections and Patient Care.

## PHRM8111

2 Credits

### Integrated Pharmacotherapy IX-X: Conceptual Connections and Patient Care

This course ties in the contents learned in Integrated Pharmacotherapy IX-X, in a case-based, active-learning fashion. While Integrated Pharmacotherapy IX-X prepare students with clinical knowledge and skill set, this course is designed to provide hands-on experience of patient interaction and assessment, triage and referral and treatment formulation and recommendation. Students will develop proficiency in patient-assessment skills system-by-system, effective counseling techniques with regards to drug administration, New Jersey prescription regulations and skills in dosing calculations, all of which are commonly encountered in pharmacy practice. Real-life cases involving autoimmune diseases, rare diseases, oncologic diseases, hematologic diseases and special populations will require students to think critically in every step of the care: presentation, history-taking, assessment, treatment formulation and administration and monitoring for efficacy and toxicity. Students will work on cases focusing on patients with several co-morbidities previously covered. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care. Corequi-

sites: PHRM8109 Integrated Pharmacotherapy IX: Autoimmune Diseases, Rare Diseases and Special Populations and PHRM8110 Integrated Pharmacotherapy X: Hematology and Oncology.

## PHRM8112

2 Credits

### Integrated Pharmacotherapy I-X: A Whole System Overview and Effecting Patient Care

This course ties in the contents learned in Integrated Pharmacotherapy I-X in a case-based, active-learning fashion. While Integrated Pharmacotherapy I-X prepared students with clinical knowledge and skill set, this course is designed to provide hands-on experience of patient interaction and assessment, triage and referral and treatment formulation and recommendation. Students will demonstrate proficiency in patient-assessment skills system-by-system, effective counseling techniques with regards to drug administration, New Jersey prescription regulations and skills in dosing calculations, all of which are commonly encountered in pharmacy practice. Real-life cases representing the disease states previously covered in the integrated pharmacotherapy courses will require students to think critically in every step of the care: presentation, history-taking, assessment, treatment formulation and administration and monitoring for efficacy and toxicity. Students will work on cases focusing on patients with several co-morbidities. Students will be certified by the American Pharmacist's Association Immunization Program. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

## PHRM8113

3 Credits

### Advanced Topics in Pharmacotherapy I

This course provides students an opportunity to expand their knowledge in the area of drug-induced diseases, nutrition, infectious diseases and critical-care pharmacotherapy. A case-based, team-based learning approach will be utilized to foster an interactive learning experience. Students will build upon their current pharmacotherapeutic knowledge through in-depth reading, discussions and case presentations. Prerequisites: PHRM6102 Integrated Pharmacotherapy II: Gastrointestinal; PHRM6104 Integrated Pharmacotherapy IV: Cardiology; PHRM7105 Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology; PHRM7106 Integrated Pharmacotherapy VI: Infectious Disease and PHRM8110 Integrated Pharmacotherapy X: Hematology and Oncology.

## PHRM8114

3 Credits

### **Advanced Topics in Pharmacotherapy II – Geriatric and Pediatrics**

This course will enhance the pharmacy students' skills in geriatric and pediatric pharmacotherapy by promoting their understanding of the unique physiologic characteristics of such special populations. The course will concentrate on the pharmacotherapy management of the disease states and special-care needs as it applies to geriatric and pediatric patients. The goals of this course are to develop skills necessary to optimize the care of inpatient and outpatient geriatric and pediatric patients by utilizing evidence-based and patient-centered therapy. The course will utilize a combination of didactic lectures, class discussions, collaborative learning and field-based activities. Prerequisites: PHRM6102 Integrated Pharmacotherapy II: Gastrointestinal; PHRM6104 Integrated Pharmacotherapy IV: Cardiology; PHRM7105 Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology; and PHRM7106 Integrated Pharmacotherapy VI: Infectious Disease.

## PHRM8115

3 Credits

### **Advanced Topics in Pharmacotherapy III – Critical Care**

This course provides students an opportunity to expand their knowledge in the areas of critical-care pharmacotherapy. A care-based, team-based learning approach will be utilized to foster an interactive learning experience. Students will build upon their current pharmacotherapeutic knowledge through in-depth reading, discussions and case presentations. In this elective course, they will develop critical-thinking, problem-solving and decision-making skills that will help them effectively evaluate medication-related issues and develop appropriate pharmacotherapy recommendations as would be required of pharmacists working in an intensive care unit. Prerequisites: PHRM6102 Integrated Pharmacotherapy II: Gastrointestinal; PHRM6104 Integrated Pharmacotherapy IV: Cardiology; PHRM7105 Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology; PHRM7106 Integrated Pharmacotherapy VI: Infectious Disease; PHRM7107 Integrated Pharmacotherapy VII: Pulmonary, Eye, Ear, Nose and Throat; and PHRM7108 Integrated Pharmacotherapy VIII: Endocrine, Urinary Tract, Renal and Reproductive Health.

## PHRM8116

3 Credits

### **Advanced Topics in Pharmacotherapy IV – Infectious Diseases**

This course provides students an opportunity to expand their knowledge in the area of infectious diseases including human immunodeficiency virus (HIV) infection. Students will build upon their current pharmacotherapeutic knowledge

through in-depth reading, discussions, journal club and patient-case presentation. Prerequisite: PHRM7106 Integrated Pharmacotherapy VI: Infectious Disease.

## PHRM8117

3 Credits

### **Emerging Topics in Cancer Pharmacology and Pharmacotherapeutics**

This course focuses on advances in pharmacology and clinical applications of novel anticancer agents. It combines didactic lectures on the emerging topics in cancer pharmacology and pharmacotherapeutics with journal-club presentation and in-class activities. Emphasis of the presentations will be on the translation of biomedical science discoveries into therapeutic agents and implementation of novel anticancer agents into clinical practice. Students will be exposed to pharmacotherapeutics of several types of cancers not covered in the core hematology/oncology course. Prerequisite: PHRM8110 Integrated Pharmacotherapy X: Hematology and Oncology.

## PHRM8118

3 Credits

### **Advanced Topics in Pharmacotherapy: Advanced Cardiology**

This elective course will build on the foundation of knowledge of cardiovascular disease and introduce some new disease states, which are not part of the required curriculum. The students will learn/evaluate major landmark trials in cardiology that provide therapy recommendations used in management of cardiovascular diseases today. The students will practice providing patient-specific recommendations based on evidence available from primary literature resources. The goals of this course are to develop skills necessary to optimize the care of inpatient and outpatient management of cardiovascular diseases by utilizing evidence-based and patient-centered therapy. The course will utilize a combination of didactic lectures, class discussions and collaborative learning. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics; PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care; PHRM6102 Integrated Pharmacotherapy II: Gastrointestinal; PHRM6104 Integrated Pharmacotherapy IV: Cardiology; PHRM7107 Integrated Pharmacotherapy VII: Pulmonary, Eye, Ear, Nose and Throat; and PHRM7108 Integrated Pharmacotherapy VIII: Endocrine, Urinary Tract, Renal and Reproductive Health. Corequisite: PHRM8111 Integrated Pharmacotherapy IX–X: Conceptual Connections and Patient Care.

## PHRM8201

2 Credits

### **Pharmacogenomics and Personalized Medicine**

This course focuses on how genetic factors can affect the pharmacokinetic and/or the pharmacodynamic parameters of a drug, ultimately impacting its efficacy and toxicity in the patient. Considerations of genomic and phenotypic information to individualize pharmacotherapy and minimize adverse events are emphasized. The underlying principles of pharmacology, pharmacokinetics and pharmacotherapeutics are reinforced. This course includes discussions on biochemical analytical methods, clinical interpretation of laboratory data, applied pharmacokinetics and therapeutic drug monitoring and principles and applications in pharmacogenomics. Economic and ethical issues in relation to the incorporation of pharmacogenomic data in the clinical decision-making process are also discussed. All concepts are discussed against the backdrop of patient-centered care. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

## PHRM8202

3 Credits

### **Current Therapeutic Targets and Their Challenges**

This course will provide students with an understanding of the drug discovery and development process. The course will be developed into three sections. In the first section, topics covering drug discovery and development will be discussed, including lead finding, hit-to-lead activities, lead optimization, preclinical development and clinical development. In the second section, challenges germane to current therapeutic targets in the neuroscience, cardiovascular, oncology, inflammation and diabetes therapeutic areas will be discussed. In the final section, students will have the opportunity to research and present a current therapeutic target, exploring the potential advantages and challenges of that target. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics and PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care.

## PHRM8203

3 Credits

### **Advanced Sterile Pharmacy Dispensing and Compounding**

Building upon the knowledge gained in PHRM7201 Pharmaceutics III: Dosage Form and Drug Delivery Systems and PHRM7202 Pharmaceutics IV: Sterile Products and Biopharmaceuticals, students will learn the advanced science and art of preparing and dispensing a

# Pharmacy

wide variety of Compounded Sterile Products (CSP). Emphasis is placed on a variety of aseptic technique methods and common regulatory and procedural processes employed in clean rooms. Students will learn USP 797, proposed USP 800 and Board of Pharmacy definitions, concepts and standards. This course provides advanced knowledge for compounding-dispensing techniques, standards and principles and integrates with knowledge gained and will rely upon retention of principles covered in PHRM7201 Pharmaceutics III: Dosage Form and Drug Delivery Systems and PHRM7202 Pharmaceutics IV: Sterile Products and Biopharmaceuticals. The course will have didactic and practical components. Prerequisites: PHRM7201 Pharmaceutics III: Dosage Form and Drug Delivery Systems and PHRM7202 Pharmaceutics IV: Sterile Products and Biopharmaceuticals.

## PHRM8211

3 Credits

### Advanced Topics in Pharmaceutical Sciences

This course provides students an opportunity to expand their knowledge in the areas of pharmaceutical sciences. A case-based, team-based learning approach will be utilized to foster an interactive learning experience. Students will build upon their current knowledge through in-depth reading, discussions and case presentations. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics; PHRM6101 Foundations in Integrated Pharmacotherapy I – An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care; PHRM6202 Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/Pharmacokinetics; and PHRM7202 Pharmaceutics IV: Sterile Products and Biopharmaceuticals.

## PHRM8212

3 Credits

### Obesity

This course will cover the broad subject of obesity from its epidemiology and associated comorbidities to its physiological underpinnings and various available treatment options. Firstly, it will provide information regarding the prevalence of obesity along with important timelines. It will cover the complex interplay of various endogenous hormones that are involved in appetite regulation (affecting hunger and satiety). The biochemistry of adipocytes and their role in energy balance will be discussed. Current pharmacotherapeutic treatment options will be discussed along with a historical perspective of prior treatments and the reasons for their failure/withdrawal, as well as potential future targets for anti-obesity drugs. This course will also discuss non-pharmacological options to treating and preventing obesity, along with other topics of relevance to pharmacists such as drug-induced obesity and pharmacodynamics/

pharmacokinetic issues in obese patients. Prerequisites: PHRM6100 Foundations in Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics; PHRM6101 Foundations in Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care; and PHRM6301 Medical Communication and Technical Writing. Corequisite: PHRM8111 Integrated Pharmacotherapy IX–X: Conceptual Connections and Patient Care.

## PHRM8301

3 Credits

### Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes

This course is designed to familiarize students with the principles of pharmacoepidemiology and pharmacoeconomics. The course focuses on major areas of the evolving fields of pharmacoepidemiology and pharmacoeconomics with an emphasis on measuring health outcomes. It builds on and extends the skills and concepts learned in previous courses within the curriculum that are focused on the effectiveness of medication use at a population level (PHRM7301 Biostatistics, PHRM7302 Epidemiology and Study Design Evaluation, PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology). The additional dimension of efficiency or cost relative to value of a given health benefit or outcome is introduced and developed. The role of pharmacoepidemiologic studies in post-marketing safety studies and communication of risk is covered as is the role of both pharmacoepidemiologic and pharmacoeconomic studies in the formulary process used for medication coverage by insurers. It is important for students to understand how to evaluate, interpret and apply medical research involving pharmaceutical care of individual patients and community or population health (public health) and use this information to aid their decision-making processes in pharmacy practice. The principles discussed and applied in this course will better prepare students to function in this capacity. Prerequisites: PHRM6301 Medical Communication and Technical Writing, PHRM6401 Professional Pharmacy Practice I: Health Care Delivery, PHRM7301 Biostatistics, PHRM7302 Epidemiology and Study Design Evaluation and PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology.

## PHRM8302

2 Credits

### Public Health and the Global Mission of Pharmacy

The course covers the evolution and basic principles of public health, including focus on relevant public health care issues affecting populations in the United States. Additionally, global public health issues are highlighted, particularly those unique to populations in developing and emerg-

ing countries. Information, principles and tools introduced in previous courses (PHRM6401 Professional Pharmacy Practice I: Health Care Delivery, PHRM7301 Biostatistics, PHRM7302 Epidemiology and Study Design Evaluation, PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology and PHRM8301 Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes) are reinforced and applied to public health topics, particularly those that pharmacists are likely to encounter in professional practice. Emphasis is given to emergency preparedness, public health improvement and disease prevention. The evolving roles of pharmacists in providing patient care and disease-management services to vulnerable populations and reducing health disparities in access to care are introduced. In particular, the role of pharmacists in improving public health, the charge for pharmacy in the United States public health service and interprofessional opportunities for pharmacists in public health initiatives such as Healthy People 2020 are explored. Prerequisites: PHRM6401 Professional Pharmacy Practice I: Health Care Delivery, PHRM7301 Biostatistics, PHRM7302 Epidemiology and Study Design Evaluation, PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology and PHRM8301 Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes.

## PHRM8303

3 Credits

### Research Methods and Data Analysis

This course provides students an opportunity to acquire research experiences in the field of health services research. Students will build up their research projects under the supervision of the faculty. A team-based learning approach will be utilized to foster an interactive learning experience. In this elective course, students will develop critical-thinking, problem-solving and decision-making skills. Prerequisite: PHRM7301 Biostatistics.

## PHRM8401

3 Credits

### Pharmacists' Careers in Pharmaceutical Industry

This course is designed for doctor of pharmacy students considering an internship, experiential rotation, additional degree options and/or post-graduate training, in preparation for a career within the pharmaceutical industry. Health care has undergone significant change within the past two decades with the advent of various managed-care delivery models, the growing influence of federal and state governments as purchasers, health care reform, increasing regulatory and patent complexities and dramatic innovation and adoption of technology in every facet of people's lives. In many emerging health care models, pharmacists are taking a more influential role on the health care team and this trend will likely continue. However, in some of

the more traditional pharmacy-practice settings, the supply of pharmacists is outpacing demand. The result of the current employment landscape is that more student pharmacists than ever before are exploring nontraditional practice settings including the pharmaceutical industry. The pharmaceutical industry including all the organizations that support it offers exciting and professional challenges and opportunities for pharmacist graduates. Consistent with changing roles of pharmacists in traditional health-care practice settings, the industry has also undergone significant changes resulting in a growing diversity of positions that are being filled by pharmacists throughout the commercialization process of pharmaceutical products. This course will explore various aspects of pharmaceutical commercialization from development and regulatory approval to marketing and sales strategies through life-cycle management. Each functional department will be described and discussed with a focus on the roles, responsibilities and opportunities for pharmacists to successfully contribute and achieve high levels of professional satisfaction. Prerequisites: PHRM6301 Medical Communication and Technical Writing and PHRM6401 Professional Pharmacy Practice I: Health Care Delivery.

## PHRM8402

2 Credits

### **Professional Pharmacy Practice IV: Pharmacy Leadership and Management**

Pharmacy practice does not exist in isolation; organizational structures and cultures have an impact on the contemporary practice of pharmacy within an organization with various stakeholders taking an interest and having a voice in the professional practice of pharmacy. To be effective, pharmacists will need to be aware of a variety of managerial issues they will likely face as practitioners. As a complement to the clinical and professional expertise pharmacy students develop by completing integrated pharmacotherapy, population health and previous professional pharmacy-practice courses, this course introduces basic administrative, business, managerial and leadership principles necessary for the effective and efficient delivery of patient-care goals. Application of these principles to pharmacy practice includes budgetary and financial considerations, marketing principles, personnel management, customer service, continuous quality assessment and performance improvement related to both improved value propositions and improved patient safety, as well as the use of technology in pharmacy practice. Risk management and the impact of compliance with state and federal laws and regulations and quality standards proposed by accrediting agencies on pharmacy management and leadership are explored. Prerequisites: PHRM6401 Professional Pharmacy Practice I: Health Care Delivery; PHRM6402 Professional Pharmacy Practice II: Communication in Health Care; and

PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology.

## PHRM8403

3 Credits

### **An Introduction to Lean Six Sigma**

This course introduces pharmacy students to the concepts and methods of Lean Six Sigma (LSS). LSS is a method that relies on effective teamwork to improve performance by decreasing waste and creating a lean enterprise. A framework of both Lean and Six Sigma tools will be covered providing a roadmap and diagnosis for workflow improvements and reduction in variability. The skills learned in this class will build capabilities that can help improve workflow and reduce errors in the pharmacy setting and organize processing in the pharmaceutical industry. Prerequisite: PHRM7301 Biostatistics. Co-requisite: PHRM8402 Professional Pharmacy Practice IV: Pharmacy Leadership and Management.

## PHRM8404

3 Credits

### **Medication Safety**

While medication therapy has become the mainstay of disease treatment and prevention, errors involving medications can result in patient harm and death. This course expands on knowledge acquired in PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology and PHRM8301 Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes related to medication safety and the technology and tools used in error prevention. The student will also conduct case-study analyses of actual adverse drug events which include both medication errors and adverse drug reactions that have occurred in both the hospital and community-pharmacy settings. Prerequisites: PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology and PHRM8301 Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes.

## PHRM8405

3 Credits

### **Medical Spanish for the Pharmacy Professional**

This course prepares students to be effective listeners and communicators using the Spanish language with the objective to actively engage with Hispanic patients to facilitate medication utilization and adherence. Triage terminology and basic pharmacy vocabulary will be introduced in addition to self-care specific medical language relative to each chapter in the text *Spanish for the Medical Professional* (i.e. fever, cough, cold, etc). Active engagement techniques and essential competencies will be practiced via role-playing. Phrases and questions required for physical assessments in addition to aspects encompassing Hispanic Cultural Competencies will also be covered. Students will also be introduced to the National CLAS (Culturally and Linguistically Appropriate Services) Standards

in order to provide a better understanding of the social and cultural aspects of the Hispanic community influencing beliefs and behaviors.

## PHRM8700

0 Credits

### **Beyond the Curriculum/Preparing Practitioners (1)**

In the first of the two-semester course sequence, students will have an opportunity to continue to engage in programs to learn more about the emerging areas of pharmacy in order to gain a deeper understanding of the evolving roles of pharmacists and the areas in which they can practice. Assessment of readiness to enter the world of professional pharmacy and career guidance for traditional and nontraditional pharmacist roles will be introduced. Prerequisites: PHRM7700 Beyond the Curriculum: Expanding Horizons (1) and PHRM7701 Beyond the Curriculum: Expanding Horizons (2).

## PHRM8701

1 Credit

### **Beyond the Curriculum/Preparing Practitioners (2)**

In this course, students will have an opportunity to continue to engage in programs to learn more about the emerging areas of pharmacy in order to gain a deeper understanding of the evolving roles of pharmacists and the areas in which they can practice. Assessment of readiness to enter the world of professional pharmacy and career guidance for traditional and nontraditional pharmacist roles will be provided. Prerequisites: PHRM7700 Beyond the Curriculum: Expanding Horizons (1) and PHRM7701 Beyond the Curriculum: Expanding Horizons (2).

## PHRM8802

3 Credits

### **Health Information Exchange and Security**

This course will provide an overview of the methods, issues and challenges surrounding the transmission, storage and preservation of health information data, including an overview of the regulatory processes that oversee exchange and security of medical information (i.e., HIPAA, Joint Commission) and a discussion on the concerns around disclosure, accountability and liability involving storage and transmission of data.

## PHRM8803

3 Credits

### **Electronic Medical Records Management**

An introductory overview of computer-based medical record systems, including introductions to data entry and processing, health systems standards and regulations, data modeling, ethical and legal concerns, visualization and output of data and other topics involved in the management and processing of medical data.

# Pharmacy

---

## PHRM8804

3 Credits

### **Computational Modeling and Data Management**

This course provides an overview of the systems and databases used within a health care information system, including database architecture, reporting and querying, data optimization. Prerequisite: PHRM7801 Informatics and Information Systems.

## PHRM8805

3 Credits

### **System Management and Planning**

This course provides an overview of the challenges and strategies of management within health care organizations and discusses the roles that informatics and information systems play in providing necessary data, information and organization to each of the major components within the organization. Discussion on how to be an effective leader and manager, and how to provide valued insight and information to document cost savings, efficiency, projected and increased return on investment and potential organizational adjustments and improvements will take place. Prerequisite: PHRM7801 Informatics and Information Systems.

## PHRM8806

3 Credits

### **Project Management**

The purpose of this course is to integrate the essential components of project planning and management with health care information systems for health care leaders. The course will outline the process for developing, implementing and evaluating project plans as well as integration of communication and project life-cycle theory. Prerequisite: PHRM7401 Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology.

## PHRM8807

3 Credits

### **Human Factors in Informatics**

Human Factors is a behavioral science with applications in almost every field, including ergonomics, software design, medical-device development and health care. By definition, this discipline is concerned with the interaction between humans and the systems with which they perform work. Increasingly, the processes that health care workers navigate are technologically laced and data-driven. This presents a perfect area for the expert informaticists to liaise. This course will investigate deeply how people interact with technology and data. Through comprehensive study, future informaticists will identify how best to apply technology to health care processes, how to manage change, best practices in data exposition and useful instructional design techniques. While the bulk of this course deals with how people interact with technology, the class will also explore how programmatic reporting of outcomes influences the technolo-

gies and actions taken in health care. A focused exploration of mortality, readmissions and preventable harm will complement the practical use of technology students will be learning in other courses in the informatics sequence.

## PHRM8810

3 Credits

### **Medical and Clinical Report Writing**

This course provides a basic overview of the necessary means of communication for the clinical research professional, including methods for documentation, presentation of data and reporting of results. Focused attention will be paid to developing approaches for communication that allows for effective information transfer to a broad and diverse set of audiences, including patients, physicians, nurses, pharmacists, researchers and the general public. Prerequisite: PHRM7302 Epidemiology and Study Design Evaluation. Note: For pharmacy students only.

## PHRM8811

2 Credits

### **Ethics of Health Care Research**

The student will examine the ethical issues that confront health care providers and patients. The medical, scientific, moral and socioeconomic bases of these issues and the decision-making process that providers and patients engage in are analyzed. Topics include informed consent, the role of institutional review boards, euthanasia and the allocation of scarce resources.

## PHRM8812

3 Credits

### **Clinical Trial Research Administration**

This course provides a focused overview on the logistic and operational factors in conducting and completing a clinical research study. This includes discussion on the responsibilities and relationships for each of the professionals and parties involved in bringing the study from conceptualization through implementation and into the phase of data evaluation and report writing.

## PHRM8821

3 Credits

### **Regulatory Compliance for Pharmaceuticals**

This course will review the regulatory pathways for drugs, biologics, biosimilars, medical devices and other pharmaceutical and biotechnology areas of awareness. Discussions on compliance strategies, risks and processes within each framework will provide insight into the challenges (financial, ethical and procedural) facing each industry and area.

## PHRM8822

3 Credits

### **U.S. Regulatory New Drug Application Submission and Dossier Preparation**

This course will review steps and consideration in preparing a New Drug Application (NDA)

submission to the U.S. Food and Drug Administration (FDA). Students will become knowledgeable on terminology used in NDA submission process in an electronic (e) Common Technical Document (CTD) format, Extensive Markup Language (XML) backbone, portable document format (PDF) file, structured product labeling format (SPL) for U.S. package-insert labeling, what area and statistical analysis systems (SAS) transport files. The course will provide a fundamental understanding of the different types of NDAs to file for under Section 505 of the Federal Food and Drug and Cosmetic Act for marketing authorization in the United States and describe the components and essential documents necessary for inclusion in an NDA submission. Students will learn how to consider key sections and data within the U.S. NDA submission for consideration of global regulatory submissions outside of the U.S. by using the CTD format and International Conference on Harmonization (ICH) principles.

## PHRM9101

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) I: Community**

This is an advanced practice experience course building on the student's prior knowledge and practice in the community-care setting. The student will spend full-time hours (40 plus hours per week) for five weeks focusing on patient-centered pharmacy practice in a community-pharmacy setting. Acquisition of new knowledge and skills in providing primary patient care and development of confidence in clinical decision making and managing individual and population care is the goal of this practice course. This course prepares students to be critical thinkers who will continually build their knowledge across the curriculum as they engage in practice experiences.

## PHRM9102

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) II: Institutional**

This advanced institutional pharmacy practice experience will provide students with the opportunity to apply knowledge acquired during the didactic portion of the curriculum and build upon skills and competencies gained through earlier introductory pharmacy practice experiences. With a focus on the central pharmacy and distributive areas of an inpatient pharmacy, students will participate in clinical, distributive and administrative functions of pharmacists. Throughout the experience, students will engage in all aspects of hospital/health system pharmacy, including the medication-use process, quality assurance, medication safety, interprofessional collaboration, observation and/or participation in sterile and nonsterile product preparation and patient-care activities. Through this hands-on experience, the student will progress from the

student-pharmacist level to developing the competencies necessary to become a practicing pharmacist accountable for pharmacist-delivered, patient-centered care. Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9103

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) III: Ambulatory Care**

This is an advanced pharmacy practice experience focusing on the application of didactic course work and acquired patient-care skills to the care of ambulatory-care patients. Students will be active participants in the delivery of high-quality care to patients through patient counseling, drug-therapy monitoring and the development of patient-education material. Students will collaborate with other health care professionals as active participants in the drug therapy decision-making process. Acquisition of new knowledge and skills in providing primary patient care and development of confidence in clinical decision making is the goal of this practice course. Students are expected to be present at the site for a minimum of eight hours a day, five days per week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9104

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) IV: Acute Care**

This acute-care pharmacy practice experience will enable students to integrate skills and knowledge gained during the didactic portion of the curriculum and apply this knowledge and skills to optimize drug-therapy management and medication safety in an acute-care medical setting. Students will establish their understanding of the role of a pharmacist as a clinical provider and as an integrated member of the health care team. Students will evaluate and identify medication-related problems and formulate clinical solutions to provide care for patients in an acute-care setting. Students will contribute to effective patient-care delivery while simultaneously gaining an appreciation and respect for the roles of each health professional within an interprofessional team. Throughout the course, students will be exposed to a variety of disease states and differing levels of medical acuity. Students will utilize their knowledge of therapeutics and health disparities to communicate with patients and health care providers to positively impact patient outcomes, prevent adverse events and assure safe medication use. Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9201

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Community Practice I**

The five-credit advanced community advanced pharmacy practice experience surrounds various aspects of medication dispensing encompassing the delivery patient-centered care and effective medication management. The primary focus of this experience is patient assessment, counseling and education, medication therapy, disease-state management and documentation of patient information and interventions. The Advanced Community Advanced Pharmacy Practice Elective Experience is a five-credit, full-time (40 hours per week for five weeks) course affording students a pharmacy-practice setting in which to further develop their skills and competencies acquired in their introductory community experience. This experience contributes to the integration of clinical knowledge and skills with the basics of medication dispensing and control.

## PHRM9202

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Community Practice II**

The five-credit community practice advanced pharmacy practice experience surrounds various aspects of medication dispensing encompassing the delivery of patient-centered care and effective medication management. The primary focus of this experience is patient assessment, counseling and education, medication therapy, disease-state management and documentation of patient information and interventions. This full-time (40 hours per week for five weeks) course affords students a pharmacy-practice setting in which to further develop their skills and competencies acquired in their introductory community experience. This experience contributes to the integration of clinical knowledge and skills with the basics of medication dispensing and control.

## PHRM9203

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Ambulatory Care I**

The five-credit ambulatory care advanced pharmacy practice experience affords students the ability to enhance their skills and competencies in the provision of medication-therapy management and pharmaceutical care in an ambulatory/outpatient clinical setting. The experience emphasizes appropriate identification, resolution and prevention of drug-related problems, as well as effective communication with patients and interprofessional allied health professionals. Competencies enhanced and acquired include patient counseling and education, drug information, written and verbal communication, assessment and documentation of interventions, patient-care services and therapy and the appreciation for the pharmacist's role in patient-

centered care and promotion of rational and effective drug therapy.

## PHRM9204

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Ambulatory Care II**

The five-credit ambulatory care advanced pharmacy practice experience affords students the ability to enhance their skills and competencies in the provision of medication-therapy management and pharmaceutical care in an ambulatory/outpatient clinical setting. The experience emphasizes appropriate identification, resolution and prevention of drug-related problems, as well as effective communication with patients and interprofessional allied health professionals. Competencies enhanced and acquired include patient counseling and education, drug information, written and verbal communication, assessment and documentation of interventions, patient-care services and therapy, and the appreciation for the pharmacist's role in patient-centered care and promotion of rational and effective drug therapy.

## PHRM9205

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Community Compounding I**

The five-credit community compounding advanced pharmacy practice experience is an elective rotation in a community pharmacy specializing in compounding extemporaneous (patient-specific) drug products. In addition to the preparation and compounding of patient-specific dosage forms, the experience will also encompass the provision of medication-therapy management and individualized medication instructions to enhance medication compliance.

## PHRM9206

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Community Compounding II**

The five-credit community compounding advanced pharmacy practice experience is an elective rotation in a community pharmacy specializing in compounding extemporaneous (patient-specific) drug products. In addition to the preparation and compounding of patient-specific dosage forms, the experience will also encompass the provision of medication therapy management and individualized medication instructions to enhance medication compliance.

## PHRM9207

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Medication Therapy Management I**

The five-credit medication therapy management advanced pharmacy practice experience is an

# Pharmacy

---

elective clinical rotation affording students the ability to acquire and enhance essential competencies and skills in the identification, prevention and resolution of medication-related problems in addition to effective methods in patient and interprofessional communication to optimize therapeutic outcomes. Medication-therapy management skills developed encompass comprehensive medication review, patient education, written and verbal communication skills and assessment and documentation of medication-related services and therapies.

## PHRM9208

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Medication Therapy Management II**

The five-credit medication therapy management advanced pharmacy practice experience is an elective clinical rotation affording students the ability to acquire and enhance essential competencies and skills in the identification, prevention and resolution of medication-related problems in addition to effective methods in patient and interprofessional communication to optimize therapeutic outcomes. Medication-therapy management skills developed encompass comprehensive medication review, patient education, written and verbal communication skills and assessment and documentation of medication-related services and therapies.

## PHRM9209

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – HIV/AIDS I**

The five-credit HIV/AIDS advanced pharmacy practice experience is a clinical elective rotation that introduces the student to the care and treatment of patients in the various stages of the disease state. Since many patients with HIV/AIDS experience numerous complications as their disease progresses, students will learn how to prevent and/or treat these complications in this specific patient population. This rotation may take place in an inpatient or outpatient setting.

## PHRM9210

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – HIV/AIDS II**

The five-credit HIV/AIDS advanced pharmacy practice experience is a clinical elective rotation that introduces the student to the care and treatment of patients in the various stages of the disease state. Since many patients with HIV/AIDS experience numerous complications as their disease progresses, students will learn how to prevent and/or treat these complications in this specific patient population. This rotation may take place in an inpatient or outpatient setting.

## PHRM9211

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Home Infusion I**

The five-credit home infusion advanced pharmacy practice experience is an elective clinical rotation in a setting that provides home health care services. The student will acquire and enhance competencies and skills surrounding the pharmacist's responsibilities in preparation of home-parenteral products including home-parenteral nutrition, home chemotherapy, hospice-care products and medications and necessary medical device equipment for the patient to be managed at home. The experience will also include involvement in participation in home-infusion assessment activities, inventory and quality control of products and patient-discharge consultations along with exposure to various infusion pumps and related home-care parenteral devices utilized in the home-infusion environment.

## PHRM9212

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) V: Elective – Home Infusion II**

The five-credit home infusion advanced pharmacy practice experience is an elective clinical rotation in a setting that provides home health care services. The student will acquire and enhance competencies and skills surrounding the pharmacist's responsibilities in preparation of home-parenteral products including home-parenteral nutrition, home chemotherapy, hospice-care products and medications and necessary medical device equipment for the patient to be managed at home. The experience will also include involvement in participation in home-infusion assessment activities, inventory and quality control of products and patient-discharge consultations along with exposure to various infusion pumps and related home-care parenteral devices utilized in the home-infusion environment.

## PHRM9301

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Hospital Practice I**

The five-credit Hospital Advanced Pharmacy Practice Experience is an inpatient hospital rotation which provides a setting for the provision of pharmaceutical care encompassing medication-management process relative to medication-order entry, preparation, distribution and control of medications, medication interventions, monitoring and control affording the integration of critical thinking problem-solving clinical skills and interprofessional communication.

## PHRM9302

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Hospital Practice II**

The five-credit Hospital Advanced Pharmacy Practice Experience is an inpatient hospital rotation which provides a setting for the provision of pharmaceutical care encompassing medication-management process relative to medication-order entry, preparation, distribution and control of medications, medication interventions, monitoring and control affording the integration of critical thinking problem-solving clinical skills and interprofessional communication.

## PHRM9303

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Acute Care I**

The five-credit acute care advanced pharmacy practice experience is an elective clinical rotation providing students an opportunity to provide medication-therapy management and pharmaceutical care to adult patients in an inpatient acute-care environment. The acute-care experience prepares the student to evaluate drug-therapy problems from a patient-centered care perspective engaging in interprofessional collaboration to gain an appreciation for the wide variety of disease states and therapeutic problems encountered routinely which encompass clinical management and monitoring of patients' disease states and medication therapy.

## PHRM9304

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Acute Care II**

The five-credit acute care advanced pharmacy practice experience is an elective clinical rotation providing students an opportunity to provide medication-therapy management and pharmaceutical care to adult patients in an inpatient acute-care environment. The acute care experience prepares the student to evaluate drug-therapy problems from a patient-centered care perspective engaging in interprofessional collaboration to gain an appreciation for the wide variety of disease states and therapeutic problems encountered routinely, which encompass clinical management and monitoring of patients' disease states and medication therapy.

## PHRM9305

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Long Term Care I**

The five-credit long-term care advanced pharmacy practice experience is an elective clinical rotation enabling students to acquire and enhance skills and competence in the distribu-



tion of medication; provision of medication-therapy management; and consulting services to residents of nursing home facilities, subacute care and assisted-living facilities, psychiatric hospitals, hospice and home- and community-based care.

## PHRM9306

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Long Term Care II**

The five-credit long-term care advanced pharmacy practice experience is an elective clinical rotation enabling students to acquire and enhance skills and competence in the distribution of medication; provision of medication-therapy management; and consulting services to residents of nursing home facilities, subacute care and assisted-living facilities, psychiatric hospitals, hospice and home- and community-based care.

## PHRM9307

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Infectious Disease I**

The five-credit infectious disease advanced pharmacy practice experience is an elective clinical rotation affording students the ability to acquire and enhance competency and proficiency in the medical management of patients with infectious diseases in the hospitalized setting.

## PHRM9308

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Infectious Disease II**

The five-credit infectious disease advanced pharmacy practice experience is an elective clinical rotation affording students the ability to acquire and enhance competency and proficiency in the medical management of patients with infectious diseases in the hospitalized setting.

## PHRM9309

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Oncology I**

The five-credit hematology/oncology advanced pharmacy practice experience is an elective clinical rotation enabling students to acquire and enhance competencies and skills encompassing the provision of pharmaceutical care for oncology patients. The student will gain an in-depth knowledge and understanding of antineoplastics, toxicity management, supportive/palliative care and administrative oncology pharmacist functions surrounding patient-centered oncology medication management. This rotation may be completed in an acute-care setting or an ambulatory-care setting.

## PHRM9310

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Oncology II**

The five-credit hematology/oncology advanced pharmacy practice experience is an elective clinical rotation enabling students to acquire and enhance competencies and skills encompassing the provision of pharmaceutical care for oncology patients. The student will gain an in-depth knowledge and understanding of antineoplastics, toxicity management, supportive/palliative care and administrative oncology pharmacist functions surrounding patient-centered oncology medication management. This rotation may be completed in an acute-care setting or an ambulatory-care setting.

## PHRM9311

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Critical Care I**

The five-credit critical care advanced pharmacy practice experience is a clinical elective rotation enabling students to acquire and enhance competencies in patient medical management in the intensive-care unit of a hospital. The experience will encompass experiences in pharmacotherapy management of medical, surgical and trauma patients exposing students to a multidisciplinary-team approach actively demonstrating the importance of interprofessional communication and working collaboratively with physicians, nurses and respiratory therapists and other health care professionals.

## PHRM9312

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Critical Care II**

The five-credit critical care advanced pharmacy practice experience is a clinical elective rotation enabling students to acquire and enhance competencies in patient medical management in the intensive-care unit of a hospital. The experience will encompass experiences in pharmacotherapy management of medical, surgical and trauma patients exposing students to a multidisciplinary-team approach actively demonstrating the importance of interprofessional communication and working collaboratively with physicians, nurses and respiratory therapists and other health care professionals.

## PHRM9313

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Cardiology I**

The five-credit cardiology advanced pharmacy practice experience is an elective clinical rotation that will develop and enhance the student's ability to make rational decisions surrounding

proficient use of cardiovascular medications affecting the cardiovascular system. The student will acquire specialized knowledge encompassing major cardiovascular disease states, invasive and noninvasive cardiovascular diagnostic techniques and the pharmacology, pharmacokinetics and the clinical use of cardiac drugs. This rotation setting is primarily inpatient, but may be based in an ambulatory setting or a combination of both.

## PHRM9314

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Cardiology II**

The five-credit cardiology advanced pharmacy practice experience is an elective clinical rotation that will develop and enhance the student's ability to make rational decisions surrounding proficient use of cardiovascular medications affecting the cardiovascular system. The student will acquire specialized knowledge encompassing major cardiovascular disease states, invasive and noninvasive cardiovascular diagnostic techniques and the pharmacology, pharmacokinetics and clinical use of cardiac drugs. This rotation setting is primarily inpatient, but may be based in an ambulatory setting or a combination of both.

## PHRM9315

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Behavioral Health I**

The five-credit behavioral health advanced pharmacy practice experience is an elective clinical rotation offering students the opportunity to provide medication-therapy management to mentally ill patients in an inpatient acute care or outpatient setting. The student will collaborate interprofessionally with members of the mental health care team and engage in patient monitoring, therapeutic decisions regarding drug therapy, patient-medication counseling and provision of drug information to team members. The behavioral health APPE provides students an opportunity to actively communicate with the mental health care team and their patients in an effort to understand the impact and effects of psychiatric medication.

## PHRM9316

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Behavioral Health II**

The five-credit behavioral health advanced pharmacy practice experience is an elective clinical rotation offering students the opportunity to provide medication-therapy management to mentally ill patients in an inpatient acute care or outpatient setting. The student will collaborate interprofessionally with members of the mental health care team and engage in patient monitor-

# Pharmacy

ing, therapeutic decisions regarding drug therapy, patient-medication counseling and provision of drug information to team members. The behavioral health APPE provides students an opportunity to actively communicate with the mental health care team and their patients in an effort to understand the impact and effects of psychiatric medication.

## PHRM9317

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Transitions of Care I**

This five-credit elective will grant students the opportunity to participate in the emerging field of transitions of care, which is intended to improve continuity of care from the inpatient setting to the home. A primary goal of this experience is to reduce 30-day readmission rates by targeting high-risk populations including patients with congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), atrial fibrillation, uncontrolled diabetes, uncontrolled hypertension, multiple medications, as well as patients with insurance issues, medication compliance and/or dietary challenges. By providing the patient with education, tools for adherence to diet and medications and helping patients and/or caregivers to coordinate social and medical necessities, the patients are enabled to remain healthy and medically stable once discharged from the hospital. Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9318

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Transitions of Care II**

This five-credit elective will grant students the opportunity to participate in the emerging field of transitions of care, which is intended to improve continuity of care from the inpatient setting to the home. A primary goal of this experience is to reduce 30-day readmission rates by targeting high-risk populations including patients with congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), atrial fibrillation, uncontrolled diabetes, uncontrolled hypertension, multiple medications, as well as patients with insurance issues, medication compliance and/or dietary challenges. By providing the patient with education, tools for adherence to diet and medications and helping patients and/or caregivers to coordinate social and medical necessities, the patients are enabled to remain healthy and medically stable once discharged from the hospital. Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9319

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Nutrition Support I**

This five-credit elective will focus on enteral nutrition (total enteral nutrition and medication administration via feeding tubes) and parenteral nutrition (clinical and compounding). By working with the interdisciplinary team, including nurses, speech-language pathologists, dietitians, prescribers and others, the student pharmacist will manage adult inpatients (medical, surgical and critically ill) receiving nutrition support enterally or parenterally. The student pharmacist may also manage NICU and pediatric patients receiving nutrition support. Note that nutrition support is NOT nutrition. This rotation is not intended for student pharmacists interested in oral nutrition, such as body building, herbal supplementation, diets and so on. The definition of nutrition support can be found online at the American Society of Parenteral and Enteral Nutrition (ASPEN) at: [http://www.nutritiocare.org/About\\_Clinical\\_Nutrition/What\\_is\\_Nutrition\\_Support\\_Therapy/](http://www.nutritiocare.org/About_Clinical_Nutrition/What_is_Nutrition_Support_Therapy/). Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9320

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Nutrition Support II**

This five-credit elective will focus on enteral nutrition (total enteral nutrition and medication administration via feeding tubes) and parenteral nutrition (clinical and compounding). By working with the interdisciplinary team, including nurses, speech-language pathologists, dietitians, prescribers and others, the student pharmacist will manage adult inpatients (medical, surgical and critically ill) receiving nutrition support enterally or parenterally. The student pharmacist may also manage NICU and pediatric patients receiving nutrition support. Note that nutrition support is NOT nutrition. This rotation is not intended for student pharmacists interested in oral nutrition, such as body building, herbal supplementation, diets and so on. The definition of nutrition support can be found online at the American Society of Parenteral and Enteral Nutrition (ASPEN) at: [http://www.nutritioncare.org/About\\_Clinical\\_Nutrition/What\\_is\\_Nutrition\\_Support\\_Therapy/](http://www.nutritioncare.org/About_Clinical_Nutrition/What_is_Nutrition_Support_Therapy/). Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9321

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Emergency Medicine I**

This five-credit elective will focus on exposing students to the role of the clinical pharmacist in the emergency department. Under preceptor supervision, students will have the opportunity to respond to adult and pediatric emergencies, perform antimicrobial stewardship interventions, serve as a drug-information resource, provide patient counseling and medication reconciliation, review patient cases for optimization of therapy, monitor for clinical response and verify medication orders. Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9322

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VI: Elective – Emergency Medicine II**

This five-credit elective will focus on exposing students to the role of the clinical pharmacist in the emergency department. Under preceptor supervision, students will have the opportunity to respond to adult and pediatric emergencies, perform antimicrobial stewardship interventions, serve as a drug-information resource, provide patient counseling and medication reconciliation, review patient cases for optimization of therapy, monitor for clinical response and verify medication orders. Students are expected to be at the site a minimum of eight hours a day, five days a week for five consecutive weeks. Students must adhere to the schedule established by the preceptor.

## PHRM9401

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Drug Information I**

This five-credit drug information advanced pharmacy practice experience affords students the experience to acquire skills and competencies necessary to competently and efficiently receive questions, identify relevant information and provide evidence-based recommendations surrounding appropriate drug therapy to pharmacists and other health care professionals. Emphasis is placed on the overall processing of drug-information requests encompassing initial inquiries, collection of background information, systematic drug searches and provision of critical analysis of medical literature. The student will develop and enhance knowledge and understanding of relevant practice resources and the development of critical evaluation skills in the provision of drug information. Opportunities may be presented for students to become involved with drug evaluation for formulary consideration and inclusion, quality assurance/

drug-usage evaluation activities, news publications, scholarly activities and Pharmacy and Therapeutics Committee support.

## PHRM9402

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Drug Information II**

This five-credit drug information advanced pharmacy practice experience affords students the experience to acquire skills and competencies necessary to competently and efficiently receive questions, identify relevant information and provide evidence-based recommendations surrounding appropriate drug therapy to pharmacists and other health care professionals. Emphasis is placed on the overall processing of drug-information requests encompassing initial inquiries, collection of background information, systematic drug searches and provision of critical analysis of medical literature. The student will develop and enhance knowledge and understanding of relevant practice resources and the development of critical evaluation skills in the provision of drug information. Opportunities may be presented for students to become involved with drug evaluation for formulary consideration and inclusion, quality assurance/drug-usage evaluation activities, news publications, scholarly activities and Pharmacy and Therapeutics Committee support.

## PHRM9403

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Medication Safety I**

The five-credit medication safety advanced pharmacy practice experience is an elective rotation that will enable students to become familiar with the key principles utilized in hospitals, health systems and medical device and pharmaceutical companies to improve medication safety. The rotation is designed to expose students to medication-safety nomenclature, key principles, safety devices and available resources. Students will participate in various activities designed to improve their working knowledge and experience with medication-safety concepts. The rotation will provide the student opportunities in which to apply acquired and enhanced knowledge to reduce patient-safety risks, optimize the safe function of medication-management systems and align pharmacy services with national initiatives that measure and reward quality performance and improve medication safety for patients.

## PHRM9404

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Medication Safety II**

The five-credit medication safety advanced pharmacy practice experience is an elective rotation

that will enable students to become familiar with the key principles utilized in hospitals, health systems and medical device and pharmaceutical companies to improve medication safety. The rotation is designed to expose students to medication-safety nomenclature, key principles, safety devices and available resources. The student will participate in various activities designed to improve their working knowledge and experience with medication-safety concepts. The rotation will provide the student opportunities in which to apply acquired and enhanced knowledge to reduce patient-safety risks, optimize the safe function of medication-management systems and align pharmacy services with national initiatives that measure and reward quality performance and improve medication safety for patients.

## PHRM9405

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Managed Care I**

The five-credit managed care advanced pharmacy practice experience is an elective clinical rotation in which the student will acquire and enhance competencies and skills in the application of managed-care pharmacy principles relative to pharmacoeconomics and cost-effective, medication-therapy management within contemporary managed-care health systems. This rotation may take place at health insurance, pharmacy benefits management (PBM) organizations as well as other sites providing formulary management and evaluation.

## PHRM9406

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Managed Care II**

The five-credit managed care advanced pharmacy practice experience is an elective clinical rotation in which the student will acquire and enhance competencies and skills in the application of managed-care pharmacy principles relative to pharmacoeconomics and cost-effective, medication-therapy management within contemporary managed-care health systems. This rotation may take place at health insurance, pharmacy benefits management (PBM) organizations as well as other sites providing formulary management and evaluation.

## PHRM9407

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Specialty Pharmacy I**

The five-credit specialty pharmacy elective is designed to offer the student experience in a specialty-pharmacy practice setting which provides services above and beyond those typically offered at the community-practice level as part

of their standard of care. The student will engage in acquiring competencies in specialty pharmacy areas encompassing adherence/compliance management, benefits investigation, interprofessional communication with prescribing physicians, dispensing of specialty pharmaceuticals and shipping coordination, enrollment in patient-assistance programs, financial assistance, patient education and medication-adverse-effect counseling, patient monitoring for safety and efficacy, payer and/or manufacturer reporting, proactive patient outreach for prescription refill and renewal, prior authorization assistance in order to collect and analyze patient information for the development of evidence-based treatment plans in the specialty-pharmacy practice settings.

## PHRM9408

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Specialty Pharmacy II**

The five-credit specialty pharmacy elective is designed to offer the student experience in a specialty-pharmacy practice setting which provides services above and beyond those typically offered at the community-practice level as part of their standard of care. The student will engage in acquiring competencies in specialty pharmacy areas encompassing adherence/compliance management, benefits investigation, interprofessional communication with prescribing physicians, dispensing of specialty pharmaceuticals and shipping coordination, enrollment in patient-assistance programs, financial assistance, patient education and medication-adverse-effect counseling, patient monitoring for safety and efficacy, payer and/or manufacturer reporting, proactive patient outreach for prescription refill and renewal, prior authorization assistance in order to collect and analyze patient information for the development of evidence-based treatment plans in the specialty-pharmacy practice settings.

## PHRM9409

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Medical Device/Patient Safety I**

The five-credit medical devices and patient safety elective is designed to offer the student various experiences within a medical-device company whose products and services encompass the provision of safe and efficacious medical devices impacting patient safety.

## PHRM9410

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VII: Elective – Medical Device/Patient Safety II**

The five-credit medical devices and patient safety elective is designed to offer the student

# Pharmacy

---

various experiences within a medical-device company whose products and services encompass the provision of safe and efficacious medical devices impacting patient safety.

## PHRM9501

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Public Health I**

The five-credit public health advanced pharmacy practice experience is an elective pharmacy rotation which provides the students with opportunities to participate in specified public health activities with an identified public health partner. Experiences in the rotation will introduce students to and expand their knowledge of pertinent principles and practices of public health impacting pharmacist practitioners. Experiences are intended to prepare and motivate new practitioners to participate in partnerships serving the vested public health interests.

## PHRM9502

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Public Health II**

The five-credit public health advanced pharmacy practice experience is an elective pharmacy rotation which provides the students with opportunities to participate in specified public health activities with an identified public health partner. Experiences in the rotation will introduce students to and expand their knowledge of pertinent principles and practices of public health impacting pharmacist practitioners. Experiences are intended to prepare and motivate new practitioners to participate in partnerships serving the vested public health interests.

## PHRM9503

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Industry I**

The five-credit industry advanced pharmacy practice experience is an elective rotation affording the student the opportunity to acquire knowledge and understanding of various responsibilities of the industry pharmacist. The experience will involve student observation and engagement in various activities surrounding the drug industry, such as research and development, manufacturing quality control, clinical trials, medical affairs, marketing and regulatory affairs.

## PHRM9504

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Industry II**

The five-credit industry advanced pharmacy practice experience is an elective rotation affording the student the opportunity to acquire

knowledge and understanding of various responsibilities of the industry pharmacist. The experience will involve student observation and engagement in various activities surrounding the drug industry, such as research and development, manufacturing quality control, clinical trials, medical affairs, marketing and regulatory affairs.

## PHRM9505

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Research I**

The five-credit research advanced pharmacy practice experience is an elective rotation designed to provide students opportunities to acquire and enhance experiences in research design and development, performance of experiments, data collection and analysis, peer-review processes and animal- or human-research regulations.

## PHRM9506

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Research II**

The five-credit research advanced pharmacy practice experience is an elective rotation designed to provide students opportunities to acquire and enhance experiences in research design and development, performance of experiments, data collection and analysis, peer-review processes and animal- or human-research regulations.

## PHRM9507

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Marketing I**

The five-credit marketing advanced pharmacy practice experience is an elective rotation affording students interested in the pharmacy marketing arena to become familiar with various marketing activities directed toward establishing, developing and maintaining successful customer and patient relationships. In the organizational setting, students will acquire knowledge surrounding promotional programs, direct mailings, customer database oversight and educational training materials. In the patient-care pharmacy setting, students will be exposed to relationship marketing relative to attracting, maintaining and enhancing patient relationships and educational materials to create mutual benefit for the pharmacist and patient.

## PHRM9508

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Marketing II**

The five-credit marketing advanced pharmacy practice experience is an elective rotation afford-

ing students interested in the pharmacy marketing arena to become familiar with various marketing activities directed toward establishing, developing and maintaining successful customer and patient relationships. In the organizational setting, students will acquire knowledge surrounding promotional programs, direct mailings, customer database oversight and educational training materials. In the patient-care pharmacy setting, students will be exposed to relationship marketing relative to attracting, maintaining and enhancing patient relationships and educational materials to create mutual benefit for the pharmacist and patient.

## PHRM9509

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Patient Advocacy I**

The five-credit patient advocacy advanced pharmacy practice experience is an elective rotation in which the student gains knowledge and understanding in the various beneficial medication and health-related services provided to the public positively impacting human and community health care needs. The student will work with various community organizations providing health care to clients in a variety of settings such as free clinics, community health centers, refugee/migrant health centers, homecare, senior centers, mental health programs, drug/alcohol crisis programs, health associations and homeless clinics/shelters.

## PHRM9510

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Patient Advocacy II**

The five-credit patient advocacy advanced pharmacy practice experience is an elective rotation in which the student gains knowledge and understanding in the various beneficial medication and health-related services provided to the public positively impacting human and community health care needs. The student will work with various community organizations providing health care to clients in a variety of settings such as free clinics, community health centers, refugee/migrant health centers, homecare, senior centers, mental health programs, drug/alcohol crisis programs, health associations and homeless clinics/shelters.

## PHRM9511

5 Credits

### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Health Care Organization Management I**

The five-credit health care organization management advanced pharmacy practice experience is an elective pharmacy rotation that provides experience in national or local pharmacy association activities and operations, interorganizational

## Psychology

There are a variety of psychology programs offered at the Florham Campus, Madison, New Jersey, (see page 204) and the Metropolitan Campus, Teaneck, New Jersey (see page 207). These programs are listed on the following pages by campus.

affairs, government affairs, health and education policy, institutional research and related programmatic fields. Pharmacy students will acquire knowledge and understanding from participation in the management activities of professional organizations as they work to balance the needs of their members and simultaneously represent pharmacy to other constituencies encompassing third-party payers and governmental agencies.

### PHRM9512

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Health Care Organization Management II**

The five-credit health care organization management advanced pharmacy practice experience is an elective pharmacy rotation that provides experience in national or local pharmacy association activities and operations, interorganizational affairs, government affairs, health and education policy, institutional research and related programmatic fields. Pharmacy students will acquire knowledge and understanding from participation in the management activities of professional organizations as they work to balance the needs of their members and simultaneously represent pharmacy to other constituencies encompassing third-party payers and governmental agencies.

### PHRM9513

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Informatics I**

The five-credit informatics advanced pharmacy practice experience is an elective rotation which focuses on the fundamentals of pharmacy informatics such as pharmacy automation technology and information systems in a hospital setting. This rotation is beneficial to students who are interested in hospital pharmacy practice or those interested in specializing in pharmacy informatics.

### PHRM9514

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Informatics II**

The five-credit informatics advanced pharmacy practice experience is an elective rotation which focuses on the fundamentals of pharmacy informatics such as pharmacy automation technology and information systems in a hospital setting. This rotation is beneficial to students who are interested in hospital pharmacy practice or those interested in specializing in pharmacy informatics.

### PHRM9515

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Management I**

The five-credit management elective is designed to offer the student advanced experience in the management of pharmacy practice in various settings. Students will be expected to apply knowledge and skills in order to manage inventory; contracts; reimbursement; information; risk; and human resources, including scheduling, salaries and performance evaluations.

### PHRM9516

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Management II**

The five-credit management elective is designed to offer the student advanced experience in the management of pharmacy practice in various settings. Students will be expected to apply knowledge and skills in order to manage inventory; contracts; reimbursement; information; risk; and human resources, including scheduling, salaries and performance evaluations.

### PHRM9517

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Regulatory I**

The five-credit regulatory advanced pharmacy practice experience is an elective rotation designed to offer the student a practice setting to learn about the regulatory processes surrounding drug discovery, development, pharmacoecconomics, biosimilars, regulatory affairs, managed markets, portfolio management and strategic marketing of a new pharmaceutical drug to better understand the issues facing the challenges of delivering a new drug on the market.

### PHRM9518

5 Credits

#### **Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Regulatory II**

The five-credit regulatory advanced pharmacy practice experience is an elective rotation designed to provide students opportunities to acquire and enhance experiences in research design and development, performance of experiments, data collection and analysis, peer-review processes and animal- or human-research regulations.

### PHRM9900

2 Credits

#### **Pharmacy Capstone**

This course will focus on reviewing and integrating all knowledge and skills acquired through didactic and experiential curriculum in preparation for licensure. Pharmacy law, basic and clinical sciences and pharmaceutical calculations will be emphasized. Capstone assessments will be administered.

## Psychology

### *Florham Campus*

These programs are offered under the auspices of the department of psychology and counseling, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### **Industrial/Organizational Psychology (M.A.)**

*See this page.*

#### **Organizational Behavior Concentration** *See page 205.*

The programs and courses offered by the department of psychology and counseling are designed to meet the needs of students who wish to prepare for a career in various professional areas of psychology and counseling such as consulting, research, teaching and working in different organizational settings. In addition, programs and courses also may be taken by those students who wish to develop a background for subsequent work leading to a doctorate.

### **Requirements for Graduate Psychology Programs Leading to a Master of Arts Degree**

1. Satisfactory completion of the core requirements. Students are required to complete core requirements before additional courses may be taken. However, during the semester in which core requirements are being completed, a maximum of one additional noncore course may be taken, subject to departmental approval. Students in the organizational behavior concentration may be required to enroll in two Saturday classes each semester.

2. Satisfactory completion of a minimum of 36 credits for graduate majors in industrial/organizational psychology. Students are required to maintain a minimum overall grade point ratio of 3.00 and must not earn more than one C-level grade (C or C+) throughout graduate course work. Students who earn two grades of less than B- or one F grade will be subject to dismissal.

3. A written comprehensive examination of the candidate's knowledge of his or her field of specialization is required at the end of the industrial/organizational gradu-

ate psychology program. Students are eligible to take this exam during the semester in which they are enrolled in their last graduate courses. The comprehensive examination may only be taken twice. Failure to pass the comprehensive examination, either in part or in full, will result in dismissal from the program. Students in the organizational behavior concentration may be waived from completing the comprehensive examination.

4. All graduate programs in psychology should be completed within a period of five years. Applications for extensions of this period are subject to departmental approval.

## Industrial/Organizational Psychology (M.A.)

The graduate program in industrial/organizational psychology is designed to provide a comprehensive background in applied psychology that will enable participants to work in organizational settings, continue their education at the doctoral level or augment their professional development as managers and leaders in organizational positions. The orientation and experience in independent research (as reflected in the optional thesis) or the concentration in organizational behavior provides a solid background for enabling them to function more independently as professionals in organizational settings, as well as compete more successfully for admission to doctoral programs.

This program is offered under the auspices of the department of psychology and counseling, Maxwell Becton College of Arts and Sciences, Florham Campus, Madison, New Jersey.

### **Admission Requirements**

1. Graduation from an accredited college or university with at least 24 credits in psychology, including at least one course each in statistics and experimental psychology.

2. A minimum grade point ratio of 3.00 in the major field of study.

3. Submission of undergraduate transcript(s).

4. Submission of an official score report for the Graduate Record Examinations (GRE) General Test taken within the last five years.

5. Students without an undergraduate major in psychology may be admitted upon successful completion of a general psychology course and an undergraduate psychology statistics course. (Neither of these carry credit toward the M.A. degree.)

6. Three letters of recommendation.

7. In some cases, a personal interview may be required.

Applicants to the low-residence organizational behavior concentration may, under certain circumstances, substitute professional work and life experience in lieu of the requirement for an undergraduate psychology major and GRE scores.

# Psychology • Industrial/Organizational

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

## Requirements for the Master of Arts Degree

Students in the M.A. in industrial/organizational psychology program must register for a minimum of two classes in the fall and spring semesters. Exceptions to this policy may be granted in unusual circumstances. Courses must be taken in the required sequence (see department for sequence list). A total of 36 credits is required.

	Credits
COUN7706	
Lifestyle and Career Counseling*.....	3
PSYC6300	
Psychological Statistics.....	3
PSYC6301	
Group Dynamics and Team Leadership**.....	3
PSYC6302	
Organizational Psychology**.....	3
PSYC6303	
Research Methods and Design**.....	3
PSYC6304	
Personnel Selection.....	3
PSYC6305	
Psychometrics**.....	3
PSYC6306	
Behavioral Consulting in Organizations**.....	3
PSYC6308	
Human Resources Development**.....	3
PSYC7700	
Industrial/Organizational Internship....	3
<i>If a thesis option is selected:</i>	
PSYC7803	
Research and Thesis.....	3
PSYC7804	
Research and Thesis.....	3
<i>If a nonthesis option is selected:</i>	
PSYC6307	
Techniques of Interviewing**.....	3
PSYC7745	
Leadership Studies**.....	3

\*See Clinical Mental Health Counseling course offerings pages 91–92.

\*\*Foundation courses for the organizational behavior concentration.

## Organizational Behavior Concentration (Low-residence Program)

The organizational behavior concentration of the M.A. in industrial/organizational psychology is targeted toward working professionals who have attained, or aspire to, leadership positions. The curriculum is designed to develop personal leadership competencies and to apply them in a variety of organizational contexts. Students work with skilled instructors and personal mentors to strengthen and apply their experience and knowledge.

All classes are held from 9 a.m. to 4 p.m. on alternate Saturdays. Much of the course work is conducted and completed online. Intensive year-round scheduling makes it possible to complete the entire 36-credit program within 30 months. Most classes include a “mentoring” component, where each student works one-on-one with an experienced business or professional faculty mentor and coach to enhance their personal skills and careers.

In addition to 24 credits of foundation courses (see Requirements for the Master of Arts degree, courses with two asterisks PSYC6301 Group Dynamics and Team Leadership, PSYC6302 Organizational Psychology, PSYC6303 Research Methods and Design, PSYC6305 Psychometrics, PSYC6306 Behavioral Consulting in Organizations, PSYC6307 Techniques of Interviewing, PSYC6308 Human Resources Development and PSYC7745 Leadership Studies), students are required to complete the following 12 credits:

	Credits
PSYC7740	
Individual Behavior Studies.....	3
PSYC7744	
Strategic Planning and Crisis Management.....	3
PSYC7746	
Leadership Tutorial.....	3
PSYC7747	
Advanced Special Projects.....	3

## Certificate in Organizational Leadership

The department currently offers an 18-credit Certificate in Organizational Leadership as part of the M.A. in industrial/organizational psychology program with a concentration in organizational behavior. Successful students in this program will be offered the opportunity of continuing their studies in the M.A. program if they wish, with full credit for completed courses.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with appropriate school director.

### Psychology

Department of Psychology and Counseling

#### PSYC6500

3 Credits

#### Psychological Statistics

A comprehensive survey of the theoretical and practical aspects of descriptive and inferential statistical procedures — z tests, t tests, analysis of variance, correlation and regression analysis and nonparametrics. Emphasis is on why and when to use the various procedures as well as on the interpretation of statistical results. Prerequisite: undergraduate statistics or permission of instructor.

Fall

#### PSYC6501

3 Credits

#### Group Dynamics and Team Leadership

This course focuses on how individuals come together in work teams to accomplish mutual goals. The various roles of team members and team leaders are explored in depth. Topics include team leadership behavior, building effective teams, managing and resolving conflict, quality team management and other aspects of interpersonal relationships within the corporate/business structure. Students learn how to ensure team success as both team leaders and participants. Emphasis is placed on understanding and influencing group and team effectiveness.

#### PSYC6502

3 Credits

#### Organizational Psychology

A seminar on the effects of organizational variables upon individual and group behavior. Systematic theories of organizational culture, organizational structure and function will be examined and related to current organizations.

Fall

#### PSYC6503

3 Credits

#### Research Methods and Design

This course is designed to explore research design in industrial/organizational psychology. It includes experimental, quasi-experimental and correlational designs; measurement issues; and the ethics of conducting research, sampling and matching the appropriate statistics to various designs. Students will learn how to understand and carry out the entire research process.

# Psychology • Industrial/Organizational

---

## PSYC6304

3 Credits

### Personnel Selection

A comprehensive survey of current practices in employee recruitment, selection, evaluation, compensation and development. Special emphasis is placed on the use of psychological tests and interviewing techniques. Current topics such as fair employment testing are reviewed.

*Spring*

## PSYC6305

3 Credits

### Psychometrics

A critical survey of the philosophy and techniques of measurements or appraisal, with emphasis given to the administration, interpretation and evaluation of intelligence, achievement, interest, aptitude and objective personality instruments.

*Fall*

## PSYC6306

3 Credits

### Behavioral Consulting in Organizations

This course provides an overview of the role of the psychologist in organizational settings. Emphasis is on establishing relationships with organizational personnel, interpreting research results, the uses of the in-house psychologist vs. the outside consultant, the use of focus groups and surveys and the process of organizational change.

*Fall*

## PSYC6307

3 Credits

### Techniques of Interviewing

A comprehensive survey of the strategies and techniques necessary for conducting an effective interview. Emphasis is placed on developing an understanding of the factors that facilitate and debilitate communication in three basic types of interviewing situations: the counseling, selection and research interview.

*Fall*

## PSYC6308

3 Credits

### Human Resources Development

An overview of the processes and programs organizations use to train and develop employees and managers. Traditional methods such as role-playing and case studies are practiced and compared to techniques such as organization development practices. Students will experience the role of both trainer and trainee. Emphasis will focus on effective ways of changing actual behavior.

*Spring*

## PSYC7700

3 Credits

### Industrial/Organizational Internship

This blended course involves a semester-long internship placement related to industrial/organizational psychology in an approved local organization. Students work a minimum of 15 hours per week in either a paid or unpaid setting and participate in the course. An onsite supervisor will provide mentoring and evaluation of the student's work in addition to the course instructor's mentoring and evaluation. The purpose of the internship is to provide practical training within the field and an opportunity to apply knowledge gained through course work. The final academic paper will be a project culminating the semester-long experience.

## PSYC7740

3 Credits

### Individual Behavior Studies

A comprehensive survey of the psychological aspects of work behavior in the organization and work-group settings. The determinants of job satisfaction and productivity are explored in depth. The role of personality and other factors in understanding and predicting human behavior in the work setting form the focus of intensive readings. Emphasis is placed on understanding and influencing human behavior.

## PSYC7741

3 Credits

### Corporate Communication (Selected Topics)

The content and curriculum for this course is selected from topics and areas of current interest to organization-development professionals. Possible topics for the future are: the role of the leader in changing organizational culture, leadership challenges of an intergenerational workforce and leadership in difficult economic times or the changing role of leaders in society.

## PSYC7744

3 Credits

### Strategic Planning and Crisis Management

This course examines the stress-related behaviors commonly found in organizational settings and the strategies used to prevent and/or cope with them. On an organizational level, students explore reactions and remedies to organizational crises such as sabotage, product failure and liability, downsizing and natural or man-made catastrophes. On the individual level, students examine the effects of layoff, outplacement, extreme workloads, ineffective supervision, burnout and other "hazardous" situations in the workplace. Strategies for managing organizational and individual crises are developed.

## PSYC7745

3 Credits

### Leadership Studies

This course reviews and integrates the research and popular wisdom on leadership through readings, films, case studies and discussions on the elements of successful management and leadership. Students examine various theories of leadership and characteristics of prominent past and current leadership in politics, business, the arts and warfare. They learn to identify and refine their own leadership styles for maximum impact.

## PSYC7746

3 Credits

### Leadership Tutorial

Students select one or more faculty mentors and work with them to implement personal developmental objectives through one-on-one meetings and a series of directed readings and projects that are analyzed and applied. Emphasis is on coaching and mentoring for personal success.

## PSYC7747

3 Credits

### Advanced Special Projects

Each student chooses a business challenge relevant to his or her own current work experiences and, with a faculty member, develops a plan to analyze behavioral strategies and techniques relevant to the problem. Specific action plans, including background, research methodologies, data collection and analysis and intervention strategies, will be formulated and completed. It is expected that students will use the full range of knowledge and experiences gained from the program in completing this assignment.

## PSYC7803, PSYC7804

6 Credits (3 Credits Each Semester)

### Research and Thesis

A program of selected research tailored to the interest and capability of the individual student under the guidance of a departmental faculty member.

*Fall or Spring*



## Psychology

### Metropolitan Campus

These programs are offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Clinical Psychology (Ph.D.)

See page 208.

### Clinical Psychopharmacology (M.S.) Post-Doctoral

See page 212.

### Forensic Psychology (M.A.)

See page 213.

### General/Theoretical Psychology (M.A.)

See page 216.

### Postbaccalaureate Respecialization Program in Psychology

See below.

### School Psychology (Psy.D.)

See page 217.

### School Psychology (M.A.)

See page 222.

### Postbaccalaureate Respecialization Program in Psychology (18 credits)

The Postbaccalaureate Respecialization Program in Psychology is designed for individuals trained in other professions (e.g., law, business or natural sciences) who are interested in pursuing careers in mental health and/or applied areas of psychology. The program's goal is to provide the appropriate background necessary to seek admission to graduate programs in psychology. The course work includes undergraduate and graduate offerings and covers essential concepts and theories, psychopathology, statistics and research methods. The course content provides sufficient background to prepare for the psychology section of the Graduate Record Examinations (GRE).

### Admission Requirements

1. Proof of an undergraduate baccalaureate degree (diploma or undergraduate transcript from an accredited college or university),
  2. An undergraduate cumulative grade point ratio of at least 3.00,
  3. Three letters of recommendation and
  4. A personal statement detailing the applicant's reason for respecialization and his/her interests in the field of psychology.
- Application materials are kept to a minimum so that students can apply at any time. GRE scores are not necessary for acceptance. Once application materials are complete, admission decisions typically occur within two weeks. Students may begin course work in the fall or spring semester or the summer session subsequent to their admission into the track.

### Personalized Advisement

Upon acceptance, students will be assigned a faculty adviser who will monitor their progress and provide guidance as to specific areas of study and careers in psychology.

Upon completion of 18 credits of prescribed courses, students will be eligible to apply to a wide range of graduate programs in psychology. The adviser will assist in the application process by offering guidance as to the selection of appropriate graduate programs and will oversee the completion of application materials.

Although GREs are not necessary for application to the respecialization track, both the general and psychology GRE exams are required for most master's and doctoral programs in psychology.

### Typical Course Sequence

If the typical course sequence is followed, students will be in a position to apply to master's and doctoral programs within one year of admission to the track. However, if students choose to enroll on a part-time basis, registration for at least one course per semester is required.

### Fall Semester Courses

	Credits
PSYC1105	
General Psychology* (Undergraduate).....	3
PSYC2201	
Statistics (Undergraduate).....	3
Graduate Elective** .....	3

### Spring Semester Courses

PSYC3202	
Experimental Psychology (Undergraduate).....	3
Graduate Electives** .....	6

### Transfer Credits

Upon acceptance to any of the School of Psychology's graduate-degree programs, students may transfer up to 9 graduate credits from the respecialization track. Transfer of credits to other universities may be possible, but will be at the discretion of the individual institution to which the student applies.

\*Students who have already taken PSYC1105 General Psychology can substitute a different undergraduate course.

\*\*M.A.-level courses such as PSYC6111 Theories of Personality, PSYC6114 Psychopathology and PSYC7125 Applied Social Psychology (this list is not exhaustive).

# Psychology • Clinical (Ph.D.)

## Clinical Psychology (Ph.D.)

This is a four-year plus internship, full-time program that follows the scientist-practitioner model in which both internship and dissertation are combined with individualized areas of specialization. The program's goal is to prepare skilled psychologists who are capable of appreciating and conducting sound research. The program has received full accreditation from the American Psychological Association (APA).

The scientist-practitioner orientation emphasizes academic content areas of psychology and views clinical training as growing directly out of such foundations in psychological theory and research. It reflects the school's belief that a competent and effective clinician is best described as a scientist-practitioner, well-versed not only in clinical techniques and methods but also in the theoretical and research-based underpinnings of these approaches.

As an expression of the scientist-practitioner model, the sequence of courses emphasizes a thorough preparation in theoretical psychology and methodology. The sequence becomes the matrix against which students receive applied training in clinical psychology. The first year of the program exposes students to basic psychological theory of measurement prior to the course work in clinical applications. For example, foundations of clinical psychology and psychopathology are explored prior to behavioral and personality assessment.

Concurrent with the work in assessment, students will begin study of the traditional psychotherapies. The third year of course work expands students' knowledge of treatment procedures, specialized populations and related medical topics. Finally, the student will have completed four semesters of statistics and research design by the end of the third year.

By the end of the third year, students are prepared to begin writing their dissertation. Each student selects a mentor from the faculty, and that mentor serves as chairperson of the dissertation committee. Adhering to certain guidelines, the chairperson and the student select the remaining three to four members of the committee. All students will also have taught a three-credit course before they finish the program.

This program is offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements and Information

For an application to this program visit the School of Psychology website at <http://ucoll.fdu.edu/surveys/phdapply.php> or call (201) 692-2315.

1. This program is open to holders of undergraduate degrees in psychology or the required number of psychology credits. The requirement of 18 psychology credits preferably includes introductory psychology, developmental psychology, statistics, experimental psychology and social psychology.

2. Students are selected from a pool of academically qualified applicants who can contribute to the diversity of the student body.

3. Acceptance decisions are based on outstanding undergraduate and (where applicable) graduate academic performance, high scores on the General Test and Subject Test in Psychology of the Graduate Record Examinations, evidence of scholarly activity such as publications and paper presentations, prior work experience and letters of recommendation.

4. Tuition for full-time course work (at least 12 credits but no more than 16.5 credits per semester with practicum assignment) is on a flat-fee basis of \$40,398.00\* per year as of 2017–2018. When students are on part-time status (less than 12 credits per semester), the fee is set at the regular graduate rate per credit. In addition, students authorized to begin their dissertation will be charged \$4,849.00\* per semester for two semesters. Thereafter, students will be required to register for dissertation maintenance (\$490.00\*) each semester until the dissertation is complete. Students are further charged \$250.00\* per semester for two semesters of internship.

### Requirements for the Ph.D. Degree

#### 1st Semester

PSYC6112 Clinical Research Methods and Psychometrics

*\*This fee is a 2017–2018 fee. New tuition and fee charges for 2018–2019 will be announced in the spring of 2018. Please check with the Office of Enrollment Services for current charges.*

PSYC6114 Psychopathology  
PSYC6116 History and Systems  
PSYC6118 Computer Applications in Statistics Lab  
PSYC6132 Developmental Issues in Clinical Psychology  
PSYC6180 First-year Clinical Practicum I

#### 2nd Semester

PSYC6122 Personality Assessment  
PSYC6131 Behavioral Assessment  
PSYC6133 Intellectual Assessment  
PSYC6160 Teaching Seminar  
PSYC6181 First-year Clinical Practicum II: Ethics  
PSYC6624 Introduction to Psychotherapy

#### 3rd Semester

PSYC7110 Research Design and Analysis I  
PSYC7113 Psychodynamic Psychotherapy  
PSYC7121 Cognitive and Behavioral Therapy  
PSYC7180 Second-year Clinical Practicum I  
PSYC Advanced Special Topics (elective)

#### 4th Semester

PSYC7111 Research Design and Analysis II  
PSYC7125 Applied Social Psychology  
PSYC7130 Biological Bases of Behavior  
PSYC7181 Second-year Clinical Practicum II  
PSYC Advanced Special Topics (elective)

#### 5th Semester

PSYC7120 Diversity Issues in Clinical Psychology  
PSYC7133 Learning, Cognition and Emotion  
PSYC8129 Psychopharmacology  
PSYC8180 Third-year Clinical Practicum I  
PSYC Advanced Special Topics (elective)

#### 6th Semester

PSYC8181 Third-year Clinical Practicum II  
PSYC9124 Advanced Research Seminar  
PSYC9138 Professional Development  
PSYC Advanced Special Topics (elective)  
PSYC Advanced Special Topics (elective)

#### 7th Semester

PSYC9111 Dissertation (Clinical Psychology)

#### 8th Semester

PSYC9111 Dissertation (Clinical Psychology)

## 9th Semester

- PSYC9112 Dissertation Maintenance (Clinical Psychology)  
PSYC9113 Internship (Clinical Psychology) — fall

## 10th Semester

- PSYC9112 Dissertation Maintenance (Clinical Psychology)  
PSYC9113 Internship (Clinical Psychology) — spring

## Electives

- PSYC8114 Neuropsychology  
PSYC8127 Clinical Child Psychology  
PSYC8145 Advanced Cognitive Behavioral Therapy  
PSYC9143 Advanced Psychodynamic Psychotherapy  
PSYC9145 Seminar in Clinical Psychology  
PSYC9160 Advanced Personality Assessment

Students will be required to participate in a full-time clinical internship approved by the program faculty. The internship may begin after the student has completed the courses listed under the first six semesters and submitted an approved dissertation proposal. Usually, the dissertation will be the focus in the fourth year and internship in the fifth year.

Students will be required to pass a series of comprehensive examinations. Those failing the exam will be given an opportunity to retake it. Those failing three times will be discharged from the program. Should they elect, those students will be evaluated for matriculation into the master's degree program in general/theoretical psychology and, upon completion of the requirements of that program, they will be awarded the master's degree.

Students who do not enter the program with a master's degree in which they completed a thesis must complete a review paper on an approved topic before they begin the third year or produce a publication or presentation on which they are the first author.

Ongoing annual evaluations of students will be conducted by the faculty using information from practicum-site supervisors, course instructors and research mentors or his/her delegate. Students will meet with the program director to receive feedback concerning these evaluations.

## Performance Requirements

1. Students receiving two or more grades of C+ or lower in any combination of courses will be dropped from the program.

2. Students with a cumulative grade point ratio (CGPR) below 3.20 at the end of any year will be placed on academic probation for one year. At the end of the probation year, the CGPR must be at least 3.20 or the student will be dropped from the program.

3. Students will be dropped from the program for a proven, serious, negligent breach of the American Psychological Association Ethical Guidelines. Students also will be dropped from the program for cheating or plagiarism.

4. Students encountering serious psychological adjustment problems will be advised to seek professional counseling. If the problems are not ameliorated, the student may be asked to leave the program.

## Forensic Track

An optional, add-on forensic track is available to students in the Ph.D. program who fulfill the following additional requirements:

1. Completion of at least one of the required clinical practica in a forensic setting.

2. Completion of at least two additional courses: PSYC6230 Introduction to Forensic Psychology and PSYC7230 Forensic Assessment and Prediction (an additional independent study is recommended).

3. Completion of a dissertation on a forensic topic.

Track courses may incur additional fees if they render a student's credit load for a given semester above the allowable, flat-fee 16.5. Completion of the forensic track will be noted on the student's transcript.

## Course Offerings

### Clinical Psychology (Ph.D.)

*School of Psychology*  
Students who are not in the Ph.D. program may take Ph.D. program courses with permission from the program director.

#### 1st Semester

PSYC6112  
3 Credits

#### Clinical Research Methods and Psychometrics

This course covers basic topics and issues in psychometrics and clinical psychology research. Topics will include scales of measurement, norms and standard scores, reliability (including interclinician reliability), psychometric validity (including diagnostic validity), experimental design validity (internal, external, statistical,

construct), test and scale construction strategies (classical true score and item response theory), current clinical research objectives and designs, major threats to valid inferences in clinical research, experimental and statistical methods of control, the design of psychotherapy efficacy studies and the identification of clinically significant client changes.

PSYC6114

3 Credits

#### Psychopathology

Detailed consideration of psychopathology with respect to physiological, cognitive, motivational, affective and interpersonal variables and their roles in etiology, diagnosis, treatment and prognosis.

PSYC6116

3 Credits

#### History and Systems

Assessment of the historic development and current status of systematic paradigms in psychology. The influence of classical and contemporary philosophy will be considered in terms of paradigmatic development and the critical evaluation of psychological theory and psychology's place as a "special science" or as a natural science.

PSYC6118

1 Credit

#### Computer Applications in Statistics Lab

Introduces the student to software for statistical analysis, with an emphasis on SYSTAT.

PSYC6132

3 Credits

#### Developmental Issues in Clinical Psychology

Focuses on the importance and contribution of developmental factors to clinical issues: the role of cognitive, social and moral development; the effect of early learning on later development, including caregiver and child characteristics as well as the subsequent interactions; development from a life-span perspective; and family and cultural influences.

PSYC6180

3 Credits

#### First-year Clinical Practicum I

Conduct intake assessments and participate in a variety of in-house clinical projects sponsored and supervised by the clinical faculty.

#### 2nd Semester

PSYC6122

3 Credits

#### Personality Assessment

Introduces the student to the domain of personality assessment. This includes a discussion of basic concepts and issues in the field of assessment, such as actuarial versus clinical prediction, the clinical utility of testing and the considera-

# Psychology • Clinical (Ph.D.)

tion of diversity in the testing situation. The student is introduced to important measures of personality functioning, particularly the interpretation of MMPI profiles and the administration and scoring of Comprehensive System Ror-schachs.

## PSYC6131

1.5 Credits

### Behavioral Assessment

Behavioral assumptions and principles. Focus on behavioral assessment: interview, observations and self-report. Discussion of ongoing assessment, behavioral classification and utility of assessment for treatment as applied to specific disorders.

## PSYC6133

3 Credits

### Intellectual Assessment

Expertise in administration, scoring and interpretation of WPPSI, WISC, WAIS. Integration of intellectual evaluation and neuropsychology — in particular, brain lateralization, minimal brain lateralization, minimal brain dysfunction and learning disabilities. Writing evaluations, including referral questions and describing and integrating behavioral observations.

## PSYC6160

3 Credits

### Teaching Seminar

Emphasis on pedagogical issues including undergraduate-course preparation, preparation of course content, evaluation of student achievement, multicultural issues and academic honesty. Students will learn to teach in both traditional classroom and online environments. They will gain experience in lecturing, leading discussions (both in-class and online), use of audiovisual aids, syllabus preparation and test construction. Videotaping will be used to give students feedback and evaluate their progress.

## PSYC6181

3 Credits

### First-year Clinical Practicum II: Ethics

Participation in in-house clinical projects sponsored and supervised by the clinical faculty. Ethics and the APA ethical code of conduct is covered in depth. Students are required to pass an examination covering the most recent code of ethics.

## PSYC6624

3 Credits

### Introduction to Psychotherapy

This course provides for an understanding of the principal theories of counseling and psychotherapy, an understanding of the similarities and differences in the various major theories and techniques and for a development of the ability to evaluate the need for counseling and/or psy-

chotherapy in problem areas. Prerequisite: PSYC6114 Psychopathology or PSYC6115 Child Psychopathology.

## 3rd Semester

### PSYC7010

1 Credit

#### Psychoeducational Assessment

The primary goal of this course is to familiarize doctoral students in the clinical psychology program with background knowledge regarding conducting child psychoeducational testing, including expected child presentation during testing sessions (e.g., attention span, rapport with clinician); information regarding the home and school context; and interacting appropriately with parent, teachers and children. Students will be given opportunities to apply this knowledge through role play and case analysis.

### PSYC7110

3 Credits

#### Research Design and Analysis I

Focuses on univariate models for the analysis of data of pure experiments, quasi-experiments and observational studies. Topics include univariate analysis of variance and covariance models for designs with between-subject and/or within-subject factors, predictive and explanatory applications of simple and multiple-regression analysis, path analysis. SYSTAT data analysis of archival data sets is demonstrated for most of the methods.

### PSYC7113

3 Credits

#### Psychodynamic Psychotherapy

Theory and techniques of psychodynamic psychotherapy, emphasizing classical drive theory, relational/developmental and cognitive/representational perspectives. Classes focus on clinical techniques, research on psychodynamic processes and technical applications to specific psychopathologies.

### PSYC7121

3 Credits

#### Cognitive and Behavioral Therapy

Extends the principles and methods of empirically based behavioral assessment to behavioral treatment in clinical settings. Treatment literature as it applies to specific psychiatric disorders and application of behavioral principles in the context of complex clinical situations.

### PSYC7180

3 Credits

#### Second-year Clinical Practicum I

Interviewing, objective and projective assessment, intellectual evaluations, etc. Some therapy experience may be included. Some supervision by clinical faculty or by off-campus supervisors.

## 4th Semester

### PSYC7111

3 Credits

#### Research Design and Analysis II

Focuses primarily on multivariate methods that have been used extensively in clinical research and on some methods whose use in clinical research has rapidly increased in the past few years. The former methods include principal-components analysis, factor analysis, multivariate analysis of variance and covariance, discriminant function analysis and linear classification functions. The latter methods include canonical correlation analysis, logistic regression analysis, logistic classification models, Bayesian classification, log-linear models, confirmatory factor analysis and structural equation modeling. SYSTAT data analysis of archival data sets is demonstrated for most of the methods.

### PSYC7125

3 Credits

#### Applied Social Psychology

Developing understanding of social underpinnings of psychological phenomena. Topics include attitude formation, attitude change, prejudice and discrimination, altruism, attribution theory, emotions, research techniques and application of social psychology to clinical practice. Research project included.

### PSYC7130

3 Credits

#### Biological Bases of Behavior

Functional neuroanatomy, neurophysiology and neuropharmacology, emphasizing the relationship of brain mechanisms and synaptic chemistry to behavior. Special topics include techniques for studying brain-behavior relationships; sensory and motor systems; homeostasis and regulation of internal states; emotions, aggression and stress; learning and memory; and the biological bases of mental illness.

### PSYC7181

3 Credits

#### Second-year Clinical Practicum II

Interviewing, objective and projective assessment, intellectual evaluations, etc. Some therapy experience included.

## 5th Semester

### PSYC7120

3 Credits

#### Diversity Issues in Clinical Psychology

Minority issues as they affect psychological testing and psychotherapy. Women's issues, issues of color, religion, ethnicity, sexual orientation, differing physical abilities and age.

## PSYC7135

3 Credits

### Learning, Cognition and Emotion

This course provides an introduction to the cognitive and affective bases of behavior. Topics to be addressed include basic principles of learning theory and alternative theoretical perspectives on the nature of emotion. The nature of cognitive processes such as memory and decision making will also be addressed. The course is designed to be particularly relevant to the application of these topics to clinical psychology.

## PSYC8129

3 Credits

### Psychopharmacology

An overview of the pharmacologic actions and behavioral effects of psychotherapeutic medications. Special attention to chemical theories of mental illness and the use of psychotherapeutics in the treatment of mental disorders.

## PSYC8180

3 Credits

### Third-year Clinical Practicum I

Therapy, assessment and consultation at an advanced level.

### Electives

Choose two from Electives.

### 6th Semester

## PSYC8181

3 Credits

### Third-year Clinical Practicum II

Therapy, assessment and consultation at an advanced level.

## PSYC9124

3 Credits

### Advanced Research Seminar

This course reviews and expands on intermediate and advanced-level analytic methods including tests of mediation and moderation in linear and nonlinear regression models, factor analysis, structural equation modeling and various approaches for longitudinal data. The course also covers integration of such techniques in the overall research process. Specifically, students will gain experience in reviewing and synthesizing literature to derive hypotheses, formulating study procedures and analytic plans to test hypotheses and presenting results in written and oral format. Prerequisites: PSYC7110 Research Design and Analysis I and PSYC7111 Research Design and Analysis II.

## PSYC9138

3 Credits

### Professional Development

This course will focus on the professional challenges and issues facing the rising clinical psychologist through several phases of training and professional development (e.g., internship, post-doctoral fellowships, early employment).

### Electives

Choose two from Electives.

### 7th Semester

## PSYC9111

3 Credits

### Dissertation (Clinical Psychology)

An experimental research project required of all Ph.D. candidates in clinical psychology.

### 8th Semester

## PSYC9111

3 Credits

### Dissertation (Clinical Psychology)

An experimental research project required of all Ph.D. candidates in clinical psychology.

### 9th Semester

## PSYC9112

0 Credits

### Dissertation Maintenance (Clinical Psychology)

Continuation of the experimental research project required of all Ph.D. candidates in clinical psychology.

## PSYC9113

0 Credits

### Internship (Clinical Psychology)

Yearlong applied clinical experience at a psychological treatment agency or institution, required for Ph.D. candidates in clinical psychology.

### 10th Semester

## PSYC9112

0 Credits

### Dissertation Maintenance (Clinical Psychology)

Continuation of the experimental research project required of all Ph.D. candidates in clinical psychology.

## PSYC9113

0 Credits

### Internship (Clinical Psychology)

Yearlong applied clinical experience at a psychological treatment agency or institution, required for Ph.D. candidates in clinical psychology.

### Electives

## PSYC8114

3 Credits

### Neuropsychology

Introduction to clinical neuropsychology. Review of functional neuroanatomy, basic neurological disorders and the assessment of the cognitive sequence of those disorders. Includes introduction to basic neuropsychological assessment batteries.

## PSYC8127

3 Credits

### Clinical Child Psychology

This course focuses on the diagnosis and treatment of clinical disorders first manifested in children and adolescents. Multiple modalities of treatment are introduced.

## PSYC8145

3 Credits

### Advanced Cognitive Behavioral Therapy

This course will cover new modalities of cognitive-behavioral therapy including cognitive therapy, motivational interviewing, mindfulness meditation and acceptance and commitment therapy. Emphasis will be placed on the theoretical underpinnings of these therapies, specific techniques, applied examples and practice through role-plays. Prerequisite: PSYC7121 Cognitive and Behavioral Therapy.

## PSYC9143

3 Credits

### Advanced Psychodynamic Psychotherapy

This course will focus on the contemporary psychodynamic treatment approaches to the personality disorders. Object relations and ego-psychology perspectives will be emphasized.

## PSYC9145

3 Credits

### Seminar in Clinical Psychology

A seminar for advanced doctoral and clinical master's students using actual case material and devoted to diagnostic issues, treatment planning and treatment issues.

## PSYC9160

3 Credits

### Advanced Personality Assessment

Psychological assessment requires a synthesis of empiricism and art. This course is intended to increase understanding of the way in which this synthesis occurs. It combines discussion of topics of testing with case material as a means of enhancing skills in the field of psychological assessment.

## Clinical Psychopharmacology (Postdoctoral M.S.)

The clinical psychopharmacology program in psychology is intended for psychologists who provide health care services and are interested in increasing their awareness of psychotropic medications. Topics covered include the anatomy and physiology of the nervous system, biological systems that may be impacted by psychotropic drugs and the practice of clinical psychopharmacology.

The program is designated as meeting the requirements for training in psychopharmacology as established by the American Psychological Association (APA). This model of training is also consistent with the APA model for didactic training in preparation for independent practice as a prescribing psychologist, should state legislatures choose to award such authority to the profession.

This program is offered online under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

1. A doctoral degree in a discipline of psychology considered appropriate for the provision of health care services or a doctoral degree in another discipline of psychology plus evidence of completion of a respecialization program at a postdoctoral level relevant to status as a health care provider. Both the doctoral transcript and the respecialization certificate, if relevant, must come from an accredited college or university.

2. Candidates must be currently licensed as a psychologist in any state or be actively seeking licensure at the time of initiating the program.

3. Classes may only be taken on a non-matriculated basis with the permission of the program's academic director.

4. Members of other health care professions may participate with completion of a terminal degree in their discipline, licensure as a health care provider and the permission of the program's academic director.

### Requirements for the Master of Science degree

1. Satisfactory completion of a minimum of 30 graduate credits in the courses approved for participants in this program.

#### Required Courses

	Credits
PSYC7910 Biological Foundations of Clinical Psychopharmacology I.....	3
PSYC7915 Biological Foundations of Clinical Psychopharmacology II.....	3
PSYC7920 Neuroscience.....	3
PSYC7925 Neuropharmacology.....	3
PSYC7930 Clinical Pharmacology.....	3
PSYC7935 Professional Issues and Practice Management.....	3
PSYC7940 Treatment Issues in Clinical Psychopharmacology: Affective Disorders.....	3
PSYC7945 Treatment Issues in Clinical Psychopharmacology: Psychotic Disorders.....	3
PSYC7950 Treatment Issues in Clinical Psychopharmacology: Anxiety Disorders.....	3
PSYC7955 Treatment Issues in Clinical Psychopharmacology: Other Disorders.....	3

#### Elective

PSYC7960 Clinical Psychopharmacology Practicum.....	0
--	---

2. Based on prior academic experience, students may waive some courses. However, the final four courses cannot be waived.

3. Students receiving two or more grades below B- will be terminated from the program.

4. Upon completion of the 10-course sequence, students must complete an exit examination and achieve a passing score to receive the master's degree. This exam may be taken a maximum of three times.

5. The entire degree program must be completed within a three-year period.

6. After completion of their coursework, students are eligible to participate in an elective supervised clinical experience.

### Course Offerings

#### Clinical Psychopharmacology School of Psychology

#### Required

##### PSYC7910 3 Credits

#### Biological Foundations of Clinical Psychopharmacology I

This course presents an integrated approach to the study of primary body systems as it relates to psychopharmacological practice (respiratory, cardiovascular and genitourinary) that includes anatomy, physiology and pathophysiology of a specific body system with the clinical applications (health assessment, physical examination, laboratory assessment) pertaining to that system.

##### PSYC7915 3 Credits

#### Biological Foundations of Clinical Psychopharmacology II

This course presents an integrated approach to the study of primary body systems as it relates to psychopharmacological practice (hematologic, immunologic, gastrointestinal, endocrine, reproductive, musculoskeletal and dermatologic) that includes anatomy, physiology and pathophysiology of a specific body system with the clinical applications (health assessment, physical examination, laboratory assessment) pertaining to that system.

##### PSYC7920 3 Credits

#### Neuroscience

This course focuses on the anatomy and physiology of the nervous system, beginning at the cellular level. Knowledge of principles of neurochemistry, neuroendocrinology and neuropathology will serve as a foundation for the understanding of neurotransmitter systems and their role in the etiology and treatment of mental disorders.

##### PSYC7925 3 Credits

#### Neuropharmacology

This course introduces the knowledge bases pertaining to pharmacology and psychopharmacology. It includes advanced study of neurotransmitter systems and other factors in the psychopharmacological treatment of mental disorders, as well as an introduction to classes of psychotropic medications.

## PSYC7930

3 Credits

### **Clinical Pharmacology**

This course presents major classes of drugs (excluding psychotropics) and their uses in clinical settings. It includes an examination of the social, cultural and behavioral aspects of prescribing medications.

## PSYC7935

3 Credits

### **Professional Issues and Practice Management**

This course reviews issues in prescribing from the perspective of a professional health care provider. Legal and ethical issues as well as standards of care ranging from informed consent to documentation are addressed. Interprofessional relationships and aspects of collaborative practice, as well as enhancement strategies such as computer-based aids, will provide learners with a solid foundation for the continued integration of psychopharmacology into their practices.

## PSYC7940

3 Credits

### **Treatment Issues in Clinical Psychopharmacology: Affective Disorders**

This course addresses issues of diagnosis/differential diagnosis; etiology/biological basis of affective disorders; and psychopharmacological treatment options, including mechanism of action, side effects, adverse reactions, polypharmacy, drug interaction and patient education. Disorders covered include major depression and the affective elements of bipolar disorder. Issues of diversity and development are considered.

## PSYC7945

3 Credits

### **Treatment Issues in Clinical Psychopharmacology: Psychotic Disorders**

This course addresses issues of diagnosis/differential diagnosis; etiology/biological basis of psychotic disorders; and psychopharmacological treatment options, including mechanism of action, side effects, adverse reactions, polypharmacy, drug interaction and patient education. Disorders covered include schizophrenia and the psychotic elements of bipolar disorder. Issues of diversity and development are considered.

## PSYC7950

3 Credits

### **Treatment Issues in Clinical Psychopharmacology: Anxiety Disorders**

This course addresses issues of diagnosis/differential diagnosis; etiology/biological basis of anxiety disorders; and psychopharmacological treatment options, including mechanism of

action, side effects, adverse reactions, polypharmacy, drug interaction and patient education. Disorders covered include panic, phobias and generalized anxiety disorder. Issues of diversity and development are considered.

## PSYC7955

3 Credits

### **Treatment Issues in Clinical Psychopharmacology: Other Disorders**

This course addresses issues of diagnosis/differential diagnosis; etiology/biological basis of a variety of disorders; and psychopharmacological treatment options, including mechanism of action, side effects, adverse reactions, polypharmacy, drug interaction and patient education. Disorders covered include eating disorders, chronic pain, sleep disorders, substance abuse and childhood disorders.

### *Elective*

## PSYC7960

0 Credits

### **Clinical Psychopharmacology Practicum**

Field training in psychopharmacological prescriptive practice for licensed psychologists under the supervision of a licensed physician.

## Forensic Psychology (M.A.)

The program is a one-and-a-half-year, full-time graduate program designed to provide students with the skills necessary to provide treatment interventions and assessment in a forensic setting and conduct forensic research.

The specific program objectives are to:

- Prepare students to provide specialized treatment and intervention in a forensic setting.
- Provide students with training in psychopathology, interviewing, forensic assessment and evaluation, clinical forensic practice and ethics.
- Provide students with knowledge and practical experiences designed to promote the development of professional skills required in multiple areas of forensic psychology.

The program will prepare students for careers as master's-level forensic specialists in civil and criminal-justice settings, and provide students with exposure to multiple areas of forensic psychology, such as forensic assessment, criminal responsibility, interviewing and risk assessment. Secondly, the program will prepare students to pursue doctoral-level training in clinical psychology by providing numerous opportunities to participate in ongoing research projects.

This program is offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### **Admission Requirements**

1. A bachelor's degree from an accredited college or university.
2. Applicants must submit an official report for the General Test of the Graduate Record Examinations (GRE). The psychology subtest is **not** required. The schedule of testing dates can be obtained from Educational Testing Service, Princeton, New Jersey 08540.
3. Applicants must have taken introductory psychology, statistics and abnormal psychology.
4. Two letters of recommendation.
5. Students enrolling with prior graduate-level course work relevant to the curriculum may petition for waiver.

# Psychology • Forensic

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a nonmatriculated or nondegree basis.

## Requirements for the Master of Arts Degree

1. The program is a 36-credit program, including a 3-credit externship, and encompasses three content areas of study: concepts of psychology, foundations of forensic psychology and applied knowledge/practical skills in forensic psychology. Students complete courses in graduate-level statistics and psychopathology before taking core courses. The courses in each content area are noted below.

2. Students receiving a grade below B in any graduate course will be placed on academic probation with the possibility of a reduced course load for the next regular semester. Students receiving a concurrent or subsequent grade below B will not be permitted to continue in the program. A grade point ratio of at least 3.00 must be maintained at all times to continue in the program.

## Curriculum

<b>First Trimester (Fall)</b>	Credits
PSYC6114	
Psychopathology.....	3
PSYC6121	
Statistics and Research Methods.....	3
PSYC6230	
Introduction to Forensic Psychology.....	3
PSYC6231	
Psychological Bases of Criminal Behavior.....	3
<b>Second Trimester (Spring)</b>	
PSYC6130	
Interviewing Techniques.....	3
PSYC7230	
Forensic Assessment and Prediction.....	3
PSYC7235	
Criminal Responsibility and Competency.....	3
Forensic Psychology Elective.....	3
<b>Third Trimester (Summer)</b>	
PSYC6227	
Clinical Practice in Forensic Context.....	3
PSYC7243	
Special Topics in Forensic Psychology...	3
<b>Fourth Trimester (Fall)</b>	
PSYC7234	
Ethical Issues in Forensic Practice.....	3
PSYC7240	
Externship in Forensic Psychology.....	3

All students are required to take and pass a comprehensive examination at the conclusion of their course work, and only students who pass the comprehensive examination will be admitted to the degree.

Interested students may elect to complete a master's thesis and must take PSYC7810 I.S. Master's Thesis (3 credits). These 3 credits may be substituted for one elective.

Note: PSYC7810 I.S. Master's Thesis may be taken as an elective in lieu of a comprehensive examination.

## Course Offerings

*Other psychology courses are described on pages 209–211, 216–217 and 220–222.*

### Forensic Psychology (M.A.)

*School of Psychology*

#### Required

#### PSYC6130

**3 Credits**

#### Interviewing Techniques

Survey of interviewing principles and techniques as they relate to various counseling theories, with an emphasis on the clinical interview as a means for gathering pertinent information about a client in the context of conducting a forensic evaluation. Focuses on unique issues encountered within forensic contexts. Prerequisite: PSYC6114 Psychopathology.

#### PSYC6227

**3 Credits**

#### Clinical Practice in Forensic Context

This course focuses on two main areas of clinical practice with forensic clients in secure settings and in the community. The two areas of focus are *treatment* (therapy, management and medication) with general offenders, sex offenders, juvenile offenders and offenders with major mental illness; and *testing* (structured personality tests, cognitive and neuropsychological tests, deception/malingering, diagnostic tests and trauma). Prerequisites: PSYC6114 Psychopathology and PSYC6230 Introduction to Forensic Psychology. Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, B.A./M.A. accelerated program (forensic or general/theoretical psychology).

#### PSYC6230

**3 Credits**

#### Introduction to Forensic Psychology

Introduction to the application of psychological principles to legal (civil and criminal) problems. Review of historical and contemporary issues such as the interface of the mental health system and the criminal system, civil commitment, the insanity defense, diminished capacity, sentencing, capital punishment, competency to

stand trial and use of research in court. Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, B.A./M.A. accelerated program (forensic or general/theoretical psychology).

#### PSYC6231

**3 Credits**

#### Psychological Bases of Criminal Behavior

An in-depth analysis of research on the psychological bases and dynamics of criminal, aggressive and antisocial behavior. Review of multiple theoretical and explanatory aspects of criminal behavior, with emphasis on the relationships between psychopathological states, personality disorders, psychodiagnostics and antisocial behavior. Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, B.A./M.A. accelerated program (forensic or general/theoretical psychology).

#### PSYC7230

**3 Credits**

#### Forensic Assessment and Prediction

Review of relevant measurements used in forensic assessment — assessment of risk of violence, psychopathology, malingering, personal injury, disability and child custody. A focus of the course is on heuristics of risk-related decision-making under uncertainty. Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, forensic B.A./M.A. accelerated program or the clinical psychology Ph.D. forensic track.

#### PSYC7234

**3 Credits**

#### Ethical Issues in Forensic Practice

This course focuses on ethical conflicts and dilemmas facing forensic psychologists when working within the legal system as evaluators, consultants or expert witnesses. Topics include standards of practice in forensic psychology, role of the expert witness, protection of rights of defendants, confidentiality and duty to protect, refusal and consent to treat and more. Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, B.A./M.A. accelerated program (forensic or general/theoretical psychology).

#### PSYC7235

**3 Credits**

#### Criminal Responsibility and Competency

This course focuses on the history of the insanity defense, procedures for assessing mental state, mental conditions that diminish capacity for "requisite intent," the complex structure and assessment of malingering and assessment of mitigation. Prerequisite: PSYC6114 Psychopathology and PSYC6230 Introduction to Forensic Psychology. Note: Instructor approval



required for students who are not in the M.A. in forensic psychology program, forensic B.A./M.A. accelerated program or the clinical psychology Ph.D. forensic track.

## PSYC7240

3 Credits

### Externship in Forensic Psychology

A supervised experience in the assessment, management and treatment of patients. Students obtain an approved externship at forensic sites including prisons, special treatment facilities, hospitals or rehabilitation centers. Students have the opportunity to specialize in their externship, working with populations such as juvenile offenders or with other special populations such as criminals with alcohol or substance-abuse disorders or with sex offenders. Course will be pass/fail.

## PSYC7242

3 Credits

### Externship in Pro-Seminar

The pro-seminar provides group supervision around clinical, treatment, ethical and other general-practice issues that arise during externship.

## PSYC7245

3 Credits

### Special Topics in Forensic Psychology

This course provides focused coverage of special populations and issues in the area of forensic psychology. Examples of topics include assessment and treatment to gain an understanding of issues specific to particular populations (e.g., juvenile offenders, female offenders, offenders with psychopathic traits), contexts (e.g., assessment of law enforcement personnel) and areas of forensic practice (e.g., criminal profiling). Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, B.A./M.A. accelerated program (forensic or general/theoretical psychology).

## Electives

## PSYC6228

3 Credits

### Mental Health Law

This course provides a general overview of mental health issues in the forensic context, including privileged communications, confidentiality, mental disorders in involuntary commitment, civil liability and competencies, diminished capacity and criminal responsibility, guardianships and conservatorships.

## PSYC6229

3 Credits

### Psycholegal Analysis of Forensic Cases

The course will introduce actual cases and facts and will probe, in depth, the presumptive underpinnings of the psychological, legal and ethical issues raised by the case. One case will be pre-

sent each week and active discussion of the psycholegal issues raised by the case will be expected. Cases have been selected to cover a broad range of challenging issues raised for forensic psychologists. Prerequisite: PSYC6230 Introduction to Forensic Psychology. Note: Instructor approval required for students who are not in the M.A. in forensic psychology program, B.A./M.A. accelerated program (forensic or general/theoretical psychology).

## PSYC6232

3 Credits

### Juvenile Offenders

This course focuses on the etiology, assessment, classification and treatment of the juvenile offender. Emphasis is placed on developmental, cognitive-behavioral and psychodynamic explanations and treatment approaches. The use of case studies is also emphasized in this course, and part of the course is devoted to reviewing and critiquing legal and institutional responses to juvenile crime.

## PSYC6234

3 Credits

### Evaluation and Treatment of Sex Offenders

This course focuses on the diagnosis, classification and treatment of sex offenders as well as issues confronting psychologists when working with this population, such as the interpersonal and intrapsychic dynamics of sex offenders. Presentation of case material is utilized in this course.

## PSYC7232

3 Credits

### Psychological Profiling

Examines crime and the criminal mind from the perspective of psychological profiles, with an emphasis on phenomenology and psychopathology, as well as prognostication of criminal behavior. A major focus is placed on profiling through the presentation of case material and findings, with an emphasis on the homicidal offender.

## PSYC7233

3 Credits

### Evaluation and Treatment of Alcohol and Substance Abuse Disorders

This course presents theory and research on the development, assessment and treatment of alcohol and substance-abuse disorders (drug abuse and gambling), particularly as they relate to criminal behavior.

## PSYC7236

3 Credits

### Forensic Scientific Evidence

This course delves into the nature of scientific evidence, validity, reliability and admissibility of evidence in court and the role of science in the courtroom, including the use of science to bias, prejudice or mislead.

## PSYC7237

3 Credits

### Forensic Issues in Family Court

This course addresses the role of the mental health practitioner in family court as an expert, special master, mediator and custody evaluator. This course will focus on the impact of such complex issues as abuse, mental illness, medical problems, sexual preference and substance abuse on divorce, custody, placement and domestic-law issues.

## PSYC7238

3 Credits

### Women and Crime

This course explores the role of women as criminals, the capacity of women to engage in a wide range of criminal acts, including crimes that are "uniquely" committed by women and the response of the criminal justice system to women. Famous cases are included for illustrative purposes. The etiologic role of victimization will also be addressed.

## PSYC7239

3 Credits

### Abuse in Intimate Relationships

The focus of this course is on domestic violence and the response of the criminal justice system to managing spouse abuse, parent abuse and child abuse.

## PSYC7241

3 Credits

### Psychology and Law Enforcement

This course covers a range of topics concerned with the interface of law enforcement and psychology, including fitness-for-duty evaluations, pre-employment screening, special ethical issues, interviewing techniques, assessment of dangerousness, behavioral pattern analysis and threat analysis.

## General/ Theoretical Psychology (M.A.)

The general/theoretical program in psychology is designed to meet the needs of students who wish to prepare for service in various scientific and professional areas of psychology and related fields or who are looking to strengthen their background in preparation for applying to doctoral programs. The program is expected to take two years to complete for full-time students, but can be completed on a part-time basis for those working full time.

This program is offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements

1. A bachelor's degree from an accredited college or university.
2. Applicants must submit an official score report for the Graduate Record Examinations (GRE). (The Subject Test in Psychology is not required.) The schedule of testing dates can be obtained from Educational Testing Service, Princeton, New Jersey 08540.
3. Applicants must have taken general/introductory psychology, statistics and experimental psychology/research methods on either the undergraduate or graduate level.
4. Three letters of recommendation.

Applicants who have not completed all requirements for admission to the degree program may be permitted to enroll in classes for credit on a provisional, nonmatriculated or nondegree basis.

### Requirements for the Master of Arts Degree

1. Satisfactory completion of a minimum of 36 credits in the courses approved for a graduate major in psychology. Of the 36 credits, 6 may be allowed for a thesis, but the writing of a thesis is at the option of the student.
2. The following courses comprise the core curriculum: PSYC6121 Statistics and Research Methods and PSYC6129 Research Methods and Psychometrics. Stu-

dents should complete core requirements before progressing to other courses.

3. Students receiving two or more grades below B- in any graduate course will be placed on academic probation with the possibility of a reduced course load for the next regular semester. Students receiving a concurrent or subsequent third grade below B- will not be permitted to continue in the program. A grade point ratio of at least 2.75 must be maintained at all times to continue in the program.

### Basic Requirements (6 credits)

	Credits
PSYC6121	
Statistics and Research Methods.....	3
PSYC6129	
Research Methods and	
Psychometrics.....	3

### Specialization Requirements (15 credits)

Students will elect a minimum of 15 credits from the following list of courses.

PSYC6109	
Social Psychological Applications.....	3
PSYC6111	
Theories of Personality.....	3
PSYC6114	
Psychopathology.....	3
PSYC6128	
Computer Applications and	
Scientific Report Writing.....	3
PSYC7114	
Learning, Motivation and Emotion.....	3
PSYC7122	
Developmental Psychology.....	3
PSYC7130	
Biological Bases of Behavior.....	3

### Electives (15 credits)

Students, with an adviser's approval, will elect an additional 15 credits to complete the required 36 credits. Up to 6 of these credits may consist of a master's thesis. Several courses are offered jointly with the Ph.D. program.

In addition to the course requirements, candidates for the master's degree must meet the following requirements:

1. All students are required to take and pass a comprehensive examination at the conclusion of their course work, and only students who pass the comprehensive examination will be admitted to the degree. If a student completes a master's thesis, the comprehensive examination will be waived.

2. The graduate program of studies should be completed within a period of five years.

### Course Offerings

Other psychology courses are described on pages 209–211.

A wide range of electives for the M.A. in general/theoretical psychology are available in consultation with the program director.

## General/Theoretical Psychology (M.A.)

School of Psychology

### PSYC6109

3 Credits

#### Social Psychological Applications

This course focuses on applications of social psychological theory and research techniques in understanding and alleviating problems encountered in legal, business, community and mental health domains. Topics include, but are not limited to, attitude formation, attitude change, prejudice and discrimination, altruism and attribution theory.

### PSYC6111

3 Credits

#### Theories of Personality

Overview of nature of personality theory; summaries of theories of personality selected because of influence on clinical practice; psychological research. Freud, Adler, Jung, Murray, G.W. Allport, Rogers, Maslow, Fromm; some existentialists and some social, behavioral or learning approaches are included.

### PSYC6114

3 Credits

#### Psychopathology

Detailed consideration of psychopathology with respect to physiological cognitive, motivational, affective and interpersonal variables and their roles in etiology, diagnosis, treatment and prognosis.

### PSYC6115

3 Credits

#### Child Psychopathology

Examination of behavior disorders most likely to have childhood onsets or variants. Variables such as effects of age onset, treatment modalities that are age specific, approaches or techniques, recovery rates and adult correlates are considered.

### PSYC6121

3 Credits

#### Statistics and Research Methods

Review of issues related to research design, psychometrics and descriptive and inferential statistics. Statistical topics include, but are not limited to, parametric techniques such as t-tests,

analysis of variance and simple and multiple regression analysis. Heavy emphasis will be placed on application of techniques using statistical software and interpretation of results. Prerequisite: PSYC2201 Statistics.

## PSYC6128

3 Credits

### Computer Applications and Scientific Report Writing

This course will cover the use of SPSS (Statistical Package for Social Sciences) statistical software and related programs (e.g., Excel) for data management, analysis and graphing. Emphasis will be placed on using the graphical interface of SPSS software, but the program syntax for various applications also will be covered. This course will also cover scientific report writing (i.e., summarizing SPSS output) with emphasis placed on APA (American Psychological Association) style. Prerequisite: PSYC6121 Statistics and Research Methods.

## PSYC6129

3 Credits

### Research Methods and Psychometrics

This course covers basic topics and issues in psychometrics and research design. In addition to a review of basic statistical concepts, topics include: classical true score theory and scale creation; scale reliability and validity assessment; experimental design validity (internal, external, statistical, construct); major threats to valid inferences in research; and ethical issues in behavioral research. Prerequisite: PSYC6121 Statistics and Research Methods.

## PSYC7114

3 Credits

### Learning, Motivation and Emotion

Survey of the experimental literature relating to these constructs. Emphasis placed on integrative theory involving brain function, reward and incentive as well as human cognitive process.

## PSYC7122

3 Credits

### Developmental Psychology

Childhood, adolescence and early to mid-adulthood, including major theories of development (Piaget, Freud and social learning theories), research and application. Special emphasis on research concerning the development of prosocial behavior, internalization and sex typing.

## PSYC7125

3 Credits

### Applied Social Psychology

Developing understanding of social underpinnings of psychological phenomena. Topics include attitude formation, attitude change, prejudice and discrimination, altruism, attribution theory, emotions, research techniques and

application of social psychology to clinical practice. Research project included.

## PSYC7810

0-3 Credits

### I.S. Master's Thesis

An experimental research project. Can be used in place of the master's comprehensive examination.

## PSYC7811

3-6 Credits

### I.S. Master's Clinical Practicum

Interviewing and assessment experience. Some therapy experience may be included.

## PSYC7812

0-3 Credits

### I.S. Master's Thesis II

The continuation of an independent research project (chapters 3 and 4 of Thesis: Results and Discussion sections). Thesis can be used in place of master's comprehensive examination.

## School Psychology (Psy.D.)

The School of Psychology offers two tracks for the school psychology doctoral degree: a five-year full-time program (see this page) for applicants with a bachelor's degree in psychology or a related field and an advanced program (see page 219) for those who already have a master's degree and certification in school psychology. All classes for both programs are held late afternoon or evening.

## School Psychology (Five-year Psy.D.)

The five-year school psychology doctoral program is an integration of theoretical and foundational knowledge and applied professional training for those committed to working with children and adolescents in schools and school-related settings. The program's goal is to prepare individuals to assume leadership positions within schools, school-related and academic settings. The program prepares students for certification in school psychology and eligibility for licensure as a psychologist.

The program is a full-time program. Classroom experiences are integrated with field-based experiences in a multitude of settings, beginning in the first semester of study. Classes are held in late afternoon and evening, providing ample opportunity for practicum and research. The program's eclectic orientation and wide range of course work provide education in research, consultation, assessment, prevention, program evaluation, neuropsychology and psychopharmacology. There are opportunities for students to work closely with program faculty to develop specialized areas of interest and research. During their fourth year of study, students are expected to complete a doctoral dissertation in the form of an original clinical investigation, a program evaluation, case study or meta-analysis. Students are also expected to successfully complete a comprehensive examination and the PRAXIS exam in school psychology.

The program culminates (fifth year) in a yearlong internship in a school or related

# Psychology • School (Five-year Psy.D.)

clinical setting. Students are encouraged to apply for APA-approved internships. Stipends supporting half tuition are available for highly qualified students. The granting of a tuition stipend requires a commitment of 12 hours per week as a research assistant.

This program is offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

## Admission Requirements and Information

To apply for the five-year Psy.D. in school psychology program, check the FDU website ([www.fdu.edu](http://www.fdu.edu)), call or write to the School of Psychology, Fairleigh Dickinson University, 1000 River Road, Teaneck, N.J. 07666-1914, (201) 692-2301.

Applications for admission to the five-year program should be submitted no later than February 15. Applications received after that date will be considered on a space-available basis only. Should an individual not yet be qualified for the Psy.D. program, that application will automatically be reviewed for the M.A. plus certification program.

Applicants to the five-year Psy.D. program should hold an undergraduate degree in psychology or related field with at least 18 credits in psychology beyond general psychology.

Applicants to the program must submit:

1. A completed FDU Psy.D. Application for Admission.
2. Transcripts from all academic institutions previously attended.
3. Official report of Graduate Record Examinations (GRE) scores for the General Test and the Subject Test in Psychology.
4. Three letters of recommendation from academic and/or professional references.
5. A typed statement of professional interests and goals.
6. Applicants will be selected, based on credential review, for a personal interview.
7. Transfer credits will be handled individually by the Program Committee.

## Requirements for the Psy.D. Degree

### First Semester

	Credits
PSYC6111	
Theories of Personality.....	3

	Credits
PSYC6121	
Statistics and Research Methods.....	3
PSYC6651	
Ethics and Professional Practice in Schools and School Psychology.....	3
PSYC7819	
Introduction to School Learning Problems I.....	3
Practicum in Schools I.....	3

### Second Semester

PSYC6115	
Child Psychopathology.....	3
PSYC6129	
Research Methods and Psychometrics.....	3
PSYC7124	
Developmental Child and Adolescent Psychology.....	3
PSYC7820	
Introduction to School Learning Problems II.....	3
Practicum in Schools II.....	3

### Third Semester

EDUC6743	
Introduction to Students with Disabilities in School and Community.....	3
PSYC7615	
Child Assessment I with Practicum.....	3
PSYC7815	
Child Assessment II with Practicum.....	3
PSYC8910	
School-based Consultation with Practicum.....	3
Practicum in Schools III.....	3

### Fourth Semester

PSYC7125	
Applied Social Psychology.....	3
PSYC7825	
Child Neuropsychology.....	3
PSYC8725	
Prevention and Intervention with Children and Adolescents.....	3
PSYC8815	
Child Assessment III with Practicum.....	3
Practicum in Schools IV.....	3

### Fifth Semester

PSYC6116	
History and Systems.....	3
PSYC7145	
Issues and Techniques in Research and Evaluation I.....	3

	Credits
PSYC8130	
Pediatric Psychology.....	3
PSYC8720	
Seminar in Child/Adolescent Assessment.....	3
PSYC9175	
Practicum in School Psychology V.....	3

### Sixth Semester

PSYC7146	
Issues and Techniques in Research and Evaluation II.....	3
PSYC8721	
Seminar in Child/Adolescent Intervention.....	3
PSYC8930	
Advanced Consultation for School Psychologists.....	3
PSYC8951	
Administration and Supervision in School Psychology.....	3
PSYC9176	
Practicum in School Psychology VI.....	3

### Summer

PSYC7135	
Learning, Cognition and Emotion.....	3

### Seventh Semester

PSYC8112	
Dissertation Seminar (School Psychology).....	3
PSYC9150	
Internship (School Psychology)*.....	3

### Eighth Semester

PSYC8112	
Dissertation Seminar (School Psychology).....	3
PSYC9150	
Internship (School Psychology)*.....	3

Note: PRAXIS Exam must be taken prior to graduation.

## Course Descriptions

See "Course Offerings," pages 220–222.

*\*Students may choose to postpone PSYC9150 Internship (School Psychology) until the fifth year. The fourth year may be used for dissertation. The goal would be dissertation completion prior to or in conjunction with internship.*

# Psychology • School (Advanced Psy.D.)

## School Psychology (Advanced Psy.D.)

The doctoral program in school psychology is an innovative, applied professional psychology program. The program builds on the master's degree training and experiences of each student. Its goal is to prepare professionals who will be leaders in the design, evaluation, provision and supervision of comprehensive mental health and psychoeducational services to children, youths and families.

The program prepares students for eligibility for licensure as psychologists. Course work can be completed in two years, including summer sessions. Classes are held in the late afternoons and evenings. Therefore, students are able to work while in the program. Upon completion of their course work, students engage in research culminating in a doctoral dissertation. The research project may be in the form of an original applied clinical investigation, program evaluation, case study, meta-analysis or validation of a test or clinical procedure.

This program is offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### Admission Requirements and Information

To apply for the Psy.D. in school psychology program, write to the School of Psychology, Fairleigh Dickinson University, Metropolitan Campus, 1000 River Road, Teaneck, N.J. 07666-1914, or call (201) 692-2301 for an application. Applications for admission should be submitted no later than March 1. Applications received after that date will be considered only on a space-available basis.

Applicants to the advanced Psy.D. in school psychology program should hold a master's degree and certification in school psychology. Candidates who are not certified school psychologists will be required to take the necessary course work and field experience to obtain certification prior to admittance into the doctoral program.

Applicants to the program must submit:

1. A completed FDU Psy.D. Application for Admission.
2. Transcripts from all academic institutions previously attended.

3. Official report of Graduate Record Examinations (GRE) scores for the General Test and Subject Test in Psychology.

4. Three letters of recommendation from academic and/or professional references.

5. A typed statement of professional goals.

6. A representative work sample of current professional skills (e.g., psychological testing report, consultation or therapy summary, etc.).

7. Applicants will be required to complete a personal interview.

8. Transfer of graduate credits to this program is handled individually by the program director.

### Requirements for the Advanced Psy.D. Degree

#### First Year

**Fall Semester** Credits  
PSYC7145

Issues and Techniques in Research and Evaluation I.....3

PSYC7651  
Seminar in Professional School Psychology Practice and Ethics.....3

PSYC8720  
Seminar in Child/Adolescent Assessment.....3

#### Spring Semester

PSYC7146  
Issues and Techniques in Research and Evaluation II.....3

PSYC8721  
Seminar in Child/Adolescent Intervention.....3

PSYC8930  
Advanced Consultation for School Psychologists.....3

#### Summer Semester

PSYC8128  
Child and Adolescent Psychopharmacology.....3

PSYC8131  
Special Topics in School Psychology.....3

#### Second Year

**Fall Semester**  
PSYC6116  
History and Systems.....3

PSYC8130  
Pediatric Psychology.....3

PSYC9125  
Advanced Practicum I  
(School Psychology).....3

#### Spring Semester

PSYC8112  
Dissertation Seminar  
(School Psychology).....3

PSYC8951  
Administration and Supervision  
in School Psychology.....3

PSYC9126  
Advanced Practicum II  
(School Psychology).....3

#### Summer Semester

PSYC8110  
Dissertation (School Psychology).....3

PSYC8140  
Seminar in School Change.....3

#### Third Year

**Fall Semester**  
PSYC9115  
Dissertation Maintenance  
(School Psychology).....0

PSYC9150  
Internship (School Psychology).....3

#### Spring Semester

PSYC9115  
Dissertation Maintenance  
(School Psychology).....0

PSYC9150  
Internship (School Psychology).....3

#### Summer Semester

PSYC9152  
Internship Maintenance  
(School Psychology).....0

The comprehensive examination is taken during the summer of the second year. Dissertation defense is scheduled for the fall or spring semester of the third year.

Note: For individuals pursuing Supervisor Certification, enrollment in EDUC6702 Curriculum and Instruction: Theory and Practice is required. For descriptions of education courses, refer to Peter Sammartino School of Education program, pages 130–143.

## Course Offerings

### School Psychology

#### School of Psychology

The following courses were developed specifically for the school psychology programs. Other psychology courses are described on pages 209–211 and 216–217. Other listed education (EDUC) courses are described under Education in the catalog.

#### PSYC6651

3 Credits

##### **Ethics and Professional Practice in Schools and School Psychology**

Ethical issues, professional problems and legislation affecting the practice of school psychology are examined. American Psychological Association (APA) and National Association of School Psychologists (NASP) ethical practice guidelines are discussed. The role and function of the school psychologist as a mental health professional and educational specialist are reviewed.

#### PSYC7124

3 Credits

##### **Developmental Child and Adolescent Psychology**

Childhood through adolescence, including major theories of development (Piaget, Freud and social learning theories), research and application. Special emphasis on research concerning the development of prosocial behavior, internationalization and sex typing.

#### PSYC7145

3 Credits

##### **Issues and Techniques in Research and Evaluation I**

The first of a two-semester course that introduces the doctoral student to research methodology and exemplary research in school psychology and related fields of child mental health and special education. Students will be exposed to topics including data collection and analysis, meta-analysis methods, statistical packages (e.g., SPSS and SYSTAT), program evaluation and outcome-based school psychological services, qualitative research, case study and single-subject design.

Fall

#### PSYC7146

3 Credits

##### **Issues and Techniques in Research and Evaluation II**

The second of a two-semester course that introduces the doctoral student to research methodology and exemplary research in school psychology and related fields of child mental health and special education. Students will be exposed to topics including data collection and analysis, meta-analysis methods, statistical packages (e.g., SPSS and SYSTAT), program evaluation and outcome-based school psychological

services, qualitative research, case study and single-subject design. Prerequisite: PSYC7145 Issues and Techniques in Research and Evaluation I.

Spring

#### PSYC7615

3 Credits

##### **Child Assessment I with Practicum**

Development of skills in objective testing and intellectual assessment, focusing on the WJIV, DAS-2 and Wechsler batteries. Translation of findings into reports relevant to treatment outcomes will be emphasized. Assessment of culturally diverse populations will be discussed. Practicum experience is required.

#### PSYC7651

3 Credits

##### **Seminar in Professional School Psychology Practice and Ethics**

This course provides an overview of the critical issues and emerging perspectives in professional school psychology. Students are reacquainted with historical, sociocultural, philosophical and fiscal issues facing the profession. Attention to role and function, with emphasis on the school psychologist in a leadership role in orchestrating a full range of prevention and intervention services to children, youth and families.

#### PSYC7815

3 Credits

##### **Child Assessment II with Practicum**

Development of skills in personality assessment with children and adolescents. Objective assessment of personality will be considered.

#### PSYC7819

3 Credits

##### **Introduction to School Learning Problems I**

The focus of this course is early identification of learning problems and their assessment with an emphasis on Curriculum-based Assessment (CBA), Functional Behavioral Assessment (FBA), Response to Intervention (RTI) and standardized measures of achievement.

#### PSYC7820

3 Credits

##### **Introduction to School Learning Problems II**

Theories of teaching and learning, research and methods of assessing effectiveness as related to the classroom experience. Issues of learner diversity as it affects the process are examined along with Functional Behavioral Assessment (FBA).

#### PSYC7825

3 Credits

##### **Child Neuropsychology**

Neuropsychology provides important underpinnings for effective assessment and planning interventions. Developmental neuropsychological

approaches as they relate to child development and education will be presented together with appropriate assessment strategies. Educational and curriculum implications will be reviewed.

#### PSYC8110

3 Credits

##### **Dissertation (School Psychology)**

Research project required of all doctoral candidates in school psychology.

Fall, Spring, Summer

#### PSYC8112

3 Credits

##### **Dissertation Seminar (School Psychology)**

This seminar will guide students through the often difficult process of conceptualizing a dissertation topic, writing proposals and defending both the proposal and the final project. Areas covered will include, but not be limited to, the development of a research statement, review of relevant literature, the writing process, Institutional Review Board (IRB) approval and data collection and analysis.

Spring

#### PSYC8128

3 Credits

##### **Child and Adolescent Psychopharmacology**

This course focuses on up-to-date and practical information pertaining to the use of psychopharmacological agents in the treatment of childhood and adolescent disorders. Topics covered include general and cellular neuroanatomy, physiology and function; basic pharmacology; general principles of psychopharmacotherapy; and the use of sympathomimetic amines, central nervous system stimulants, antipsychotics, antidepressants, lithium carbonate, anxiolytics and other medications in children and adolescents.

Summer

#### PSYC8150

3 Credits

##### **Pediatric Psychology**

This course focuses on the relationship between physical and mental health in children and adolescents, from a biopsychosocial approach. Developmental disabilities, pervasive developmental disorders, chronic illnesses, failure to thrive and delayed development are among the topics covered. Assessment and treatment will be emphasized along with the mental-health impact of physical, developmental and medical disorders on the child, the family and schooling.

Fall

#### PSYC8151

3 Credits

##### **Special Topics in School Psychology**

This course focuses on contemporary and critical topics in the school psychology field. Topics may vary from semester to semester.

## PSYC8140

3 Credits

### **Seminar in School Change**

This advanced-level course focuses on synthesizing theoretical formulations and evidence-based research findings in order to facilitate significant changes in the educational environment. Issues focusing on barriers and resistance to change as well as contributors to resilient environments will be examined.

## PSYC8720

3 Credits

### **Seminar in Child/Adolescent Assessment**

Builds upon the students' training and experience with various child and adolescent diagnostic and assessment procedures and techniques. Introduces new assessment strategies and critically reviews the strengths and limitations of commonly used assessment instruments and techniques. Students are provided an opportunity to apply advanced assessment techniques in either their work settings or at a practicum site.  
*Fall*

## PSYC8721

3 Credits

### **Seminar in Child/Adolescent Intervention**

The practice and application of empirically supported psychoeducational and psychotherapeutic interventions with children in preschool through high school. Takes a developmental and transactional perspective on children's learning and behavior problems. Students will be expected to bring case material from their field/work placement to complement lectures and discussions.  
*Spring*

## PSYC8725

3 Credits

### **Prevention and Intervention with Children and Adolescents**

Methods of child and adolescent therapy are examined with an emphasis on evaluation of the appropriate treatment for children and adolescents at different stages of cognitive and emotional development. Research focusing on treatment outcome as well as clinical case material will be reviewed.

## PSYC8815

3 Credits

### **Child Assessment III with Practicum**

New directions in assessment are examined. The focus will be integration of intellectual, personality and cognitive information, resulting in meaningful data sharing. Students will be expected to complete two comprehensive psychological assessments.

## PSYC8910

3 Credits

### **School-based Consultation with Practicum**

Indirect methods of intervention are explored through different approaches to consultation which include mental health consultation, behavioral consultation and instructional consultation. Students are required to complete a project at an assigned site.

## PSYC8922

3 Credits

### **Externship in School Psychology I**

This is the culminating educational experience for students in the M.A./certification program in school psychology. Students are engaged in a planned sequence of field experiences in a school or other approved educational setting under the supervision of a certified school psychologist for a minimum of 1,200 hours over the course of two semesters in order to meet school psychology certification requirements.

## PSYC8925

3 Credits

### **Externship in School Psychology II**

Continuation of PSYC8922 Externship in School Psychology I.  
*Fall, Spring*

## PSYC8930

3 Credits

### **Advanced Consultation for School Psychologists**

This course will cover the major models of school-based consultation (e.g., mental health, behavioral, instructional and ecological). Students will develop strong background knowledge in various models of psychological consultation, strengthen their problem-solving skills as applied to indirect service provision, master specific techniques used in various consultative models and practice applying their consultative skills to sample cases. Special attention will be paid to ethical issues as well as to issues pertaining to diversity and equity in psychological practice.  
*Spring*

## PSYC8951

3 Credits

### **Administration and Supervision in School Psychology**

This doctoral-level seminar introduces the student to the theory and practice of administration and supervision of psychological services. Topics will include strategic planning, budget, human resources, marketing and staff development. Students are required to supervise a master's-level school psychology student.

## PSYC9110

3 Credits

### **School-Community Mental Health**

Preventive science focusing on mental health services in the schools and communities is the primary focus of the course. Interdisciplinary courses in a sociocultural context are examined and model programs preventing mental illness and promoting mental health for children, adolescents and their families are reviewed and analyzed.

## PSYC9115

0 Credits

### **Dissertation Maintenance (School Psychology)**

Continuation of the research project required of all doctoral candidates in school psychology.  
*Fall, Spring*

## PSYC9125

3 Credits

### **Advanced Practicum I (School Psychology)**

Supervised training experiences at FDU's Center for Psychological Services. Doctoral students are supervised by faculty on two or more child, adolescent or adult treatments and/or testing cases during the course. Practicum encompasses approximately 100 hours of training.  
*Fall*

## PSYC9126

3 Credits

### **Advanced Practicum II (School Psychology)**

Supervised training experiences at FDU's Center for Psychological Services. Doctoral students are supervised by faculty on two or more child, adolescent or adult treatments and/or testing cases during the course. Practicum encompasses approximately 100 hours of training. Prerequisite: PSYC9125 Advanced Practicum I (School Psychology).  
*Spring*

## PSYC9150

3 Credits

### **Internship (School Psychology)**

Yearlong applied field experience in a school system, educational agency and/or mental health facility, required for Psy.D. candidates in school psychology.  
*Fall, Spring, Summer*

## PSYC9152

0 Credits

### **Internship Maintenance (School Psychology)**

Continuation of applied field experience in a school system, educational agency and/or mental health facility.  
*Fall, Spring, Summer*

# Psychology • School (M.A. Plus Certification)

PSYC9171

3 Credits

## **Practicum in School Psychology I**

The primary goal of the practicum sequence is to provide students with incremental opportunities to acquire an understanding of the skills to implement school-related practice under supervision.

PSYC9172

3 Credits

## **Practicum in School Psychology II**

The primary goal of the practicum sequence is to provide students with incremental opportunities to acquire an understanding of the skills to implement school-related practice under supervision.

PSYC9173

3 Credits

## **Practicum in School Psychology III**

The primary goal of the practicum sequence is to provide students with incremental opportunities to acquire an understanding of the skills to implement school-related practice under supervision.

PSYC9174

3 Credits

## **Practicum in School Psychology IV**

The primary goal of the practicum sequence is to provide students with incremental opportunities to acquire an understanding of the skills to implement school-related practice under supervision.

PSYC9175

3 Credits

## **Practicum in School Psychology V**

The primary goal of the practicum sequence is to provide students with incremental opportunities to acquire an understanding of the skills to implement school-related practice under supervision.

PSYC9176

3 Credits

## **Practicum in School Psychology VI**

The primary goal of the practicum sequence is to provide students with incremental opportunities to acquire an understanding of the skills to implement school-related practice under supervision.

PSYC9801

3 Credits

## **Independent Study in Psychology (Psy.D.)**

Topic to be chosen by student and faculty mentor. Prerequisite: completion of required courses.

*Note: For descriptions of education courses, refer to Peter Sammartino School of Education programs, pages 130–145.*

## School Psychology (M.A.) Plus Certification

The school psychology program provides the education to become a professional school psychologist at the master's plus certification level (60 credits). The program emphasizes the development of skills to provide direct service to school-age children and the development of competencies necessary for maximizing the educational potential of all children. Students are expected to apply the knowledge and skills acquired to foster learning and social development. The program features opportunities to develop special competencies in areas such as assessment, identifying and treating behavior problems in children and adolescents, utilizing curriculum-based measurement tools to assess school health and student progress and assisting students on the autism spectrum in strengthening academic and life skills. Offered at Fairleigh Dickinson University's Metropolitan Campus in Teaneck, New Jersey, the School Psychology program is recognized by and registered with the State Department of Education. The program holds full National Association of School Psychologists (NASP) accreditation, and graduates are able to become Nationally Certified School Psychologists upon successful completion of the PRAXIS examination and externship requirements.

This program is offered under the auspices of the School of Psychology, University College: Arts • Sciences • Professional Studies, Metropolitan Campus, Teaneck, New Jersey.

### **Professional Accreditation**

The Master of Arts in school psychology is accredited by the National Association of School Psychologists (NASP).

### **Admission Requirements**

1. Completed applications for admissions are due by March 1 for September admission.

2. Applicants must hold a bachelor's degree from an accredited college or university.

3. Applicants for the Master of Arts and certification in school psychology must submit Graduate Record Examinations (GRE) scores for the General Test. (The

GRE General Test requirement is waived for applicants who have completed a master's degree.) The schedule of testing dates can be obtained from Educational Testing Service, Princeton, N.J. 08540.

4. Applicants must have taken general psychology and statistics, and either child development, experimental psychology, abnormal psychology or theories of personality on either the undergraduate or graduate level.

5. Applicants must submit three letters of recommendation.

6. Applications are carefully reviewed, and group interviews are conducted for those applicants who meet the school's criteria.

Students are admitted either full time or part time, both requiring the completion of a minimum of two courses per semester.

Applications also will be considered from individuals holding a master's degree in psychology, education or related fields and/or certification in an allied educational area and who wish to obtain certification as a school psychologist. If such applicants meet the academic requirements of the school, a course of study will be determined on an individual basis to meet certification requirements.

### **Requirements for the Master of Arts Degree and Certification in School Psychology**

1. Satisfactory completion of 60 credits in the courses approved for the school psychology program.

2. Students receiving two or more grades below B– in any graduate course will be placed on academic probation with the possibility of a reduced course load for the next regular semester. Students receiving a concurrent or subsequent third grade below B– will not be permitted to continue in the program. A grade point ratio of at least 2.75 must be maintained at all times to continue in the program.

3. All students are required to take and pass a comprehensive examination at the conclusion of their course work, and only students who pass the comprehensive examination will be admitted to the degree.

4. Students must complete a total of 300 hours of practicum experiences (through course work and school-based experiences) before beginning the externship.



# Psychology • School (M.A. Plus Certification)

5. All students must take the school psychology Praxis examination before completion of the program.

6. Students must complete a 1,200-hour externship in a school or school-related setting under the supervision of a certified school psychologist.

7. Students will be dropped from the program for a proven, serious, negligent breach of the American Psychological Association Ethical Guidelines. Students also will be dropped from the program for violation of the Academic Integrity Policy.

8. Students encountering serious psychological adjustment problems will be advised to seek professional counseling. If the problems are not ameliorated, the student may be asked to leave the program.

## Curriculum

<b>First Semester</b>	Credits
PSYC6111	
Theories of Personality.....	3
PSYC6121	
Statistics and Research Methods.....	3
PSYC6651	
Ethics and Professional Practice in Schools and School Psychology.....	3
PSYC7819	
Introduction to School Learning Problems I.....	3
<b>Second Semester</b>	
PSYC6115	
Child Psychopathology.....	3
PSYC6129	
Research Methods and Psychometrics.....	3
PSYC7122	
Developmental Psychology.....	3
PSYC7820	
Introduction to School Learning Problems II.....	3
<b>Third Semester</b>	
EDUC6743	
Introduction to Students with Disabilities in School and Community.....	3
PSYC7615	
Child Assessment I with Practicum.....	3
PSYC7815	
Child Assessment II with Practicum.....	3
PSYC8910	
School-based Consultation with Practicum.....	3

<b>Fourth Semester</b>	Credits
EDUC6702	
Curriculum and Instruction: Theory and Practice.....	3
PSYC7825	
Child Neuropsychology.....	3
PSYC8725	
Prevention and Intervention with Children and Adolescents.....	3
PSYC8815	
Child Assessment III with Practicum.....	3
<b>Fifth Semester</b>	
EDUC7721	
Philosophy of Education.....	3
PSYC8922	
Externship in School Psychology I (600 hours).....	3
PSYC9110	
School-Community Mental Health.....	3
<b>Sixth Semester</b>	
PSYC8923	
Externship in School Psychology II (600 hours).....	3

## Course Offerings

### School Psychology

#### School of Psychology

The following courses were developed specifically for the M.A. in school psychology programs. Other psychology courses are described on pages 209-211 and 216-217. Other listed education (EDUC) courses are described under Education in the catalog.

<b>PSYC6651</b>	<b>3 Credits</b>
<b>Ethics and Professional Practice in Schools and School Psychology</b>	
Ethical issues, professional problems and legislation affecting the practice of school psychology are examined. American Psychological Association (APA) and National Association of School Psychologists (NASP) ethical practice guidelines are discussed. The role and function of the school psychologist as a mental health professional and educational specialist are reviewed.	
<b>PSYC7615</b>	<b>3 Credits</b>
<b>Child Assessment I with Practicum</b>	
Development of skills in objective testing and intellectual assessment, focusing on the WPPSI, K-ABC and Weschler batteries. Translation of findings into reports relevant to treatment outcomes will be emphasized. Assessment of culturally diverse populations will be discussed. Practicum experience is required.	

<b>PSYC7651</b>	<b>3 Credits</b>
<b>Seminar in Professional School Psychology Practice and Ethics</b>	
For first-year doctoral students in school psychology, the course provides an overview of the critical issues and emerging perspectives in professional school psychology. Students are reacquainted with historical, sociocultural, philosophical and fiscal issues facing the profession. Attention to role and function, with emphasis on the school psychologist in a leadership role in orchestrating a full range of prevention and intervention services to children, youth and families.	

<b>PSYC7815</b>	<b>3 Credits</b>
<b>Child Assessment II with Practicum</b>	
Development of skills in personality assessment with children and adolescents. Objective assessment of personality will be considered.	

<b>PSYC7819</b>	<b>3 Credits</b>
<b>Introduction to School Learning Problems</b>	
The focus of this course is early identification of learning problems and their assessment with an emphasis on Curriculum-based Assessment (CBA), Response to Intervention (RTI) and standardized measures of achievement.	

<b>PSYC7820</b>	<b>3 Credits</b>
<b>Introduction to School Learning Problems II</b>	
Theories of teaching and learning, research and methods of assessing effectiveness as related to the classroom experience. Issues of learner diversity as it affects the process are examined along with Functional Behavioral Assessment (FBA).	

<b>PSYC7825</b>	<b>3 Credits</b>
<b>Child Neuropsychology</b>	
Neuropsychology provides important underpinnings for effective assessment and planning interventions. Developmental neuropsychological approaches as they relate to child development and education will be presented together with appropriate assessment strategies. Educational and curriculum implications will be reviewed.	

<b>PSYC8725</b>	<b>3 Credits</b>
<b>Prevention and Intervention with Children and Adolescents</b>	
Methods of child and adolescent therapy are examined with an emphasis on evaluation of the appropriate treatment for children and adolescents at different stages of cognitive and emotional development. Research focusing on treatment outcome as well as clinical case material will be reviewed.	

# Public Administration

PSYC8815

3 Credits

## **Child Assessment III with Practicum**

New directions in assessment are examined. The focus will be integration of intellectual, personality and cognitive information, resulting in meaningful data sharing. Students will be expected to complete two comprehensive psychological assessments.

PSYC8910

3 Credits

## **School-based Consultation with Practicum**

Indirect methods of intervention are explored through different approaches to consultation which include mental health consultation, behavioral consultation and instructional consultation. Students are required to complete a project at an assigned site.

PSYC8922

3 Credits

## **Externship in School Psychology I**

This is the culminating educational experience for students in the M.A./certification program in school psychology. Students are engaged in a planned sequence of field experiences in a school or other approved educational setting under the supervision of a certified school psychologist for a minimum of 1,200 hours over the course of two semesters in order to meet school psychology certification requirements.

PSYC8923

3 Credits

## **Externship in School Psychology II**

Continuation of PSYC8922 Externship in School Psychology I.  
*Fall, Spring*

PSYC9110

3 Credits

## **School-Community Mental Health**

Preventive science focusing on mental health services in the schools and communities is the primary focus of the course. Interdisciplinary courses in a sociocultural context are examined and model programs preventing mental illness and promoting mental health for children, adolescents and their families are reviewed and analyzed.

*Note: For descriptions of education courses, refer to Peter Sammartino School of Education programs, pages 130–145.*

## Public Administration (M.P.A.)

A part of the School of Public and Global Affairs, the Public Administration Institute offers a curriculum leading to the degree of Master of Public Administration (M.P.A.). The Institute is a member of the National Association of Schools of Public Affairs and Administration (NASPAA). Part of the University's efforts to meet its public service obligations, the Institute seeks to provide well-trained recruits for public and nonprofit agencies and to improve the knowledge and credentials of administrators already employed in these organizations.

The curriculum is designed to provide graduates with conceptual, analytic and managerial skills for dealing with a variety of public services administration situations. Experienced administrators should be able to exchange perspectives with each other, apply job knowledge and anticipate the process of coping with ongoing change. Students new to the field will acquire a wide knowledge of public management and concept issues common to public administrators.

In an effort to broaden the educational experience of its students, the Public Administration Institute offers specialized course work at the University's Wroxton College in England in such fields as health, emergency management and urban development.

This program is offered under the auspices of the Public Administration Institute, at the Florham Campus, Madison, New Jersey, and the Metropolitan Campus, Teaneck, New Jersey; at the Hudson City Center in Jersey City, New Jersey; at Newark Liberty International Airport in Newark, New Jersey; at the Port Authority Transportation Center in Jersey City, New Jersey; at the Port Authority George Washington Bridge Training Center in Fort Lee, New Jersey; and at other locations in New Jersey.

## **Honor Society**

Students are eligible for membership in the National Public Administration Honor Society, Phi Alpha Alpha, upon the completion of 18 credits with a cumulative grade point ratio of at least 3.70.

## **Certificates**

A **certificate in public management** will be granted to all students upon successful completion of 18 credits. A **certificate in transportation management** will be awarded to students completing six transportation-related courses.

## **Specializations**

The Public Administration Institute offers various master's specializations: bilingual administration, global transportation management, health services administration, international relations and diplomacy, nursing management, public management and sustainability.

## **Bilingual Administration**

Courses are designed for those who are in, or seek to enter, fields of bilingual administration, in both the public and private sectors. Emphasis is placed on administration in multicultural settings, communication, pedagogy and related technological issues. Courses include PADM7802 Bilingual Methodology and PADM7806 Seminar for Public and Educational Administrators in the Metropolitan Area.

## **Global Transportation Management**

This specialization concentrates on the background, administrative structure and issues, environmental components and operational aspects in the context of international transportation and commerce. Courses include PADM7749 Development of Global Transportation System and PADM7753 Issues of Security and Transportation Systems.

## **Health Services Administration**

The specialization in health services administration consists of a series of courses that are designed, in combination with the M.P.A. core curriculum, to meet the accreditation standards of the Association of University Programs in Health Administration. Students in the health care management concentration take course work such as PADM7731 Introduction to Health Systems and Policy, PADM7732 Health Finance and Control Systems, PADM7734 Managing the Continuum of Care and PADM7791 Global Health Issues.

## **International Relations and Diplomacy**

This specialization concentrates on the administrative structure and issues in the areas of international and diplomatic relations and activities. Courses stress communication, leadership and administrative interaction in the international arena, as well as cultural perspectives. Courses include PADM7780 Diplomatic Communication for Administrators and PADM7796 International Dimensions of Public Administration.

## **Nursing Management**

The nursing management specialization is offered in cooperation with the Henry P. Becton School of Nursing and Allied Health. Students who choose this specialization complete all M.P.A. core course requirements and take selected courses in nursing management in the School of Nursing and Allied Health. Interested persons should contact the Public Administration Institute or the School of Nursing and Allied Health for details on this specialization.

## **Public Management**

Students choosing this specialization take 15 credits of course work selected from among a series of specially designated elective courses such as PADM7713 Organizational Performance Assessment, PADM7714 Law and Administration, PADM7715 Employee Relations and PADM7716 Delivery of Public Services.

## **Sustainability**

This 18-credit specialization emphasizes multi-stakeholder approaches to sustainability. Courses include PADM7820 Introduction to Sustainability, PADM7821 Environmental Law, PADM7822 Environmental and Ecological Economics, PADM7823 The Human Environment, PADM7824 Introduction to the Environment and Public Administration and PADM7825 Sustainability Capstone.

## **Admission Requirements**

The credentials required for admission to the Master of Public Administration degree program as a matriculated student include the following:

1. A graduate application for admission and nonrefundable application fee.
2. A bachelor's degree from an accredited college or university with a minimum

cumulative grade point ratio (CGPR) of 2.70. (Applicants with a CGPR of less than 2.70 may be admitted as matriculated students on probation.)

3. Official transcripts from all colleges and universities previously attended.

Applicants who are unable to provide official documents at the time of enrollment may register as nonmatriculated or nondegree students with the approval of a graduate faculty adviser.

## **B.A./M.P.A. Combined Degree Program**

Undergraduate students admitted to the B.A./M.P.A. combined degree program enter as matriculated students and must comply with all academic program requirements. (See *Undergraduate Studies Bulletin*.)

## **Requirements for the Master of Public Administration Degree**

The M.P.A. degree is granted for a minimum of 39 credits, of which at least 30 credits must be taken at Fairleigh Dickinson University. The 39-credit total must contain:

1. Twenty-one credits of required foundation courses:
  - PADM6600 Public and Nonprofit Management
  - PADM6601 Organization Theory
  - PADM6602 Budgeting and Finance
  - PADM6603 Public Policy Administration
  - PADM6604 Human Resources Management
  - PADM6610 Quantitative Methods for Administrators
  - PADM6680 Information Technology Management

2. Electives:

The M.P.A. elective course offerings are designed to offer students the opportunity to pursue in-depth study in public management, international relations and diplomacy, bilingual administration, health services administration, sustainability and nursing management.

3. PADM6801 Seminar in Strategic Management or PADM6802 Strategic Health Services Management Seminar. This course may be taken after completion of 27 credits, including the core curriculum.

4. An accepted M.P.A. Project Report (3 credits) or M.P.A. Thesis (3 credits).

5. A cumulative grade point ratio of 3.00 (on a 4.00 scale) is required for graduation. Students who receive more than two grades of C or lower will be dismissed from the program.

6. In addition to the 39-credit requirement indicated, an internship (3 credits) is required for students having little or no background in public service. Students will be informed of their need to complete an internship upon admission to the program.

7. Students are required to meet with their assigned academic adviser each semester to assess overall academic performance and plan for their next semester's program of study.

Students with weak backgrounds in government, communication skills, computer literacy or other critical areas may be required to take additional work beyond the 39-credit minimum.

## **Course Offerings**

*Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the Institute director.*

## **Public Administration**

*Public Administration Institute*

### **PADM6015**

**1 Credit**

### **CPT (Curricular Practical Training) Independent Study**

This course fulfills the credit requirement and complements students' enrollment in a Curricular Practical Training (CPT) experience.

### **PADM6600**

**3 Credits**

### **Public and Nonprofit Management**

This course provides an overview of the macro and micro forces that influence public and nonprofit management. These factors include fiscal and resource scarcity, rapid technological change and obsolescence, organizational downsizing/restructuring, information management technology and shifting employee demographics. The course focuses on the methods and strategies for efficiently and effectively managing public organizations in the face of the endemic internal and external problems and challenges.

### **PADM6601**

**3 Credits**

### **Organization Theory**

An analysis of the role of organizational theory, discussion of the major orientations in explaining organizational and administrative activities and their impact upon those who work within or are affected by organizational action.

*Fall, Spring*

# Public Administration

---

## PADM6602

3 Credits

### **Budgeting and Finance**

This course presents an overview of the major principles and concepts associated with public-expenditure budgeting and the resource allocation decision-making process. The first part of the course focuses on the centrality of the budget process and examines the logic and process of budgeting, including various approaches to budgeting, fund accounting and financial statement analysis. The second part of the course focuses on revenue structures and examines the basic principles of taxation and the nature and diversity of public sector revenues.

## PADM6603

3 Credits

### **Public Policy Administration**

The goal of this course is to introduce managers to the public policy-making process. This introduction exposes students to the economic and moral justifications for public policies and teaches the policy-analytic tools that support informed policy. The course addresses policy-making at all levels of government with an emphasis on skills that can be used by managers on a daily basis. Prerequisite: PADM6610 Quantitative Methods for Administrators.

## PADM6604

3 Credits

### **Human Resources Management**

This course presents students with an overview of tools and techniques of human resources management and major personnel policy issues. The course emphasizes the application of specific knowledge, skills and abilities to solve management problems. Topics covered include recruitment, examination, job classification, salary and wage administration, performance management, employee development, supervision, equal employment opportunity and affirmative action.

## PADM6610

3 Credits

### **Quantitative Methods for Administrators**

This course provides students with the computer and interpretation skills needed to answer quantitative questions that confront managers and policy-makers. Topics covered include statistical inference, forecasting and other forms of prediction.

## PADM6680

3 Credits

### **Information Technology Management**

This course is an overview of the various tools and technologies of information management. The fundamentals of information systems are presented, including the future impact of the technology on society with emphasis on understanding emerging policy and ethical and managerial issues. Focus will be on the use of management information systems in decision making and performance management.

## PADM6685

3 Credits

### **Computer Application Resources**

The course provides students with a comprehensive understanding of computers and computer software and applications, including the internet, and explores such concepts as computer architecture, data storage and file management. It also examines the effects of computers and their applications to ethical, social and managerial issues.

## PADM6801

3 Credits

### **Seminar in Strategic Management**

This seminar is designed to involve the integration of the concepts and techniques covered in previous courses. Through use of case studies and simulations, the students will analyze the problem situations in order to identify the most strategic issues, the leverage points of action and appropriate action plans. An emphasis will be placed on collaborative problem solving and team work. The case studies will be drawn from the public and nonprofit sectors and will vary from semester to semester. Prerequisites: must have completed 27 credits of course work and have approval of the academic adviser.

*Fall, Spring*

## PADM6802

3 Credits

### **Strategic Health Services Management Seminar**

An advanced-level course oriented toward an overall view of strategy formulation and implementation from the perspective of senior management. The course is designed to serve as the capstone of the health services administration curriculum, offering students an opportunity to integrate what they have learned in their functional and specialty course work and to apply this knowledge to the analysis and resolution of general management problems. Didactic emphasis will be placed on contemporary approaches to environmental assessment, strategic planning and competitive positioning of organizations in the health care marketplace. A combination of lectures, case studies and supplemental research activities will be used in conjunction with oral presentations and class discussions. Prerequisite: completion of at least 27 credits.

*Spring*

## PADM6810

3 Credits

### **Public Management Internship**

Participation in the activities of an administrative agency, either public or quasi-public, local, state, federal or special or civic organization. Completion of a project or specific work assignment under the joint supervision of a faculty member and an agency supervisor. Prerequisites: must have completed all required courses and have permission of both the course instructor and the academic adviser. (Required for students with little or no background in public or

nonprofit service. [NOTE: for those students who are required to complete an internship — the 3-credit internship is in addition to the 39-credit requirement.] This requirement may be waived through petition to the Institute for those students having sufficient professional experience.)

*Fall, Spring and/or Summer*

## PADM6811

3 Credits

### **Independent Study in Public Administration**

Independent study in a specialized aspect of administration selected by the student, academic adviser and instructor. Prerequisites: PADM6600 Public and Nonprofit Management and prior approval of academic adviser and instructor.

## PADM6812

3 Credits

### **The Political Environment of Public Administration**

Public administration is part of the overall governmental process. This course explores the relationship between public administration and other branches of the political system. It covers such topics as the Constitution and public administration; relations between the executive and public administration; legislative oversight; and the influence of interest groups on public administration. Prerequisite: PADM6600 Public and Nonprofit Management.

*Fall, Spring*

## PADM6821

3 Credits

### **M.P.A. Project Report**

An analytic, written report detailing action-oriented research accomplished for a public agency. Prerequisite: must have completed 33 credits and have approval of the academic adviser. (PADM6821 M.P.A. Project Report or PADM6822 M.P.A. Thesis is required.)

*Fall, Spring*

## PADM6822

3 Credits

### **M.P.A. Thesis**

A major piece of written work based on research applicable to administration. Prerequisites: must have completed 30 credits and have approval of the academic adviser. (PADM6821 M.P.A. Project Report or PADM6822 M.P.A. Thesis is required.)

*Fall, Spring*

## PADM7111

3 Credits

### **Accounting for Managerial Decision Making**

This course centers on the use of accounting data in the management decision-making process in public and nonprofit organizations. Particular attention is given to evaluation of the underlying financial stability and the operating efficiency and effectiveness of public and not-

for-profit organizations. The management implications of using several bases of accounting is considered. A review of financial statements is undertaken to illustrate the early warning signs of underlying fiscal distress. Prerequisites: PADM6600 Public and Nonprofit Management and PADM6602 Budgeting and Finance.

## **PADM7712**

**3 Credits**

### **Managing Organizational Change**

This course provides a conceptual framework for analyzing the dynamics and process of planned organizational change in public and nonprofit organizations. The focus is on effective techniques for diagnosing organization problems, identifying intervention strategies and implementing planned change efforts. Each student is given an opportunity to prepare an action plan to implement a significant change in his or her organization. Prerequisites: PADM6600 Public and Nonprofit Management and PADM6604 Human Resources Management.

## **PADM7713**

**3 Credits**

### **Organizational Performance Assessment**

This course, directed to public and nonprofit organizations, assesses organizational effectiveness, examining it in terms of different levels of the organization, from the individual, to the programmatic, to the institutional. The focus is on the identification of criteria assessing organizational effectiveness and on techniques available to measure effectiveness in terms of operational efficiency, outcome effectiveness and consumer/client satisfaction. Prerequisite: PADM6600 Public and Nonprofit Management.

## **PADM7714**

**3 Credits**

### **Law and Administration**

This course focuses on the constitutional-legal basis in which American public administration is set, including fundamental concepts such as separation of powers, checks and balances, federalism, regulation, delegation and discretionary authority and common law and equity. The course also seeks to familiarize students with legal reasoning, judicial process and the role of lawyers. The course introduces students to administrative agency rule making and adjudicative practice; law defining and constraining public official action and responsibility, including investigative powers, openness and public disclosure, public official tort liability and political activity; and the "basics" of primary legal research, especially in tracing the evolution of public policy. Prerequisite: PADM6600 Public and Nonprofit Management.

## **PADM7715**

**3 Credits**

### **Employee Relations**

The management of employee labor relations in both the public and nonprofit sectors is

surveyed in this course. Collective bargaining practices are examined, with emphasis on the art of successful labor negotiations and contract administration. Included are discussions of the legal framework, the dynamics and effects of unionization, current issues in employee relations and the role of the grievance procedure and other workplace-dispute resolution mechanisms. Prerequisites: PADM6600 Public and Nonprofit Management and PADM6604 Human Resources Management.

## **PADM7716**

**3 Credits**

### **Delivery of Public Services**

This course examines the traditional organizational and institutional structures for delivering public services, including regional entities, public authorities and "mixed" approaches. In addition, more recent developments are examined, including competitive contracting; transfer of functions between sectors; and "privatization." The course covers domestic and international developments in "mixed" economies and enterprises. Prerequisite: PADM6600 Public and Nonprofit Management.

## **PADM7717**

**3 Credits**

### **Planning and Marketing for Managers**

An integrated overview of the theory and processes of modern strategic planning and marketing as they apply to the delivery of public and not-for-profit services. Contemporary strategies and techniques will be examined through formal lectures and group discussions focusing on the applications of theory to practice. This course is designed to develop the conceptual skills that will help the student understand the role of marketing within the broader scope of institutional planning. Prerequisite: PADM6600 Public and Nonprofit Management.

## **PADM7718**

**3 Credits**

### **Contemporary Management Issues**

An analysis of current issues and approaches to enhancing the quality of administration in the public and nonprofit sectors. Topics change; may be repeated for credit. Prerequisites: PADM6600 Public and Nonprofit Management and permission of instructor.

## **PADM7721**

**3 Credits**

### **Environmental and Sociologic Aspects of Global Transportation**

The course provides an in-depth analysis of the environmental and ecological aspects of the extent of global transportation in the contemporary era. Changes in consumption, sustainability, mobility and distribution are presented in conjunction with transitions in societal paradigms and constructs.

## **PADM7724**

**3 Credits**

### **Comparative Governmental and Administrative Systems**

The course takes a global view of comparative governmental and administrative systems by introducing students to their background development and their essential institutional and political components. The wide diversity of such systems is highlighted by a study of such systems in six or seven nations through comparative analyses of their various approaches to policy and relative problematic issues.

## **PADM7726**

**3 Credits**

### **Development of Political and Administrative Theory**

Through primary sources and materials, the course traces the development of individualism, rationalism, utilitarianism, positivism, feminism, liberalism, social Darwinism and other concepts and movements that have contributed to the evolution of modern political and administrative theory. Applications to the administrative area are made by an analysis of the writings of Hobbes, Locke, Montesquieu, Beccaria, Burke, Paine, Bentham, Mill, Marx, Spencer, Weber and others. Comparative aspects of these works are also discussed.

## **PADM7731**

**3 Credits**

### **Introduction to Health Systems and Policy**

This course presents an integrated overview of traditional and contemporary approaches to financing and organizing the provision of health services in the United States. The course traces the evolution of the health care delivery system, with special attention given to the interplay between political, legal and socioethical dynamics in the formation of health policy at the federal and state levels of government.

*Fall*

## **PADM7732**

**3 Credits**

### **Health Finance and Control Systems**

This course focuses on the unique characteristics of the health care marketplace in relation to the challenge of financing care and controlling utilization at both the macro and micro levels of the delivery system. Topics include prospective rate-setting and reimbursement systems, capital financing, regulatory processes and utilization-management techniques.

*Fall*

## **PADM7733**

**3 Credits**

### **Quantitative Methods for Health Administration**

This course introduces the student to a variety of quantitative analytic tools and their application to planning, decision making and program evaluation. Areas covered include research

# Public Administration

---

design, sample survey techniques, biostatistics and cost/benefit analysis. Special attention is given to applying the concepts and methods of epidemiology to health services management. *Fall, Spring*

## **PADM7734**

**3 Credits**

### **Managing the Continuum of Care**

This course focuses on the administrative challenges of designing and managing organizational arrangements for delivering a comprehensive array of health services spanning the continuum from wellness to extended care. Course content concentrates on the structural and integrative mechanisms required to meet the medical, mental health and social support needs of patients on an ongoing basis. Financial, marketing, human resources and legal/ethical issues also are addressed. Prerequisites: PADM6600 Public and Nonprofit Management and PADM7731 Introduction to Health Systems and Policy or permission of instructor.

*Spring*

## **PADM7735**

**3 Credits**

### **Comparative Health Systems**

This is a two-week intensive course studying the British health system, with particular reference to the National Health Service. The course analyzes the historical background, institutional framework, governing policies, financing, organization and staffing, services and operations and the roles of public and private sector services. Topics are presented through lecture, discussion and field visit methods, accompanied by selected readings. Prerequisites: PADM6600 Public and Nonprofit Management and PADM7731 Introduction to Health Systems and Policy or permission of instructor.

*Spring*

## **PADM7736**

**3 Credits**

### **Integrated Health Care Systems**

The concept of system integration has emerged as a unifying theme for the health care industry as it prepares to respond to market demands for cost containment, quality assurance and accountability. The purpose of this course is to present a comprehensive overview of contemporary strategies for achieving collaboration and coordination of hospital and physician services within the context of managed care. Alternative models for organizing and financing integrated delivery of health care will be discussed. Legal, regulatory and operational implications of health-system integration also will be addressed.

*Spring*

## **PADM7737**

**3 Credits**

### **Ethical and Legal Issues in Health Care**

The legal content of this course will focus on major elements in professional liability, risk

management, patient rights, quality-of-life outcomes and rationing of care. The ethical content will address the moral foundation of the profession, ethical decision making, critical thinking and the development of an ethical perspective throughout the life span. An ongoing theme of this course is the emphasis on humanizing health care. (May be taken as an alternative to PADM7735 Comparative Health Systems.)

*Spring*

## **PADM7748**

**3 Credits**

### **Introduction to Technology Management**

This course is an overview of the various desktop applications used in an information systems environment. Focus will be on the various components of management information systems and their components.

## **PADM7749**

**3 Credits**

### **Development of Global Transportation System**

The course analyzes the various venues of transportation systems (air, land, water) in terms of the human component and materials. In particular, emphasis will be given to the effect of these systems on various international, cultural, economic and technological developments. Also, case studies will be presented which highlight each system's administrative and organizational elements.

## **PADM7753**

**3 Credits**

### **Issues of Security and Transportation Systems**

The course is a study of the aspects of security issues as they relate to the various components of modern international transportation systems. Issues of security and transportation administration in the 21st century will be emphasized, along with national and international governmental policies and responses.

## **PADM7759**

**3 Credits**

### **The Administration and Law of Sports**

The course will provide an overview of the sports industry from an administrative and legal perspective. The course will address the administrative issues of professional and amateur sports; franchise valuation; league structure, stadiums and arenas; the media; sports marketing and intellectual property rights; labor relations and antitrust laws; finance and tax issues; and ethics.

## **PADM7762**

**3 Credits**

### **Public Purchasing**

The course traces the background and role of purchasing in the public sector, with emphasis on centralized purchasing, local and state con-

tracts, cooperative purchasing in municipalities and the creation of bid specifications. Case studies and analyses will highlight each of the issues presented.

## **PADM7763**

**3 Credits**

### **Developing Modern International Relations**

The course presents the background and development of modern international relations, with an emphasis on its administrative, political and bureaucratic aspects. Selected cases from the 19th, 20th and 21st centuries will be analyzed, particularly in terms of governmental structures. The evolution of contemporary concepts and practices will also be traced.

## **PADM7769**

**3 Credits**

### **Aviation Management and Operations**

With an introduction and historical overview, the course presents and analyzes the components of transportation centers, classifications and regulations and safety. The economic role and environmental responsibility of such center management are also emphasized. Future projections for such centers summarize the course components.

## **PADM7770**

**3 Credits**

### **Global Administrative Skills**

The course will analyze the changing and interactive aspects of global administrative skills, communication and policies in the modern world. The international factors of administration in the public and nonprofit as well as the private sectors will be presented with the goal of making students aware and conversant in these areas.

## **PADM7780**

**3 Credits**

### **Diplomatic Communication for Administrators**

The course will give students a working knowledge of French terminology and phrasing, applicable to public service and/or health care administration. The course seeks to meet the communicative needs of a linguistic group in the U.S., Canada and the Caribbean, as well as elsewhere globally. In that regard, the course reinforces the University's global educational mission.

## **PADM7789**

**3 Credits**

### **Global Energy System**

The course provides an in-depth presentation of the global energy resources and consumption issues. The format will be a scientific overview of diverse energy issues such as needs, fossil fuels, grown fuels, nuclear technology and natural fuels (wind, solar, etc.) Future forecasts will also be discussed and analyzed.

## PADM7790

3 Credits

### **Knowledge Management in Public Administration**

This course focuses on knowledge management, especially in the public and nonprofit sector, and the various technologies that potentially would be used to construct knowledge management systems. The domain of knowledge management is analyzed and discussed, as well as the nature of the related technological structures. The numerous aspects of communications and their connectability to the public and, in certain cases, private sectors, will be explored.

## PADM7791

3 Credits

### **Global Health Issues**

The course will study the effects of globalization on contemporary health care, especially in the public sector. Worldwide health organizations (WHO, NGOs) in particular will be discussed and analyzed.

## PADM7795

3 Credits

### **Finance and Accounting for Public Administration**

This course will start with a review of key terms and concepts and introduce generally accepted accounting and auditing principles. Case studies and real-world examples will be used so students can learn how to: read financial statements (i.e., balance sheet, income statement, cash flow analysis); conduct breakeven analysis; calculate cost of capital and return on investments (ROI); recognize trends and evaluate organizational performance; and use financial measures for strategic planning.

## PADM7796

3 Credits

### **International Dimensions of Public Administration**

The course addresses the essential dimensions of the international and cross-cultural aspects of public administration. Social and cultural comparisons are employed with analysis of various select global models with an understanding of the varied international dimensions of administration being presented as a primary objective.

## PADM7797

3 Credits

### **Corporate Finance for Public Administrators**

An introduction to the financial management of a corporation. Students study the following broad questions: How should a firm decide whether to invest in a new project? How much debt and equity should a firm use to finance its activities? How should a firm pay its investors? How do taxes affect a firm's investment and financing decisions? What determines the value of a firm? The emphasis throughout the course is on the economic principles that underlie answers to these questions.

## PADM7801

3 Credits

### **Introduction to Contemporary Chinese Culture and Society for Administrators**

The course offers a basic introduction to contemporary cultural and sociological aspects of contemporary China through the presentation and discussion of issues relevant to the modern global experience. Emphasis is given to the application of this knowledge in the bilingual administrative area.

## PADM7802

3 Credits

### **Bilingual Methodology**

The course introduces the methodology of presentation, instruction and delivery of various aspects of Chinese and East Asian culture essential for those in the bilingual administrative and pedagogic areas. Chinese will be used during classes, although English will be the primary language of instruction in the course.

## PADM7803

3 Credits

### **Administrative Aspects of East Asian Confucianism**

The outstanding influence of Confucianism is presented through a discussion of its origins and effect on East Asian structures, with particular emphasis on its application to administrative theory, skills and roles. Confucian readings are used to highlight these aspects.

## PADM7804

3 Credits

### **Global Communication Skills Forum for Administrators**

In a seminar format, students are introduced to the communicative aspects of bilingual Chinese and Asian studies, with emphasis on international communicative methods as well as particular skills essential in fulfilling administrative roles.

## PADM7805

3 Credits

### **Advanced Topics in Bilingual and Intercultural Administration**

Readings and discussion of scholarly texts in history, philosophy and political and social issues in modern Chinese prose are presented. Emphasis is given to the analysis of structural patterns and writing practice in a bilingual modality.

## PADM7806

3 Credits

### **Seminar for Public and Educational Administrators in the Metropolitan Area**

The course offers the knowledge and skills for administrative and leadership roles in the bilin-

gual educational field. Application of bilingual studies is made, and aspects of the administrative role in the educational process are analyzed. Emphasis is also given to market analysis and application.

## PADM7807

3 Credits

### **Methodology of Second Language Acquisition**

The structure, methodology and uses of second-language acquisition are studied and analyzed through discussion and research into both linguistics and pedagogic techniques. The nature of second-language acquisition is also explored as well as evaluates aspects of language studies.

## PADM7809

3 Credits

### **Seminar in Career Orientation for Administrators**

The course will introduce students to the application of the knowledge and experience of a career in bilingual presentation. This includes résumé and interview techniques and an analysis of the context of the area of educational administrative oversight.

## PADM7810

3 Credits

### **Airport Operations Management**

The course presents and analyzes the various aspects and components of airport management and planning, which include background, legal aspects, governmental relations, as well as the financial and economic dimensions of commercial aviation. The environmental components of modern transportation are also delineated.

## PADM7811

3 Credits

### **Grant Writing and Evaluation**

The major objective of this course is to prepare students who are planning careers in public and nonprofit organizations to attain grants for their organizations' projects. For success in this area, students will learn planning attractive proposals, attaining research funding, actual proposal writing and management of the final grant. The course combines theory and practice, with emphasis on the practical.

## PADM7812

3 Credits

### **Ethics in Public Administration**

The course presents and analyzes the foundational and essential aspect of ethics and ethical principles in the realm of public administration. Applicable ethical concepts are identified and related to the various components of the public sector, with their significance and implication being related especially to contemporary institutions.

# School Psychology

---

**PADM7814**

**3 Credits**

## **Health Policy and the Public**

The course presents the various policy and administrative issues related to health care and the public, military bureaucratic structure, organization and policy-related issues.

**PADM7820**

**3 Credits**

## **Introduction to Sustainability**

This class will focus on understanding the concept of sustainability, including the challenge of integrating the not necessarily easily compatible fields of environmental protection, economic development and social equity. As this is an opportunity to bring together students from three different schools (business, public administration and education), full exploration will be made to possible synergies in understanding sustainability.

**PADM7821**

**3 Credits**

## **Environmental Law**

This class will focus on the interrelationship of the environment (in its natural state) and humanity (as an embodiment of intelligent actors) acting upon the environment with consumptive and preservation forces leading to the establishment of rules, laws and policies to balance their coexistence.

**PADM7822**

**3 Credits**

## **Environmental and Ecological Economics**

An introduction to the economics of sustainable growth and development. The difference between standard neoclassical macroeconomics and microeconomics, environmental economics and ecological economics; the nature and impact of economic growth, population growth, technological change and consumption on the environment and human well-being. The nature and impact of markets, market failures, property rights, international trade and globalization on the environment. Environmental policy objectives, decision making and instruments.

**PADM7823**

**3 Credits**

## **The Human Environment**

The human species is treated as a biological component of a complex ecosystem. Topics include human evolution, technological change, resource availability and pollution problems. The scheduling of lecture, lab and field experiences may vary to accommodate conditions of tide, weather and unique learning opportunities that may arise. Some field trips may be scheduled for a weekend.

**PADM7824**

**3 Credits**

## **Introduction to the Environment and Public Administration**

This is an introduction on how public administrators handle environmental concerns and the effects of global warming on local, state and federal levels. The class structure will include 1) what are environmental problems and concerns; 2) differences on a local, state and federal level; and 3) how environmental issues can influence local, state and national politics.

**PADM7825**

**3 Credits**

## **Sustainability Capstone**

A major, real-world project in the development and promotion of a sustainability initiative. The project and its results will be gathered in a portfolio with work done in the other courses and presented to the other program participants in a common seminar. Prerequisites: PADM7820 Introduction to Sustainability, PADM7821 Environmental Law, PADM7822 Environmental and Ecological Economics, PADM7823 The Human Environment and PADM7824 Introduction to the Environment and Public Administration.

## School Psychology (Psy.D.)

See Psychology, School Psychology, page 217.

---

## School Psychology (M.A.)

See Psychology, School Psychology, page 222.



# Service Innovation and Leadership

## Service Innovation and Leadership (M.S.)

The degree is designed to provide master's-level studies for traditional and nontraditional students in preparation for or advancement in the hospitality management field with a unique focus on service innovation and leadership. It has a strong foundation in the core areas of leadership, service strategies, financial systems, organizational communication and conflict management, human resource administration and marketing as they pertain to service innovation and leadership.

The 30-credit, nonthesis program consists of 27 credits of core courses and 3 credits of electives. The required courses include: MSSIL7001 Introduction to Graduate Studies and Research; MSSIL7003 Current Concepts of Leadership in the Service Industry; MSSIL7004 Service Management; MSSIL7005 Managing Service Industry Financial Systems; MSSIL7006 Human Resource Management and Development in the Service Industry; MSSIL7007 Global Marketing for the Service Industry; MSSIL7008 Organizational Communication and Conflict Management; MSSIL7009 Service Capstone; and MSSIL7010 Technology in the Service Industry. There is a required master's project.

Classes are offered in-person at the Metropolitan Campus, Teaneck, New Jersey; at the Florham Campus, Madison, New Jersey; and at Wyndham Worldwide in Parsippany, N.J., where the University has a partnership to offer graduate degrees online and in-person.

The program is offered through the International School of Hospitality and Tourism Management of the Anthony J. Petrocelli College of Continuing Studies.

### Admission Requirements

1. Must have completed a bachelor's degree program with a minimum cumulative grade point ratio of 3.00 from an accredited undergraduate institution. (No GMAT or GRE test score is required.)

2. Transcripts from all undergraduate, graduate and postgraduate studies.

3. A written statement of 1,000 words detailing the applicant's interest and goals for a career in service leadership.

4. Three letters of recommendation, including at least two from former instructors.

5. International students must take the Test of English as a Foreign Language.

### Requirements for the Master of Science Degree

The M.S. in service innovation and leadership is a 30-credit, nonthesis program requiring completion of 27 credits of core courses, plus 3 credits of electives. A Master's Research Project is required.

### Curriculum

Whether taken in-person, blended or fully online, the M.S. in service innovation and leadership prepares students for leadership positions in the service sector. The curriculum draws upon the work experience of students to integrate theory and practice as it prepares them for positions in service leadership. The proposed required courses were developed based on need and potential demand. Students will be required to complete a noncredit Master's Research Project during the last term of study in the program as a capstone requirement. This paper and its requirements will be introduced during the early part of the degree program when the students are enrolled in the MSSIL7001 Introduction to Graduate Studies and Research course.

### Required Courses (27 credits)

All students enrolled in the M.S. in service innovation and leadership must complete the following:

	Credits
MSSIL7001	
Introduction to Graduate Studies and Research*.....	3
MSSIL7003	
Current Concepts of Leadership in the Service Industry.....	3
MSSIL7004	
Service Management.....	3
MSSIL7005	
Managing Service Industry Financial Systems.....	3
MSSIL7006	
Human Resource Management and Development in the Service Industry.....	3

\*Must be taken in the first semester.

	Credits
MSSIL7007	
Global Marketing for the Service Industry.....	3
MSSIL7008	
Organizational Communication and Conflict Management.....	3
MSSIL7009	
Service Capstone*.....	3
MSSIL7010	
Technology in the Service Industry.....	3
<b>Total.....</b>	<b>27</b>

### Electives (3 credits)

Electives may be chosen from the list below or from courses offered by the Anthony J. Petrocelli College of Continuing Studies and the International School of Hospitality and Tourism Management. Electives must be approved in advance and students must meet all prerequisite requirements. Additional electives will be developed with guidance from the school's industry advisory board.

MSSIL6001	
Civil Law and the Service Industry.....	3
MSSIL6002	
Accounting for Service-industry Administrators.....	3
MSSIL6003	
Distribution Systems Management.....	3
MSSIL6004	
Global Service Industry Business Management.....	3
MSSIL6005	
Organizational Behavior.....	3
MSSIL6006	
Strategic Processes in Service Firms.....	3
MSSIL6007	
Curriculum and Instruction for Service-industry Professionals.....	3
<b>Total.....</b>	<b>3</b>
<b>Total Program.....</b>	<b>30</b>

### Master's Research Project (Noncredit)

Students will be required to complete a Master's Research Project during the last term of study in the program as a capstone requirement. This project is a requirement for graduation. The requirements for the Master's Research Project will be introduced during the early part of the student's degree when they take MSSIL7001 Introduction to Graduate Studies and Research. Guidelines

\*Must be taken in the last semester.

# Service Innovation and Leadership

---

introduced in that class will include the parameters for the final project as well as specific benchmarks in the process that need to be met by the students. In addition, the research project will demonstrate understanding of competencies regarding service innovation and leadership that are developed throughout the course. This project will be evaluated by full-time faculty to determine whether it meets the requirements, and a pass/fail grade will be used.

## Course Offerings

Courses offered fall, spring and/or summer are so noted. To determine availability of courses not so designated, please check with the school.

## Service Innovation and Leadership International School of Hospitality and Tourism Management

### Core Course Requirements

#### MSSIL6100 0 Credits

##### Master's Research Project

The research project is an interactive, culminating learning project that focuses on an area chosen by the student related to the service industry in line with the student's professional area of interest. This qualitative research paper should present the nature of the problem or subject investigated, its significance to the profession or larger field of study, a discussion of the relevant literature, a clearly defined method for answering or exploring the question of interest and specific conclusions or evaluations based on investigation. The length of the project depends on the subject. However, 25–40 pages are appropriate, plus appendices such as tables, charts, questionnaires, interview schedules, etc. Documentation and the bibliography must meet the standards for academic research set forth by the American Psychological Association (APA). Notes and bibliography should be consistent and follow the style of the latest edition of the APA.

#### MSSIL7001 3 Credits

##### Introduction to Graduate Studies and Research

This course provides an introduction to graduate studies with heavy emphasis on referencing and citations in APA style. Quantitative and qualitative research studies are explored for structure, discussed in depth and critiqued. A comprehensive research proposal is the goal of this course. The Master's Research Project (MSSIL6100) and its requirements will be introduced in this course. The research paper will then be completed in the last term of study in the program as a capstone requirement.

#### MSSIL7003 3 Credits

##### Current Concepts of Leadership in the Service Industry

This course examines key theories of leadership and motivation as applied to various service-industry contexts, with an emphasis on analysis of leadership behaviors, managerial action and servant leadership.

#### MSSIL7004 3 Credits

##### Service Management

This course offers a review of current service theories and strategies used to provide total customer satisfaction, including methods for measuring customer satisfaction and total quality management applications.

#### MSSIL7005 3 Credits

##### Managing Service Industry Financial Systems

This course focuses on the analysis, interpretation and application of financial information derived from the four major financial statements. Moreover, students will develop an understanding of the time value of money and various valuation techniques. This course also focuses on providing students with an understanding of the ways in which service-industry enterprises access the capital markets.

#### MSSIL7006 3 Credits

##### Human Resource Management and Development in the Service Industry

This course provides an in-depth review of human-resource management practices, with case-study reviews of best practices across the service-industry context. Students will be introduced to essential functions including performance and evaluation systems, training and development, staffing and succession, compensation and rewards, workplace diversity, teamwork and communication.

#### MSSIL7007 3 Credits

##### Global Marketing for the Service Industry

This course provides an overview of advanced marketing strategies and tactics. Global contexts will be explored to the extent of their impact and best practices will be reviewed. The following topics will be studied: strategic planning, pricing practices, international marketing, global distribution systems and advertising.

#### MSSIL7008 3 Credits

##### Organizational Communication and Conflict Management

This course provides an overview of theories and models of communication and examination of barriers to effective communication. Techniques for improving conflict management and resolution are considered through interpersonal, group and organizational communication.

#### MSSIL7009 3 Credits

##### Capstone for Service, Innovation and Leadership

This course is designed to be a capstone experience. Students will draw on all previously taken courses in a "real-world" application toward their particular area of interest. Service-industry partners will pose real-world consulting dilemmas for the students to solve in teams. To be taken after 30 credits have been completed.

#### MSSIL7010 3 Credits

##### Technology in the Service Industry

The technical and organizational dimensions and foundations of management information systems will be studied with a focus on the management of information, technology and systems development. This class is oriented to the end-user.

### Electives

All candidates must take 3 credits of electives. The elective may be chosen from the M.S. in service innovation and leadership courses with the approval of the student's adviser.

#### MSSIL6001 3 Credits

##### Civil Law and the Service Industry

This course provides an overview of tort and civil law oriented to service-industry contexts.

#### MSSIL6002 3 Credits

##### Accounting for Service-industry Administrators

This course emphasizes the interpretation and usage of accounting information and procedures necessary for decision making in service-industry enterprises. Topics include Uniform System of Accounts, budgeting and the interpretation of balance sheets, income, cash flow and retained-earnings statements.

## MSSIL6003

3 Credits

### **Distribution System Management**

This course reviews the essential elements of supply-chain management. The learning experience is focused on forecasting, planning, strategy, production, distribution procurement, quality control and process frameworks.

## MSSIL6004

3 Credits

### **Global Service Industry Business Management**

This course examines global service business strategies with a focus on the following key issues: management process, labor, legal, finance, service delivery, marketing and government affairs.

## MSSIL6005

3 Credits

### **Organizational Behavior**

This course examines systems-level behavior in a number of service industry contexts with an emphasis on understanding and developing the individual, team and organizational capacity for change and improvement.

## MSSIL6006

3 Credits

### **Strategic Processes in Service Firms**

This course examines a variety of strategic constructs and processes utilized by leading global service-industry firms. The course focuses on strategic thinking and learning in relation to strategic planning.

## MSSIL6007

3 Credits

### **Curriculum and Instruction for Service-industry Professionals**

The emphasis of this course will be on the relationship between models in all phases of the curriculum in service innovations and leadership. Curriculum design, content and integration incorporated with technology will be the focus for the individual who will have a career in the service industry as a trainer, workshop planner or instructor in the industry or academia.

## Sports Administration (M.S.A.)

The Master of Sports Administration (M.S.A.) degree was offered beginning in January 2009. It is the first graduate degree in sports administration offered in the state of New Jersey.

This 36-credit program includes 15 credits of required courses, 15 credits in a specialization and 6 credits of electives. The two areas of **specialization** are **sports administration** and **coaching theory and strategies**.

In its Occupational Employment Projections to 2012, the United States Bureau of Labor Standards provides information on projected growth in occupational groups. There is a 6.1-percent increase projected for the broad category of self-employed professionals and related occupations. Athletes, coaches, umpires and related workers are found within this group. Projected growth specifically for these occupations is 18.3 percent for the period in review.

The M.S.A. program focuses on practical and theoretical aspects of the various components relative to the administration and management of sports personnel and facilities, businesses, health facilities and coaching and recreational activities in both volunteer and paid positions. There is also a strong emphasis on leadership throughout the program.

The program provides master's-level studies for the traditional and nontraditional student involved in sports and health facilities, including program planning and development. The M.S.A. program focuses on the broad view of the sports administration function by including issues such as business, marketing, recruitment and support services. The program promotes the understanding of issues that impact the success of activities such as legal, health and safety standards in sports administration. The degree also encourages the development of high-quality, applied research for practitioners in the field of sports administration.

Classes are offered at convenient off-campus locations and will also be offered in a blended model, combining the traditional classroom setting with online work, and through completely online delivery.

This program is offered under the auspices of the School of Administrative Science, Anthony J. Petrocelli College of Continuing Studies, at the Florham Campus, Madison, New Jersey; at the Metropolitan Campus, Teaneck, New Jersey; at locations throughout New Jersey; and online.

### **Admission Requirements**

Candidates for admission to the Master of Sports Administration degree program must be highly motivated individuals who have work experience in the area or wish to pursue a career in sports administration. A bachelor's degree from an accredited institution with a cumulative grade point ratio of at least 3.00 is required. Care will be taken to ensure a diversity of philosophies and academic backgrounds in the classes.

Students seeking admission to the program will have to submit:

1. A completed application;
2. Transcripts from all previous undergraduate, graduate and postgraduate studies;
3. A written statement of 1,000 words on current job responsibilities, duties and management philosophy or on the applicant's career goals; and
4. Three letters of recommendation, including at least two from former instructors/professors.

There is no Graduate Record Examinations (GRE) or Graduate Management Admission Test (GMAT) requirement although there is a requirement for Test of English as a Foreign Language (TOEFL) scores for international students.

### **Requirements for the Master of Sports Administration Degree**

1. Completion of a minimum of 36 graduate credits.
2. Cumulative grade point ratio of 3.00 for the degree program of study.
3. Cumulative grade point ratio of 3.00 in the core curriculum.
4. Minimum of 30 credits completed at Fairleigh Dickinson University.
5. Maximum of six years to complete the master's degree requirements.

Up to six credits of graduate course work may be transferred from another college or university if completed within the six-year period. Courses submitted for transfer credit will be reviewed and evaluated by the director of the Master of Sports

# Sports Administration

Administration program. In assessing requests for transfer credits, the M.S.A. faculty may require students to complete additional course work to update knowledge and skills to meet master's degree requirements.

The following are the specific program requirements for the master's degree. These curriculum areas and credit-distribution requirements are designed to provide students with flexibility in planning a program of study within a focused framework of professional development.

It is important to note that since sports administration is such a broad area with many different components, a number of areas of specialization are being proposed. The five required courses (MSA6701 Legal Issues in the Domestic and International Sports Industry; MSA6702 Sports Administration Research and Policy Analysis; MSA6703 Financial Administration in Sports; MSA6704 Internship I or Individual Job-related Project; and MSA6705 Strategic Planning, Implementation and Evaluation [capstone course]) are M.S.A. courses and account for 15 credits of the 36-credit program. To satisfactorily complete an area of specialization, students must complete an additional 15 credits of the program in the area of specialization. The remaining six credits for the degree requirements can be chosen as electives taken from other M.S.A. courses. No more than six credits will be waived for previous experience that is equivalent to any course offering.

Each course will have a standardized syllabus with specific learning outcomes. Textbooks will be selected for each class — based on content relative to the topics — by the faculty in concert with the administrators of the program. Each course will have at least one required textbook. The nature of the courses also mandates the use of case studies that will link the practical application with theory.

## A. Required Courses

All students enrolled in the M.S.A. program must complete the following:

MSA6701	Legal Issues in the Domestic and International Sports Industry
MSA6702	Sports Administration Research and Policy Analysis
MSA6703	Financial Administration in Sports
MSA6704	Internship I or Individual Job-related Project
MSA6705	Strategic Planning, Implementation and Evaluation (Capstone Course)

## B. Areas of Specialization

Sports administration includes many components that range from administering professional sports teams and their facilities to fitness centers and processes to recreational facilities and operations. In addition to the required courses, the M.S.A. program will include areas of specialization as well as general electives. The initial program offerings are as follows:

*Sports Administration (any five courses)*

MSA6601	Organizational Leadership and Team Development
MSA6602	Facility Development, Administration and Programming
MSA6603	Sports Marketing and Promotions
MSA6604	Sports in a Social Context
MSA6605	Legal and Professional Ethics in Sports
MSA6606	Group Dynamics
MSA6607	Human Resource Administration in Sports Organizations
MSA6608	Sports Risk Assessment
MSA6609	Communications and Media Relations
MSA6610	Strategies in Fundraising and Development

*Coaching Theory and Strategies (any five courses)*

MSA6605	Legal and Professional Ethics in Sports
MSA6608	Sports Risk Assessment

MSA6611	Coaching Leadership
MSA6612	Coaching Theory, Methods and Issues
MSA6613	Coaching Psychology
MSA6614	Assessing Human Performance
MSA6615	Effective Team Administration
MSA6633	Weight Training and Conditioning

*Electives*

MSA6624	Organization and Administration of Sports
MSA6625	Physiological Basis of Physical Fitness
MSA6626	Nutrition for Sports and Fitness
MSA6628	Valuing Diversity
MSA6629	Motivation and Performance
MSA6630	Global Sports
MSA6634	Sports Security
MSA6635	Events Planning and Administration
MSA6636	Internship II

## Graduate Certificate Programs

Students who successfully complete an area of specialization will also receive a graduate certificate in the appropriate program.

### Coaching Theory and Strategies

This 18-credit, six-course certificate is designed to provide students with skills and knowledge to address coaching at all levels of sports. Coaching methodology, nutrition, conditioning, human performance and team administration are areas studied in the program.

### Sports Administration

This 18-credit, six-course certificate focuses on the skills required for a career in the administration of professional and amateur sports. This course of study can lead to employment in areas such as sports organizations, regulatory agencies, private and/or public facilities and athletic departments at the college and university level, as well as related areas.

## Course Offerings

### Sports Administration

School of Administrative Science

#### Required Courses

MSA6701

3 Credits

#### Legal Issues in the Domestic and International Sports Industry

This course will study current issues within various areas of the domestic and international sports industry including legal liability of coaches, administrators and players; potential issues for facilities and sponsored events; regulations of amateur sports; legal relationships in professional sports; antitrust aspects of sports activities; and risk management.

MSA6702

3 Credits

#### Sports Administration Research and Policy Analysis

This course will explore current issues and trends relative to the administration and operation of various types of sports and recreation programs. Research into leadership models that have led to productive programs as well as the implication of policy on sports and recreation will also be studied.

MSA6703

3 Credits

#### Financial Administration in Sports

This course is designed to provide an understanding of different financial decisions that confront the sports industry. In addition to basic accounting skills, the course will explore financial-statement analysis, working capital and budgeting.

MSA6704

3 Credits

#### Internship I or Individual Job-related Project

This is a practical experience of previously learned skills and knowledge. The internship assignment will depend on the student's background and specific goals. Although efforts will be made to match students with appropriate opportunities to enhance their learning, some students may not be able to perform such an internship due to work or family responsibilities. In those cases, a specific job-related project can be approved by the program director.

MSA6705

3 Credits

#### Strategic Planning, Implementation and Evaluation

This course is the capstone course of the program. Students will be expected to develop either an operational or strategic plan, an implementation schedule and plan and an evaluation

process for the plans. This course can be taken once the student satisfactorily completes 27 credits in the program.

#### Sports Administration

MSA6601

3 Credits

#### Organizational Leadership and Team Development

This course will study how teams are organized and the role of leadership in motivating team performance. Topics to be covered include sports leadership in the sport and community, group and team development and the role of the leader in moving the organization to their vision of success.

MSA6602

3 Credits

#### Facility Development, Administration and Programming

Principles and applications of planning, designing, financing, budgeting and construction in the sports field, as well as the use of facilities for sports and non-sport activities, will be explored. Facility operations, event management and planning and equipment purchasing, maintenance and inventory will be included in the course.

MSA6603

3 Credits

#### Sports Marketing and Promotions

This course will explore the concepts of marketing, promotions and public relations for various components of the sports industry. At the foundation of marketing and promotion are strategic planning and coordination of efforts. Marketing strategies and varying consumer behaviors in different sports venues will be analyzed as social and economic issues related to buying and selling of sports. The inclusion of sponsorships and endorsements into the marketing efforts will also be included.

MSA6604

3 Credits

#### Sports in a Social Context

This course will explore the concepts of sports and their sociological impact on a nation or state as well as the impact of the role of sports organizations as well as a social institution.

MSA6605

3 Credits

#### Legal and Professional Ethics in Sports

This course will investigate the moral and legal framework for those in sports. Ethical dilemmas and how personal traps may affect the individual's career will be discussed. The course will also explore the differences between law and ethics, the concept of moral theory and issues of perception as well as ethical behavior. Case studies will be included.

MSA6606

3 Credits

#### Group Dynamics

This course will explore the basic nature of groups and how productive groups develop. Topics will include the various models of group development, the stages of development, informal and formal groups, team building and changing informal work groups or team norms.

MSA6607

3 Credits

#### Human Resource Administration in Sports Organizations

This course will explore administrative regulations; techniques, procedures and policies for effective personnel administration; and legal and ethical parameters that guide personnel in organizations. Additional topics include communication, compensation, negotiation, appraisal processes, training and development and decision making.

MSA6608

3 Credits

#### Sports Risk Assessment

This course will investigate the costs of sporting accidents, which can be a significant financial and emotional burden for an organization. Although organizations look at legal liabilities, there are other costs that organizations need to consider. Case studies and scenarios will be utilized in the class.

MSA6609

3 Credits

#### Communications and Media Relations

This course will explore practical techniques in understanding the media, how to build relationships with journalists, how to communicate messages effectively and what steps to take when faced with a crisis. The course aims to equip students with common-sense tools to properly manage their message while handling a variety of media that range from newspapers to radio and TV to the internet.

MSA6610

3 Credits

#### Strategies in Fundraising and Development

This course will explore ways organizations can capitalize on fundraising activities to improve market share and visibility. Examples from private and volunteer organizations will be used in the course.

#### Coaching Theory and Strategies

MSA6611

3 Credits

#### Coaching Leadership

This course will explore leadership skills needed for those entering into coaching positions.

# Sports Administration

---

**MSA6612**

**3 Credits**

## **Coaching Theory, Methods and Issues**

This course will explore the foundations for coaching as a profession and how coaching has influenced society and been influenced by society. Topic areas will include the psychology of coaching, coaching players and the relationship between players and coaches as well as coaches and colleagues.

**MSA6613**

**3 Credits**

## **Coaching Psychology**

This course will investigate the foundations of the psychological factors related to coaching. The course will review the concepts of sports psychology and how coaches can encourage optimum performance from the players.

**MSA6614**

**3 Credits**

## **Assessing Human Performance**

This course will explore the concepts of human performance for sports and appropriate assessment processes. As organizations seek to attain a certain performance goal, there is a need to ensure the individuals involved meet the requisite standards of performance or have the ability to do so. Various assessment tools will be reviewed as will case studies that demonstrate standards in use.

**MSA6615**

**3 Credits**

## **Effective Team Administration**

This course will investigate how effective teams are developed. There are a number of essential concepts that will be studied, including assessing a current team, defining team objectives and criteria of success, establishing team capabilities, defining ground rules, assessing the team culture and behavior, developing effective personal collaboration processes, conducting effective meetings and conducting good team-decision processes.

## **Electives**

**MSA6624**

**3 Credits**

## **Organization and Administration of Sports**

This course will study the fundamental skills of sports administration including planning, organizing, staffing, coordinating and budgeting in public, not-for-profit and for-profit sectors.

**MSA6625**

**3 Credits**

## **Physiological Basis of Physical Fitness**

This course will explore the physiological basis for testing physical fitness, the range of methods for assessing power, muscular strength and

endurance and flexibility. Different tests will be studied as well as methods for improving fitness in participants.

**MSA6626**

**3 Credits**

## **Nutrition for Sports and Fitness**

This course will study fundamental principles of nutrition and physical training for sports and exercise. The role of nutrition and physiology will be investigated as they relate to performance. Nutritional needs for specific sports and appropriate preparation for competition, the use of performance-enhancement supplements, screening procedures for various substances and legal issues will also be explored.

**MSA6628**

**3 Credits**

## **Valuing Diversity**

This course will explore the concepts of diversity in teams. Diversity includes various categories such as gender, age, education and nationality. As individuals work together, there is a need to understand individual differences that may influence the operations. The course will use case studies in addition to lectures.

**MSA6629**

**3 Credits**

## **Motivation and Performance**

This course will examine the impact of motivation on performance in the area of sports administration. Various motivational theories, concepts of positive reinforcement and recognition programs and maximization of performance relative to individual and group will be studied.

**MSA6630**

**3 Credits**

## **Global Sports**

Sports extend beyond national boundaries. This course will explore sports from a global perspective by examining the similarities and differences among various national sports cultures. The course will also investigate the types of sports activities found in specific cultures in order to determine the potential for expansion of activities into other international venues.

**MSA6633**

**3 Credits**

## **Weight Training and Conditioning**

This course will explore the theory and practice behind weight training and conditioning of sports participants. Included will be assessments and exercises designed to increase strength and endurance. Assessments will range from novices to professional-level athletes.

**MSA6634**

**3 Credits**

## **Sports Security**

This course will investigate the various strategies employed for major sports events. Ensuring a safe and secure environment for the players

and spectators is necessary for organizational survival. The course will employ case studies and scenarios to develop potential strategies.

**MSA6635**

**3 Credits**

## **Events Planning and Administration**

This course will explore choosing the appropriate venue, presentations and exhibits; selecting and managing vendors; and providing onsite coordination. In addition, establishing priorities, building alliances and defining duties and responsibilities for various functional areas will be investigated.

**MSA6636**

**3 Credits**

## **Internship II**

This is a practical experience of previously learned skills and knowledge. The internship assignment will depend on the student's background and specific goals and must be approved by the program director.

**MSA6638**

**3 Credits**

## **Community Relations in Sports Organizations**

This course will explore how community relations departments make a significant positive impact on both a sports team and in the community in which it resides. Course content focuses on customer/fan relations, working with nonprofit organizations, event planning, player appearances and social media. The course aims to prepare students with every aspect involved in the field and gives an inside look into one of the smallest yet most important departments in sports.

## Student Services Administration (M.A.)

The Master of Arts (M.A.) in student services administration was offered beginning in January 2011. This degree is designed for individuals pursuing careers in administrative and support positions in higher education. The relationship of universities to the federal government, to states and to local communities has taken on entirely new dimensions. Until now, the only educational leadership program available at FDU focused on grades K–12.

The 36-credit, nonthesis program consists of 18 credits of core courses, which include a three-credit course in college student personnel internship and 18 credits of electives. The required courses include: MSSA6601 Research Methods; MSSA6602 College Student Development; MSSA6603 Social Issues in Higher Education; MSSA6604 Governance, Planning and Finance in Higher Education; MSSA6605 The Law and Student Affairs; and MSSA6606 Student Services Internship. There is a required master's project.

Classes will be offered online, in-person at the Metropolitan Campus, Teaneck, New Jersey; at the Florham Campus, Madison, New Jersey; at other offsite locations where the University has a partnership to offer graduate degrees; and online.

Students can **specialize** in one of four areas including: **admission and financial-aid administration, institutional risks administration, intercollegiate sports administration and on-campus student administration.** The program is offered through the School of Administrative Science of the Anthony J. Petrocelli College of Continuing Studies.

### Admission Requirements

1. Must have completed a bachelor's degree program with a minimum cumulative grade point ratio of 3.00. (No GMAT or GRE test score is required.)
2. International students must take the Test of English as a Foreign Language.

### Requirements for the Master of Arts Degree

The M.A. in student services administration is a 36-credit, nonthesis program requiring completion of 18 credits of core courses, including a 3-credit MSSA6606 Student Services Internship plus 18 credits of electives.

### Curriculum

Whether taken in-person, blended or fully online, the M.A. in student services administration offers an outstanding degree that will prepare students for leadership positions in higher education. The curriculum integrates theory and practice with hands-on learning to provide a thorough understanding of current issues facing colleges and universities.

### Required Courses (18 credits)

All students enrolled in the M.A. in student services administration must complete the following:

- MSSA6601 Research Methods
- MSSA6602 College Student Development
- MSSA6603 Social Issues in Higher Education
- MSSA6604 Governance, Planning and Finance in Higher Education
- MSSA6605 The Law and Student Affairs
- MSSA6606 Student Services Internship

### Areas of Specialization and Certificates (18 credits)

The specialization in college student services administration encompasses many different components that range from recruitment and admissions to administering financial aid, on-campus institutional risk, on-campus student administration and intercollegiate sports. Students in the M.A. in student services administration will be able to complete work in an area of specialization that will lead to a certificate. There are four certificates for the program and their order of implementation are:

#### On-campus Student Administration

Students must complete the following three required courses:

- MSSA6602 College Student Development
- MSSA6604 Governance, Planning and Finance in Higher Education
- MSA6605 The Law and Student Affairs

Students must select three of the following to complete the certificate:

- MSSA6611 Program Design and Instructional Strategies for Adults in Higher Education
- MSSA6612 Program Design and Strategies for Special Populations in Higher Education
- MSSA6613 Post-secondary Student Affairs Issues and Management
- MSSA6626 Mentoring Students for Success

#### Admissions and Financial Aid Administration

Students must complete the following course:

- MSSA6604 Governance, Planning and Finance in Higher Education

Students must select the following to complete the certificate:

- MSSA6602 College Student Development
- MSSA6608 Technology Foundations in Higher Education
- MSSA6610 Multiculturalism, Diversity and Difference: Theory, Research and Practice in Student Affairs
- MSSA6614 Administration of College Financial Aid
- MSSA6619 Grant Writing and Administration in Higher Education

#### Intercollegiate Sports Administration

Students must complete the following two courses:

- MSSA6604 Governance, Planning and Finance in Higher Education
- MSSA6623 Legal Issues in Domestic College Sports

Students must select the following to complete the certificate:

- MSSA6602 College Student Development
- MSSA6620 Marketing and Promotion for College Sports
- MSSA6622 Financial Administration in College Sports
- Elective Master of Sports Administration course approved by adviser

#### Institutional Risks Administration

Students must complete the following six courses:

- MSSA6604 Governance, Planning and Finance in Higher Education

# Student Services Administration

MSSA6605 The Law and Student Affairs

MSSA6608 Technology Foundations in Higher Education

MSSA6616 Threat Assessment and Risk Analysis in Higher Education

MSSA6617 Crisis Management for Higher-education Administrators

MSSA6618 Impact of Terrorism on College Safety

If students already have a graduate degree and would like to earn a post-master's certificate, 24 credits (8 three-credit courses) must be successfully completed.

## **Electives (18 credits)**

Students can select any six courses from Areas of Specialization and Certificates.

## **Master's Capstone Project**

Aspiring M.A. candidates will find the graduate capstone project to be the ultimate challenge. It requires the ability to apply the skills, methods and knowledge gained through their study of student services administration.

Students will be required to complete MSSA6100 Master Project during their last term of study in the student services administration program. Although it is required for graduation, no credit is awarded for the project. Requirements — including parameters for the final project and specific benchmarks that must be met — will be introduced early in the program during the MSSA6601 Research Methods course. Full-time faculty will evaluate the project to determine whether it meets graduation requirements.

## **Course Offerings**

### **Student Services Administration**

*School of Administrative Science*

### **Core Course Requirements**

MSSA6100

0 Credits

#### **Master Project**

This noncredit course is part of the degree requirements and must be completed in order to graduate from the program.

MSSA6601

3 Credits

#### **Research Methods**

This course provides an introduction to quantitative methods and procedures through the

study of the logic and procedures of educational and social research. Information about the various stages of the research process with attention to measurement, sampling, design, data analysis and application will be included in the course.

MSSA6602

3 Credits

#### **College Student Development**

This course provides an introduction to the theory and practice of college student development and focuses on the variety of non-instructional services that impact the student's growth as an individual and as a member of the campus community.

MSSA6603

3 Credits

#### **Social Issues in Higher Education**

This course provides an analysis of the historical and current social issues that shape the experience of a college student. Topics include gender/sexual identity, ageism, racism, ethnocentrism and religious intolerance, among others.

MSSA6604

3 Credits

#### **Governance, Planning and Finance in Higher Education**

This course provides an overview of college governance and explores the relationship between program development, planning and budgeting to management in higher-education settings, resource acquisition and alumni/trustee relations.

MSSA6605

3 Credits

#### **The Law and Student Affairs**

This course provides an overview of relevant state/federal statutes (FERPA, ADA, etc.). In addition, the development and implementation of campus judicial models are reviewed with a focus on best practices.

MSSA6606

3 Credits

#### **Student Services Internship**

All students will be required to complete the graduate course MSSA6606 Student Services Internship. To describe and analyze the internship experience, students will complete a portfolio, which must document what was done and explain how the student achieved the objectives. This is a practical experience of previously learned skills and knowledge. The internship assignment will depend on the student's background and specific goals and the opportunities will be in higher education. Although efforts will be made to match students with appropriate opportunities to enhance their learning, some students may not be able to perform such an internship due to work or family responsibilities. In those cases, a specific job-related project can be approved by the program director.

## **Specializations and Electives**

All candidates must take 18 credits of electives. The electives may be chosen from the M.A. in student services administration with the approval of the student's adviser.

MSSA6608

3 Credits

#### **Technology Foundations in Higher Education**

This course provides an overview of the following topics related to planning and using technology: instructional technology models; internet resources; web design; networking and database fundamentals; technology standards; technology-integration strategies; assessment and evaluation; societal, legal and ethical issues; social media and related strategies; and collaborative planning of technology programs.

MSSA6610

3 Credits

#### **Multiculturalism, Diversity and Difference: Theory, Research and Practice in Student Affairs**

This course explores issues of multiculturalism, diversity and differences as they relate to work in student personnel through assignments, exercises, discussions, readings and reflection.

MSSA6611

3 Credits

#### **Program Design and Instructional Strategies for Adults in Higher Education**

This course explores program planning, development and evaluation for adult and continuing-education programs. The course will include diagnosis of client needs; effective system of planning, development and evaluation for adult-education programs; program scheduling; and budget and resource planning.

MSSA6612

3 Credits

#### **Program Design and Strategies for Special Populations in Higher Education**

This course explores designing programs for the wide range of populations attending colleges. This includes students with disabilities, bilingual populations and other targeted groups that add to the diversity of institutions.

MSSA6613

3 Credits

#### **Post-secondary Student Affairs Issues and Management**

This course is intended for higher-education professionals in leadership positions and includes topics such as student-affairs issues, co-curricular programming, residence life, substance abuse, judicial issues and related public relations.



# Taxation • Teaching • Teaching English as a Second/Foreign Language

---

MSSA6614

3 Credits

## **Administration of College Financial Aid**

This course explores the current laws, rules and regulations relative to financial aid at the federal and state levels as well as the processes needed to ensure students receive the appropriate funds. Included in the course are scholarship design, work-study programs and supplemental financial-aid programs.

MSSA6616

3 Credits

## **Threat Assessment and Risk Analysis in Higher Education**

This course investigates approaches for maintaining a safe and secure facility through planning for possible threats. The topics include vulnerability assessments, hazard mitigation and physical-security assessments. Students will conduct a vulnerability assessment for their organization and will develop a comprehensive response plan.

MSSA6617

3 Credits

## **Crisis Management for Higher-education Administrators**

This course explores the assessment and preparation of plans for addressing crises that may occur within a college setting. The components will include crisis-management planning, response and recovery efforts. In addition to safeguarding the students and facility, there is a need to consider the psychological impact on the students and faculty. This course focuses on the broad range of issues such as natural disasters, terrorist activity, violent students and active-shooter issues on college property.

MSSA6618

3 Credits

## **Impact of Terrorism on College Safety**

This course investigates the latest school-violence trends, including fatal and non-fatal shootings and gang activity and the threat of terrorist attacks on American schools. Case studies of incidents from throughout the world are studied and assessed to determine best practices.

MSSA6619

3 Credits

## **Grant Writing and Administration in Higher Education**

This course provides students with an understanding of the process of writing successful grant proposals, including responding to the Request for Proposal, letter proposals, defining needs, methodology, timelines and the budget. The essential elements of preparing a winning proposal that can secure funding for major initiatives are reviewed, and students will prepare and submit a full grant proposal relevant to their organizations.

MSSA6620

3 Credits

## **Marketing and Promotion for College Sports**

The concepts of marketing, promotions and public relations for intercollegiate sports are explored. Strategic planning and coordination of efforts are also included in the course. Marketing strategies, varying consumer behaviors and different sports venues will be analyzed as social and economic issues related to marketing sports and their related activities.

MSSA6622

3 Credits

## **Financial Administration in College Sports**

This course provides an understanding of different financial decisions that confront the intercollegiate sports industry. In addition to basic accounting skills, the course explores financial-statement analysis, working capital and budgeting.

MSSA6623

3 Credits

## **Legal Issues in Domestic College Sports**

This course studies current issues within various areas of domestic sports including legal liability of coaches, administrators and players; potential issues for facilities and sponsored events; regulations of amateur sports; legal relationships in professional sports; antitrust aspects of sports activities; and risk management.

MSSA6626

3 Credits

## **Mentoring Students for Success**

The role of individuals involved in the area of student affairs is broad, and it involves counseling for academic success and future achievements. This course explores the mentoring processes as well as concepts of counseling. Case studies will be used to supplement lectures and research.

---

## **Taxation (M.S.)**

See Business, Taxation, pages 71–72.

---

## **Teaching (M.A.T.)**

See Education, Teaching, pages 126–129.

---

## **Teaching English as a Second/Foreign Language (TESL/TEFL) (M.A.)**

See Education, Teaching, pages 129–130.

## Overseas Studies

### Wroxton College

Wroxton Near Banbury,  
Oxfordshire, England

Nicholas D.J. Baldwin, Dean

Wroxton College is the British campus of the University, situated in the ancestral home of Lord North at Wroxton Abbey on 56 acres of land in Oxfordshire. It is centrally located in England, lying near Banbury, between Oxford and Stratford-upon-Avon and 75 miles away from London.

#### Admission Requirements

1. A graduate studies application.
2. Official transcripts from all accredited institutions of higher learning in which the student has enrolled and, if matriculating:
3. The Graduate Record Examinations (GRE) test scores.
4. Three letters of recommendation (preferably from former professors).

In addition, applicants must have an undergraduate cumulative grade point ratio of 3.00 or better (based on a 4.00 system).

Graduate courses in a variety of graduate programs are usually available at Wroxton College during the annual summer session. Reference this catalog for specific programs of interest to seek more information about applications to these courses and course details.

#### For Information

For information contact  
FDU's Wroxton College/  
Study-abroad Office  
Fairleigh Dickinson University  
285 Madison Avenue  
Madison, New Jersey 07940  
(973) 443-8086 or 1 (800) 338-8803.

### **Master of Science in Hospitality Management Studies (M.S.)**

Students can now earn a Master of Science in hospitality management studies at Fairleigh Dickinson University's picturesque Wroxton College, situated on a 56-acre country estate just 90 minutes from London. The first degree program to be offered at Wroxton College, this program will equip students with the knowledge and skills to become leaders in the international hospitality field.

The 33-credit Master of Science in hospitality management studies is structured to meet the educational needs of adult learners working as managers, entrepreneurs, educators or other professionals in the tourism and hospitality industry. The program is designed to provide a hospitality management education with an academically rigorous, yet flexible, program of study that meets the requirements for a professional master's degree.

For working adults seeking to upgrade their professional skills to enhance their careers, the degree program increases analytical, managerial and leadership competencies and provides graduates with the requisite preparation for career advancement in various hospitality-related professional areas.

This program is offered under the auspices of the International School of Hospitality and Tourism Management, Anthony J. Petrocelli College of Continuing Studies.

#### Admission Requirements

Candidates for admission to the Master of Science in hospitality management studies degree program could be managers, business owners or educators or hold other professional positions related to the hospitality industry. The credentials required for admission as a matriculated student include the following:

1. A graduate application for admission and nonrefundable application fee.
2. A bachelor's degree from an accredited college or university with a minimum cumulative grade point ratio (GPR) of 2.75. (Applicants with a GPR of less than

2.75 may be admitted as pre-matriculated students on probation.)

3. Official transcripts from all colleges and universities previously attended.

4. English-language proficiency, both written and verbal.

5. Industry work experience preferred (applicants without industry work experience may be required to take foundation courses HRTM6100 Hospitality Operations Management and HRTM6200 Tourism Destination Management upon evaluation).

6. Personal statement of 400 words explaining reasons for pursuing hospitality graduate studies.

7. Personal interview with a graduate program adviser.

Additional classes may be required as a prerequisite for acceptance into the program. Applicants who are unable to provide official documents at the time of enrollment may register as nonmatriculated or nondegree students with the approval of a graduate faculty adviser.

To apply visit <http://view2.fdu.edu/admissions/graduate-admissions/> to submit your application (see <http://view2.fdu.edu/admissions/graduate-admissions/apply-now-for-graduate-admission-at-fdu/>).

#### For Additional Information

For additional information and the course outlines, admission requirements and requirements for the degree go to pages 161–162.

#### Course Descriptions

See "Course Offerings," Hospitality Management Studies, pages 162–164.

## Vancouver Campus

Vancouver, British Columbia  
Canada

Cecil A. Abrahams, Campus Provost

In fall 2007, Fairleigh Dickinson University opened an overseas campus in beautiful downtown Vancouver, British Columbia, Canada. FDU students in New Jersey have the opportunity to study at this campus during winter and summer sessions each year. Graduate courses, which include a study-abroad component in Vancouver, are offered regularly by one or more of the colleges in New Jersey. Please consult the online class schedule on WebAdvisor (<http://webadvisor.fdu.edu>) each term for overseas courses at the University's campus in Vancouver.

### For More Information

For more information contact  
Office of Admissions  
Vancouver Campus  
842 Cambie Street  
Vancouver, BC V6B 2P6  
By phone at 1-877-338-8002 toll free  
U.S. and Canada (604) 682-8112  
Email [vancouver\\_admissions@fdu.edu](mailto:vancouver_admissions@fdu.edu).

## Master of Administrative Science (M.A.S.)

The Master of Administrative Science (M.A.S.) graduate degree program, offered through the University's Anthony J. Petrocelli College of Continuing Studies School of Administrative Science, is a 30-credit program at Vancouver.

It utilizes primarily in-person (but also blended and online) instruction and is designed to develop and sharpen critical managerial and leadership skills among students who aspire to careers in which leadership skills are essential and who desire a degree program that offers specializations that are not commonly offered in more traditional programs. The curriculum ranges widely in scope and range of subject matter — with a core curriculum, six specializations and a capstone course.

The core and specialization courses bridge two competency areas: 1) administrative competencies and 2) analytical and decision-making competencies. Students must take a total of six courses (18 credits) in administrative competencies, three courses (9 credits) in analytical and decision-making competencies and one capstone course (MADS6612 Seminar in Strategic Management – Capstone). All core and capstone courses (18 credits) are delivered in person. Specialization courses may be delivered in person, via blended instruction or online.

Six specializations are offered to students in Vancouver — computer security and forensic administration, emergency management administration, global health and human services administration, global leadership and administration, global technology administration and human resources administration.

### Admission Requirements

Students will be admitted to the M.A.S. program on an application-deadline model, with an intake each term.

For admission, students must meet the following criteria:

1. Graduated from a four-year, regionally accredited undergraduate program.
2. Maintained a cumulative grade point ratio of at least 2.70 (out of 4.00) in their undergraduate studies (or the equivalent).
3. Submitted official transcripts of their undergraduate studies.

4. Completed an application form that can be found on the M.A.S. program website, including a 1000-word essay.

5. Demonstrate proficiency in communication of the English language (for international students whose first language is not English). This can be accomplished through one of the following:

- a. A TOEFL-IBT score of 79 or higher; TOEFL-CBT score of 213 or higher; TOEFL-PBT score of 550 or higher) or
- b. An IELTS overall band of 6.0 or higher.

6. Submitted two letters of recommendation (at least one from an academic reference) using a "structured" recommendation form provided by the University's graduate admissions office in Vancouver.

### Requirements for the Master of Administrative Science Degree, Vancouver Campus

#### Core Administrative Competency Courses (9 credits) Credits

MADS6600	Theory and Practice of Administration.....	3
MADS6602	Personnel Administration.....	3
MADS6604	Ethics and Public Values.....	3

#### Core Analytic and Decision-making Competency Courses (6 credits)

MADS6601	Financial Administration.....	3
MADS6610	Organizational Decision Making.....	3

#### Specialization Courses (12 credits)

Qualify for either Administrative or Analytical Decision-making Competencies  
MADS..... 12

#### Capstone Course (3 credits)

MADS6612	Seminar in Strategic Management – Capstone*.....	3
----------	--	---

\*Taken after completion of 24 credits.

# Overseas Studies

## Areas of Specialization

### Computer Security and Forensic Administration

Choose any four courses

	Credits
MADS6637	
Computer Systems Seizure and Examination.....	3
MADS6638	
Computer Security Administration.....	3
MADS6639	
The Forensic Expert.....	3
MADS6697	
Current Issues in Cyber Forensics.....	3
MADS6701	
Introduction to Computer Network Security.....	3
MADS6735	
Introduction to Countermeasures for Malware.....	3

### Emergency Management Administration

Choose any four courses

MADS6617	
Emergency Management and Safety Administration.....	3
MADS6633	
GIS and Emergency Administration.....	3
MADS6634	
Community Threat Assessment and Risk Analysis.....	3
MADS6636	
Global Preparedness for Catastrophic Emergencies.....	3
MADS6648	
Disaster Recovery and Organizational Continuity.....	3
MADS6715	
Special Topics: Global Terrorism and Emergency Management Preparation.....	3

### Global Health and Human Services Administration

Choose any four courses

MADS6628	
Building Strategic Partnerships.....	3
MADS6642	
Global Health and Human Services Systems.....	3
MADS6643	
Community Needs Assessment and Qualitative Analysis for Health and Human Services.....	3
MADS6644	
Law, Ethics and Policy for Health and Human Services.....	3

	Credits
MADS6645	
Marketing Social Change.....	3
MADS6718	
Special Topics: Lifestyle Modification for Leaders.....	3
MADS6753	
Special Topics: Elder Care: Legal Issues.....	3

### Global Leadership and Administration

Choose any four courses

MADS6606	
Administrative Leadership in Complex Organizations.....	3
MADS6609	
Productivity and Human Performance.....	3
MADS6615	
Global Leadership.....	3
MADS6618	
Leadership Plus.....	3
MADS6634	
Community Threat Assessment and Risk Analysis.....	3
MADS6653	
Global Citizenship Seminar.....	3
MADS6658	
Leadership: Global Advanced Scholarship and Practice.....	3
MADS6661	
Managing Organizational Change.....	3
MADS6675	
Optimum Leadership.....	3
MADS6706	
Collaborative Leadership.....	3
MADS6709	
Special Topics: Creativity, Change and 21st-century Leaders.....	3
MADS6717	
Special Topics: Leading Out of the Mainstream.....	3

### Global Technology Administration

Students are required to take the following two courses

MADS6605	
Principles of Information Systems.....	3
MADS6700	
Global Technology Project Management.....	3

Choose any two courses

MADS6618	
Leadership Plus.....	3
MADS6638	
Computer Security Administration.....	3
MADS6677	
Planning for Change in Information Technology.....	3

	Credits
MADS6696	
Building Effective Teams.....	3

### Human Resources Administration

Choose any four courses

MADS6608	
Organizational Communication and Conflict Resolution.....	3
MADS6609	
Productivity and Human Performance.....	3
MADS6620	
Human Resources Systems: Approaches and Techniques for the Modern Workplace.....	3
MADS6661	
Managing Organizational Change.....	3
MADS6662	
Customer Service for Public and Not-for-Profit Organizations.....	3

### Course Descriptions

See "Course Offerings," Administrative Science, pages 42–53.

## **Master of Science in Hospitality Management Studies (M.S.)**

The Master of Science degree in hospitality management studies, which consists of 33 credits, is structured to meet the educational needs of adult learners working as managers, entrepreneurs, educators or other professionals in the hospitality industry. It is designed to provide an educational alternative for working professionals with an academically rigorous, yet flexible, program of study that meets the requirements for a professional master's degree. For working adults seeking to upgrade their professional skills to enhance their careers, the degree program increases analytical, managerial and leadership competencies and provides graduates with the requisite preparation for career advancement in various hospitality-related professional areas.

This program is offered under the auspices of the International School of Hospitality and Tourism Management, Anthony J. Petrocelli College of Continuing Studies.

### **Admission Requirements**

Candidates for admission to the Master of Science in hospitality management studies degree program could be managers, business owners or educators or hold other professional positions related to the hospitality industry. The credentials required for admission as a matriculated student include the following:

1. A graduate application for admission and nonrefundable application fee.
2. A bachelor's degree from an accredited college or university with a minimum cumulative grade point ratio (GPR) of 2.75. (Applicants with a GPR of less than 2.75 may be admitted as pre-matriculated students on probation.)
3. Official transcripts from all colleges and universities previously attended.
4. English-language proficiency, both written and verbal.
5. Industry work experience preferred (applicants without industry work experience may be required to take foundation courses HRTM6100 Hospitality Operations Management and HRTM6200 Tourism Destination Management upon evaluation).

6. Personal statement of 400 words explaining reasons for pursuing hospitality graduate studies.

7. Personal interview with a graduate program adviser.

Additional classes may be required as a prerequisite for acceptance into the program. Applicants who are unable to provide official documents at the time of enrollment may register as nonmatriculated or nondegree students with the approval of a graduate faculty adviser.

To apply visit <http://view2.fdu.edu/admissions/graduate-admissions/> to submit your application (see <http://view2.fdu.edu/admissions/graduate-admissions/apply-now-for-graduate-admission-at-fdu/>).

### **For Additional Information**

For additional information and the course outlines, admission requirements and requirements for the degree go to pages 161–162.

### **Course Descriptions**

See “Course Offerings,” Hospitality Management Studies, pages 162–164.

# Faculty and Administration

---

## Faculty

### Sameh Abdelazim

*Assistant Professor of Electrical Engineering Technology and Electrical Engineering*  
B.E., M.E., Ph.D., The City University of New York

### Catherine Acosta

*Senior Lecturer of Psychology*  
B.A., Binghamton University, State University of New York; M.A., Teachers College, Columbia University

### Anthony J. Adrignolo, Jr., PE.

*Professor of Global Transportation Studies; Director of Global Transportation Studies Program; Director of Graduate Preprofessional Advising*  
B.S.I.E., Fairleigh Dickinson University; M.S.O.R., New York University

### Kathryn Ado

*Associate Professor of Education; Director of QUEST/B.A.–M.A.T.*  
B.A., Susquehanna University; M.A., Ed.D., Teachers College, Columbia University

### Joseph Agugliaro

*Associate Professor of Biology*  
B.S., The College of New Jersey; Ph.D., University of Arkansas

### Vahid Alizadeh

*Assistant Professor of Civil and Construction Engineering*  
B.S., Azad University, Iran; M.S., Shiraz University, Iran; Ph.D., University of Wisconsin-Milwaukee

### James G. Almeida

*Associate Professor of Entrepreneurship; Associate Dean for Graduate Programs, Silberman College of Business*  
B.S., M.M.S., University of Bombay, India; M.B.A., Northeast Louisiana University; Ph.D., University of South Carolina

### Fernando Alonso

*Senior Lecturer of Business; Director of Puerta al Futuro Program; Director of Latino Promise Program*  
B.A., Holy Cross University; J.D., Pennsylvania State University

### Petros Anastasopoulos

*Associate Professor of Economics*  
B.A., Graduate School of Business and Economics, Athens, Greece; M.A., Ph.D., New School University

### Gloria Anderle

*Associate Professor of Chemistry*  
B.S., Fairleigh Dickinson University; M.S., Ph.D., Rutgers, The State University of New Jersey

### Wladina Antoine

*Associate Professor of Mathematics*  
B.A., City College of New York, The City University of New York; M.S., Ed.D., Columbia University

### Stephen R. Armeli

*Professor of Psychology; Director of M.A. Program in General/Theoretical Psychology; Director of Undergraduate Studies, School of Psychology, Metropolitan Campus*  
B.B.A., Temple University; M.A., Ph.D., University of Delaware

### Daniel Aronoff

*Lecturer of Education; Interim Director of M.A. in Educational Leadership Program*  
B.A., William Paterson University; M.A.E., Seton Hall University

### Yelena Aronson

*Professor of Computer Graphics*  
B.S., Moscow Architecture, Russia; B.F.A., School of Visual Arts; M.F.A., Brooklyn College, The City University of New York

### Michael J. Avaltroni

*Associate Professor of Chemistry; Dean of School of Pharmacy and Health Sciences, Florham Campus*  
B.S., Fairleigh Dickinson University; M.A., Ph.D., Princeton University

### Marzieh Azarderakhsh

*Assistant Professor of Civil and Construction Engineering*  
B.Sc., Khaje Nasir Toosi University of Technology, Iran; M.S., Tarbiat Modarres University, Iran; M.Phil., Ph.D., The City University of New York

### Nicholas D.J. Baldwin

*Dean of Wroxton College; British Faculty of Wroxton College*  
B.A., The University of Hull, United Kingdom; Ph.D., The University of Exeter, United Kingdom

### Robin Barkley

*Professor of Film and Animation*  
B.F.A., M.A., William Paterson University

### Michele Barto

*Senior Lecturer of Communication*  
B.A., Fairleigh Dickinson University; M.A., Rowan University; Ed.D., Argosy University

### Svetlana Bashkova

*Assistant Professor of Chemistry*  
B.S., Riga Technical University, Latvia; M.S., Ph.D., City University of New York

### Bruno Battistoli

*Assistant Professor of Communication*  
B.A., State University of New York, New Paltz; M.A., Ph.D., Syracuse University

### Patricia Bazán-Figueras

*Professor of Foreign Languages and Literature*  
B.A., New York University; M.A., Instituto Internacional de Madrid, Spain; Ph.D., New York University

### Thomas J. Beam, C.P.A.

*Professor of Accounting; Director of University Core, Online and Off-campus Programs*  
B.S., Temple University; Ph.D., New York University

### Stephen Bear

*Assistant Professor of Management*  
B.A., Duke University; M.B.A., Harvard University; D.P.S., Pace University

### Scott J. Behson

*Associate Professor of Management*  
B.S., Cornell University; Ph.D., State University of New York at Albany

### Silvia Belen-Ramos

*Senior Lecturer of Spanish*  
B.A., University of Belgrano, Buenos Aires, Argentina

### Peter Benson

*Professor of English*  
B.A., Boston College; M.A., Ph.D., State University of New York at Stony Brook

### Alice Benzecry

*Associate Professor of Biological Sciences*  
B.A., Eckerd College; Ph.M., Ph.D., City University of New York

### Cynthia Bergstein

*Professor of Psychology*  
B.A., Duke University; M.A., Ph.D., State University of New York at Albany

### Kenneth Betz

*Senior Lecturer of Economics*  
B.S., M.B.A., M.A., Fairleigh Dickinson University

### Paula Blank

*Senior Lecturer of Mathematics*  
B.A., Queens College, The City University of New York; M.S., Columbia University

### Janet Boyd

*Associate Professor of English Composition; Associate Dean of University College: Arts • Sciences • Professional Studies, Metropolitan Campus; Director of School of the Humanities, Metropolitan Campus*  
B.A., Rutgers, The State University of New Jersey; M.A., M.Phil., Ph.D., Columbia University

### Mathieu Boyd

*Associate Professor of Literature*  
B.A., Princeton University; Ph.D., Harvard University

**Gary J. Bronson**

*Professor of Information Systems*  
B.S., M.S., Ph.D., Stevens Institute of  
Technology

**Donalee Brown**

*Professor of Psychology*  
B.S.Ed., Clarion University of Pennsylvania;  
M.Ed., Colorado State University; M.A.,  
Fairleigh Dickinson University; Ph.D., Seton  
Hall University

**Frank Brunetti**

*Professor of Law and Taxation*  
B.A., Rutgers, The State University of New  
Jersey; J.D., Duquesne University; LL.M., New  
York University

**Jaime Buenahora**

*Assistant Professor of Political Science*  
B.S., J.D., Pontificia Universidad Javariana,  
Colombia; M.A., Université de la Sorbonne,  
France

**Peter Burkholder**

*Professor of History*  
B.A., University of Minnesota; M.A., University  
of Toronto; M.A., Ph.D., University of  
Minnesota

**Donald Buzinkai**

*Lecturer of Accounting*  
B.S., King's College; M.B.A., University of  
Colorado Colorado Springs

**Karen Buzzard**

*Professor of Communication; Director of School  
of Art and Media Studies, Metropolitan Campus*  
B.A., Drury College; M.A., University of Iowa;  
Ph.D., University of Wisconsin-Madison

**Constance Bygrave**

*Vancouver Campus Faculty*  
*Assistant Professor of Administrative Science*  
*and Program Coordinator of Administrative*  
*Science and Individualized Studies Programs,*  
*Vancouver Campus*  
B.B.A., Simon Fraser University, Canada;  
M.B.A., Ph.D., Saint Mary's University, Canada

**William Byrne**

*Lecturer of Computer Science*  
B.S., M.S., New York University; M.E., Stevens  
Institute of Technology; M.S., Columbia  
University

**Sylvia Colon Cabassa**

*Clinical Assistant Professor of Nursing;*  
*Associate Director of Undergraduate Nursing*  
*Program*  
B.S., Manhattan College; A.A.S., B.S.N.,  
M.S.N., Felician College; M.P.S., The New  
School; D.N.P., Fairleigh Dickinson University

**Daniel J. Calcagnetti**

*Associate Professor of Psychology*  
B.S., Moravian College; M.S., Rensselaer  
Polytechnic Institute; M.A., Ph.D., Temple  
University

**Matthew Calderisi, C.PA.**

*Associate Professor of Accounting*  
B.B.A., Iona College; M.B.A., Iona College  
Graduate School of Business Administration

**Christopher Caldiero**

*Associate Professor of Communication Studies*  
B.A., M.A., Montclair State University; Ph.D.,  
Rutgers, The State University of New Jersey

**Christopher A. Capuano**

*Associate Professor of Psychology; University*  
*President*  
B.S., Purdue University; M.A., Hunter College,  
The City University of New York; M.Phil.,  
Ph.D., The City University of New York

**Antonia Carbone**

*Clinical Assistant Professor of Pharmacy*  
*Practice*  
Pharm.D., Rutgers, The State University of New  
Jersey

**Daniel Cassino**

*Associate Professor of Political Science*  
B.A., University of Arizona; M.A., Ph.D., State  
University of New York at Stony Brook

**Alexander Casti**

*Assistant Professor of Mathematics*  
B.S., M.S., M.Phil., Ph.D., Columbia University

**Domenick Celentano**

*Assistant Clinical Professor of Entrepreneurship*  
B.S., Montclair State University; M.B.A., St.  
Joseph's University

**Rebecca Chace**

*Assistant Professor of Creative Writing*  
B.F.A., M.F.A., New York University; M.F.A.,  
Bennington College

**Rajesh Chandrashekar**

*Professor of Marketing*  
B.E., Mangalore University, India; M.B.A.,  
Ph.D., Rutgers, The State University of  
New Jersey

**Zong Chen**

*Associate Professor of Computer Science*  
B.S.E.E., East China Institute of Technology;  
M.S.E.E., Southeast University, China; Ph.D.,  
New Jersey Institute of Technology

**Sibyl Cherian**

*Clinical Assistant Professor of Pharmacy*  
*Practice*  
Pharm.D., St. John's University

**Liza Chowdhury**

*Assistant Professor of Criminal Justice*  
B.S., M.A., Rutgers, The State University of  
New Jersey

**John Cinco**

*Assistant Professor of Computer Graphics*  
B.F.A., University of the Philippines; M.F.A.,  
School of Visual Arts

**Gerald Cleaves**

*Senior Lecturer of Management*  
B.S., Lehigh University; M.S., Princeton  
University; M.B.A., Harvard University

**Jennifer Cleveland**

*Logan Family Trust Lecturer in Psychology*  
B.A., Texas Wesleyan University; M.A., Ph.D.,  
University of North Texas

**George Cochrane**

*Associate Professor of Art*  
B.A., Sarah Lawrence College; B.F.A., Hunter  
College, The City University of New York

**Allen Cohen**

*Professor of Music*  
B.A., Ripon College; M.F.A., State University of  
New York at Purchase; D.M.A., The City  
University of New York

**Vicki L. Cohen**

*Professor of Education; Interim Dean of*  
*University College: Arts • Sciences •*  
*Professional Studies, Metropolitan Campus;*  
*Program Coordinator, Instructional Technology*  
*Certificate Program*  
B.A., State University of New York at Stony  
Brook; M.Ed., University of Florida; M.Ed.,  
Ed.D., Columbia University

**Maria Collado**

*Senior Lecturer of Business*  
B.A., M.A.S., Fairleigh Dickinson University;

**Deirdre M. Collier**

*Associate Professor of Accounting*  
B.A., College of William and Mary; M.B.A.,  
Columbia University

**Laureano Corces**

*Associate Professor of Spanish*  
B.B.A., Baruch College, The City University of  
New York; M.A., Ph.D., New York University

**Jeannie Couper**

*Assistant Professor of Nursing*  
B.S.N., Seton Hall University; M.S.N., Ed.D.,  
William Paterson University; Ph.D., Seton Hall  
University

**Everard (Jim) Cowan**

*Assistant Professor of Finance*  
B.B.A., Texas Tech University; Ph.D., University  
of Texas at Austin

**Tarika Daftary-Kapur**

*Associate Professor of Criminal Justice*  
B.S., Wilson College; M.A., University of  
Dayton; Ph.D., John Jay College of Criminal  
Justice, The City University of New York

**David Daniel**

*Associate Professor of Creative Writing*  
B.A., Vanderbilt University; M.A., The Johns  
Hopkins University; M.F.A., University of  
Virginia

# Faculty

---

**Gary Darden**

*Associate Professor of U.S. History; Chair of Social Sciences and History Department, Florham Campus*

B.A., Hamden-Sydney College; M.A., Southern Methodist University; Ph.D., Rutgers, The State University of New Jersey

**Francesca Degiuli**

*Assistant Professor of Sociology*

Laurea in Lettere e, University of Turin, Italy; M.A., Ph.D., University of California, Santa Barbara

**Yoshiko Demotta**

*Assistant Professor of Marketing*

B.A., Yokohama National University, Japan; M.B.A., Seattle University; Ph.D., The City University of New York

**Karen C. Denning**

*Professor of Finance; Chair of Economics, Finance and International Business Department*  
A.B., Cornell University; M.S.W., M.B.A., Ph.D., University of Pittsburgh

**Joseph A. Devine**

*Associate Professor of Administrative Science*

B.A., William Paterson University; M.S., New Jersey City University; M.A.S., Fairleigh Dickinson University; Ed.D., Seton Hall University

**Evangelos S. Djimopoulos**

*Professor of Economics*

B.A., Brandeis University; Ph.D., Columbia University

**Eamon Doherty**

*Professor of Administrative Science*

B.S., Marquette University; M.S., Montclair State University; Ph.D., University of Sunderland, England

**Gregory D. Dorata**

*Lecturer of Physics*

B.S., Stony Brook University, State University of New York; M.S., Ph.D., The College of William and Mary

**James Dougherty**

*Professor of Chemistry; Co-director, School of Natural Sciences, Metropolitan Campus*

B.S., Montclair State University; M.S., Seton Hall University; Ph.D., Rensselaer Polytechnic Institute

**Mary Kathryn Douglas**

*Senior Lecturer of College Writing; Director of College Writing*

B.A., Lebanon Valley College; M.A., William Paterson University

**Ronald Dumont**

*Professor of Psychology; Director of School of Psychology, Metropolitan Campus*

B.S., University of Massachusetts; M.Ed., Ed.D., Boston University

**Thomas Duncan**

*British Faculty of Wroxton College*

B.A., Trinity College, Dublin, Ireland; M.A., Johns Hopkins University

**Katherine Dunsmore**

*Associate Professor of Communication Studies*

B.A., University of Portland; M.A., University of Washington State, Seattle

**Anna Dushenkov**

*Assistant Professor of Pharmacy Practice*

Pharm.D., Rutgers, The State University of New Jersey

**Nicole East**

*Clinical Assistant Professor of Pharmacy*

*Practice*

Pharm.D., Northeastern University

**Novlette Edwards-Hammond**

*Clinical Instructor of Nursing*

B.S.N., William Paterson University; M.S.N., Fairleigh Dickinson University

**Hopemary Egbuonu**

*Clinical Instructor of Nursing*

B.S.N., M.S.N., Kean University

**Andrew Eisen**

*Professor of Psychology*

B.S., State University of New York at Oswego; M.A., Ph.D., State University of New York at Albany

**Linda Elfers-Mabli**

*Senior Lecturer of English*

B.A., Fairleigh Dickinson University; M.A., Montclair State University

**Nina Elk**

*Assistant Professor of Pharmacy Practice*

Pharm.D., Long Island University

**Mohammed Elshaer**

*Assistant Professor of Biochemistry*

B.S., Ph.D., Seton Hall University

**Mohamed El-Sherbeini**

*Lecturer of Biology*

B.S., Mansoura University, Egypt; Ph.D., University of London, United Kingdom

**Frederick Englander**

*Professor of Economics*

B.B.A., University of Massachusetts; M.A., Ph.D., Rutgers, The State University of New Jersey

**Burçak Ertimur**

*Associate Professor of Marketing*

B.S., M.S., Bilkent University, Turkey

**Andrew Fader**

*Senior Lecturer of College Writing*

B.S., University of Scranton; M.F.A., Fairleigh Dickinson University

**Kent Fairfield**

*Associate Professor of Management*

A.B., University of Illinois; M.B.A., Harvard University; M.A., Ph.D., Columbia University

**Sasha Falbaum**

*Clinical Assistant Professor of Pharmacy Practice*

Pharm.D., Long Island University

**Mark Farag**

*Associate Professor of Mathematics*

B.S., M.S., Stevens Institute of Technology; Ph.D., Texas A&M University

**Gerard Farias**

*Associate Professor of Management*

B.S., Ness Nadia College of Commerce, India; M.B.A., Xavier Labor Relations Institute, India; M.S., Ph.D., Texas Tech University

**Mary L. Farrell**

*Professor of Learning Disabilities Education;*

*Director of Dyslexia Studies and Regional Center for Learning Disabilities*

B.A., M.Ed., University of Rochester; Ph.D., M.Ed., Columbia University

**Alan Fask**

*Associate Professor of Statistics*

B.S., City College of New York, The City University of New York; M.S., Ph.D., New York University

**Elizabeth Feeley**

*Associate Professor of Physical Education;*

*Associate Dean of Student Services of Maxwell Becton College of Arts and Sciences; Chair of Health and Physical Education Department, Florham Campus*

B.S., Panzer College; M.S., Fairleigh Dickinson University

**F. Nigel Forman**

*British Faculty of Wroxton College*

B.A., New College, University of Oxford, United Kingdom; DIPL (Distinction), College of Europe, Bruges, Belgium; M.P.A., Harvard University; D.Phil., University of Sussex, United Kingdom

**Christine Foster**

*Lecturer of Communication Studies*

B.A., Ramapo College of New Jersey; M.A., William Paterson University

**Benjamin Freer**

*Associate Professor of Psychology*

B.S., Valparaiso University; M.A., Ph.D., University of Kentucky

**Zev Fried**

*Assistant Professor of Accounting*

B.S., Excelsior College; M.S., Ph.D., University of Houston

**Evelyn Garcia**

*Lecturer of Criminal Justice*

A.A.S., Suffolk Community College; B.A., M.P.A., John Jay College of Criminal Justice, City University of New York; Ed.D., Seton Hall University



## Ajay K. Garg

*Vancouver Campus Faculty*  
*Assistant Professor of Administrative Science*  
 B.S., National Institute of Technology, India; M.B.A., Kurukshetra University, India; Ph.D., Guru Gobind Singh Indraprastha University, India

## Charles Garrity

*British Faculty of Wroxton College*  
 B.A., M.A., Ph.D., University of Exeter, United Kingdom

## Carolyn Garzone-Johnson

*Lecturer of Nursing*  
 B.S.N., Felician College; M.S.N., William Paterson University

## Iris W. Gersh

*Assistant Professor of Hospitality Management*  
 B.S., Price University; M.B.A., Fordham University; Ed.D., Seton Hall University

## Nandita Ghosh

*Associate Professor of English*  
 B.A., M.A., M.Phil., Delhi University, India; Ph.D., Fordham University

## James Gifford

*Vancouver Campus Faculty*  
*Associate Professor of English; Director of University Core, Vancouver Campus; Director of Fairleigh Dickinson University Press*  
 B.A., Simon Fraser University, Canada; M.A., California State University, Dominguez Hills; Ph.D., University of Alberta, Canada

## Pamela Giordano

*Clinical Assistant Professor of Pharmacy Practice*  
 B.S., Pharm.D., University of Florida

## David Grand

*Associate Professor of Creative Writing*  
 B.A., University of California; M.A., New York University

## Erin Graulich

*Clinical Instructor of Nursing*  
 B.S., The College of New Jersey; B.S.N., M.S.N., Fairleigh Dickinson University

## Debbie Green

*Associate Professor of Psychology*  
 B.A., University of Alberta, Canada; M.A., Ph.D., Fordham University

## Robert Griffo

*Assistant Professor of Psychology*  
 B.A., Rutgers, The State University of New Jersey; M.A., Ph.D., Northeastern University

## Meaghan Guiney

*Clinical Assistant Professor of Psychology*  
 B.A., Bowdoin College; M.Ed., Ph.D., Fordham University

## Yong Guo

*Professor of Pharmaceutical Science; Director of Research and Graduate Studies, School of Pharmacy and Health Sciences, Florham Campus*  
 B.S., University of Science and Technology of China; M.B.A., Fairleigh Dickinson University; Ph.D., University at Buffalo, State University of New York

## Minerva Guttman

*Professor of Nursing; Director of the Henry P. Becton School of Nursing and Allied Health*  
 B.S., University of the Philippines; M.A., M.Ed., Ed.D., Columbia University

## Jayoung Han

*Assistant Professor of Pharmacy Practice*  
 B.S., Kyung Hee University, South Korea; M.S., Osaka University, Japan; Ph.D., University of Iowa

## Tiffany Hansbrough

*Associate Professor of Management*  
 B.A., University of Iowa; Ph.D., University at Buffalo, State University of New York

## Nicole Hansen

*Assistant Professor of Learning Disabilities*  
 B.S., M.A.T., The College of New Jersey

## Sara Reynolds Hardie

*Assistant Professor of Microbiology*  
 B.S., Ph.D., University of Maryland

## Joel I. Harmon

*Professor of Management*  
 B.A., City College of New York, The City University of New York; M.S., Rensselaer Polytechnic Institute; Ph.D., State University of New York at Albany

## Wendy Hart

*British Faculty of Wroxton College*  
 B.A., M.A., Oxford Brookes University, United Kingdom

## Kathleen Haspel

*Associate Professor of Communication Studies*  
 B.A., College of Staten Island, The City University of New York; M.A., The City University of New York; Ph.D., Rutgers, The State University of New Jersey

## Elliot Hoffman

*Associate Professor of Film and Animation*  
 B.A., Middlebury College; M.S., Boston University

## Stephen Hollis

*Assistant Professor of Theater; Director of Theater Arts Program, Florham Campus*  
 B.A., University of Grenoble, France

## Donald Hoover

*Senior Lecturer of Hospitality Management*  
 B.S., Indiana University; M.S., Fairleigh Dickinson University

## Robert Houle

*Associate Professor of History*  
 B.A., University of Minnesota, Morris; M.A., Ph.D., University of Wisconsin-Madison

## Jeffrey Hsu

*Associate Professor of Management Information Systems*  
 B.A., Rutgers, The State University of New Jersey; M.A., Montclair State University; M.S., New Jersey Institute of Technology; M.B.A., Ph.D., Rutgers, The State University of New Jersey

## Stanley Huddy

*Assistant Professor of Mathematics*  
 B.S., Montclair State University; M.S., Ph.D., Clarkson University

## Luz E. Huertas

*Lecturer of Latin American History and Spanish Language*  
 B.A., Universidad Nacional Mayor De San Marcos, Peru; M.A., Ph.D., Texas Christian University

## Eleanor Ann Huser

*Senior Lecturer of Marketing*  
 B.A., M.A., Duke University; M.B.A., Massachusetts Institute of Technology

## Francis Ingledew

*Professor of English and Comparative Literature*  
 B.A., Reading University, England; M.A., Ph.D., Washington University

## Irwin R. Isquith

*Professor of Biological Sciences*  
 B.S., Brooklyn College, City University of New York; M.S., Ph.D., New York University

## Otito Iwuchukwu

*Assistant Professor of Pharmaceutical Sciences*  
 B.Pharm., University of Ibadan, Nigeria; Ph.D., Temple University

## Vasudevan Janarthanan

*Vancouver Campus Faculty*  
*Associate Professor of Information Technology; Program Coordinator of Information Technology Program, Vancouver Campus*  
 B-Tech., Regional Engineering College, India; M.A.Sc., Ph.D., Concordia University, Canada

## Carol Jasko

*Senior Lecturer of Nursing*  
 B.S.N., Boston University; M.S.N., Rutgers, The State University of New Jersey

## Krista Jenkins

*Professor of Political Science; Executive Director of PublicMind™*  
 B.A., University of California-Los Angeles; Ph.D., Rutgers, The State University of New Jersey

# Faculty

---

**Fares Jnaid**

Assistant Professor of Civil Engineering and Civil Engineering Technology  
B.S., Al-Baath University, Syria; M.S., Ph.D., Syracuse University

**Gwen Jones**

Professor of Management; Chair of Management and Entrepreneurship Department  
B.S., University of Wisconsin; B.A., Gustavus Adolphus College; M.S., St. Mary's University; Ph.D., State University of New York at Albany

**Khyati Joshi**

Professor of Education  
B.A., M.S., Emory University; Ed.D., University of Massachusetts Amherst

**Paiboon Jungsuwadee**

Associate Professor of Pharmaceutical Science  
B.S., Chiang Mai University, Thailand; M.S., Mahidol University, Thailand; Ph.D., University of Vienna, Austria

**Julie Kalabalik**

Assistant Professor of Pharmacy Practice; Director of Pharmacy Practice, School of Pharmacy and Health Sciences, Florham Campus  
Pharm.D., St. John's College of Pharmacy and Health Sciences

**Steven Kapica**

Lecturer of English; Director of Writing, Metropolitan Campus  
B.A., M.A., Appalachian State University; Ph.D., Northeastern University

**Frank Barry Karger**

Assistant Professor of English  
B.A., C.W. Post College; M.A., Long Island University

**Carol F. Karpinski**

Professor of Education; Director of M.A.T. Program  
B.A., M.A., University of California; Ed.D., Rutgers, The State University of New Jersey

**Kyle Kattelmann**

Assistant Professor of Political Science  
B.A., M.A., Eastern Illinois University; Ph.D., University of Missouri

**Judith Kaufman**

Professor of Psychology; Director of Psy.D. and M.A. Programs in School Psychology, Metropolitan Campus; Director of University Core, Metropolitan Campus  
B.B.A., M.S., City College of New York, The City University of New York; Ph.D., Yeshiva University

**James Kenny**

Professor of Criminal Justice  
B.A., New Jersey City University; M.A., Montclair State University; Ph.D., Rutgers, The State University of New Jersey

**Adam Kessler**

Associate Professor of Economics  
B.A., City College of New York, The City University of New York; Ph.D., New York University

**Laila Khreisat**

Associate Professor of Computer Science; Chair of Mathematics, Computer Science and Physics Department, Florham Campus  
B.S., Yarmouk University, Jordan; M.S., Columbia University; M.S., Ph.D., The City University of New York

**Maureen Kieff**

Senior Lecturer of Quantitative Analysis  
B.A., St. Francis University; M.B.A., Fairleigh Dickinson University; M.A., Fordham University

**Joseph J. Kiernan**

Associate Professor of Economics and Finance  
B.S., Manhattan College; M.A., Ph.D., Fordham University

**Dongmi Park Kim**

Assistant Professor of Pharmacy Practice  
Pharm.D., St. John's University

**Jong-Chae Kim**

Assistant Professor of Administrative Science  
B.A., Korea University, Korea; M.S., Texas A&M University; Ph.D., Florida State University

**Yeoh Kim**

Senior Lecturer of Mathematics  
B.A., New York University; M.A., Ed.D., Columbia University

**Yongbeom Kim**

Professor of Information Systems  
B.S., M.S., Seoul National University, Korea; M.Phil., Ph.D., Stern School of Business, New York University

**Richard W. Kjetsaa**

Associate Professor of Economics and Finance  
B.S., Manhattan College; M.A., Ph.D., Fordham University

**Brian Knorr**

Assistant Professor of Physics  
B.S., Ramapo College of New Jersey; M.S., Ph.D., Lehigh University

**Erdal Kose**

Lecturer of Computer Science  
B.S., Gaziantep University, Turkey; M.A., Brooklyn College, The City University of New York; M.Phil., Ph.D., The City University of New York

**Ernest "Bub" Kovacs**

Associate Professor of Administrative Science  
B.A., Ed.D., Rutgers, The State University of New Jersey

**Isabella Krysa**

Vanocover Campus Faculty  
Assistant Professor of Management  
B.A., M.A., Ph.D., St. Mary's University, Canada

**Ish Kumar**

Associate Professor of Pharmaceutical Chemistry  
B.S., M.S., Panjab University, India; Ph.D., Institute of Microbial Technology, India

**Leon L. Kurland, C.P.A.**

Assistant Professor of Law  
B.S., Rutgers, The State University of New Jersey; J.D., Seton Hall University

**Juliana Lachenmeyer**

Professor of Psychology; Director of Ph.D. Program in Clinical Psychology  
B.A., Manhattanville College; M.A., University of North Carolina; Ph.D., Columbia University

**Christine Lam**

Clinical Assistant Professor of Pharmacy Practice  
Pharm.D., Temple University

**David Landau**

Professor of Film and Animation  
B.S., Ithaca College; M.F.A., Goddard College

**Sarah Latson**

Senior Lecturer of Journalism  
B.A., Colgate University; M.S., Columbia University

**Paulette M. Laubsch**

Professor of Administrative Science  
B.A., M.A., Rowan University; M.P.A., Rutgers, The State University of New Jersey; D.P.A., Nova Southeastern University

**Teresita Lawson**

Clinical Assistant Professor of Pharmacy Practice  
B.S.Ph., Long Island University

**Eun Jeong Lee**

Senior Lecturer of Business; Director of Korean Studies Program (MiraeRo)  
B.A., Binghamton University, State University of New York; M.B.A., Fairleigh Dickinson University

**Linda Lee-Davies**

British Faculty of Wroxton College  
M.B.A., University of Reading, United Kingdom; Ph.D., University of Chester, United Kingdom

**Bernard Lefkowitz**

Associate Professor of Electrical and Mechanical Engineering  
B.C.E., City College of New York, The City University of New York; M.S.C.E., Northwestern University; Ph.D., University of California, Los Angeles

**Jennifer Lehr**

Associate Professor of Communication Studies; Associate Dean of Maxwell Becton College of Arts and Sciences, Florham Campus  
B.A., M.A., William Paterson University; Ph.D., Rutgers, The State University of New Jersey

**Maria Leibfried**

*Clinical Assistant Professor of Pharmacy Practice*  
B.S., Pharm.D., Rutgers, The State University of New Jersey

**Stacie Lents**

*Associate Professor of Theater; Director of Acting, Florham Campus*  
B.A., Yale University; M.F.A., Rutgers, The State University of New Jersey

**Mihaela Leonida**

*Professor of Chemistry*  
M.S., Ph.D., Polytechnic University, Romania; Ph.D., Wesleyan University

**Gertrude Levine**

*Professor of Computer Science*  
B.A., Hunter College, The City University of New York; M.S., New York University; M.S., Fairleigh Dickinson University; Ph.D., Stevens Institute of Technology

**Melvin Lewis**

*Senior Lecturer of Engineering Technology*  
B.S.E.E., Fairleigh Dickinson University; M.S.E.E., Columbia University

**Suhua Li**

*Lecturer of Pharmaceutical Sciences*  
B.S., Hunan University of Traditional Chinese Medicine, China; M.S., Sichuan University, China; Ph.D., St. John's University

**Howard Libov**

*Professor of Film and Animation; Chair of Visual and Performing Arts Department, Florham Campus*  
B.F.A., New York University; M.A., American Film Institute; M.A., Georgia State University

**Sherry Liu**

*Senior Lecturer of Public Administration; Director of Chinese Studies Program (Cheng Gong)*  
B.A., People's University of China; M.P.A., Fairleigh Dickinson University

**Teodoro Llallire**

*Senior Lecturer of Business*  
B.A., M.A., S., Fairleigh Dickinson University

**Katharine Loeb**

*Professor of Psychology*  
B.A., Barnard College; M.S., Ph.D., Rutgers, The State University of New Jersey

**Cynthia Loewus**

*Clinical Assistant Professor of Musical Theater*  
B.A., Butler University

**Richard W. Lo Pinto**

*Professor of Biological Sciences*  
B.S., Iona College; M.S., Ph.D., Fordham University

**Tina LoPonte**

*Senior Lecturer of Communication*  
B.A., Fairleigh Dickinson University; M.A., The New School

**Robin A. Lubisco**

*Assistant Professor of Sports Administration*  
B.S., Rutgers, The State University of New Jersey; M.S., University of New Haven; Ph.D., University of New Mexico

**Jia Ma**

*Lecturer of Inorganic Chemistry*  
B.E., Dalian University of Technology, China; M.S., Ph.D., Ohio State University

**Phyllis MacIntyre**

*Vancouver Campus Faculty*  
*Assistant Professor of Administrative Science*  
B.I.E., Nova Scotia Technical College; Canada; M.B.A., University of British Columbia, Canada

**Rubi Mahato**

*Assistant Professor of Pharmaceutical Sciences*  
B.Pharm., Rajiv Gandhi University of Health Sciences, India; Ph.D., University of Missouri, Kansas City

**Odysseus Makridis**

*Associate Professor of Philosophy; Chair of Literature, Language, Writing and Philosophy Department, Florham Campus*  
B.A., Middlebury College; Ph.D., Brandeis University

**Zhiwei Mao**

*Associate Professor of Electrical Engineering*  
B.Sc., M.Sc., Beijing University of Post and Telecommunications, China; Ph.D., University of Victoria, Canada

**Pamela Mason**

*British Faculty of Wroxton College*  
B.A., M.A., Ph.D., University of Birmingham, United Kingdom

**Kurt Masten**

*Assistant Professor of Supply Chain Management*  
B.S., Pennsylvania State University; Ph.D., Drexel University

**Robert Mayans**

*Associate Professor of Mathematics*  
B.A., Yale University; M.A., Ph.D., University of Michigan

**Marion McClary**

*Professor of Biological Sciences; Co-director of School of Natural Sciences, Metropolitan Campus*  
B.S., Richard Stockton College of New Jersey; Ph.D., Duke University

**Shawn K. McCloud**

*Senior Lecturer of Hospitality/Tourism Management*  
B.A., Richard Stockton College of New Jersey; M.S., Fairleigh Dickinson University

**Adam J. McConkey**

*British Faculty of Wroxton College*  
B.A., Loughborough University, United Kingdom

**Eleanor McGlinchey**

*Assistant Professor of Clinical Child Psychology*  
B.A., Temple University; M.A., Ph.D., University of California, Berkeley

**Robert E. McGrath**

*Professor of Psychology*  
B.A., Hartwick College; M.A., Ph.D., Auburn University

**Bryan Meadows**

*Associate Professor of Education: Second Language Acquisition*  
B.A., San Francisco State University; M.Ed., University of Houston; Ph.D., University of Arizona

**Robert Medaska, Jr.**

*Senior Lecturer of Mathematics and Computer Science*  
B.S., M.B.A., Fairleigh Dickinson University

**Patricia Melloy**

*Associate Professor of Cell Biology*  
B.S., Loyola College of Maryland; M.S., Villanova University; Ph.D., University of Pennsylvania

**Leslie Meskin**

*Lecturer of Education*  
B.A., Temple University; Ed.M., Ed.D., Rutgers, The State University of New

**Mary Molloy**

*Clinical Assistant Professor of Nursing*  
B.S.N., Lyceum-Northwestern University, Philippines; M.S.N., The City University of New York

**Kalyan Mondal**

*Associate Professor of Electrical Engineering; Program Coordinator of Information Technology Program*  
B.Tech., M.Tech., University of Calcutta, India; Ph.D., University of California, Santa Barbara

**Teresa Oettinger Montani**

*Associate Professor of Learning Disabilities; Director of Learning Disabilities Program*  
B.A., Hunter College, The City University of New York; M.S., California State University; Ed.D., Rutgers, The State University of New Jersey

**Judy Moonelis**

*Professor of Visual and Performing Arts*  
B.F.A., Tyler School of Arts, Temple University; M.F.A., Alfred University

**Teresa Moore**

*Assistant Professor of Nursing*  
B.S.N., Dominican College; M.S.N., D.N.P., Fairleigh Dickinson University

# Faculty

---

**Angela Morris**

*British Faculty of Wroxton College*

B.A., The University of Hull, United Kingdom;  
M.A., The University of Essex, United Kingdom

**Kwon Gi Mun**

*Assistant Professor of Supply Chain Management*

B.A., Ajou University, South Korea; M.A., M.S.,  
University of Missouri

**Arthur Murphy**

*Professor of Chemistry*

B.S., Fairleigh Dickinson University; M.S.,  
Ph.D., Stevens Institute of Technology

**Edith Myers-Arnold**

*Associate Professor of Biological and Allied Health Sciences*

B.A., University of Delaware; Ph.D., University  
of Pennsylvania

**Javad Namazi**

*Professor of Mathematics*

B.S., Shiraz University, Iran; Ph.D., Indiana  
University

**Giridhar Nandikotkur**

*Assistant Professor of Physics*

M.Sc., Indian Institute of Technology, India;  
M.S., Iowa State University; Ph.D., University of  
Maryland

**Riad Nasser**

*Professor of Sociology*

B.A., Tel-Aviv University, Israel; M.A., Clark  
University; Ph.D., University of Maryland

**Chee K. Ng**

*Professor of Finance*

B.E., National University of Singapore; M.B.A.,  
Northern Arizona University; Ph.D., Arizona  
State University

**Richard Nisa**

*Assistant Professor of Geography*

B.A., Syracuse University; M.A., Ph.D., Rutgers,  
The State University of New Jersey

**Jordan Nowotny**

*Assistant Professor of Criminology*

B.A., Saginaw Valley State University; M.A.,  
Ph.D., University of Illinois at Chicago

**Osita Nwachukwu**

*Associate Professor of Management*

B.S.B.A., M.B.A., Xavier University; Ph.D.,  
University of Mississippi

**Cailin O'Connor Fitzpatrick**

*Lecturer of Biology*

B.S., M.S., Montclair State University

**Bamidele Ojo**

*Professor of Political Science*

B.S., M.S., University of Ife, Nigeria; LL.M.,  
University of Nottingham, England; M.Phil.,  
Ph.D., Institut d'Études Politiques, Bordeaux,  
France

**Brian Olechnowski**

*Assistant Professor of Biology*

B.S., Cornell University; Ph.D., Iowa State  
University

**Fernando Oliver**

*Professor of Business and Law*

B.B.A., University of Puerto Rico; M.A.,  
Glassboro State College; J.D., Brooklyn Law  
School

**Erika Oliveros**

*Senior Lecturer of Communications and English*

B.A., M.Ed., William Paterson University

**Janet O'Neil**

*Associate Professor of Computer Graphic Design*

B.A., Albany State University; M.A., William  
Paterson University; M.F.A., Marywood  
University

**Gerry O'Neill**

*British Faculty of Wroxton College*

B.A., University of Newcastle upon Tyre, United  
Kingdom

**Maria Irene Oujo**

*Senior Lecturer of Communications and English*

B.A., M.A., American University

**Camilla Overup**

*Assistant Professor of Psychology*

B.A., M.A., Marshall University; Ph.D.,  
University of Houston

**Ayse Elif Özdener**

*Clinical Assistant Professor of Pharmacy Practice*

Pharm.D., University of the Sciences,  
Philadelphia College of Pharmacy

**Chimezie N. Ozurumba**

*Associate Professor of Public Administration*

B.A., Columbia University; M.A., Ph.D.,  
Rutgers, The State University of New Jersey

**Susan Palmer**

*Lecturer of Nursing*

B.S.N., Dominican College; M.S., Rutgers, The  
State University of New Jersey

**Elizabeth Panuccio**

*Assistant Professor of Criminal Justice*

B.A., Drew University; M.A., Fordham  
University; M.A., Ph.D., Rutgers, The State  
University of New Jersey

**Francisco Parra**

*Senior Lecturer of Business; Assistant Director of Latino Promise Program*

B.A., M.A.S., Fairleigh Dickinson University

**Keith Parsons**

*British Faculty of Wroxton College*

B.A., University of Birmingham, United  
Kingdom

**Harald Parzer**

*Assistant Professor of Biology*

M.S., University of Vienna, Austria; Ph.D.,  
Indiana University

**Gloria Pastorino**

*Professor of Italian and French*

A.M., University of New Mexico; Ph.D.,  
Harvard University

**Shreya Patel**

*Associate Professor of Pharmacy Practice*

Pharm.D., Massachusetts College of Pharmacy  
and Health Sciences

**April Patrick**

*Lecturer of Literature; Director of University Honors Program, Florham Campus*

B.A., Schreiner University; M.A., University of  
Houston; Ph.D., Texas Christian University

**Bruce Peabody**

*Professor of Political Science; Director of Florham Institute for Lifelong Learning*

B.A., Wesleyan University; Ph.D., University  
of Texas

**Adam Pennoyer**

*Clinical Assistant Professor of Pharmacy Practice*

Pharm.D., Rutgers, The State University of New  
Jersey

**Parwin Penrice**

*Senior Lecturer of Mathematics*

B.S., Kabul University, Afghanistan; M.S.,  
Fairleigh Dickinson University

**Neena Philips**

*Professor of Biological Sciences*

B.S., Women Christian College, India; M.A.,  
Mount Holyoke College; Ph.D., Thomas  
Jefferson University

**William Phillips**

*Lecturer of Computer Science*

B.S., University of Washington; M.S., Seattle  
University; M.S., Southern Methodist  
University; Ph.D., New Jersey Institute of  
Technology

**Frank Pinto**

*Lecturer of College Writing*

B.A., George Washington University; M.F.A.,  
Fairleigh Dickinson University

**David Pogge**

*Clinical Lecturer of Psychology*

B.A., Creighton University; M.S., Ph.D.,  
University of New Mexico

**Robert Prentky**

*Professor of Psychology; Director of M.A. Program in Forensic Psychology, Metropolitan Campus*

B.A., San Jose State University; Ph.D.,  
Northwestern University

**Li Qin**

*Associate Professor of Information Systems*  
B.A., B.S., Tianjin University, China; M.B.A.,  
Ph.D., Rutgers, The State University of New  
Jersey

**Bethany Rabinowitz**

*Senior Lecturer of College Writing*  
B.A., Fairleigh Dickinson University; M.A.,  
University at Albany, State University of New  
York

**Gary Radford**

*Professor of Communication Studies; Chair of  
Communication Studies Department, Florham  
Campus*  
B.A., Sheffield City Polytechnic, Sheffield,  
England; M.S., Southern Illinois University  
at Carbondale; Ph.D., Rutgers, The State  
University of New Jersey

**Alevoor Rao**

*Assistant Professor of Computer Engineering  
and Computer Science*  
B.Tech., Indian Institute of Technology, India;  
Ph.D., University of Michigan

**Samuel J. Raphaelides**

*Professor of Political Science and History;  
Director of School of Criminal Justice, Political  
Science and International Studies, Metropolitan  
Campus; Director of Global Scholars Program,  
Metropolitan Campus*  
B.A., New Jersey City University; M.A., Seton  
Hall University; M.A., Ph.D., New School  
University

**Chris Rasmussen**

*Associate Professor of History*  
B.A., Grinnell College; M.A., Ph.D., Rutgers,  
The State University of New Jersey

**Louis Ray**

*Associate Professor of Education*  
B.A., St. Lawrence University; M.F.A.,  
Columbia University; Ph.D., New York  
University

**Janet Regan-Livingston**

*Clinical Assistant Professor of Nursing*  
A.D.N., Bergen Community College; B.S.,  
Montclair State University; M.S.N., Rutgers,  
The State University of New Jersey

**Evelyn Reid**

*Senior Lecturer of College Writing*  
B.A., Rutgers, The State University of New  
Jersey; M.A., City College of New York

**Jill Reid**

*Senior Lecturer of Marketing*  
B.A., University of Salford, United Kingdom;  
M.B.A., Aston University Business School,  
United Kingdom

**Gloria B. Reinish**

*Professor of Electrical Engineering*  
B.S.E.E., M.S.E.E., Eng.Sc.D., Columbia  
University

**Aixa Ritz**

*Associate Professor of Hotel, Restaurant and  
Tourism Management*  
B.S., Dominican College; M.S., Iona College;  
Ed.D., Columbia University

**Anastasia Rivkin**

*Professor of Pharmacy Practice; Assistant Dean  
for Faculty of School of Pharmacy and Health  
Sciences, Florham Campus*  
B.S., Pharm.D., North Dakota State University

**Marie Roberts**

*Professor of Fine Arts*  
B.A., Brooklyn College, The City University of  
New York; M.F.A., Queens College, The City  
University of New York

**William J. Roberts**

*Professor of Social Sciences; Director of Public  
Administration Institute*  
B.A., Fairleigh Dickinson University; M.A.,  
Fordham University; M.Phil., Ph.D., The City  
University of New York

**Jadihal Rodriguez**

*Senior Lecturer of Business*  
B.A., University of Central Florida; J.D., Barry  
University

**David M. Rosen**

*Professor of Anthropology*  
B.A., Hofstra University; Ph.D., University  
of Illinois

**Andrew J. Rosman**

*Professor of Accounting; Dean of Silberman  
College of Business*  
B.S., Hofstra University; Ph.D., University of  
North Carolina

**Barbara Rossi**

*Lecturer of Pharmacy Practice; Assistant Dean  
for Experiential Education of School of  
Pharmacy and Health Sciences, Florham  
Campus*  
B.S.Ph., St. John's University; M.A., Montclair  
State University

**Marycarol Rossignol**

*Associate Professor of Nursing; Associate  
Director for Florham Programs, Henry P. Becton  
School of Nursing and Allied Health*  
B.S.N., University of Illinois; M.S.N., University  
of Maryland; Ph.D., Widener University

**Banibrata Roy**

*Lecturer of Pharmacy Practice; Assessment  
Specialist of School of Pharmacy and Health  
Sciences, Florham Campus*  
B.S., M.S., The Maharaja Sayajirao University of  
Baroda, India; M.Phil., Ph.D., Sardar Patel  
University, India

**Lillian Rozaklis**

*Lecturer of Pharmacy Practice; Assessment  
Specialist of School of Pharmacy and Health  
Sciences, Florham Campus*  
B.S., State University of New York at Geneseo;  
M.S., Syracuse University; Ph.D., Drexel  
University

**Hannah Rozen**

*Associate Professor of Accounting*  
B.A., M.A., Cleveland State University; Ph.D.,  
Hebrew University, Israel

**Marilyn Rubin**

*Lecturer of Allied Health; Associate Director of  
Allied Health Program, Metropolitan Campus*  
B.S., Montclair State University; Ed.M.,  
Rutgers, The State University of New Jersey

**Oleksandr Rudniy**

*Assistant Professor of Computer Science*  
B.S., M.S., Kharkiv National University of  
Radioelectronics, Ukraine; Ph.D., New Jersey  
Institute of Technology

**Janice Rummell**

*Assistant Professor of Accounting*  
B.A., M.B.A., University of Pittsburgh; M.A., St.  
Francis University; D.B.A., Kennesaw State  
University

**Meghan Sacks**

*Associate Professor of Criminology; Director of  
B.A. in Criminology Program, Florham Campus*  
B.A., University of Rhode Island; M.A., Ph.D.,  
John Jay College, The City University of New  
York

**Edward J. Salaski**

*Assistant Professor of Chemistry*  
B.S., Michigan State University; Ph.D.,  
Massachusetts Institute of Technology

**James Salierno**

*Associate Professor of Biological and Allied  
Health Sciences; Chair of Biological and Allied  
Health Sciences Department, Florham Campus*  
B.S., University of Rhode Island; M.S., Ph.D.,  
University of Maryland

**Kenneth Sammond**

*Senior Lecturer of College Writing*  
B.A., M.A., Rutgers, The State University of  
New Jersey

**Chadwin Sandifer**

*Lecturer of Pharmacy Practice; Assistant Dean  
for Student Affairs and Programmatic  
Effectiveness, School of Pharmacy and Health  
Sciences, Florham Campus*  
B.S., University of Central Arkansas; M.S.,  
University of Central Missouri; Ed.D., St. John's  
University

**Arthur Sanzari**

*Clinical Instructor of Nursing*  
B.S.N., M.S.N., Fairleigh Dickinson University

# Faculty

---

**John Schiemann**

*Professor of Political Science*  
B.A., University of California, Berkeley; M.A., Ph.D., Columbia University

**Jonathan Schiff, C.M.A., C.I.A.**

*Professor of Accounting*  
B.A., M.S., Ph.D., New York University

**William "Pat" Schuber**

*Assistant Professor of Administrative Science*  
B.A., J.D., Fordham University

**Arthur Schultzer**

*Lecturer of Law*  
B.A., Fairleigh Dickinson University; J.D., Seton Hall University

**Jason A. Scorza**

*Professor of Philosophy and Political Science; Vice Provost for Academic and International Affairs*  
B.A., Rutgers, The State University of New Jersey; M.A., Ph.D., Princeton University

**Dennis J. Scotti**

*Professor of Management; Alfred E. Driscoll Chair in Health Care and Life Sciences*  
B.S., State University of New York at Stony Brook; M.B.A., Adelphi University; M.S., Ph.D., Temple University

**Mohammad Sedaghat**

*Senior Lecturer of Operations Management*  
B.A., College of Math Communications, Iran; M.S., Ph.D., Polytechnic University of New York

**Ralph Selig**

*Professor of Mathematics and Computer Science*  
B.A., Hunter College, The City University of New York; M.A., Ed.D., Columbia University

**Carrie Shanafelt**

*Assistant Professor of English*  
B.A., M.A., Case Western University; Ph.D., City University of New York

**Kiron Sharma**

*Professor of Mathematics, Computer Science and Physics; Director of University Core, Florham Campus*  
B.S., University of Delhi, India; M.Sc., Indian Institute of Technology; M.Tech./M.Phil., Jawaharlal Nehru University, New Delhi, India; Ph.D., The City University of New York

**Katherine Shirley**

*Assistant Professor of Counseling Education*  
B.A., M.A., Ed.S., Rider University; Ph.D., Old Dominion University

**Amy Shlosberg**

*Assistant Professor of Criminology*  
B.S., Rutgers, The State University of New Jersey; M.A., John Jay College of Criminal Justice, The City University of New York

**Howard Silver, P.E.**

*Professor of Electrical Engineering; Deputy Director of Engineering, Engineering Technology and Information Technology*  
B.E.E., City College of New York, The City University of New York; M.E.E., Ph.D., New York University

**Miriam Singer**

*Associate Professor of Education; Interim Director of Peter Sammartino School of Education*  
B.S., Michigan State University; M.A., Eastern Michigan University; Ed.D., Seton Hall University

**Gurjot Singh**

*Assistant Professor of Computer Science*  
B.Tech., Punjab Technical University, India; M.S., Ph.D., Mississippi State University

**Neelu Sinha**

*Professor of Computer Science*  
B.E., University of Bombay, India; M.S., Ph.D., Iowa State University

**John H. Skarbnik, C.P.A.**

*Professor of Taxation*  
B.A., J.D., Rutgers, The State University of New Jersey; LL.M., New York University

**Marek Slaby**

*Associate Professor of Mathematics*  
M.S., University of Wroclaw, Poland; Ph.D., Case Western Reserve University

**Malgorzata Slugocki**

*Assistant Professor of Pharmacy Practice*  
Pharm.D., Long Island University

**Gordon G. Sollars**

*Associate Professor of Management*  
B.A., Pomona College; M.B.A., The Wharton School, University of Pennsylvania; Ph.D., University of Virginia; J.D., Rutgers, The State University of New Jersey

**Thomas J. Stavola**

*Professor of English*  
B.A., M.A., Ph.D., Fordham University

**René Steinke**

*Professor of English; Director of M.F.A. in Creative Writing Program, Florham Campus*  
B.A., Valparaiso University; M.F.A., University of Virginia; Ph.D., University of Wisconsin-Milwaukee

**Joseph Stout**

*Lecturer of Biological Sciences*  
B.A., Sarah Lawrence College; M.A., New School University; Ph.D., Rutgers, The State University of New Jersey

**Jesse Sullivan**

*Clinical Assistant Professor of Pharmacy Practice*  
Pharm.D., St. John's University College of Pharmacy and Allied Health Professions

**Zhenbin Sun**

*Professor of Communication*  
B.A., Beijing Broadcasting Institute, China; Ph.D., New York University

**Thomas B. Swanzey**

*Professor of English; Associate Dean of Anthony J. Petrocelli College of Continuing Studies*  
B.A., St. Francis College; M.A., Ph.D., Rutgers, The State University of New Jersey

**Ethné Swartz**

*Associate Professor of Entrepreneurship*  
B.A., University of Cape Town, South Africa; B.A., Rhodes University, South Africa; M.S., Manchester Metropolitan University, United Kingdom; Ph.D., University of Manchester, United Kingdom

**Lotfi Tadj**

*Vancouver Campus Faculty*  
*Assistant Professor of Decision Science; Program Coordinator for Business Administration Program*  
B.S., Université des Sciences et de la Technologie Houari Boumediène, Algeria; M.S., Carnegie Mellon University; Ph.D., Florida Institute of Technology

**Alfredo C. Tan**

*Professor of Electrical Engineering; Director of Lee Gildart and Oswald Haase School of Computer Sciences and Engineering, Metropolitan Campus*  
B.S.M.E., B.S.E.E., Adamson University, Philippines; M.E., Ph.D., Stevens Institute of Technology

**Xin Tan**

*Associate Professor of Management Information Systems*  
B.E., Shanghai Jiao University, China; M.B.A., Miami University; Ph.D., University of Nebraska-Lincoln

**Yongming Tang**

*Associate Professor of Computer Science and Information Systems*  
B.S., M.S., Northwest University, China; Ph.D., New Jersey Institute of Technology

**Anthony Tasso**

*Associate Professor of Psychology; Chair of Psychology and Counseling Department, Florham Campus*  
A.S., Bergen Community College; B.A., Montclair State University; M.A., Fairleigh Dickinson University; Ph.D., University of Tennessee

**Yuliana Teper**

*Senior Lecturer of Mathematics*  
B.A., University of Haifa, Israel; M.S., Brooklyn College, The City University of New York

## Alexey Teslja

*Associate Professor of Chemistry; Chair of Chemistry and Pharmaceutical Science Department, Florham Campus*  
B.S., Rutgers, The State University of New Jersey; M.A., Dartmouth College; Ph.D., The Johns Hopkins University

## Lana Tiersky

*Associate Professor of Psychology*  
B.A., New York University; M.A., Ph.D., California School of Professional Psychology

## William Toms

*Assistant Professor of Administrative Science*  
B.S., The College of New Jersey; M.A., Seton Hall University; Ed.D., George Washington University

## Joseph Torney

*Assistant Professor of Hospitality and Tourism Management; Director of International School of Hospitality and Tourism Management*  
B.B.A., Pace University; M.S., Fairleigh Dickinson University; D.H.T.M., The Hong Kong Polytechnic University, China

## Kirsten Tripodi

*Assistant Professor of Hospitality Management*  
B.A., Rutgers, The State University of New Jersey; M.A., Cornell University

## Sorin A. Tuluca

*Professor of Finance*  
M.Ae., Polytechnic Institute of Bucharest, Romania; M.B.A., D.B.A., Cleveland State University

## Patricia Ukaigwe

*Clinical Assistant Professor of Nursing*  
B.S.N., New Jersey City University; M.S.N., Kean University

## Lloyd Ultan

*Professor of History*  
B.A., Hunter College, The City University of New York; M.A., Columbia University

## Georgeta Vaidean

*Professor of Pharmacy Practice*  
B.S., Aurel Vlaicu College, Romania; M.P.H., University of South Carolina; M.D., University of Medicine and Pharmacy Cluj-Napoca, Romania; Ph.D., University of North Carolina, Chapel Hill

## Sandeep Vansal

*Associate Professor of Pharmaceutical Science; Director of Pharmaceutical Science, School of Pharmacy and Health Sciences, Florham Campus*  
B.Pharm., Addis Ababa University, Ethiopia; Ph.D., University of Mississippi

## Maryelena Vargas

*Associate Professor of Nursing; Coordinator of D.N.P. Program*  
B.S.N., Fairleigh Dickinson University; D.N.Sc., Columbia University

## Antonio Velásquez

*Assistant Professor of Spanish*  
B.A., University of Waterloo, Canada; M.A., Ph.D., University of Toronto, Canada

## Kathleen Viezel

*Associate Professor of Psychology*  
B.A., Temple University; M.A., Ph.D., Ball State University

## Vincent S. Viglione

*Clinical Assistant Professor of Counselor Education*  
B.A., Queens College, The City University of New York; M.A., Ph.D., Montclair State University

## Robert Vodde

*Associate Professor of Criminal Justice; Metropolitan Campus Executive*  
B.S., William Paterson University; M.A., John Jay College of Criminal Justice, The City University of New York; M.P.A., Fairleigh Dickinson University; Ph.D., University of Leicester, United Kingdom

## Julia Wagner

*Lecturer in Academic Writing*  
B.A., University of Cincinnati; M.F.A., The City University of New York, Brooklyn College

## Richard C. Wagner

*Professor of Mathematics*  
B.A., Rutgers, The State University of New Jersey; M.S., Ph.D., University of Chicago

## Lina Sanchez Wall

*Assistant Professor of Mathematics Education*  
B.A., Ed.D., Rutgers, The State University of New Jersey

## Andre Wallace

*Assistant Professor of Biological Sciences and Genetics*  
B.S., Medgar Evers College, The City University of New York; Ph.D., Pennsylvania State University

## Zhaobo Wang

*Professor of Operations Management; Chair of Marketing, Information Systems and Decision Sciences Department*  
B.S., Northern University of Technology; M.S., Northeast University of Technology; Ph.D., Rutgers, The State University of New Jersey

## M. Patricia Warunek

*Professor of Biological Sciences; Director of University Honors Program, Metropolitan Campus*  
B.A., Notre Dame College; M.S., Ph.D., Fordham University

## Geoffrey S. Weinman

*Professor of English; Dean of Maxwell Becton College of Arts and Sciences, Florham Campus*  
B.A., Hunter College, The City University of New York; M.A., Ph.D., Johns Hopkins University

## Diane Keyser Wentworth

*Professor of Psychology*  
B.A., Wake Forest University; M.A., Ph.D., Wayne State University

## Ron West, C.P.A., C.F.P.<sup>®</sup>

*Associate Professor of Law and Taxation; Director of Tax Program; Chair of Accounting, Taxation and Law Department*  
B.S., Brooklyn College, The City University of New York; J.D., Vanderbilt University; LL.M., New York University School of Law

## Randall Westbrook

*Lecturer of Education*  
B.A., Livingston College; Ed.M., Ed.D., Rutgers, The State University of New Jersey

## Ligia Westrich

*Assistant Professor of Pharmaceutical Science; Director of Assessment, School of Pharmacy and Health Sciences, Florham Campus*  
B.S., Rutgers, The State University of New Jersey; Ph.D., University of Medicine and Dentistry of New Jersey

## Gillian Wigglesworth

*British Faculty of Wroxtton College*  
B.A., Ph.D., University of London, United Kingdom

## Laurence Winters

*Senior Lecturer of Interdisciplinary Studies; Director of Interdisciplinary Studies Program*  
B.A., Boston University; M.A., McGill University, Canada; Ph.D., New School University

## J. Daniel Wischnevsky

*Associate Professor of Management*  
Licenciatura in Psychology, Universidad de Buenos Aires, Argentina; M.B.A., Ph.D., Rutgers, The State University of New Jersey

## Peter J. Woolley

*Professor of Political Science; Vice President for Strategic Initiatives; Founding Director of School of Public and Global Affairs*  
A.B., St. Joseph's University; M.A., Ph.D., University of Pittsburgh

## Yan Yan

*Assistant Professor of Accounting*  
B.S., Southwestern University of Finance and Economics, China; M.B.A., Ph.D., Baruch College, The City University of New York

## Xiaohui Yang

*Assistant Professor of Finance*  
B.S., Central Southern University, China; M.S., George Mason University; Ph.D., University of Massachusetts Amherst

## K. Paul Yoon

*Professor of Operations Management*  
B.S., Seoul National University, Korea; M.S., Ph.D., Kansas State University

# Faculty

---

## **Rasheda Young**

*Lecturer of College Writing*  
B.A., Hampton University; M.A., The City College of New York

## **Boas Yu**

*Associate Professor of Nursing; Associate Director of Graduate Nursing Programs*  
B.A., Rutgers, The State University of New Jersey; B.S.N., Fairleigh Dickinson University; M.S.N., The College of New Jersey; Ed.D., Teachers College, Columbia University

## **Hong Zhao**

*Associate Professor of Electrical Engineering*  
B.S., Taiyuan University of Technology, China; M.S., Xi'an Jiaotong University, China; Ph.D., New Jersey Institute of Technology

## **Jamie Zibulsky**

*Associate Professor of Psychology; Associate Director of Teaching Programs, School of Psychology, Metropolitan Campus*  
B.A., Wesleyan University; M.A., Ph.D., University of California, Berkeley

## **William Zimmerle**

*Assistant Professor of Humanities*  
B.A., Fairleigh Dickinson University; M.Div., Harvard University; Ph.D., University of Pennsylvania

## **Vladimir Zwass**

*Distinguished Professor of Computer Science and Management Information Systems; Deputy Director of Computer Science, Management Information Systems, E-commerce and Mathematics*  
M.S., Moscow Institute of Energetics, Russia; Ph.D., Columbia University

## **Burton Zwick**

*Senior Lecturer of Finance*  
B.A., M.B.A., Harvard University; M.S., Ph.D., Carnegie Mellon University

## **Emeriti Faculty**

### **Wesley O. Alven**

*Professor Emeritus of Psychology*

### **Virote Angkatavanich**

*Professor Emeritus of Economics and Finance*

### **Wallace Arthur**

*Professor Emeritus of Electrical Engineering and Physics*

### **Ernest Baden**

*Professor Emeritus of Pathology*

### **Eileen Costello Balassi**

*Professor Emerita of Management*

### **Raymond Baylouny**

*Professor Emeritus of Chemistry*

### **Mary H. Beaven**

*Professor Emerita of Management*

### **John Becker**

*Professor Emeritus of English*

### **Max Bender**

*Professor Emeritus of Chemistry*

### **Donald Bernstein**

*Professor Emeritus of Psychology*

### **J. Warren Blaker**

*Professor Emeritus of Physics*

### **Paul Boyer**

*Professor Emeritus of Chemistry*

### **Lev Braun**

*Professor Emeritus of History and Political Science*

### **Richard D. Bronson**

*Professor Emeritus of Mathematics and Computer Science*

### **Helen G. Brudner**

*Professor Emerita of History and Political Science*

### **Nicholas Calas**

*Professor Emeritus of Art*

### **Ronald Carlin**

*Professor Emeritus of Biology*

### **Peter Cassimatis**

*Professor Emeritus of Economics*

### **Richard Castellana**

*Professor Emeritus of Humanities and Fine Arts*

### **Maria Castellani**

*Professor Emerita of Mathematics*

### **Edna Charles**

*Professor Emerita of English*

### **Robert Chell**

*Professor Emeritus of Psychology*

### **Jean Christie**

*Professor Emerita of History*

### **A. William Clark**

*Professor Emeritus of Fine Arts*

### **Edward Cook**

*Professor Emeritus of Philosophy*

### **Mary Cross**

*Professor Emerita of English*

### **Walter Cummins**

*Professor Emeritus of English*

### **Christopher Devine**

*Professor Emeritus of Chemistry and Philosophy*

### **Bernard F. Dick**

*Professor Emeritus of English and Communication*

### **Teresa Donati**

*Professor Emerita of Sociology*

### **Chester Dugdale**

*Professor Emeritus of Biological Sciences*

### **Gloria Dyer**

*Professor Emerita of Biology*

### **Duane Edwards**

*Professor Emeritus of English (posthumously)*

### **Hussein Elkholy**

*Professor Emeritus of Physics*

### **Peter Falley**

*Professor Emeritus of Mathematics*

### **Faramarz S. Fatemi**

*Professor Emeritus of History and Political Science*

### **John Fisher**

*Professor Emeritus of Languages*

### **Harvey Flaxman**

*Professor Emeritus of Theater and Performing Arts*

### **Margaret S. Gibbs**

*Professor Emerita of Psychology*

### **Stephen Gittleson**

*Professor Emeritus of Biological Sciences*

### **Kalman Goldstein**

*Professor Emeritus of History*

### **Marvin Goldstein**

*Professor Emeritus of Art*

### **Lois Gordon**

*University Distinguished Professor Emerita of English*

### **Louis Gordon**

*Professor Emeritus of Music*

### **Martin Green**

*Professor Emeritus of English*

### **Robert L. Greenfield**

*Professor Emeritus of Economics and Finance*

### **Leonard Grob**

*Professor Emeritus of Philosophy*

### **David Hanson**

*Professor Emeritus of Art*

### **Louis Hsu**

*Professor Emeritus of Psychology*



**Ivan Huber**

*Professor Emeritus of Biology*

**Murray Hundert**

*Professor Emeritus of Chemistry*

**Harry Keyishian**

*Professor Emeritus of English*

**Selwyn Kittredge**

*Professor Emeritus of English (posthumously)*

**Sherwin Klein**

*Professor Emeritus of Philosophy*

**Richard Kruse**

*Professor Emeritus of Social Sciences*

**James R. Kuehl**

*Professor Emeritus of Philosophy  
(posthumously)*

**Frank Lang**

*Professor Emeritus of Chemistry*

**Kathe B. Leidke**

*Associate Professor Emerita of Biological  
Sciences*

**Sister Margherita Marchione**

*Professor Emerita of Languages*

**Neil Massoth**

*Professor Emeritus of Psychology*

**Janevive Mechanic**

*Professor Emerita of Philosophy*

**Frederick J. Meystre, Jr.**

*Professor Emeritus of Marketing*

**Fred Midlidge**

*Professor Emeritus of Biology*

**Karl Dieter Moeller**

*Professor Emeritus of Physics*

**Govindasami (Naadi) Naadimuthu**

*Professor Emeritus of Operations Management  
and Decision Sciences*

**Benjamin Nelson**

*Professor Emeritus of English*

**Martin Novemsky**

*Professor Emeritus of Theater*

**Richard Panicucci**

*Professor Emeritus of Quantitative Analysis*

**Herbert Potash**

*Professor Emeritus of Psychology*

**Kent Redmond**

*Professor Emeritus of History*

**Stephen J. Rosen**

*Professor Emeritus of Economics*

**Lee Rosenthal**

*Professor Emeritus of Engineering Technology*

**Morris Rothblatt**

*Professor Emeritus of Political Science*

**John Santelli**

*Professor Emeritus of Psychology*

**Anjali Saxena**

*Professor Emerita of Biological Sciences*

**Charles Schaefer**

*Professor Emeritus of Psychology*

**Gervasia M. Schreckenberg**

*Professor Emerita of Biological Sciences*

**Janet Sigal**

*Professor Emerita of Psychology*

**Harriet Spagnoli**

*Professor Emerita of Biological Sciences*

**Ronald S. Strange**

*Professor Emeritus of Chemistry*

**Emil Szebenyi**

*Professor Emeritus of Biological Sciences*

**Margaret C. Tavolga**

*Professor Emerita of Biological Sciences*

**Daniel Twomey**

*Professor Emeritus of Management*

**Rosemary Twomey**

*Professor Emerita of Law*

**Peter Walsh**

*Professor Emeritus of Electrical Engineering*

**Judith A. Waters**

*Professor Emerita of Psychology*

**Sol Weider**

*Professor Emeritus of Physics*

**Harvey Winters**

*Professor Emeritus of Biological Studies*

**William Zander**

*Professor Emeritus of English*

# Administration

## Administration

### Board of Trustees

**Patrick J. Zenner\***

*Chair*

**Anthony J. Vespa\***

*Vice Chair*

**Anthony P. Ambrosio\***

**Brenda Blackmon\***

**Stephen F. Bozer\***

**Cheryl K. Beebe\***

**Christopher A. Capuano**

**Michael J. Clarke\***

**Rosemary Ruggiero Español\***

**Angeliki Frangou\***

**Franklyn G. Jenifer**

**Stewart Krentzman\***

**Daniel C. Lewis\***

**Winston I. Lowe\***

**Donna DelPrete Marki\***

**Michael D. Moss\***

**Ralph Mucerino**

**Gregory H. Olsen\***

**Antoinette C. Petrocelli**

**Robert J. Pures\***

**Howard W. Robin\***

**David M. Rosen**

**Robert T. Saltarelli**

**Paul C. Santucci\***

**Robert A. Stewart\***

**Marta L. Tellado\***

**S. "Skippy" Weinstein\***

*Trustees Emeriti*

**Elinor J. Ferdon**

**Edward L. Hennessy, Jr.\***

**Vincent J. Naimoli\***

**George J. Sella, Jr.**

**Mary Kay Mastronardy Stratis\***

### University Offices

#### Office of the President

**Christopher A. Capuano, Ph.D.**

*President*

**Jeanne Mazzolla**

*Assistant to the President*

**Peter J. Woolley, Ph.D.**

*Vice President for Strategic Initiatives*

**Barbara Dawson**

*Assistant to the Vice President for Strategic Initiatives*

**Matthew J. Dikovics, B.A.**

*Director of Government and Community Affairs*

**Krista Jenkins, Ph.D.**

*Executive Director of PublicMind™*

#### Office of General Counsel

**John M. Codd, J.D.**

*General Counsel*

**Martha C. Young, B.S.**

*Assistant to the General Counsel*

#### Office of Communications

**Angelo Carfagna, M.A.**

*Associate Vice President for University Communications*

**Carol T. Black, M.A.**

*Director of University Publications*

**William Kennedy, M.A.S.**

*Director of Web Operations*

**Dina S. Schipper, B.A.**

*Director of University Public Relations*

**Duff Sheffield, B.S.**

*General Manager and Program Director, WFDU (FM)*

**Hector L. Torres, B.F.A.**

*University Designer*

#### Office of the University Provost and Senior Vice President for Academic Affairs

**Gillian M. Small, Ph.D.**

*University Provost and Senior Vice President for Academic Affairs*

**Norina Lapp**

*Assistant to the University Provost and Senior Vice President for Academic Affairs*

**Sam Michalowski, Ph.D.**

*Associate Provost for Institutional Research and Assessment*

**Catherine Kelley, Ph.D.**

*Associate Provost for Educational Resources and Assessment*

**Jason Scorza, Ph.D.**

*Vice Provost for Academic and International Affairs*

**Jane Tsambis, M.B.A.**

*University Director of Grants and Sponsored Projects*

**Minna Proctor, M.F.A.**

*Editor-in-Chief of The Literary Review*

#### Office of International Education

**Diana Cvitan, M.A.T.**

*Director of Global Learning and Partnerships*

**Brian Swanzey, M.A.**

*Director of Study Abroad*

#### Office of Veterans Services

**Jeffrey Dunn, M.B.A.**

*Director of Veterans Services for Operations*

**Martha Papson Garcia, M.B.A.**

*Director of Veterans Services for Outreach*

#### University Core

**Kiron Sharma, Ph.D.**

*Director, Florham Campus*

**Judith Kaufman, Ph.D.**

*Director, Metropolitan Campus*

**James Gifford, Ph.D.**

*Director, Vancouver Campus*

**Thomas Beam, Ph.D.**

*Director, Online and Off-campus Programs*

#### Center for Teaching and Learning with Technology

**Sandra Selick, Ph.D.**

*Director of Center for Teaching and Learning with Technology*

#### Center for Instructional Design

**David Lavoie, Ph.D.**

*University Director of Center for Instructional Design*

#### Library Services

**Kathleen Stein-Smith, Ph.D.**

*Associate University Librarian and Director of Public Services, Frank Giovatto Library, Metropolitan Campus*

**Maria Kocylowsky, M.A., M.L.S.**

*Associate University Librarian and Director of Business, Metropolitan Campus*

**Nicole Potdevin, M.A., M.L.I.S.**

*Acting Director of Public Services, John and Joan Monninger Center for Learning and Research, Florham Campus*

\*FDU graduate

## **Office of Admissions and Financial Aid**

### **Traci Banks, B.S.**

*Associate Vice President for Admissions and Financial Aid*

### **Elizabeth Dikovics**

*Special Assistant to the Associate Vice President for Admissions and Financial Aid*

## **Admissions**

### **Coleen Curtis, B.A.**

*University Director of Undergraduate Admissions Operations*

### **Andrew Ippolito, M.S.**

*Director of Undergraduate Admissions and Marketing, Metropolitan Campus*

### **Donna Tatarka, M.S.**

*Director of Undergraduate Admissions, Florham Campus*

### **Susan Brooman, B.A.**

*Director of Graduate Recruiting and Marketing*

### **Heather Augar, M.A.**

*Director of International Admissions Recruitment and Marketing*

### **Barbara Heissenbittel, M.S.W.**

*Director of International Admissions Operations*

### **Anita Rivers, M.A.**

*Director of Undergraduate Adult and Part-time Admissions*

## **Financial Aid**

### **Renée Volak, M.M.**

*University Director of Financial Aid*

### **Emily Grant, M.A.**

*Director of Financial Aid, Florham Campus*

### **Carmen Ferrari, M.S.**

*Director of Financial Aid, Metropolitan Campus*

### **Theresa A. Coll, M.A.**

*Director of Financial Aid Operations*

## **Office of Career Development**

### **Donna Robertson, M.A.**

*University Director of Career Development*

### **Ryan Stalgaitis, Ed.M.**

*Florham Campus Director of Career Development*

## **School of Public and Global Affairs**

### **Peter J. Woolley, Ph.D.**

*Founding Director of School of Public and Global Affairs*

## **Public Administration Institute**

### **William J. Roberts, Ph.D.**

*Director*

## **Office of Chief Operating Officer**

### **Hania Ferrara, M.B.A., Ed.D.**

*Senior Vice President for Finance and Chief Operating Officer*

### **Lisa Carnevale**

*Assistant to Senior Vice President for Finance and Chief Operating Officer*

### **Gail Lemaire**

*University Risk Manager*

## **Office of Finance**

### **Frank N. Barra, C.P.A., M.S.**

*Associate Vice President for Finance*

### **Frank Lawson, M.B.A.**

*Director of Budgeting Services*

### **Juliette Brooks, B.S.**

*University Director of Purchasing*

### **James Pierce, M.B.A.**

*Controller*

### **Gregory Sarajian, B.A.**

*Manager of Accounts Payable*

### **Aeda Ghandour-Khamis, M.B.A.**

*Manager of Credit and Collections/Student Loan*

## **Office of Vice President for Facilities and Auxiliary Services**

### **Richard Frick, M.Ed.**

*Vice President for Facilities and Auxiliary Services*

### **Paul Palladino, B.S.**

*Acting Associate Director of Facilities/Project Manager — Florham Campus*

### **Michael DiArchangel**

*MEP Manager — Florham Campus*

### **Michael Ervelli**

*Buildings and Grounds Manager — Florham Campus*

### **Peter Bonasia**

*Acting Associate Director of Facilities/Project Manager — Metropolitan Campus*

### **Augusto Paule**

*MEP Manager — Metropolitan Campus*

### **Michael Noe**

*Buildings and Grounds Manager — Metropolitan Campus*

## **Auxiliary Services**

### **Robert A. Valenti, M.A.S.**

*Associate Vice President for Auxiliary Services*

## **Bookstore**

### **Andrew Egan**

*Manager — Florham Campus (Follett Higher Education Group)*

### **Maureen Delaney**

*Manager — Metropolitan Campus (Follett Higher Education Group)*

## **Food Service**

### **Jeff Gourley, AOF**

*Director — Florham Campus (Gourmet Dining Services, Inc.)*

### **Joshua Ormond**

*Director — Metropolitan Campus (Gourmet Dining Services, Inc.)*

## **Mail Room**

### **Raymond Shafer**

*Bi-campus Manager*

## **Copies Plus and Fleet Copier Services**

### **Richard Villanueva**

*Bi-campus Manager (Collegiate Press Co.)*

## **Office of Enrollment Services**

### **Carol Creekmore, M.A.S.**

*Associate Vice President for Enrollment Services*

## **Office of Human Resources**

### **Rose D'Ambrosio, M.B.A.**

*Associate Vice President for Human Resources*

### **Julie L. Friedman, B.A.**

*Director of Payroll*

### **Maureen Curry, M.A.**

*Manager of Compensation*

### **Stefanie Miller, M.A.**

*Director of Employee Benefits and Training*

### **Patricia Miller, M.B.A.**

*Manager of Employment*

## **Office of Information Resources and Technology**

### **Neal Sturm, M.B.A.**

*Vice President and Chief Information Officer*

### **Saul Kleinman, B.A.**

*Associate Vice President for Management Information Systems*

### **Brian Domenick, M.S.**

*Associate Vice President of Technology Infrastructure/CTO/CISO*

### **Mahesh Wadhwa, M.B.A.**

*University Director of Academic Technologies*

### **Robert Pelech, B.S.**

*Director of Computing Services*

### **Kimberly Hart**

*Manager of Telephone and Voice Services*

## **Lane Goldstein**

*University Director of Technologies and Special Projects*

### **James Lebo, M.S., PMP, HDM, MCSE**

*University Director of IT Client Services, Support and Process Management*

# Administration

---

## **Office of University Advancement**

**Richard P. Reiss, B.S.**

*Senior Vice President for University Advancement*

**Colleen Coppla, M.A.T.**

*Associate Vice President for University Advancement*

**Karen Ann Lewis, Ph.D.**

*Assistant Vice President for Development and Alumni Relations*

**Christopher S. Groff, M.S.**

*Executive Director of Corporate and Foundation Relations*

**Marilyn Adamczyk, B.S.**

*Director of Development Operations and Systems*

**David Berkner, B.S.**

*Director, The Fund for FDU*

**Karin Hamilton, M.B.A.**

*Director of Advancement Operations*

**Andrew McKay, M.F.A.**

*Director of Advancement Communications*

**Delia Perez, M.A.**

*Director of Planned Giving*

**Laura R. Reynolds, M.B.A.**

*Director of Special Events*

**Jane Savitt Tennen, M.F.A.**

*Director of Development – School of the Arts*

## **Office of Florham Campus Executive**

**Brian Mauro, Ph.D.**

*Interim Campus Executive*

**Mary Keyser**

*Special Assistant to the Campus Executive*

### **Academic Support Services**

#### **Academic Support Center**

**Darshan Shah, M.B.A.**

*Interim Director*

#### **Advising Center**

**Deborah Pilipie Dobson, B.A.**

*Director*

#### **Educational Opportunity Fund**

**Marjorie A. Hall, M.A.**

*University Director*

#### **Office of International Student Services**

**James Deleppo, M.S.Ed.**

*University Director*

#### **Athletics Division III**

**Roger Kindel, M.A.**

*Interim Director*

## **Florham Institute for Lifelong Learning**

**Bruce Peabody, Ph.D.**

*Director*

### **Office of Special Student Services**

**Darshan Shah, M.B.A.**

*Coordinator of Disability Support Services*

### **Public Safety**

**Willie Thornton, B.A.**

*Director*

### **University Honors Program**

**April Patrick, Ph.D.**

*Director*

### **Office of the Dean of Students**

**Jasmin Verem, M.A.**

*Dean of Students*

**Christine Gaydos, M.A.**

*Assistant Dean of Students for Student Engagement*

**Sandra Gilot-West, M.A.**

*Assistant Dean of Students for Residential Education*

### **Office of Student Life**

**Sarah Azavedo, M.A.**

*Director*

### **Wellness Center**

**Stephanie Koempel, Ph.D.**

*Director of Counseling Services*

**Shirley Smith, R.N.C., M.S.N.**

*Director of Student Health Services*

### **Office of Metropolitan Campus Executive**

**Robert F. Vodde, Ph.D.**

*Campus Executive*

**S. Craig Mourton, M.P.S.**

*Deputy Campus Executive*

**Angela DePoalo, M.A.**

*Assistant to the Campus Executive*

### **Academic Support Services**

#### **Center for Academic Student Services**

**Rachel D. Murphy, M.A., M.S.**

*Director*

#### **Educational Opportunity Fund**

**Marjorie A. Hall, M.A.**

*University Director*

#### **Office of International Student Services**

**James Deleppo, M.S.Ed.**

*University Director*

## **Athletics Division I**

**David Langford, M.Ed.**

*Director*

### **Global Scholars Program**

**Samuel J. Raphaelides, Ph.D.**

*Director*

### **Center for Psychological Services**

**Stephanie Ulrich, Ph.D.**

*Director*

### **Office of Public Safety**

**David A. Miles, M.S.**

*Director*

### **University Honors Program**

**M. Patricia Warunek, Ph.D.**

*Director, Metropolitan Campus*

### **Campus Ministry**

**Rev. Jim Om, M.A.**

*Director and Protestant Chaplain*

### **Office of Residence Life**

**Ruben C. Flores, M.Ed.**

*Director*

### **Office of Student Life**

**Jessica D. O'Brien, M.Ed.**

*Director*

### **Student Health Services**

**April Quatrano, F.N.P., M.S.N.**

*Director of Student Health Services/  
Nurse Practitioner*

### **Student Counseling and Psychological Services**

**Alice Mills, Ph.D.**

*Co-director of Counseling Service*

**David Mednick, Psy.D.**

*Co-director of Counseling Service*

### **Regional Center for Learning Disabilities**

**Mary L. Farrell, Ph.D.**

*University Director*

**Barbara A. Byrnes, M.A.**

*Metropolitan Campus Director*

**William N. Presutti, M.S.**

*Florham Campus Director*

**Grace Hottinger**

*Coordinator of Admissions*

### **Office of the Dean of Students**

**Vidal Lopez-Marrero, M.P.S.**

*Dean of Students*

**Childerick Barthelus, M.A.S.**

*Assistant Dean of Students for Commuter Students*

**Stephen Dembowski, M.B.A.**

*Assistant Dean of Students for Athletic Engagement and Judicial Affairs*

## Colleges, Institutes, Schools

### Maxwell Becton College of Arts and Sciences

*Florham Campus, Madison, New Jersey*

**Geoffrey S. Weinman, Ph.D.**  
*Dean*

**Jennifer Lehr, Ph.D.**  
*Associate Dean*

**Elizabeth Feeley, M.S.**  
*Associate Dean of Student Services*

### Biological and Allied Health Sciences Department

**James Salierno, Ph.D.**  
*Chair*

### Chemistry and Pharmaceutical Science Department

**Alexey Teslja, Ph.D.**  
*Chair*

### Communication Studies Department

**Gary Radford, Ph.D.**  
*Chair*

### Health and Physical Education Department

**Elizabeth Feeley, M.S.**  
*Chair*

### Literature, Language, Writing and Philosophy Department

**Odysseus Makridis, Ph.D.**  
*Chair*

### Mathematics, Computer Science and Physics Department

**Laila Khreisat, Ph.D.**  
*Chair*

### School of Pharmacy and Health Sciences

**Michael J. Avaltroni, Ph.D.**  
*Dean*

**Anastasia Rivkin, Pharm.D.**  
*Assistant Dean for Faculty*

**Barbara Rossi, M.A.**  
*Assistant Dean for Experiential Education*

**Chadwin Sandifer, Ed.D.**  
*Assistant Dean for Student Affairs and Programmatic Effectiveness*

**Yong Guo, Ph.D.**  
*Director of Research and Graduate Studies*

**Julie Kalabalik, Pharm.D.**  
*Director of Pharmacy Practice*

**Patricia Lemmerman, M.S.**  
*Director of Student Affairs and Community Engagement*

**Leslie McRae, M.S.**  
*Director of Technical Operations*

**Jennifer Olsakowski, Pharm.D.**  
*Director of Student Pharmacist Practice*

**Tracy Templin, M.S.**  
*Director of Admissions and Marketing*

**Sandeep Vansal, Ph.D.**  
*Director of Pharmaceutical Science*

**Ligia Westrich, Ph.D.**  
*Director of Assessment*

### Psychology and Counseling Department

**Anthony Tasso, Ph.D.**  
*Chair*

### Social Sciences and History Department

**Gary Darden, Ph.D.**  
*Chair*

### Visual and Performing Arts Department

**Howard Libov, M.A.**  
*Chair*

### Silberman College of Business

*Florham Campus, Madison, New Jersey; Metropolitan Campus, Teaneck, New Jersey; and Vancouver Campus, British Columbia, Canada*

**Andrew J. Rosman, Ph.D.**  
*Dean*

**James G. Almeida, Ph.D.**  
*Associate Dean for Graduate Programs*

**Janette Shurdom, M.B.A.**  
*Assistant Dean for Undergraduate Programs and Student Services*

**Peter Caliguari, M.B.A.**  
*Director of Executive M.B.A. Programs*

**Ron West, J.D., C.P.A., C.F.P.®**  
*Director, Tax Program*

### Accounting, Taxation and Law Department

**Ron West, J.D., C.P.A., C.F.P.®**  
*Chair*

### Economics, Finance and International Business Department

**Karen C. Denning, Ph.D.**  
*Chair*

### Management and Entrepreneurship Department

**Gwen Jones, Ph.D.**  
*Chair*

### Marketing, Information Systems and Decision Sciences Department

**Zhaobo Wang, Ph.D.**  
*Chair*

### Rothman Institute of Innovation and Entrepreneurship

**Timur Pakay, M.A.**  
*Executive Director*

# Administration

---

## **Anthony J. Petrocelli College of Continuing Studies**

**Metropolitan Campus, Teaneck, New Jersey; Florham Campus, Madison, New Jersey; and Vancouver Campus, British Columbia, Canada; Wroxton College, Oxfordshire, England**

**Lisa R. Braverman, Ph.D.**  
*Dean*

**Thomas B. Swanzey, Ph.D.**  
*Associate Dean*

**Deborah Fredericks, Ph.D.**  
*Associate Dean for Continuing Education*

**Anthony J. Adrignolo, PE., M.S.O.R.**  
*Director of Global Transportation Studies Program*

**Roger Kane, M.A.S., M.P.A.**  
*Director of Transfer Student Services*

## **School of Administrative Science**

**Lorraine S. Nienstedt, M.A.S., C.P.M.**  
*Associate Director*

**Donna Ganley, M.A.S.**  
*Senior Coordinator for Off-campus Credit Programs*

**James H. Behnke, M.Ed.**  
*Director of Web, Instructional Technology and Online Learning*

**Jasmine Sahni, M.A., M.B.A.**  
*Coordinator of Online Programs*

## **International School of Hospitality and Tourism Management**

**Joseph Tormey, D.H.T.M.**  
*Director*

## **Division of Continuing Education**

**Karen Nelson, M.B.A.**  
*Senior Program Director*

**Barbara Torna, B.A.**  
*Senior Program Director*

## **Interdisciplinary Studies Program**

**Laurence Winters, Ph.D.**  
*Director*

## **Chinese Studies Program (Cheng Gong)**

**Sherry Liu, M.P.A.**  
*Director*

## **Korean Studies Program (MiraeRo)**

**Eun Jeong Lee, M.B.A.**  
*Director*

## **Office of Online Programs**

**Joanna Steiner, M.S.**  
*Associate Director of Online Programs*

## **Puerta al Futuro Program**

**Fernando Alonso, J.D.**  
*Director*

## **Latino Promise Program**

**Fernando Alonso, J.D.**  
*Director*

## **University College: Arts • Sciences • Professional Studies**

**Metropolitan Campus, Teaneck, New Jersey; Florham Campus, Madison, New Jersey; and Vancouver Campus, British Columbia, Canada**

**Vicki L. Cohen, Ed.D.**  
*Interim Dean*

**Janet Boyd, Ph.D.**  
*Associate Dean*

**Mutiara Mohamed, Ed.D.**  
*Director, Programs in Language, Culture and Professional Advancement (PLCPA)*

## **Center for Dyslexia Studies**

**Mary Farrell, Ph.D.**  
*Director*

## **School of Art and Media Studies**

**Karen Buzzard, Ph.D.**  
*Director*

## **Lee Gildart and Oswald Haase School of Computer Sciences and Engineering**

**Alfredo C. Tan, Ph.D.**  
*Director*

**Howard Silver, Ph.D.**  
*Deputy Director, Engineering, Engineering Technology and Information Technology*

**Vladimir Zwass, Ph.D.**  
*Deputy Director, Computer Science, Management Information Systems, E-commerce and Mathematics*

## **School of Criminal Justice, Political Science and International Studies**

**Samuel J. Raphaelides, Ph.D.**  
*Director*

**Patrick Reynolds, M.P.A.**  
*Assistant Director*

## **Peter Sammartino School of Education**

**Miriam Singer, Ed.D.**  
*Interim Director*

**Daniel Aronoff, M.A.**  
*Deputy Director; Interim Director, M.A. in Educational Leadership Program*

**Carol Karpinski, Ed.D.**  
*Director, Master of Arts in Teaching Program*

**Vicki L. Cohen, Ed.D.**  
*Program Coordinator, Instructional Technology Certificate Program*

**Kathryn Ado, Ed.D.**  
*Director, QUEST/B.A.-M.A.T.*

**Teresa Oettinger Montani, Ed.D.**  
*Director, Learning Disabilities Program*

**Vincent Martone, M.A.**  
*Director, Field Placement and Certification*

## **School of the Humanities**

**Janet Boyd, Ph.D.**  
*Director*

## **School of Natural Sciences**

**James Dougherty, Ph.D.**  
*Co-director*

**Marion McClary, Ph.D.**  
*Co-director*

## **Henry P Becton School of Nursing and Allied Health**

**Minerva Guttman, Ed.D.**  
*Director*

**Marycarol Rossignol, Ph.D.**  
*Associate Director of Florham Programs*

**Marilyn Rubin, Ed.M.**  
*Associate Director of Allied Health*

**Sylvia Colon Cabassa, M.S.N.**  
*Associate Director of Undergraduate Nursing  
Program*

**Boas Yu, Ed.D.**  
*Associate Director of Graduate Nursing  
Program*

## **Department of Physical Education**

**David Langford, M.Ed.**  
*Athletic Director*

**Catherine M. Liggett**  
*Coordinator*

## **School of Psychology**

**Stephen Armeli, Ph.D.**  
*Director, M.A. Program in General/Theoretical  
Psychology; Director, Undergraduate Studies*

**Ronald Dumont, Ed.D.**  
*Director of School of Psychology*

**Judith Kaufman, Ph.D.**  
*Director, Psy.D. and M.A. Programs in School  
Psychology*

**Juliana Lachenmeyer, Ph.D.**  
*Director, Ph.D. Program in Clinical Psychology*

**Robert Prentky, Ph.D.**  
*Director, M.A. Program in Forensic Psychology*

**Stefanie Ulrich, Ph.D.**  
*Director, Center for Psychological Services*

## **Vancouver Campus**

**Cecil A. Abrahams, Ph.D.**  
*Campus Provost*

**Lynda Kuit**  
*Assistant to the Campus Provost*

## **Admissions**

**Natalia Kharitonova, Ph.D.**  
*Associate Director*

## **B.S. in Business Administration Program**

**Lotfi Tadj, Ph.D.**  
*Program Coordinator*

## **B.A. in Individualized Studies Program**

**Constance Bygrave, Ph.D.**  
*Program Coordinator*

## **B.S. in Information Technology Program**

**Vasudevan Janarthanan, Ph.D.**  
*Program Coordinator*

## **Fairleigh Dickinson University Press**

**James Gifford, Ph.D.**  
*Director*

## **Global Scholars Program**

**Gudrun Dreher, Ph.D.**  
*Director*

## **Enrollment Services**

**Arlette Hernandez, M.A.S.**  
*Director*

## **Learning Resources**

**David O'Reilly, M.B.A.**  
*Director of Learning Resources and Support  
Programs and Business Manager*

## **Marketing and Recruitment**

**Amy Yan, M.A.S.**  
*Director*

**Candice Ho, M.B.A.**  
*Regional Marketing Manager, Asia-Pacific*

## **Master of Administrative Science Program**

**Constance Bygrave, Ph.D.**  
*Program Coordinator*

## **Student Services**

**Jobin Mojtavavi, M.A.S.**  
*Director*

## **Technology and Information Services**

**Jonn Martell, B.Sc.**  
*Director of Technical Operations*

## **University Core**

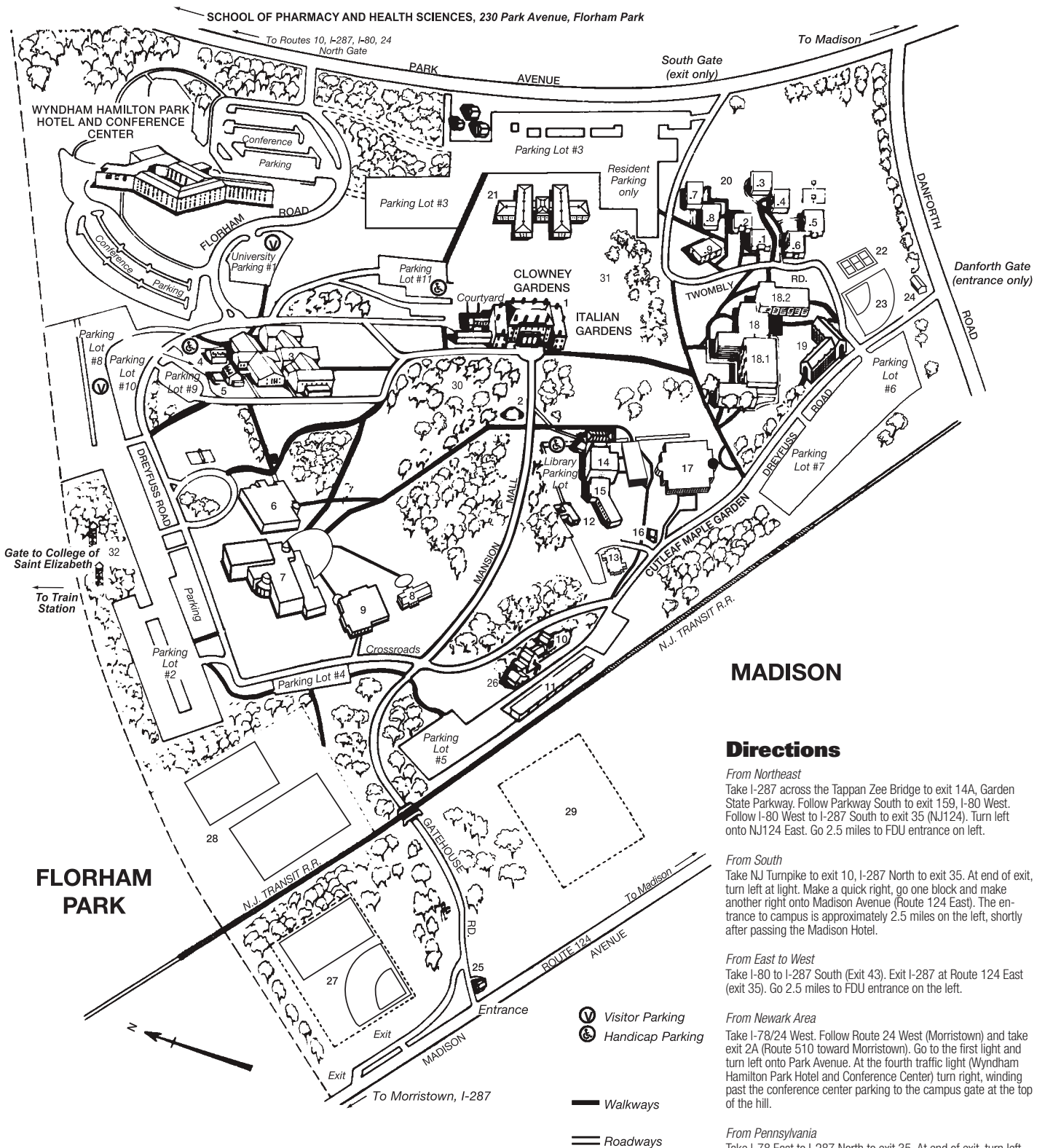
**James Gifford, Ph.D.**  
*Director*

## **Wroxton College**

**Nicholas D.J. Baldwin, Ph.D.**  
*Dean and Director of Operations*

# Florham Campus

Madison, New Jersey



## MADISON

### Directions

#### From Northeast

Take I-287 across the Tappan Zee Bridge to exit 14A, Garden State Parkway. Follow Parkway South to exit 159, I-80 West. Follow I-80 West to I-287 South to exit 35 (NJ124). Turn left onto NJ124 East. Go 2.5 miles to FDU entrance on left.

#### From South

Take NJ Turnpike to exit 10, I-287 North to exit 35. At end of exit, turn left at light. Make a quick right, go one block and make another right onto Madison Avenue (Route 124 East). The entrance to campus is approximately 2.5 miles on the left, shortly after passing the Madison Hotel.

#### From East to West

Take I-80 to I-287 South (Exit 43). Exit I-287 at Route 124 East (exit 35). Go 2.5 miles to FDU entrance on the left.

#### From Newark Area

Take I-78/24 West. Follow Route 24 West (Morristown) and take exit 2A (Route 510 toward Morristown). Go to the first light and turn left onto Park Avenue. At the fourth traffic light (Wyndham Hamilton Park Hotel and Conference Center) turn right, winding past the conference center parking to the campus gate at the top of the hill.

#### From Pennsylvania

Take I-78 East to I-287 North to exit 35. At end of exit, turn left at light. Make a quick right, go one block and make another right onto Madison Avenue (Route 124 East). The entrance to the campus is approximately 2.5 miles on the left, shortly after passing the Madison Hotel.

FLORHAM PARK

Gate to College of Saint Elizabeth  
To Train Station

SCHOOL OF PHARMACY AND HEALTH SCIENCES, 230 Park Avenue, Florham Park  
To Routes 10, I-287, I-80, 24 North Gate

South Gate (exit only)

Danforth Gate (entrance only)

- Visitor Parking
- Handicap Parking
- Walkways
- Roadways



## Campus Buildings

- 1 Hennessy Hall (Mansion)
- 2 Reuter's Rock
- 3 Science Building
- 4 East Cottage
- 5 West Cottage
- 6 Martin F. Stadler, Patrick J. Zenner, Hoffmann-La Roche Inc. Academic Building
- 7 Roberta Chiaviello Ferguson and Thomas G. Ferguson Recreation Center
- 8 Rothman Building-Admissions (Rothman Institute of Innovation and Entrepreneurship offices located in Hennessy Hall [Mansion], Bldg. 1)
- 9 Dreyfuss Building
- 10 Barn (Campus Safety, Campus Facilities/Maintenance, Web Lab)
- 11 Maintenance Shops
- 12 Maintenance Shops
- 13 Chainé House
- 14 John and Joan Monninger Center for Learning and Research
- 15 Educational Opportunity Fund Office
- 16 Public Relations Office
- 17 Student Center
- 18 Twombly Residence Halls
  - 18.1 Florence Twombly Hall
  - 18.2 Hamilton Twombly Hall
- 19 Rutherford Hall (Residence Hall)
- 20 Village Residence Halls
  - 20.1 Stirling Hall
  - 20.2 York Hall
  - 20.3 Ellsworth Hall
  - 20.4 Barclay Hall
  - 20.5 Penn Hall
  - 20.6 Rice Hall
  - 20.7 Wilder Hall
  - 20.8 Vanderbilt Hall
  - 20.9 Danforth Hall
- 21 Park Avenue Residence Hall
- 22 Tennis Courts
- 23 McManus Field
  - Women's Softball
- 24 Wellness Center
- 25 Gatehouse
- 26 Black Box Theater
- 27 Athletics Field
  - Baseball
  - Men's Soccer
- 28 Robert T. Shields Athletics Field
  - Football
  - Men's and Women's Lacrosse
- 29 Athletics Field
  - Field Hockey
  - Men's and Women's Soccer
- 30 Secret Garden
- 31 Sculpture Gardens
- 32 Gate to College of Saint Elizabeth

## Where to Find

Academic Support Center	Monninger Center, Bldg. 14
Admissions	Rothman Building, Bldg. 8
Adult Education (Continuing Education)	Danforth Hall, Bldg. 20.9
Advising	Hennessy Hall (Mansion), Bldg. 1
Allied Health	Science Building, Bldg. 3
Arts and Sciences, Maxwell Becton College of	Hennessy Hall (Mansion), Bldg. 1
Art Studio	Florence Twombly Hall, Bldg. 18.1
Athletics	Ferguson Recreation Center, Bldg. 7
ATM Machine	Student Center Bldg. 17
Audiovisual (Instructional Media)	Monninger Center, Bldg. 14
Becton College of Arts and Sciences, Maxwell	Hennessy Hall (Mansion), Bldg. 1
Biology	Science Building, Bldg. 3
Black Box Theater	Barn, Bldg. 26
Bookstore	Student Center, Bldg. 17
Bottle Hill Room and Pub	Student Center, Bldg. 17
Bursar	Hennessy Hall (Mansion), Bldg. 1
Business, Silberman College of Cafeterias	Hennessy Hall (Mansion), Bldg. 1
	Stadler/Zenner Academic Building, Student Center, Bldgs. 1, 6 & 17
Campus Executive, Office of	Hennessy Hall (Mansion), Bldg. 1
Campus Life	Student Center, Bldg. 17
Campus Ministry	Florence Twombly Hall, Bldg. 18.1
Career Development	Student Center, Bldg. 17
Chemistry/Geological Sciences	Science Building, Bldg. 3
Communication	Stadler/Zenner Academic Building, Bldg. 6
Computer Center, Peter Falley	Dreyfuss Building, Bldg. 9
Computer Science/Mathematics	Stadler/Zenner Academic Building, Bldg. 6
Computing Services	Dreyfuss Building, Bldg. 9
Conferences/Summer Programs	Student Center, Bldg. 17
Confrerie de la Chaîne des Rôtisseurs National Headquarters	Chainé House, Bldg. 13
Continuing Education	Danforth Hall, Bldg. 20.9
Copy Center	Hennessy Hall (Mansion), Bldg. 1
Core Curriculum Office	Hennessy Hall (Mansion), Bldg. 1
Counseling	Wellness Center, Bldg. 24
Criminology	Hennessy Hall (Mansion), Bldg. 1
Dean of Students	Student Center, Bldg. 17
Dean, Maxwell Becton College of Arts and Sciences	Hennessy Hall (Mansion), Bldg. 1
Dean, Silberman College of Business	Hennessy Hall (Mansion), Bldg. 1
Education	Hennessy Hall (Mansion), Bldg. 1
Educational Opportunity Fund (EOF)	Bldg. 15
English	Monninger Center, Bldg. 14
Enrollment Services	Hennessy Hall (Mansion), Bldg. 1
Entrepreneurship, Rothman Institute of Innovation and	Hennessy Hall (Mansion), Bldg. 1
Facilities Department	Barn, Bldg. 10
Financial Aid	Hennessy Hall (Mansion) Courtyard, Bldg. 1
Fine Arts	Twombly Residence Halls, Bldg. 18
Florham Institute for Lifelong Learning	Hennessy Hall (Mansion), Bldg. 1
Florham Room	Student Center, Bldg. 17
Food Service Office	Student Center, Bldg. 17
Freshman Experience	Student Center, Bldg. 17
Freshman Intensive Studies Program	Hennessy Hall (Mansion), Bldg. 1
Global Learning	Hennessy Hall (Mansion), Bldg. 1
Hartman Lounge	Hennessy Hall (Mansion), Bldg. 1
Health Services	Wellness Center, Bldg. 24
History/Social Sciences	Hennessy Hall (Mansion), Bldg. 1
Honors Program	Hennessy Hall (Mansion), Bldg. 1
Hospitality and Tourism Management, International School of	Chainé House, Bldg. 13
Human Resources, University	Chainé House, Bldg. 13
Instructional Media Center	Monninger Center, Bldg. 14
Interactive Television (ITV)	Dreyfuss Building, Room 214, Bldg. 9
International Education, Office of	Hennessy Hall (Mansion), Bldg. 1
International Student Services	Student Center, Bldg. 17
Journal of Psychology and Behavioral Science	Stadler/Zenner Academic Building, Bldg. 6
Languages	Hennessy Hall (Mansion), Bldg. 1
Leafs and Grains	Stadler/Zenner Academic Building, Bldg. 6
Learning Disabilities, Regional Center for	Hennessy Hall (Mansion), Bldg. 1
Lenfell Hall	Hennessy Hall (Mansion), Bldg. 1
Library	Monninger Center, Bldg. 14
Literary Review, The	Gatehouse, Bldg. 25
Literature	Hennessy Hall (Mansion), Bldg. 1
Mailroom, University	Hennessy Hall (Mansion), Bldg. 1
Maintenance	Barn, Bldg. 10
Mansion	Hennessy Hall, Bldg. 1
Mathematics/Computer Science	Stadler/Zenner Academic Building, Bldg. 6
MBA Program	Hennessy Hall (Mansion), Bldg. 1
Medical Technology	Science Building, Bldg. 3
Modern Languages	Hennessy Hall (Mansion), Bldg. 1
Nurse	Wellness Center, Bldg. 24
Paralegal Studies	Danforth Hall, Bldg. 20.9
Parking Permits	Barn, Bldg. 10
Petrocelli College of Continuing Studies, Anthony J.	Danforth Hall, Bldg. 20.9
Pharmacy and Health Sciences, School of	230 Park Avenue, Florham Park
Philosophy	Hennessy Hall (Mansion), Bldg. 1
Physics	Stadler/Zenner Academic Building, Bldg. 6
Pillar (Student Newspaper)	Florence Twombly Hall, Bldg. 18.1
President, Office of	Hennessy Hall (Mansion), Bldg. 1
Psychology	Stadler/Zenner Academic Building, Bldg. 6
Pub	Student Center, Bldg. 17
Public Relations	Bldg. 16
Public Safety	Barn, Bldg. 10
Records/Registration	Hennessy Hall (Mansion), Bldg. 1
Regional Center for Learning Disabilities	Hennessy Hall (Mansion), Bldg. 1
Residence Life	Student Center, Bldg. 17
Rothman Institute of Innovation and Entrepreneurship	Hennessy Hall (Mansion), Bldg. 1
Rutherford Room	Ferguson Recreation Center, Bldg. 7
Safety/Security	Barn, Bldg. 10
Sammartino Room	Student Center, Bldg. 17
Silberman College of Business	Hennessy Hall (Mansion), Bldg. 1
Snax	Hennessy Hall (Mansion), Bldg. 1
Social Sciences/History	Hennessy Hall (Mansion), Bldg. 1
Special Student Services	Student Center, Bldg. 17
Student Health	Wellness Center, Bldg. 24
Student Life	Student Center, Bldg. 17
Student Newspaper (Pillar)	Florence Twombly Hall, Bldg. 18.1
Student Recreational Services	Ferguson Recreation Center, Bldg. 7
Study-abroad Programs	Hennessy Hall (Mansion), Bldg. 1
Sullivan Lounge	Hennessy Hall (Mansion), Bldg. 1
Swimming Pool	Ferguson Recreation Center, Bldg. 7
Teleconference Site	Dreyfuss Building, Room 125, Bldg. 9
Theater	Dreyfuss Building, Bldg. 9
The Grill	Student Center, Bldg. 17
University Advancement	Monninger Center, Bldg. 14
University Provost and Senior Vice President for Academic Affairs	Hennessy Hall (Mansion), Bldg. 1
Visual/Performing Arts	Dreyfuss Building, Bldg. 9
Web Lab	Barn, Bldg. 10
Wellness Center	Bldg. 24
WFDM (Student Radio)	Student Center, Bldg. 17
Writing, College Program	Monninger Center, Bldg. 14
Wroxton College (Study-abroad Programs)	Hennessy Hall (Mansion), Bldg. 1
Wroxton Room	Student Center, Bldg. 17

# Metropolitan Campus

Teaneck, New Jersey

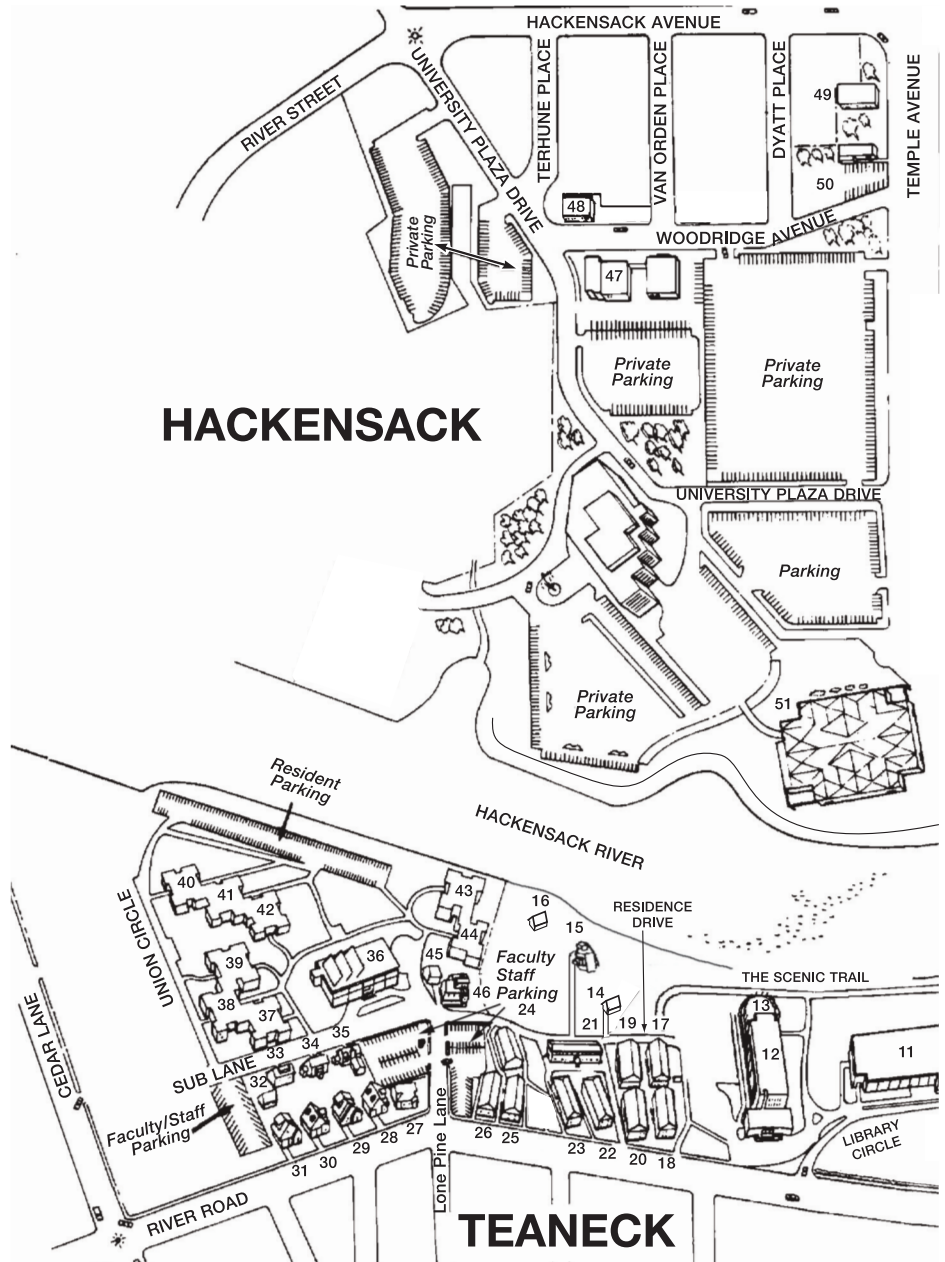
## Campus Buildings

- 1 Bancroft Hall (1094 River Road, Teaneck)
- 2 Williams Hall (1090 University Circle, Teaneck)
- 3 Fitness Center (1080 University Circle, Teaneck)
- 4 Northpointe (Residence Hall)
- 5 Robison Hall (1040 University Circle, Teaneck)
- 6 Robison Hall Annex (1081 Scenic Trail, Teaneck)
- 7 Muscarelle Center for Building Construction Studies (1004 University Circle, Teaneck)
- 8 Kron Administration Building (1000 River Road, Teaneck)
- 9 University Hall (994 Library Circle, Teaneck)
- 10 Alumni Hall (990 Library Circle, Teaneck)
- 11 Frank Giovatto Library (980 Library Circle, Teaneck)
- 12 Becton Hall (960 River Road, Teaneck)
- 13 Becton Theater (960 River Road, Teaneck)
- 14 914 River Road, Teaneck (continuation of Lone Pine Lane)
- 15 River House (888 River Road, Teaneck, continuation of Lone Pine Lane)
- 16 Banta Coe House (884 Lone Pine Lane)
- 17 University Court Residence Hall #9 (929 Lone Pine Lane, Teaneck)
- 18 University Court Residence Hall #10 and WFDU-FM (920 River Road, Teaneck)
- 19-23 University Court Residence Halls #4-8 (896, 906, 916 River Road and 901, 921 Lone Pine Lane, Teaneck)
- 24-26 University Court Residence Halls #1-3 (883 Lone Pine Lane and 882, 886 River Road, Teaneck)
- 27 Public Safety Office (870 River Road, Teaneck)
- 28 Interfaith Chapel (842 River Road, Teaneck)
- 29 841 River Road, Teaneck
- 30 840 River Road, Teaneck
- 31 838 River Road, Teaneck
- 32 Housekeeping
- 33 835 SUB Lane, Teaneck (Programs in Language, Culture and Professional Advancement)
- 34 839 SUB Lane, Teaneck (SUB Annex)
- 35 867 SUB Lane, Teaneck (Dean of Students)
- 36 Student Union Building (SUB)
- 37-44 Linden Residence Halls #1-8
- 45 Knight Spot (24/7 Study Lounge)
- 46 880 Lone Pine Lane, Teaneck
- 47 10 Woodridge Ave., Hackensack
- 48 Maintenance Shop
- 49 139 Temple Ave., Hackensack
- 50 131 Temple Ave., Hackensack
- 51 George and Phyllis Rothman Center (100 University Plaza Drive, Hackensack)
- 52 Dickinson Hall (140 University Plaza Drive, Hackensack)
- 53 Edward Williams Hall (150 Kotte Place, Hackensack)
- 54 Field House (1130 River Road, Teaneck)
- 55 1154 River Road, Teaneck
- 56 Naimoli Family Baseball Complex
- 57 Athletic Fields
  - a Softball
  - b Soccer
  - c Tennis

## Where to Find

Academic Advisement Center	Robison Hall, Bldg. 5
Academic Affairs, Senior Vice President for, and University Provost	Dickinson Hall, Bldg. 52
Academic Resource Center	Robison Hall, Bldg. 5
Administrative Science	Dickinson Hall, Bldg. 52
Admissions	
Graduate, International	Kron Administration Building, Bldg. 8
Undergraduate,	
Full-time, Part-time, Adult	Dickinson Hall, Bldg. 52
Adult Education (Continuing Education)	Dickinson Hall, Bldg. 52
Adult Programs (Evening/Weekend)	Edward Williams Hall, Bldg. 53
Advisement,	
Business Graduate Students	Dickinson Hall, Bldg. 52
Advisement, Office of Professional Programs/Graduate Studies	Robison Hall, Bldg. 5
Allied Health, Nursing and	Dickinson Hall, Bldg. 52

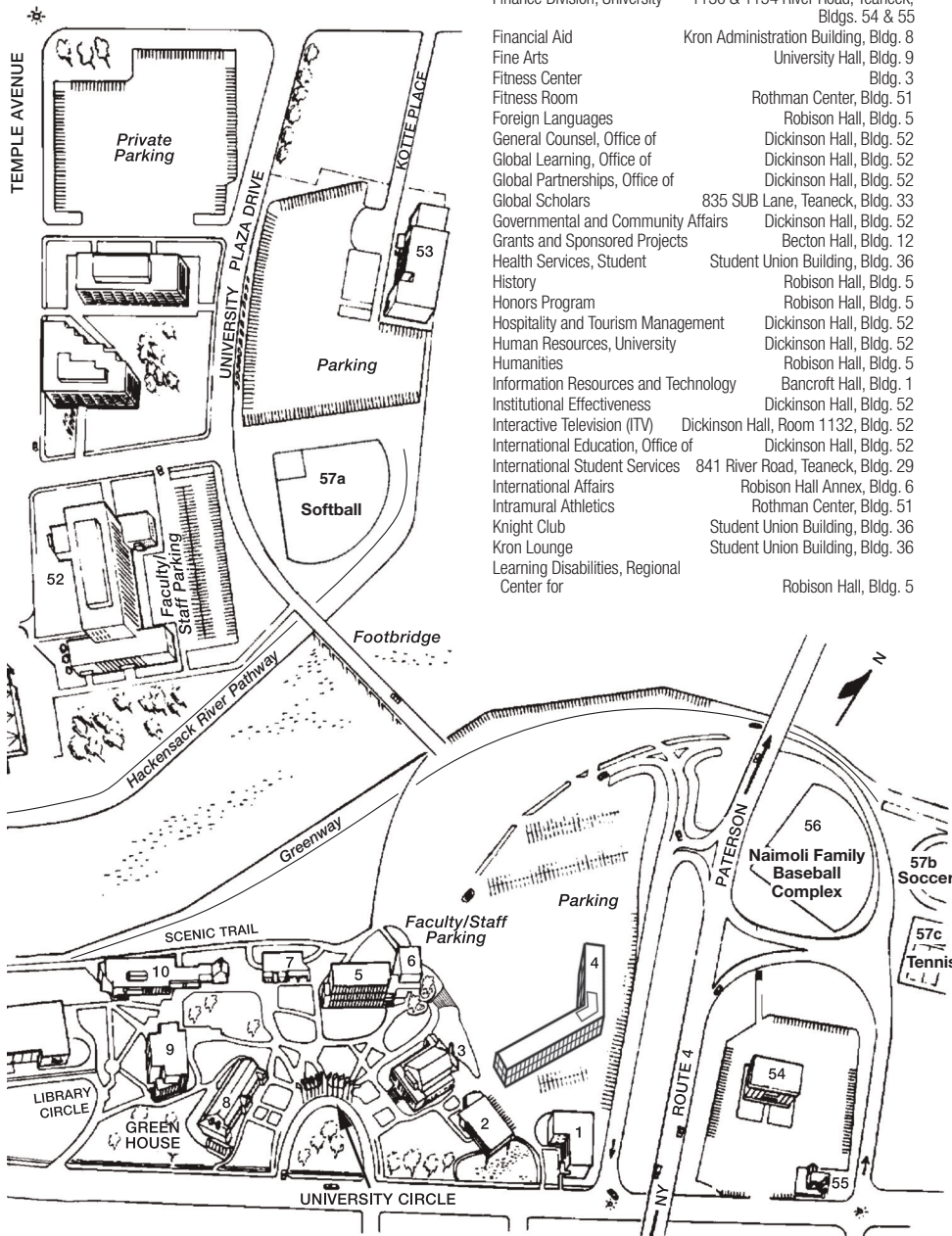
Alumni Relations	Dickinson Hall, Bldg. 52
Art and Media Studies	University Hall, Bldg. 9
Arts • Sciences • Professional Studies, University College:	Robison Hall, Bldg. 5
Athletics Center	Rothman Center, 100 University Plaza Drive, Hackensack, Bldg. 51
ATM Machine	Dickinson Hall, Bldg. 52
Audiovisual (Instructional Media)	Giovatto Library & Dickinson Hall, Bldgs. 11 & 52
Biological Sciences	Dickinson Hall, Bldg. 52
Bookstore	Alumni Hall, Bldg. 10
Bursar	Kron Administration Building, Bldg. 8
Business, Silberman College of	Dickinson Hall, Bldg. 52
Campus Executive, Office of	Robison Hall, Bldg. 5
Career Development	Giovatto Library, Bldg. 11
Certified Financial Planning	Dickinson Hall, Bldg. 52
Chaplain's Office	Interfaith Chapel, Bldg. 28



# Metropolitan Campus

Teaneck, New Jersey

Chemistry	Dickinson Hall, Bldg. 52	Dean, Silberman College of Business	Dickinson Hall, Bldg. 52	Lost & Found, Public Safety	870 River Road, Teaneck, Bldg. 27
Communications/Speech	Robison Hall, Bldg. 5	Dean, University College: Arts • Sciences • Professional Studies	Robison Hall, Bldg. 5	Mail Room, Student	Student Union Building, Bldg. 36
Computer Sciences and Engineering	Muscarella Center & Becton Hall, Bldgs. 7 & 12	Dining Halls	Alumni Hall, Student Union Building & Dickinson Hall, Bldgs. 10, 36 & 52	Mail Room, University	10 Woodridge Ave., Hackensack, Bldg. 47
Computing Services	University Hall & Dickinson Hall, Bldgs. 9 & 52	Dining Services Office	Student Union Building, Bldg. 36	Mathematics/Computer Science	Becton Hall, Bldg. 12
Continuing Education	Dickinson Hall, Bldg. 52	Education	Bancroft Hall, Bldg. 1	MBA Program	Dickinson Hall, Bldg. 52
Continuing Studies, Anthony J. Petrocelli College of	Edward Williams Hall, Bldg. 53	Educational Opportunity Fund (EOF)	840 River Road, Teaneck, Bldg. 30	Metropolitan Club	Alumni Hall, Bldg. 10
Cooperative Education	Giovatto Library, Bldg. 11	ELS Language Centers	Robison Hall, Bldg. 5	Natural Sciences	Dickinson Hall, Bldg. 52
Copy Center	Giovatto Library, Bldg. 11	Employment Office	Dickinson Hall, Bldg. 52	Nursing and Allied Health	Dickinson Hall, Bldg. 52
Core Curriculum Office	Dickinson Hall, Bldg. 52	Engineering	Muscarella Center & Becton Hall, Bldgs. 7 & 12	Parking, Security	870 River Road, Teaneck, Bldg. 27
Counseling and Psychological Services, Student (S-CAPS)	914 River Road, Teaneck, Bldg. 14	English	Robison Hall, Bldg. 5	Payroll	Dickinson Hall, Bldg. 52
Criminal Justice	Robison Hall Annex, Bldg. 6	Enhanced Freshman Experience	Robison Hall, Bldg. 5	Petrocelli College of Continuing Studies, Anthony J.	Edward Williams Hall, Bldg. 53
Dean of Students	867 SUB Lane, Teaneck, Bldg. 35	Enrollment Management	Dickinson Hall, Bldg. 52	Philosophy	Robison Hall, Bldg. 5
Dean, Petrocelli College of Continuing Studies, Anthony J.	Edward Williams Hall, Bldg. 53	Equinox (Student Newspaper)	Student Union Building, Bldg. 36	Physical Education	Rothman Center, Bldg. 51
		Executive MBA Programs	Dickinson Hall, Bldg. 52	Physics	Dickinson Hall, Bldg. 52
		Facilities and Auxiliary Services	10 Woodridge Ave., Hackensack, Bldg. 47	Political Science	Robison Hall Annex, Bldg. 6
		Finance Division, University	1130 & 1154 River Road, Teaneck, Bldgs. 54 & 55	Preprofessional/Graduate Advisement	Robison Hall, Bldg. 5
		Financial Aid	Kron Administration Building, Bldg. 8	President, Office of	Dickinson Hall, Bldg. 52
		Fine Arts	University Hall, Bldg. 9	Programs in Language, Culture and Professional Advancement	835 SUB Lane, Teaneck, Bldg. 33
		Fitness Center	Bldg. 3	Psychological Services, Center for	131 & 139 Temple Ave., Hackensack, Bldgs. 49 & 50
		Fitness Room	Rothman Center, Bldg. 51	Psychological Services, Student Counseling and (S-CAPS)	914 River Rd., Teaneck, Bldg. 14
		Foreign Languages	Robison Hall, Bldg. 5	Psychology	Williams Hall, Bldg. 2
		General Counsel, Office of	Dickinson Hall, Bldg. 52	Public Administration	Dickinson Hall, Bldg. 52
		Global Learning, Office of	Dickinson Hall, Bldg. 52	Publications	Dickinson Hall, Bldg. 52
		Global Partnerships, Office of	Dickinson Hall, Bldg. 52	Public Relations	Dickinson Hall, Bldg. 52
		Global Scholars	835 SUB Lane, Teaneck, Bldg. 33	Public Safety	870 River Road, Teaneck, Bldg. 27
		Governmental and Community Affairs	Dickinson Hall, Bldg. 52	Radio Station, WFDD-92-FM	Student Union Building, Bldg. 36
		Grants and Sponsored Projects	Becton Hall, Bldg. 12	Radio Station, WFDD-FM	University Court #10, Bldg. 18
		Health Services, Student	Student Union Building, Bldg. 36	Records/Registration	Kron Administration Building, Bldg. 8
		History	Robison Hall, Bldg. 5	Regional Center for Learning Disabilities	Robison Hall, Bldg. 5
		Honors Program	Robison Hall, Bldg. 5	Residence Life	880 Lone Pine Lane, Bldg. 46
		Hospitality and Tourism Management	Dickinson Hall, Bldg. 52	River House	888 River Road, Bldg. 15
		Human Resources, University	Dickinson Hall, Bldg. 52	Riverside Café	Alumni Hall, Lower Level, Bldg. 10
		Humanities	Robison Hall, Bldg. 5	Russell H. Ratsch Experimental Theatre	University Hall, Bldg. 9
		Information Resources and Technology	Bancroft Hall, Bldg. 1	Rutherford Room	Student Union Building, Bldg. 36
		Institutional Effectiveness	Dickinson Hall, Bldg. 52	Safety/Security	870 River Road, Teaneck, Bldg. 27
		Interactive Television (ITV)	Dickinson Hall, Room 1132, Bldg. 52	Silberman College of Business	Dickinson Hall, Bldg. 52
		International Education, Office of	Dickinson Hall, Bldg. 52	Sociology	Williams Hall, Bldg. 2
		International Student Services	841 River Road, Teaneck, Bldg. 29	Student Government Association	Student Union Building, Bldg. 36
		International Affairs	Robison Hall Annex, Bldg. 6	Student Life	Student Union Building, Bldg. 36
		Intramural Athletics	Rothman Center, Bldg. 51	Student Newspaper, Equinox	Student Union Building, Bldg. 36
		Knight Club	Student Union Building, Bldg. 36	Study-abroad Programs	Robison Hall, Bldg. 5
		Kron Lounge	Student Union Building, Bldg. 36	Study Lounge 24/7	Knight Spot, Bldg. 45
		Learning Disabilities, Regional Center for	Robison Hall, Bldg. 5	Telecommunications	University Court #10, Bldg. 18



## Directions

**From North**  
Garden State Parkway to exit 163 to Route 17 South to Route 4 East. Exit Route 4 at River Road. Campus parking is on the right.

**From South**  
Take Garden State Parkway to exit 161 to Route 4 East. Exit Route 4 at River Road. Campus parking is on the right.

**From West**  
Follow Route 80 East to Garden State Parkway North. Proceed on Garden State Parkway to exit 161 (Route 4 East). Follow Route 4 to River Road exit. Campus parking is on the right.

**From East**  
Take the George Washington Bridge; follow signs to Route 4 West. Exit Route 4 at River Road. Campus parking is on the left, past the athletic fields.

# Index

## A

- Abuse in Intimate Relationships, 215
- Academic Calendar, 4
- Academic Calendar, Nontraditional, 5
- Academic Integrity Policy, 33–34
- Appeals Process, 34
- Plagiarism Described, 33
- Procedure, 34
- Sanctions, 33–34
- Academic Leave of Absence, 35
- Academic Load, 34–35
- Academic Regulations, 33–36, 60
- Academic Integrity Policy, 33–34
- Academic Leave of Absence, 35
- Academic Load, 34–35
- Attendance, 35
- Candidacy for a Graduate Degree, 35
- Credit Hour Definition, 34
- Degree Requirements, 35
- Grades, 35
- Maintenance of Matriculation Status, 35
- Major Religious Holy Days, 36
- Repeated Courses, 36
- Transcripts of Records, 36
- Withdrawal, 35
- Academic Support, 50
- Academic Support and Research, 29–32
- Academic Support and Student Services Centers, 29
- Acceptable Use Policies for Computer Usage, 31
- Computer Facilities, 30–31
- Fairleigh Dickinson University Press, 32
- Libraries, 29–30
- Literary Review, The, 32
- Research, 31–32
- Students with Disabilities, 32
- UTAC, 30
- Academic Support and Student Services Centers, 29
- Accelerated D.N.P. Programs, 173, 180–181
- Admission Requirements, 178–179
- Post-Baccalaureate Nursing to D.N.P., 180–181
- Post-master's D.N.P., 181
- Pre-Baccalaureate Nursing to D.N.P. with Gerontology Focus, 180
- Acceptable Use Policies for Computer Usage, 31
- Accounting (M.B.A.), 62
- Admission Requirements, 61
- Courses, 72–73
- Degree Requirements, 61
- Post-M.B.A. Graduate Certificate, 65
- Specialization Requirements, 62
- Accounting (M.S.), 69
- Admission Requirements, 69
- Courses, 72–73
- Degree Requirements, 69
- Post-M.B.A. Graduate Certificate, 65
- Accounting and Auditing Case Studies, Seminar, 73
- Accounting for Hospitality Managers and Administrators, 163
- Accounting for Income Taxes (ASC 740/FAS 109/FIN 48), 84
- Accounting for Managerial Decision Making, 226
- Accounting for Service-industry Administrators, 232
- Accounting Graduate Certificate, 65
- Accounting, Graduate Independent Study in, 73
- Accounting Topics, Selected, 73
- Accreditation, 9–10
- ACPE Accreditation Status (School of Pharmacy and Health Sciences), 184
- Active Circuits Analysis and Design I, II, 145
- Acute Care, Advanced Pharmacy Practice Experience (APPE) IV, 197
- Acute Care I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 198
- Adaptive Signal Processing, 147
- Addictions Counseling, 92
- Administration, 256–261
- Colleges, Institute, Schools, 259–261
- University Offices, 256–258
- Administration and Law of Sports, The, 228
- Administration and Supervision in School Psychology, 220
- Administration of College Financial Aid, 239
- Administrative Aspects of East Asian Confucianism, 229
- Administrative Leadership in Complex Organizations, 43
- Administrative Practicum (Nursing), 176
- Administrative Science
- Florham Campus/Metropolitan Campus, 38–53; Also see Vancouver Campus this page
- Administrative Science Certificate, 38
- Admission Requirements, 42
- Career Development Certificate, 38
- Computer Security and Forensic Administration Certificate, 38–39
- Correctional Administration and Leadership Certificate, 39
- Courses, 42–53
- Degree Requirements, 42
- Diplomacy and International Relations Certificate, 39
- Displaced Persons Administration Certificate, 39
- Emergency Management Administration Certificate, 39
- European Studies and Administration Certificate, 39
- First-responder Administration Certificate, 39
- Global Emergency Medical Services Administration Certificate, 39
- Global Health and Human Services Administration Certificate, 39–40
- Global Leadership and Administration Certificate, 40
- Global Security and Terrorism Studies Certificate, 40
- Global Technology Administration Certificate, 40
- Government and Administration Certificate, 40
- Homeland Security Administration Certificate, 40
- Human Resource Administration Certificate, 40
- Information Literacies and Learning Environments Certificate, 40
- Intelligence-led Policing Certificate, 40–41
- Latin American Studies Certificate, 41
- Law and Public Safety Administration Certificate, 41
- Leadership Theory and Practice Certificate, 41
- Legal Environment Administration Certificate, 41
- Nonprofit Organization Development Certificate, 41
- Online Graduate Degree and Certificate Programs, 42
- Program Highlights, 38
- Public and Nonprofit Leadership Postgraduate Certificate in, 42
- Public Relations Administration Certificate, 41
- School Security and Safety Administration Certificate, 41
- Wroxtton Experience — Global Perspective, 41
- Vancouver Campus, 241–243
- Admission Requirements, 241
- Computer Security and Forensic Administration Specialization, 242
- Courses, 42–53
- Degree Requirements, 241
- Emergency Management Administration Specialization, 242
- Global Health and Human Services Administration Specialization, 242
- Global Leadership and Administration Specialization, 242
- Global Technology Administration Specialization, 242
- Human Resources Administration Specialization, 242
- Administrative Science Certificate, 38
- Administrative Science Courses, 42–53
- Admissions
- Change of Program, 16
- Degree and Certificate-seeking Students, 15
- Matriculated Students, 15
- Nonmatriculated Students, 15
- General Information, 15
- International Students, 16
- Nondegree and Noncertificate-seeking Students, 15–16
- Auditor, 16
- Students Enrolled in Classes for Credit, 15
- Visiting Students, 16
- Readmission for Graduate Study, 16
- Transfer Credit, 16
- See also under each program.
- Admissions and Financial Aid Administration Certificate, 237
- Admissions and Financial Aid Administration Specialization, 237
- Adult Gerontology Nurse Practitioner, Clinical Track in, 169–170

- Adult Gerontology Nurse Practitioner — Education or Administration Focus, Clinical Track in, 170
- Adult Gerontology Nurse Practitioner — Forensic Focus, Clinical Track in, 170
- Adult Gerontology Nurse Practitioner Post-Master's Certificate, 172
- Adult Gerontology II Practicum, Advanced, 177
- Adult Gerontology II Theory, Advanced, 177
- Advanced Adult Gerontology II Practicum, 177
- Advanced Adult Gerontology II Theory, 177
- Advanced Analytical Chemistry, 89
- Advanced Auditing, 73
- Advanced Biotechnology, 57
- Advanced Cardiology, Advanced Topics in Pharmacotherapy:, 193
- Advanced Clinical Practice (Teaching), 132
- Advanced Cognitive Behavioral Therapy, 211
- Advanced Computer Programming Certificate, 97
- Advanced Consultation for School Psychologists, 221
- Advanced Corporate Tax I, 82
- Advanced Corporate Tax II, 83
- Advanced Criminological Theory, 112
- Advanced Database Systems, 103
- Advanced Digital Communications, 146
- Advanced Educator Role Seminar I, II, III, IV, 176
- Advanced Employment Law, 47
- Advanced Federal Tax: Individual Income Taxation, 82
- Advanced Federal Tax: Property Transactions, 83
- Advanced Field Placement, 135
- Advanced Financial Accounting, 73
- Advanced Funding Practices, 44
- Advanced Global Seminar (Hospitality Management), 163
- Advanced Health Assessment Practicum, 174
- Advanced Health Assessment Theory, 174
- Advanced Human Resource Management, 163
- Advanced Inorganic Chemistry, 86, 89
- Advanced Internet for Educators, 142
- Advanced Internship in Criminal Justice, 113
- Advanced Language Structure, 133
- Advanced Leadership Seminar, 136
- Advanced Managerial Applications, 73
- Advanced Microbiology, 58
- Advanced Microbiology, Lab., 57
- Advanced Network: TCP/IP and Routing, 99
- Advanced New Venture Management, 164
- Advanced Nursing: Philosophies and Theories, Introduction to, 174
- Advanced Oracle SQL Performance and Tuning, 103
- Advanced Organic Chemistry, 89
- Advanced Organic Synthesis, 87, 90, 156
- Advanced Orton-Gillingham Practicum I, II, 142
- Advanced Pathophysiology, 176
- Advanced Personality Assessment, 211
- Advanced Pharmacology, 174
- Advanced Pharmacy Practice Experience (APPE) I: Community, 196
- Advanced Pharmacy Practice Experience (APPE) II: Institutional, 196
- Advanced Pharmacy Practice Experience (APPE) III: Ambulatory Care, 197
- Advanced Pharmacy Practice Experience (APPE) IV: Acute Care, 197
- Advanced Pharmacy Practice Experience (APPE) V: Elective – Ambulatory Care I, II, 197
- Advanced Pharmacy Practice Experience (APPE) V: Elective – Community Compounding I, II, 197
- Advanced Pharmacy Practice Experience (APPE) V: Elective – Community Practice I, II, 197
- Advanced Pharmacy Practice Experience (APPE) V: Elective – HIV/AIDS I, II, 198
- Advanced Pharmacy Practice Experience (APPE) V: Elective – Home Infusion I, II, 198
- Advanced Pharmacy Practice Experience (APPE) V: Elective – Medication Therapy Management I, 197
- Advanced Pharmacy Practice Experience (APPE) V: Elective – Medication Therapy Management II, 198
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Acute Care I, II, 198
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Behavioral Health I, II, 199
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Cardiology I, II, 199
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Critical Care I, II, 199
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Emergency Medicine I, II, 200
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Hospital Practice I, II, 198
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Infectious Disease I, II, 199
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Long Term Care I, 198
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Long Term Care II, 199
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Nutrition Support I, II, 200
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Oncology I, II, 199
- Advanced Pharmacy Practice Experience (APPE) VI: Elective – Transitions of Care I, II, 200
- Advanced Pharmacy Practice Experience (APPE) VII: Elective – Drug Information I, 200
- Advanced Pharmacy Practice Experience (APPE) VII: Elective – Drug Information II, 201
- Advanced Pharmacy Practice Experience (APPE) VII: Elective – Managed Care I, II, 201
- Advanced Pharmacy Practice Experience (APPE) VII: Elective – Medical Device/Patient Safety I, II, 201
- Advanced Pharmacy Practice Experience (APPE) VII: Elective – Medication Safety I, II, 201
- Advanced Pharmacy Practice Experience (APPE) VII: Elective – Specialty Pharmacy I, II, 201
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Health Care Organization Management I, 202
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Health Care Organization Management II, 203
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Industry I, II, 202
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Informatics I, II, 203
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Management I, II, 203
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Marketing I, II, 202
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Patient Advocacy I, II, 202
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Public Health I, II, 202
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Regulatory I, II, 203
- Advanced Pharmacy Practice Experience (APPE) VIII: Elective – Research I, II, 202
- Advanced Practice Nursing Role Development, 178
- Advanced Practicum I, II (School Psychology), 221
- Advanced Programming for the Internet, 101
- Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses, 175
- Advanced Psychiatric/Mental Health Nursing I: Assessment and Differential Diagnoses Practicum, 175
- Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics, 175
- Advanced Psychiatric/Mental Health Nursing II: Individual Therapeutics Practicum, 175
- Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics, 175
- Advanced Psychiatric/Mental Health Nursing III: Group and Family Therapeutics Practicum, 175
- Advanced Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents, 174
- Advanced Psychiatric/Mental Health Nursing Practicum II: Adults, 174

# Index

- Advanced Psychiatric/Mental Health Nursing Practicum III: Geriatrics, 174
- Advanced Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents, 173
- Advanced Psychiatric/Mental Health Nursing Theory II: Adults, 174
- Advanced Psychiatric/Mental Health Nursing Theory III: Geriatrics, 174
- Advanced Psychodynamic Psychotherapy, 211
- Advanced Quantitative Analysis, 100, 166
- Advanced Research and Evidence-based Practice, 176
- Advanced Research (Medical Technology), 168
- Advanced Research Seminar (Clinical Psychology), 211
- Advanced Special Projects:
- Chemistry, 87
  - Computer Science, 101
  - Education, 139
  - Electrical Engineering, 147
  - Field Experiences (Education), 142
  - Marketing, 81
  - Mathematics, 143
  - Psychology, 206
- Advanced Sterile Pharmacy Dispensing and Compounding, 193
- Advanced Switching Internet Routing, 100
- Advanced Topics in Bilingual and Intercultural Administration, 229
- Advanced Topics in Pharmaceutical Sciences, 194
- Advanced Topics in Pharmacotherapy I, 192
- Advanced Topics in Pharmacotherapy:
- Advanced Cardiology, 193
- Advanced Topics in Pharmacotherapy II – Geriatric and Pediatrics, 193
- Advanced Topics in Pharmacotherapy III – Critical Care, 193
- Advanced Topics in Pharmacotherapy IV – Infectious Diseases, 193
- Advances in Cell Biology, 57, 168
- Advances in Ecology, 58
- Advances in Ecology, Lab., 58
- Advances in Molecular Genetics, 168
- Advances in Pharmacology, 58
- Africa, Current Issues in, 51
- Airport Operations Management, 229
- Alcohol and Substance Abuse Disorders, Evaluation and Treatment of, 215
- Alumni Incentive Grant, 17
- Ambulatory Care, Advanced Pharmacy Practice Experience (APPE) III: 197
- Ambulatory Care I, II, Advanced Pharmacy Practice Experience (APPE) V: Elective –, 197
- Analytical Chemistry, Advanced, 89
- Analytical Chemistry, Theories of, 86
- Animal Behavior, 55
- An Introduction to Lean Six Sigma, 195
- Anthony J. Petrocelli College of Continuing Studies, 13
- Faculty & Staff, 13
  - Programs, 13
- APN Practicum, 178
- Appeals Process, 34
- Applications of Digital Signal Processing, 146
- Applied Business Law, 79
- Applied Colloid and Surface Science, 90, 105
- Applied Cryptography, 100
- Applied Field Project (Education), 142
- Applied Linguistics for Language Teachers, 131
- Applied Social Psychology, 210, 217
- Applied Statistics, 181
- Applied Statistics I, II, 104
- Appraisal of Individuals: Assessment and Measurement, 92
- Apprenticeship Teaching, 131
- Apprenticeship Teaching Model (M.A.T.), 126–128
- Apprenticeship Teaching Seminar, 138
- Artificial Intelligence, 100
- Art, M.A.T., 127–128
- Arts and Sciences, Maxwell Becton College of, 11
- Faculty & Staff, 11
  - Programs, 11
- Assembly Language, 99
- Assessing Human Performance, 236
- Assessing Internal and External Threats, 159
- Assessment in the Second-language Classroom, 133
- Assistantship (Education), 132
- Assistive Technology for Students with Dyslexia, 134
- Assistive Technology for the Inclusive Classroom, 138
- Athletics, 26
- Attendance, 33
- Auditing, Advanced, 73
- Auditing Concepts and Methods, 73
- Auditor, 16
- Auditor, Admission of, 16
- Autism Spectrum Disorders, Introduction to, 135
- Autoimmune Diseases, Rare Diseases and Special Populations, Integrated Pharmacotherapy IX:, 192
- Automata Theory, 101
- Automatic Control Systems I, 146
- Aviation Management and Operations, 228
- 
- ## B
- B.A./M.P.A. Combined Degree Program, 225
- Becton College of Arts and Sciences, Maxwell, 11
- Behavioral Assessment, 210
- Behavioral Consulting in Organizations, 206
- Behavioral Ecology, 58
- Behavioral Health I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 199
- Behavioral Research, 92
- Behavioral Science: An Introduction to Multicultural Studies, A, 134
- Behavioral Science for Teachers:
- Language and Culture in the Classroom, 134
  - Learning Process, The, 134
- Best Practices in Human Resource Management, 164
- Beyond the Curriculum: Expanding Horizons (1), (2), 191
- Beyond the Curriculum: Foundations in Pharmacy Education (1), 188
- Beyond the Curriculum: Foundations in Pharmacy Education (2), 189
- Beyond the Curriculum/Preparing Practitioners (1), (2), 195
- Big Data Analytics with Hadoop and R, 102
- Bilingual Administration Specialization, 224
- Bilingual and Intercultural Administration, Advanced Topics in, 229
- Bilingual/Bicultural Education (BBE) Specialist Certificate Program, 116–117
- Bilingual Methodology, 229
- Billing Information, 20–22
- Biochemistry, 87, 89, 154
- Biochemistry II, 87
- Biochemistry for the Medical Sciences, 155
- Bioethics, 58
- Bioinformatics, Topics in, 58
- Biological Bases of Behavior, 210
- Biological Foundations of Clinical Psychopharmacology I, II, 212
- Biological Sciences, M.A.T., 127–128
- Biological Sciences Courses, 54–56, 57–59
- Biology
- Florham Campus, 53–56
    - Admission Requirements, 53
    - Business Areas (Finance, Management, Marketing) Concentration, 54
    - Chemistry/Pharmaceutical Sciences Concentration, 54
    - Courses, 54–56
    - Degree Requirements, 53–54
    - Education Concentration, 54
    - Psychology/Counseling Concentration, 54
  - Metropolitan Campus, 56–59
    - Admission Requirements, 56
    - Business Concentration, 58
    - Courses, 57–59
    - Degree Requirements, 56–57
    - Elective Concentration Courses, 57
  - Biology, Research and Thesis, 56, 59
  - Biology, Selected Studies in, 55, 57, 59
  - Biology Seminar, 59
- Biomedical Instrumentation Design, 146
- Biostatistics, 156, 190
- Biotechniques, 58
- Biotechniques, Lab., 58
- Biotechnology, Advanced, 57
- Bio-terrorism Preparedness and Response, 160
- Board of Trustees, 256
- Border Security: Policies, Actions and Implications, 160
- Brazil, Mexico, Colombia and Argentina: A Comparative Perspective, 51
- Bridge Program to the D.N.P., 179
- Budgeting and Finance, 226
- Building Effective Teams, 48
- Building Electronic Commerce Systems, 103
- Building Strategic Partnerships, 44
- Business, 60–84
- Academic Regulations, 60
  - Admission Requirements, 60
  - Degree Requirements (M.B.A.), 61
  - Post-M.B.A. Graduate Certificate, 65–66

- Programs, 60  
   Accounting (M.B.A.), 62  
   Accounting (M.S.), 69  
   Business Administration (M.B.A.), 62  
   Digital Marketing (M.S.), 70  
   Finance (M.B.A.), 63  
   General Management Specialization, 68  
   Graduate Certificates, 65–66  
   Health Sector Management Specialization, 68  
   International Business (M.B.A.), 63  
   Management (M.B.A.), 63  
   Management (M.B.A.) for Executives, 67–68  
   Marketing (M.B.A.), 64  
   Master of Business Administration (M.B.A.), 61  
   Pharmaceutical Management Studies (M.B.A.), 64  
   Saturday M.B.A., 66–67  
   Supply Chain Management (M.S.), 70–71  
   Taxation (M.S.), 71–72  
 Business Administration, 62  
   Admission Requirements, 61  
   Courses, 72–84  
   Degree Requirements, 61  
 Business Analytics, 74  
 Business Areas, Concentration (Biology), 54  
 Business Concentration, 57  
 Business Law, Applied, 79  
 Business Programming Techniques and Data Structures, 166
- 
- C**
- Calendar, Academic, 4  
 Calendar, Nontraditional Academic, 5  
 Campus Life, 25–25  
 Campus Life, Office of, 23  
 Campus Maps, 262–265  
 Campus Ministry, 24  
 Campuses, 8–9  
   Florham Campus, 8  
   Metropolitan Campus, 8  
   Vancouver Campus, 9  
   Wroxton College, 8–9  
 Candidacy for a Graduate Degree, 35  
 Capstone Experience: Principles Into Practice, 94  
 Capstone for Service, Innovation and Leadership, 232  
 Capstone Project Advisement (Nursing Practice), 182  
 Cardiology, Advanced Topics in Pharmacotherapy: Advanced, 193  
 Cardiology I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 199  
 Cardiology, Integrated Pharmacotherapy IV:, 187  
 Cardiovascular Physiology, 55  
 Career Development, 25  
 Career Development Certificate, 38  
 Career-development Process, 51  
 Career Orientation for Administrators, Seminar in, 229  
 Casino Gaming, History of, 164  
 Casinos' Social and Economic Approach, 164  
 Cell Biology, Advances in, 57, 168  
 Cell Biology of Cancer, 55  
 Cell Culture, 59  
 Cell Signaling in Development and Human Disease, 55  
 Center for Clinical Teaching, 125  
 Center for Psychological Services, 25  
 Central and Southern Asia, Current Issues in, 52  
 Certificate in Organizational Leadership, 205  
 Certification  
   Dyslexia Specialist, 124–125  
   Elementary Education, 127  
   English as a Second Language, 128  
   English as a Second Language Specialist, 117  
   Learning Disabilities Teacher Consultant, 124  
   Middle School Endorsement, 129  
   New Jersey Teacher, 126  
   Preschool Through Grade 3, 127  
   Principal, 121–122  
   School Psychology, 222–224  
   Secondary Education Certification (Teaching): Art, Biological Sciences, Chemistry, Earth Science, English, Mathematics, Physical Science, Physics and Social Studies, 127–128  
   Student Assistant, 90  
   Supervisor, 121  
   Teacher of Students with Disabilities, 120, 123, 129  
   TESL/TEFL (Teaching English as a Second/Foreign Language) Specialist, 130  
 Change: Curriculum Development and Program Improvement, 135  
 Change of Program, 16  
 Chemical Analysis, Foundations in, 86  
 Chemical Analysis of Pharmaceuticals, 89  
 Chemical and Pharmaceutical Statistics, 86  
 Chemical Kinetics, 87  
 Chemical Thermodynamics, 86, 89  
 Chemistry  
   Florham Campus, 85–87  
     Admission Requirements, 85  
     Courses, 86–87  
     Degree Requirements, 85  
     Pharmaceutical Chemistry Concentration, 85  
   Metropolitan Campus, 88–90  
     Admission Requirements, 88  
     Courses, 89–90  
     Informatics Concentration, 88  
     Pharmaceutical Chemistry Concentration, 88  
 Chemistry, Advanced Special Projects:, 87  
 Chemistry Courses, 86–87, 89–90  
 Chemistry, Graduate Seminar, 87  
 Chemistry, M.A.T., 127–128  
 Chemistry of High Polymers, 87  
 Chemistry of Natural Products, 87, 89  
 Chemistry/Pharmaceutical Sciences Concentration (Biology), 54  
 Chemistry, Research and Thesis, 87  
 Chemistry, Special Topics in, 87, 89  
 Chemistry, Thesis Seminar, 87  
 Child/Adolescent Assessment, Seminar in, 221  
 Child/Adolescent Intervention, Seminar in, 221  
 Child and Adolescent Development, 139  
 Child and Adolescent Psychopharmacology, 220  
 Child Assessment I, II with Practicum, 220, 223  
 Child Assessment III with Practicum, 221, 224  
 Child Development from Birth to Age 8, 139  
 Child Neuropsychology, 220, 223  
 Child Psychopathology, 216  
 China: Past, Present and Future, 52  
 Civil Law and the Service Industry, 232  
 Civil Rights and the Administration of Justice, 113  
 Claims Substantiation, 105  
 Clery Act, 28  
 Client-server Computing, 100  
 Clinical Child Psychology, 211  
 Clinical Leadership Track, 179  
 Clinical Mental Health Counseling, 90–92  
   Admission Requirements, 90  
   Courses, 91–92  
   Degree Requirements, 90–91  
   Licensure as a Professional Counselor (LPC), 90  
   Licensure as a Student Assistant Coordinator (SAC), 90  
 Clinical Mental Health Counseling, Comprehensive Exam, 92  
 Clinical Mental Health Counseling, Comprehensive Exam II: Electronic Portfolio Review, 92  
 Clinical Mental Health Counseling, Internship I, II, III, 92  
 Clinical Mental Health Counseling, Practicum, 92  
 Clinical Nursing Information Systems and Applications, 174  
 Clinical Pharmacology, 212  
 Clinical Practice in Forensic Context, 214  
 Clinical Practice in Language Instruction, 134  
 Clinical Practice (Teaching), Advanced, 132  
 Clinical Practicum I–II, 168  
 Clinical Practicum III, 169  
 Clinical Psychology, 208–211  
   Admission Requirements and Information, 208  
   Courses, 209–211  
   Degree Requirements, 208–209  
   Forensic Track, 209  
   Performance Requirements, 209  
 Clinical Psychology, Advanced Research Seminar, 211  
 Clinical Psychology, Developmental Issues in, 209  
 Clinical Psychology, Dissertation, 211  
 Clinical Psychology Dissertation Maintenance, 211  
 Clinical Psychology, Internship, 211  
 Clinical Psychology, Seminar in, 211  
 Clinical Psychopharmacology, 212–213  
   Admission Requirements, 212  
   Courses, 212–213  
   Degree Requirements, 212

# Index

- Clinical Psychopharmacology Practicum, 212  
Clinical Research Administration Track, 152–153  
Clinical Research Capstone, 154  
Clinical Research Methods and Psychometrics, 209  
Clinical Supervision for Supervisors, 92  
Clinical Teaching, Center for, 125  
Clinical Teaching Internship and Seminar, I, II, 131  
Clinical Teaching Internship and Seminar III, IV, 140  
Clinical Toxicology, 190  
Clinical Track in Adult Gerontology Nurse Practitioner, 169–170  
Clinical Track in Adult Gerontology Nurse Practitioner — Education or Administration Focus, 170  
Clinical Track in Adult Gerontology Nurse Practitioner — Forensic Focus, 170  
Clinical Track in Family Nurse Practitioner, 171  
Clinical Track in Family Psychiatric/Mental Health Nurse Practitioner, 171  
Clinical Trial Design and Regulatory Requirements, 156, 192  
Clinical Trial Research Administration, 154, 157, 192, 196  
Cloud Computing and Social Media, 132  
Coaching Leadership, 235  
Coaching Psychology, 236  
Coaching Theory and Strategies Certificate, 234  
Coaching Theory and Strategies Specialization, 234  
Coaching Theory, Methods and Issues, 236  
Coding Theory, 146  
Cognitive and Behavioral Therapy, 210  
Cognitive Behavioral Therapy, Advanced, 211  
Collaborative Leadership, 48, 160  
Collection Fee, 22  
Collective Bargaining and Contract Administration, 43  
Colleges, The  
  Maxwell Becton College of Arts and Sciences, 11  
  Silberman College of Business, 12  
  Anthony J. Petrocelli College of Continuing Studies, 13  
  University College: Arts • Sciences • Professional Studies, 13–14  
College Student Development, 238  
Colloid and Surface Science, Applied, 90, 105  
Color Cosmetics, 105  
Combinatorics, 99  
Combined Degree Advantage Program Scholarship, 17  
Comedy, Satire and Parody, 109  
Communication, 93–95  
  Admission Requirements, 93  
  Courses, 94–95  
  Degree Requirements, 93–94  
  Global Experience, 94  
Communication and Globalization, 95  
Communication and Technology, 95  
Communication, Culture and Change, 94  
Communication in Health Care, Professional Pharmacy Practice II., 188  
Communication, Principles and Practice of, 94  
Communications and Media Relations, 235  
Communications for the Casino-industry Professional, 164  
Community, Advanced Pharmacy Practice Experience (APPE) I., 196  
Community Compounding I, II, Advanced Pharmacy Practice Experience (APPE) V: Elective –, 197  
Community Needs Assessment and Qualitative Analysis for Health and Human Services, 45  
Community Practice I, II, Advanced Pharmacy Practice Experience (APPE) V: Elective –, 197  
Community Relations in Sports Organizations, 236  
Community Threat Assessment and Risk Analysis, 44  
Comparative Criminal Justice System, 112  
Comparative Governmental and Administrative Systems, 227  
Comparative Health Systems, 228  
Comparative Phonology for Language Teachers, 131  
Comparative Political Systems, 50  
Comparative Public and Legal Systems, 43  
Compensation: Executive Compensation and Nonqualified Plans, 83  
Compensation: Qualified Pension and Profit-sharing Plans, 85  
Compilers and Translators, 102  
Comprehensive Exam (Clinical Mental Health Counseling), 92  
Comprehensive Exam II: Electronic Portfolio Review (Clinical Mental Health Counseling), 92  
Computational Modeling and Data Management, 155, 196  
Computer-aided Analysis and Design, 145  
Computer Algorithms, 101  
Computer and Network Security, 159  
Computer Application Resources, 226  
Computer Applications and Scientific Report Writing, 217  
Computer Applications in Engineering, 145  
Computer Applications in Statistics Lab, 209  
Computer Architecture, 99  
Computer as a Teaching Aid, The, 133  
Computer-based Instrumentation, 145  
Computer-based Programming for Gifted Children, 141  
Computer Communication Networks, 146  
Computer Engineering, 95–96  
  Admission Requirements, 95–96  
  Courses, 98–103, 166–167  
  Degree Requirements, 96  
  Telecommunications and Networking Certificate, 96, 98  
Computer Facilities, 30–31  
Computer Game Programming, 99  
Computer Graphics, 100  
Computer Networks, 99, 166  
Computer Network Security, Introduction to, 48  
Computer Performance and Evaluation, 100  
Computer Programming, Introduction to, 98  
Computer Science, 96–104  
  Admission Requirements, 96  
  Advanced Computer Programming Certificate, 97  
  Computer Security Certificate, 97  
  Courses, 98–103, 166–167  
  Database Administration Certificate, 97–98  
  Degree Requirements, 97  
  Internet Programming Certificate, 98  
  Telecommunications and Networking Certificate, 96, 98  
Computer Science, Advanced Special Projects, 101  
Computer Science, Graduate Research (Nonthesis), 101  
Computer Science, Internship/Work Experience, 103  
Computer Science, Introduction to, 98, 166  
Computer Science, Research and Thesis, 101  
Computer Science, Special Topics in, 101  
Computer Science II, Introduction to, 99  
Computer Security Administration, 45  
Computer Security and Forensic Administration Certificate, 38–39  
Computer Security and Forensic Administration Specialization, 242  
Computer Security Certificate, 97  
Computer Systems Seizure and Examination, 45  
Computer Telephony, Introduction to, 103  
Computer Usage, Acceptable Use Policies for, 31  
Computers as a Teacher's Aid: Curriculum and Instruction, 132  
Conceptual Connections and Patient Care, Integrated Pharmacotherapy II–IV., 187  
Conceptual Connections and Patient Care, Integrated Pharmacotherapy V–VI., 189  
Conceptual Connections and Patient Care, Integrated Pharmacotherapy VII–VIII., 189  
Conceptual Connections and Patient Care, Integrated Pharmacotherapy IX–X., 192  
Connectivism: New Learning Environments, 50  
Consolidated Returns, 83  
Consultation for School Psychologists, Advanced, 221  
Consumer Behavior, 81  
Contemporary American Drama, 110  
Contemporary American Poetry, 110  
Contemporary Chinese Culture and Society for Administrators, Introduction to, 229  
Contemporary Issues in Community Policing, 46  
Contemporary Issues in Crime and Justice, 112  
Contemporary Issues in Health Sector Management, 76  
Contemporary Legal Issues, 45  
Contemporary Management Issues, 227  
Contemporary World Literature, 110  
Content Marketing, 81  
Continuous D.N.P. Matriculation, 182  
Corporate Communication (Selected Topics), Psychology, 206  
Corporate Creativity and Innovation, 77



- Corporate Finance, 78  
 Corporate Finance for Public Administrators, 229  
 Corporate Finance, Seminar in, 79  
 Corporate Financial Reporting, 73  
 Corporate Reimbursement Deferred Payment Plan, 21  
 Corporate Tax I, Advanced, 82  
 Corporate Tax II, Advanced, 83  
 Correction of Learning Disabilities, 141  
 Correction of Reading Problems, 133  
 Correctional Administration and Leadership Certificate, 39  
 Cosmetic Products, Sensory Evaluation of, 105  
 Cosmetic Science, 104–105  
   Admission Requirements, 104  
   Courses, 105  
   Degree Requirements, 105  
 Cosmetic Science Courses, 105  
 Cosmetic Science Laboratory, 105  
 Cost: Measurement, Planning and Control, 73  
 Counseling Profession: Ethics and Standards of Practice, The, 92  
 Counseling Profession: History and Theories, The, 91  
 Counseling Services, 23, 24  
 Counseling: Sexual Issues, 92  
 Counseling Skills and Practices, 91  
 Countermeasures for Malware, Introduction to, 49  
 CPT (Curricular Practical Training) Independent Study, 225  
 Craft and Form in Fiction, 107  
 Craft and Form in Nonfiction, 107  
 Craft and Form in Poetry, 108  
 Craft and Form in Translation, 108  
 Craft and Form in Young Adult and Children's Literature, 108  
 Craft Module, 107  
 Creative Nonfiction Concentration, 106  
 Creative Nonfiction Writing, 107  
 Creative Writing, 106–108  
   Admission Requirements, 106  
   Courses, 107–108  
   Craft Module, 107  
   Creative Nonfiction Concentration, 106  
   Degree Requirements, 106–107  
   Dual Concentration M.F.A. Option, 106–107  
   Electives, 107  
   Fiction Concentration, 106  
   Literary Translation Concentration, 106  
   Modules, 107  
   Poetry Concentration, 106  
   Single Concentration M.F.A. Option, 106  
   Thesis Module, 107  
   Writing for Young Adults and Children's Literature Concentration, 106  
 Creative Writing and Literature for Educators, 108–110  
   Courses, 109–110  
   Curriculum, 108–109  
   Degree Requirements, 109  
   Residency Requirement, 109  
 Creative Writing and Literature for Educators Residency, 109  
 Credit Cards, 21  
 Credit Hour Definition, 34  
 Crime and Punishment, 113  
 Crime, Victimology and Risk Reduction, 112  
 Criminal Justice, 111–113  
   Admission Requirements, 111  
   Courses, 112–113  
   Degree Requirements, 111–112  
   Online Application, 112  
   Tuition and Financial Aid, 112  
 Criminal Justice, Advanced Internship in, 113  
 Criminal Justice and Criminology, Research Methods in, 112  
 Criminal Justice, Independent Studies, 113  
 Criminal Justice, Professional Seminar in, 112  
 Criminal Law and Forensics, 177  
 Criminal Responsibility and Competency, 214  
 Criminological Theory, Advanced, 112  
 Crisis Communication, 95  
 Crisis Intervention, 91  
 Crisis Management for Higher-education Administrators, 239  
 Critical Analysis of Criminal Justice, 113  
 Critical Care I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 199  
 Cryptography, Applied, 100  
 Cuba: Past, Present and Future, 51  
 Cultural and Social Awareness Seminar, 50  
 Cultural Diversity, Stereotype and Profile, 47  
 Current Concepts in Leadership, 163  
 Current Concepts of Leadership in the Service Industry, 232  
 Current Developments, Topics in, 82  
 Current Issues in Africa, 51  
 Current Issues in Central and Southern Asia, 52  
 Current Issues in Cyber Forensics, 48  
 Current Issues in Forensic Sciences, 51  
 Current Issues in Immigration Law, 50  
 Current Issues in Latin America, 50  
 Current Issues on Terrorism and Security, 48  
 Current Therapeutic Targets and Their Challenges, 193  
 Current Topics in Optics, 147  
 Curricular Change in Physical Science, 86  
 Curricular Practical Training, 42, 59, 90  
 Curriculum and Instruction for Service-industry Professionals, 233  
 Curriculum and Instruction for the Hospitality Educator, 163  
 Curriculum and Instruction: Theory and Practice, 135  
 Curriculum Construction, Principles of, 141  
 Curriculum Development and Theory, 176  
 Curriculum Development for Diverse Learners, 135  
 Curriculum Development, Research in, 142  
 Curriculum/Program Evaluation and Student Assessment, 136  
 Customer Service for Public and Not-for-Profit Organizations, 46  
 Cyber Forensics, Current Issues in, 48  
 Cyber Forensics Issues and Impacts, 161  
 Cybersecurity, 100  
 Cybersecurity and Information Assurance, 113–115  
   Admission Requirements, 114  
   Courses, 98–103, 166–167  
   Degree Requirements, 114  
   Network Security Administration Concentration, 114  
   Secure Software Development Concentration, 114
- 
- D**
- Darwinian Medicine, 58  
 Data Mining, 102  
 Data Structures, 99  
 Data Warehouse and Data Mining, 102  
 Database Administration Certificate, 97–98  
 Database Project with Visual Basic, 99  
 Database Systems, 99  
 Database Systems, Advanced, 103  
 Dean of Students, 23  
 Decision Sciences, Graduate Independent Study, 74  
 Decision Support Systems, 100, 166  
 Deferred Payment Plan, 19  
 Degree- and Certificate-seeking Students, 15  
 Degree Requirements, 35  
 Delivery of Public Services, 227  
 Demand and Revenue Management, 74  
 Dermal Pharmacology and Immunology, 58  
 Dermatology, Over-the-Counter Remedies and Self Care, Integrated Pharmacotherapy III., 187  
 Developing a Sustainability Mindset in Hospitality and Tourism, 164  
 Developing Metacognitive Skills, 138  
 Developing Modern International Relations, 228  
 Developing Multicultural Curricula, 140  
 Development Across the Life Span, 91  
 Development of E-business Applications, 103  
 Development of Global Transportation System, 228  
 Development of MIS 1: Project Management and Systems Analysis, 166  
 Development of MIS 2: Systems Design, Implementation and Maintenance, 166  
 Development of Political and Administrative Theory, 227  
 Developmental Child and Adolescent Psychology, 220  
 Developmental Genetics, 57  
 Developmental Issues in Clinical Psychology, 209  
 Developmental Psychology, 217  
 Diagnosing Mathematics Disabilities and Strategies for Remediation, 134  
 Diagnosis of Dyslexia, 140  
 Diagnosis of Learning Disabilities, 140  
 Diagnosis of Reading Problems, 132  
 Diagnosis/Treatment Planning (in Counseling), 91  
 Diagnostic and Remedial Techniques I, II Practicum in, 142  
 Digital Communications, 145

# Index

- Digital Communications, Advanced, 146  
Digital Image Processing, 102, 146  
Digital Marketing, 70  
    Admission Requirements, 70  
    Courses, 72–84  
    Degree Requirements, 70  
Digital Marketing Strategies, 81  
Digital Signal Processing, 145  
Digital Signal Processing, Applications of, 146  
Digital Signal Processing with C and DSP Processors, 147  
Digital Transmission, Introduction to, 146  
Dining Services, 25  
Diplomacy and International Relations Certificate, 39  
Diplomacy and International Relations, Introduction to, 52  
Diplomacy and the U.S.A.: The Impact of Global Leadership, 52  
Diplomatic Communication for Administrators, 228  
Disabilities, Students with, 32  
Disaster Recovery, 102  
Disaster Recovery and Organizational Continuity, 45  
Discourse Analysis for Language Teachers, 132  
Discovering the World of Wine, 163  
Discrimination, 28  
Displaced Persons Administration Certificate, 39  
Dissertation (Clinical Psychology), 211  
Dissertation (School Psychology), 220  
Dissertation Maintenance (Clinical Psychology), 211  
Dissertation Maintenance (School Psychology), 221  
Dissertation Seminar (School Psychology), 220  
Distance Learning: Children's Literature, 132  
Distributed Database Systems, 103  
Distribution System Management, 233  
Diversity Issues in Clinical Psychology, 210  
D.N.P., see Nursing Practice  
D.N.P. Programs, Accelerated, 173, 180–181  
D.N.P. Role Development and Entrepreneurship, 182  
Dosage Forms and Drug Delivery Systems, Pharmaceuticals III., 190  
Drug-delivery Systems, 89  
Drug Design and Discovery, 89  
Drug Information I, Advanced Pharmacy Practice Experience (APPE) VII: Elective –, 200  
Drug Information II, Advanced Pharmacy Practice Experience (APPE) VII: Elective –, 201  
Drug Information, Informatics and Toxicology, Professional Pharmacy Practice III., 191  
Drugs of Abuse, 190  
Dual Concentration M.F.A. Option, 106–107  
Dual Program in Literacy/Reading and Multisensory Reading, 118  
Dyslexia, Introductory Course in, 133  
Dyslexia Specialist Program, 124–125
- E**
- Early Childhood Education, Master's Seminar in, 141  
Earth Science, M.A.T., 127–128  
E-business Applications, Development of, 103  
Ecology, Advances in, 58  
E-commerce Certificate, 148  
Econometrics, 75  
Economic Analysis, 75  
Economic Development in Latin America, 51  
Economic Integration and Free Trade Agreements in Latin America, 51  
Economics Courses, 75  
Economics, Graduate Independent Study, 75  
Economics in the Middle East, 50  
Economics of International Trade, 75, 79  
Ecotoxicology, 55, 58  
Education, 115–143  
    Courses, 130–143  
    Education for Certified Teachers (M.A.), 115–120  
    Educational Leadership (M.A.), 121–122  
    Learning Disabilities (M.A.), 122–125  
    Mathematical Foundations, 125  
    Teaching (M.A.T.), 126–130  
    Teaching English as a Second/Foreign Language (TESL/TEFL) (M.A.), 129–130  
    Education, Advanced Special Project, 139  
    Education Concentration (Biology), 54  
    Education Courses, 130–143  
    Education, Evaluation and Measurement in, 139  
    Education, Final Project, 142  
    Education for Certified Teachers, 115–120  
        Admission and Matriculation, 116  
        Bilingual/Bicultural Education (BBE) Specialist Certificate Program, 116–117  
        Courses, 130–143  
        Degree Requirements, 116  
        Dual Program in Literacy/Reading and Multisensory Reading, 118  
        English as a Second Language Specialist Certification Program, 117  
        Instructional Technology Specialist Certificate (ITC) Program, 117  
        Literacy/Reading Specialist (LRS) Certification Program, 117–118  
        Professional Studies Concentration, 118–119  
        Program Information, 116  
        Teacher of Students with Disabilities (TSD) Certification (Nondegree Program), 120  
    Education of Students with Moderate to Severe Disabilities, 138  
    Education, Peter Sammartino School of, 115  
    Education, Special Topics in, 130  
    Educational and Learning Theory, 176  
    Educational Leadership, 121–122  
        Admission Requirements, 121  
        Courses, 130–143  
        Degree Requirements, 121  
        Post-master's Principal Certification Program, 121–122  
    Educational Leadership Field-based Internship I, II, III, 136  
    Educational Organization for the Hospitality Educator, 163
- Educator Role Seminar I, II, III, IV, Advanced, 176  
Effective Decision Making for Organizations, 161  
Effective Reading Instruction, 134  
Effective Risk Analysis, 160  
Effective Teaching and Effective Schools, 139  
Effective Team Administration, 236  
Effective Team Building, 160  
Electrical Engineering, 144–147  
    Admission Requirements, 144  
    Courses, 145–147  
    Degree Requirements, 144  
    Telecommunications and Networking Certificate, 144  
Electrical Engineering, Advanced Special Projects, 147  
Electrical Engineering, Internship/Work Experience, 147  
Electrical Engineering, Research and Thesis, 147  
Electrical Engineering Seminar, 147  
Electrical Engineering, Special Topics in, 147  
Electromagnetic Radiation and Transmission, 145  
Electronic Commerce, 147–148  
    Admission Requirements, 147  
    Courses, 98–103, 166–167  
    Degree Requirements, 148  
    E-commerce Certificate, 148  
Electronic Commerce (Course), 101  
Electronic Medical Records Management, 155, 195  
Electro-optical Properties of Materials, 146  
Elementary Education Certification, 127  
Elementary Science, Standards-based Strategy, 139  
Email and Database Marketing, 81  
Embedded Systems, 145  
Emergency Management, 160  
Emergency Management Administration Certificate, 39  
Emergency Management Administration Specialization, 242  
Emergency Management and Safety Administration, 44  
Emergency Management (Homeland Security) Concentration, 158  
Emergency Management Policies, Analysis and Implications, 160  
Emergency Medicine I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 200  
Emerging Pathogens, 55  
Emerging Topics in Cancer Pharmacology and Pharmacotherapeutics, 193  
Employee Educational Tuition Grants, 22  
Employee Relations, 227  
Employment Law, Advanced, 47  
Endocrine, Urinary Tract, Renal and Reproductive Health, Integrated Pharmacotherapy VIII., 189  
Endocrinology, 55  
Engaging Students in Physical Science Classroom, 86  
Engineering Applications in Medicine, 146  
English as a Second Language Certification (Teaching), 128

- English as a Second Language, First Certification (Teaching), 128
- English as a Second Language Specialist Certification Program, 117
- English for Occupational Purposes: English for Academic Purposes, 149
- English for Professional Success, 149
- Courses, 149
- Placement Testing, 149
- English for Professional Success: Global Exchange — New York City as a Classroom, 149
- English Language Education: Grammar for Teachers of English and E.S.L., 137
- English, M.A.T., 127–128
- Enterprise Computing for the IBM zSeries, 100
- Entrepreneurial Finance, 77
- Entrepreneurship and Innovation, 76
- Entrepreneurship and You, 164
- Entrepreneurship Capstone, 77
- Entrepreneurship, Graduate Independent Study, 77
- Environmental and Ecological Economics, 230
- Environmental and Sociologic Aspects of Global Transportation, 227
- Environmental Law, 230
- Environmental Risk Assessment, 59
- Environment and Public Administration, Introduction to the, 230
- Enzymology, 58, 168
- Epidemiology and Study Design Evaluation, 156, 190
- Essentials of Health Care Financial Management, 75
- Estate and Gift Tax Planning, 82
- Estate and Gift Taxation, 82
- Ethical and Legal Issues in Health Care, 228
- Ethical Issues in Forensic Practice, 214
- Ethics and Human Rights, 46
- Ethics and Professional Practice in Schools and School Psychology, 220, 223
- Ethics and Public Values, 43
- Ethics in Public Administration, 229
- Ethics of Health Care Research, 155, 156, 196
- Ethics, Politics and Justice, 112
- European Studies and Administration Certificate, 39
- Evaluation and Measurement in Education, 139
- Evaluation and Treatment of Alcohol and Substance Abuse Disorders, 215
- Evaluation and Treatment of Sex Offenders, 215
- Events Planning and Administration, 236
- Executive Communication and Leadership, 74
- Executive Communication as a Leadership Tool, 49
- Executive Lectures, 94
- Executive Program
- Management (M.B.A.) for Executives, 67–68
- Expanding Horizons (1), (2), Beyond the Curriculum, 191
- Expert Systems, 100
- Exploring the United Nations, 52
- Externship in Forensic Psychology, 215
- Externship in Pro-Seminar, 215
- Externship in School Psychology I, II, 221, 224
- F**
- Face of Terror, The, 160
- Facility Development, Administration and Programming, 235
- Faculty, 11, 12, 13, 14, 244–255
- Fairleigh Dickinson University Press, 32
- Family and Community in Education, 139
- Family Business Management, 76
- Family Educational Rights and Privacy Act (FERPA), 27
- Family Nurse Practitioner, Clinical Track in, 170–171
- Family Nurse Practitioner Post-Master's Certificate, 173
- Family Primary Care I Pediatrics, 178
- Family Primary Care I Practicum, 178
- Family Primary Care II Practicum, 178
- Family Primary Care II Theory, 178
- Family Psychiatric/Mental Health Nurse Practitioner, Clinical Track in, 171
- Family Psychiatric/Mental Health Nurse Practitioner Post-Master's Certificate, 173
- Family Systems, 178
- Family Systems and Counseling, 91
- FDU School of Pharmacy and Health Sciences Outcomes, 184
- Federal Direct Graduate PLUS Loan, 18–19
- Federal Direct Unsubsidized Loan, 18
- Federal Loan Programs, 18–19
- Federal Tax I: Individual, 72
- Federal Tax II: Business Entities, 72
- Federal Tax: Individual Income Taxation, Advanced, 82
- Federal Tax: Property Transactions, Advanced, 83
- Federal Tuition Assistance, 18
- Federal Veterans' Educational Assistance Programs, 18
- Federally Funded Programs, 18–19
- Fellowships, 17
- Fellowships, Graduate Administrative Assistant, 17
- Fellowships, Teaching, 17
- FERPA (Family Educational Rights and Privacy Act), 27
- Fiction Concentration, 106
- Fiction Writing, 107
- Field Experiences (Education), Advanced Special Projects, 142
- Field Placement, Advanced, 135
- Field Project Seminar (Education), 138
- Final Project (Education), 142
- Final Project: School-based Research, 136
- Final Project: Second Language Acquisition, 141
- Finance, 63
- Admission Requirements, 61
- Courses, 78–79
- Degree Requirements, 61
- Post-M.B.A. Graduate Certificate, 65
- Specialization Requirements, 63
- Finance and Accounting for Health and Human Services, 45
- Finance and Accounting for Public Administration, 229
- Finance Concentration, 54
- Finance for Health Care Managers, 75
- Finance for Managers, 78
- Finance Graduate Certificate, 65
- Finance, Graduate Independent Study, 79
- Finance, Principles of, 77, 78
- Financial Accounting, Advanced, 73
- Financial Accounting and Reporting, 77
- Financial Accounting: An End-user Approach, 72
- Financial Accounting: End-User Applications, 72
- Financial Accounting, Fundamentals of, 77
- Financial Administration, 42
- Financial Administration in College Sports, 239
- Financial Administration in Sports, 235
- Financial Aid and Scholarships, 17–19
- Alumni Incentive Grant, 17
- Awards, Terms and Conditions, 19
- Combined Degree Advantage Program Scholarship, 17
- Deferred Payment Plan, 19
- Federal Direct Graduate PLUS Loan, 18–19
- Federal Direct Unsubsidized Loan, 18
- Federal Loan Programs, 18–19
- Federal Tuition Assistance, 18
- Federal Veterans' Educational Assistance Programs, 18
- Federally Funded Programs, 18–19
- Fellowships, 17
- GI Bill, The, 18
- Graduate Administrative Assistant Fellowship, 17
- Johnson & Johnson Scholarship, 17
- Nurse Faculty Loan Program, 17–18
- Other Veterans' Affairs Educational Benefits, 18
- Post 9/11 GI Bill, 18
- Privately Funded Scholarships, 17
- Renewal, 19
- Sammartino Scholarship, 17
- Satisfactory Academic Progress, 19
- Survivors' and Dependents' Educational Assistance Program, 18
- Teaching Fellowships, 17
- Tuition Payment Options, 19
- University Fellowships, 17
- University-funded Grant Programs, 17
- University-funded Programs, 17
- University Provost's Scholarship Program for Graduate Study, 17
- VA Vocational Rehabilitation, 18
- Veterans' Education Benefits, 18
- Financial Analysis for Accountants, 78
- Financial Decisions for Sustainable Enterprise, 79
- Financial Management, 163
- Financial Markets and Investments, 79
- Firewalls and Intrusion Detection Systems, 102
- First Certification in Teaching English as a Second Language, 128
- First-responder Administration Certificate, 39
- First-Year Clinical Practicum I (Clinical Psychology), 209
- First-year Clinical Practicum II: Ethics, 210
- Florham Campus, 8
- Fluency: A Bridge to Comprehension, 134
- Forensic Accounting and Litigation Support, 73

# Index

Forensic Assessment and Prediction, 214  
Forensic Expert, The, 45  
Forensic Issues in Family Court, 215  
Forensic Psychology, 213–215  
    Admission Requirements, 213–214  
    Courses, 214–215  
    Degree Requirements, 214  
Forensic Psychology, Externship in, 215  
Forensic Psychology, Introduction to, 214  
Forensic Psychology, Special Topics in, 215  
Forensic Sciences, Current Issues in, 51  
Forensic Science Technology, 177  
Forensic Scientific Evidence, 215  
Forensic Track (Clinical Psychology), 209  
Forensics Administration, 46  
Foundations: Historical, Philosophical and  
    Legal Issues Related to Disabilities, 137  
Foundations in Chemical Analysis, 86  
Foundations in Integrated Pharmacotherapy I:  
    An Introduction to Pathophysiology,  
    Genetics, Microbiology and Delivery of  
    Care, 187  
Foundations in Pharmaceutical Science:  
    Pharmacology, Medicinal Chemistry,  
    Pharmacokinetics, 186  
Foundations in Pharmacy Education (1),  
    Beyond the Curriculum:, 188  
Foundations in Pharmacy Education (2),  
    Beyond the Curriculum:, 189  
Foundations in Reading I, II, 132  
Foundations of Management, 79  
Foundations of Modern America: African-  
    Americans, 140  
Foundations of Modern America: Asian-  
    Americans, 140  
Foundations of Modern America: Latino/a,  
    140  
French I, II, 142  
Fundamentals of Financial Accounting, 77  
Fundamentals of Health Systems and Policy,  
    75  
Fundamentals of Management, 77  
Fundamentals of Marketing, 77  
Fundamentals of Supervision in Counseling, 92  
Funding Practices, Advanced, 44  
Fusion Center Operations and Integration, 47

## G

Gaming/Casino Management, Seminar in, 163  
Gastrointestinal, Integrated Pharmacotherapy  
    II:, 187  
Gateway to Professional Studies Track, 151  
Gender Issues in Education, 135  
Gene Expression and Regulation, 56  
General Information  
    The University, 6  
    Admissions, 15  
General Management (Business), 68  
General/Theoretical Psychology, 216–217  
    Admission Requirements, 216  
    Courses, 216–217  
    Degree Requirements, 216  
German I, II, 145  
GI Bill, The, 18  
GIS and Emergency Administration, 44  
GIS in Emergency Management, 160

Global Administrative Skills, 228  
Global Business Capstone, 78, 80  
Global Citizenship Seminar, 46  
Global Communication Skills Forum for  
    Administrators, 229  
Global Emergency Medical Services  
    Administration Certificate, 39  
Global Energy System, 228  
Global Experience (Communication), 94  
Global Finance, 79  
Global Health and Human Services  
    Administration Certificate, 39–40  
Global Health and Human Services  
    Administration Specialization, 242  
Global Health and Human Services Systems,  
    45  
Global Health: Epidemiology and Genomics,  
    181  
Global Health Issues, 229  
Global Leadership, 43  
Global Leadership and Administration  
    Certificate, 40  
Global Leadership and Administration  
    Specialization, 242  
Global Marketing, 163  
Global Marketing for the Service Industry, 232  
Global Migration: Past, Present and Future, 52  
Global Parasitology Laboratory Workshop, 54  
Global Parasitology Lecture, 54  
Global Preparedness for Catastrophic  
    Emergencies, 44  
Global Security and Terrorism Studies  
    Certificate, 40  
Global Seminar, Advanced, 163  
Global Service Industry Business Management,  
    233  
Global Sourcing, Procurement and  
    Negotiations, 74  
Global Sports, 236  
Global Supply Chain Finance, 75  
Global Technology Administration Certificate,  
    40  
Global Technology Administration  
    Specialization, 242  
Global Technology Project Management, 48  
Global Tourism Development, 163  
Global Transportation Management  
    Specialization, 224  
Global Transportation System, Development  
    of, 228  
GMAT Waiver, 71  
Governance, Planning and Finance in Higher  
    Education, 238  
Government and Administration Certificate,  
    40  
Grades, 35  
Graduate Administrative Assistant  
    Fellowships, 17  
Graduate Areas of Study, Inside Front Cover, 37  
Graduate Capstone (Hospitality Management),  
    162  
Graduate Degree, Candidacy for, 35  
Graduate Independent Study  
    Accounting, 73  
    Decision Sciences, 74  
    Economics, 75  
    Entrepreneurship, 77

Finance, 79  
    International Business, 79  
    Management, 80  
    Marketing, 81  
    Pharmaceutical Management Studies, 82  
Graduate Internship (Hospitality  
    Management), 163  
Graduate (Nonthesis) Research in Chemistry,  
    87  
Graduate Research (Nonthesis), Computer  
    Science, 101  
Graduate Seminar (Chemistry), 87  
Graduate Studies and Research, Introduction  
    to, 232  
Grants and Sponsored Projects Operations, 50  
Grant Writing and Administration, 43  
Grant Writing and Administration in Higher  
    Education, 239  
Grant Writing and Evaluation, 229  
Graphic Novels, 110  
Group Communication and Leadership, 94  
Group Counseling, 91  
Group Dynamics, 235  
Group Dynamics and Team Leadership, 205

## H

Hair-care Raw Materials and Formulations,  
    105  
Harassment, 28  
Health Assessment Practicum, Advanced, 175  
Health Assessment Theory, Advanced, 174  
Health Care and Life Sciences Industry  
    Cluster, The, 76  
Health Care and Life Sciences Management,  
    Legal and Ethical Issues in, 76  
Health Care Delivery, Professional Pharmacy  
    Practice I:, 188  
Health Care Delivery Systems and Public  
    Policy, 181  
Health Care, Ethical and Legal Issues in, 228  
Health Care Financial Management, Essentials  
    of, 75  
Health Care Financial Operations, 76  
Health Care Insurance, Reimbursement and  
    Cost Control, 75  
Health Care Operations Management, 75  
Health Care Organization Management I,  
    Advanced Pharmacy Practice Experience  
    (APPE) VIII: Elective –, 202  
Health Care Organization Management II,  
    Advanced Pharmacy Practice Experience  
    (APPE) VIII: Elective –, 203  
Health Care Quality and Service Management,  
    75  
Health Care Systems and Policy, 81, 157  
Health Disparities: Social, Ethical, Legal  
    Issues, 181  
Health Finance and Control Systems, 227  
Health Informatics Capstone, 154, 157  
Health Informatics Track, 153–154  
Health Information Exchange and Security,  
    155, 195  
Health Policy and the Public, 230  
Health Quality and Outcomes Management, 76  
Health Quality Assessment and Outcomes,  
    182

- Health Science, 150–156  
 Clinical Research Administration Track, 152–153  
 Courses, 154–157  
 Degree Requirements, 150  
 Gateway to Professional Studies Track, 151  
 Health Informatics Track, 153–154  
 Regulatory Science Track, 151–152  
 Summary, 150
- Health Sector Management and Policy, 75  
 Health Sector Management (Business), 68  
 Health Sector Marketing and Consumer Behavior, 76
- Health Services Administration Specialization, 224
- Health Services, Student, 25
- Health Systems and Policy, Fundamentals of, 75
- Health Systems and Policy, Introduction to, 156, 227
- Hematology and Oncology, Integrated Pharmacotherapy X:, 192
- Heterocyclic Chemistry, 87
- Higher Geometry, 104
- Histology, 59, 154, 155
- Historical Perspectives of Terrorism, 160
- History and Systems, 209
- History of Casino Gaming, 164
- History of Multisensory Instructional Methods for Students with Learning Disabilities/Dyslexia, 133
- History of Pharmacy, 190
- History (of the University), 6–7
- HIV/AIDS I, II, Advanced Pharmacy Practice Experience (APPE) V: Elective –, 198
- Home Infusion I, II, Advanced Pharmacy Practice Experience (APPE) V: Elective –, 198
- Homeland Security, 157–161  
 Admission Requirements, 158  
 Courses, 159–161  
 Degree Requirements, 158  
 Emergency Management Certificate, 159  
 Emergency Management Concentration, 158  
 Leadership Certificate, 159  
 Leadership Concentration, 158  
 Terrorism and Security Studies Certificate, 159  
 Terrorism and Security Studies Concentration, 158
- Homeland Security Administration Certificate, 40
- Homeland Security and Constitutional Issues, 48, 159
- Homeland Security — Emergency Management Certificate, 159
- Homeland Security — Emergency Management Concentration, 158
- Homeland Security Leadership Certificate, 159
- Homeland Security Leadership Concentration, 158
- Homeland Security — Terrorism and Security Studies Certificate, 159
- Homeland Security — Terrorism and Security Studies Concentration, 158
- Honor Society (Public Administration), 224
- Hospital Practice I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 198
- Hospitality Education Practicum, 163
- Hospitality Law — Legal Issues in Hospitality, 163
- Hospitality Management, Advanced Global Seminar, 163
- Hospitality Management, Graduate Capstone, 162
- Hospitality Management, Graduate Internship, 163
- Hospitality Management, Special Project, 162
- Hospitality Management Studies  
 Florham Campus/Metropolitan Campus, 161–164  
 Admission Requirements, 161  
 Courses, 162–164  
 Degree Requirements, 162  
 Prerequisite Program for Non-hospitality Majors, 162
- Vancouver Campus, 243  
 Admission Requirements, 243  
 Courses, 162–164  
 Information, 161–162
- Wroxton College, 240  
 Admission Requirements, 240  
 Courses, 162–164  
 Information, 161–162
- Hospitality Operations Management, 162
- Human Anatomy, 154, 156
- Human Environment, The, 230
- Human Evolution, 58
- Human Factors in Informatics, 155, 196
- Human Genetics, 56, 58
- Human Physiology, 59, 154, 155
- Human Relations and Conflict Resolution for Educators, 141
- Human Resource Administration Certificate, 40
- Human Resource Administration in Sports Organizations, 235
- Human Resource Management, 160
- Human Resource Management, Advanced, 163
- Human Resource Management and Development in the Service Industry, 232
- Human Resource Management, Best Practices in, 164
- Human Resources Administration Specialization, 242
- Human Resources Development (Psychology), 206
- Human Resources Management, 226
- Human Resource Systems: Approaches and Techniques for the Modern Workplace, 44
- 
- IBM System i Enterprise Computing, 100
- Immigration Law, Current Issues in, 50
- Immunobiology, 55
- Immunology, 57, 168
- Impact, 7
- Impact of Media in World Politics, The, 52
- Impact of Terrorism on College Safety, 239
- Impact of Terrorism on School Safety, The, 48
- Implementing Organizational Change, 161
- Income Taxation of Estates and Trusts, 83
- Incorporating Children's Literature into Orton-Gillingham Program, 134
- Independent Studies (Criminal Justice), 113
- Independent Study in Psychology (Psy.D.), 222
- Independent Study in Public Administration, 226
- Individual Behavior Studies, 206
- Individual Job-related Project, Internship I or, 235
- Industrial/Organizational Internship, 206
- Industrial/Organizational Psychology, 204–206  
 Admission Requirements, 204–205  
 Courses, 205–206  
 Degree Requirements, 205  
 Organizational Behavior Concentration (Low-residence Program), 205  
 Organizational Leadership Certificate, 205
- Industry I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 202
- Infectious Disease I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 199
- Infectious Disease, Integrated Pharmacotherapy VI:, 189
- Informatics I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 203
- Informatics and Information Systems, 154, 192
- Informatics Concentration, 88
- Information and Intelligence Collection, Principles of, 47
- Information Literacies and Learning Environments Certificate, 40
- Information Literacies and Research, 50
- Information Security, 103
- Information Systems Course, 80
- Information Systems for Competitive Advantage, 166
- Information Systems for Health Care, 181
- Information Systems for Managers, 80
- Information Systems, Principles of, 43
- Information Technology Management, 226
- Infrared Optics, 146
- Innovations in Effective Teaching in Special Education, 137
- Inorganic Chemistry, Advanced, 86, 89
- Insect-transmitted Diseases, 55
- Institutional, Advanced Pharmacy Practice Experience (APPE) II:, 196
- Institutional Risks Administration Certificate, 237–238
- Institutional Risks Administration Specialization, 237–238
- Instructional Technology Specialist Certificate (ITC) Program, 117
- Instructional Technology, Seminar in, 141
- Instructional Technology, Special Topics in, 142
- Instructional Theory and Practice, 130
- Instrumental Analysis, 87, 89
- Integrated Circuit Devices, 145
- Integrated Health Care Systems, 228
- Integrated Pharmacotherapy I: An Introduction to Pathophysiology, Genetics, Microbiology and Delivery of Care, Foundations in, 187

# Index

- Integrated Pharmacotherapy I–X: A Whole System Overview and Effecting Patient Care, 192
- Integrated Pharmacotherapy II: Gastrointestinal, 187
- Integrated Pharmacotherapy II–IV: Conceptual Connections and Patient Care, 187
- Integrated Pharmacotherapy III: Dermatology, Over-the-Counter Remedies and Self Care, 187
- Integrated Pharmacotherapy IV: Cardiology, 187
- Integrated Pharmacotherapy V: Neurology, Psychiatry and Anesthesiology, 189
- Integrated Pharmacotherapy V–VI: Conceptual Connections and Patient Care, 189
- Integrated Pharmacotherapy VI: Infectious Disease, 189
- Integrated Pharmacotherapy VII: Pulmonary, Eye, Ear, Nose and Throat, 189
- Integrated Pharmacotherapy VII–VIII: Conceptual Connections and Patient Care, 189
- Integrated Pharmacotherapy VIII: Endocrine, Urinary Tract, Renal and Reproductive Health, 189
- Integrated Pharmacotherapy IX: Autoimmune Diseases, Rare Diseases and Special Populations, 192
- Integrated Pharmacotherapy IX–X: Conceptual Connections and Patient Care, 192
- Integrated Pharmacotherapy X: Hematology and Oncology, 192
- Integrating Literacy and Technology Across the Curriculum, 135
- Integrating Science/Mathematics/Technology in the Classroom, 138
- Integrating Technology in the Second-language Classroom, 135
- Intellectual Assessment, 210
- Intelligence Analysis, 47
- Intelligence-led Policing Certificate, 40–41
- Intelligence-led Policing: Concepts, Practices and Issues, 47
- Intelligence Team Management, 47
- Intercollegiate Sports Administration Certificate, 237
- Intercollegiate Sports Administration Specialization, 237
- Intermediate Accounting I, II, 73
- International Accounting, 73
- International Business, 63
- Admission Requirements, 61
- Courses, 79
- Degree Requirements, 61
- Post-M.B.A. Graduate Certificate, 65
- Specialization Requirements, 63
- International Business Concepts, 79
- International Business (Course), 78
- International Business Graduate Certificate, 65
- International Business, Graduate Independent Study, 79
- International Communication and Culture, 94
- International Conflict Resolution, 49
- International Dimensions of Public Administration, 229
- International Management, 79
- International Marketing, 79
- International Relations and Diplomacy Specialization, 225
- International Short Story, 110
- International Student Services, 25
- International Students, Admission of, 16
- International Tax I: Sourcing and Inbound, 82
- International Tax II: Outbound, 82
- International Tax III: Special Topics, 83
- International Tourism, 164
- International Tourism Study Internship, 164
- Internet, Advanced Programming for the, 101
- Internet for Educators, 141
- Internet for Educators, Advanced, 142
- Internet Programming Certificate, 98
- Internship I, II, III (Clinical Mental Counseling), 92
- Internship I or Individual Job-related Project, 235
- Internship II (Sports Administration), 236
- Internship and Seminar I, II, Clinical Teaching, 131
- Internship (Clinical Psychology), 211
- Internship in Criminal Justice, Advanced, 113
- Internship (Industrial/Organizational Psychology), 206
- Internship, International Tourism Study, 164
- Internship/Laboratory Work Experience (Chemistry), 87
- Internship Maintenance (School Psychology), 221
- Internship (Public Management), 226
- Internship (School Psychology), 221
- Internship/Work Experience (Computer Science), 103
- Internship/Work Experience (Electrical Engineering), 147
- Interviewing Techniques, 214
- Interviewing, Techniques of, 206
- Introduction to Advanced Nursing: Philosophies and Theories, 174
- Introduction to Autism Spectrum Disorders, 135
- Introduction to Computer Network Security, 48
- Introduction to Computer Programming, 98
- Introduction to Computer Science, 98, 166
- Introduction to Computer Science II, 99
- Introduction to Computer Telephony, 103
- Introduction to Contemporary Chinese Culture and Society for Administrators, 229
- Introduction to Countermeasures for Malware, 49
- Introduction to Digital Transmission, 146
- Introduction to Diplomacy and International Relations, 52
- Introduction to Forensic Psychology, 214
- Introduction to Graduate Studies and Research, 232
- Introduction to Health Systems and Policy, 156, 227
- Introduction to Lean Six Sigma, 155, 156
- Introduction to Lean Six Sigma, An, 195
- Introduction to Psychotherapy, 210
- Introduction to Real-time Systems, 102
- Introduction to Research (Chemistry), 89
- Introduction to School Learning Problems, 223
- Introduction to School Learning Problems I, 220
- Introduction to School Learning Problems II, 220, 223
- Introduction to Students with Disabilities and Autistic Spectrum Disorders, 137
- Introduction to Students with Disabilities in School and Community, 137
- Introduction to Sustainability, 230
- Introduction to Technology Management, 228
- Introduction to the Environment and Public Administration, 230
- Introduction to United States Culture, 134
- Introductory Course in Dyslexia, 133
- Introductory Medicinal Chemistry, 86, 154
- Introductory Pharmacy Practice Experience (IPPE) I: Community, 188
- Introductory Pharmacy Practice Experience (IPPE) II: Institutional, 191
- Investigation of Computer System/Network Emergencies, 48
- Irish Literature, 110
- ISIS or The Islamic State, 53
- I.S. Master's Clinical Practicum, 217
- I.S. Master's Thesis, 217
- I.S. Master's Thesis II, 217
- Issues and Techniques in Research and Evaluation I, II, 220
- Issues of Security and Transportation Systems, 228
- Itanium Processor Application Architecture, 145
- 
- ## J
- Java and the Internet, 101
- Johnson & Johnson Scholarship, 17
- Joint Degree Program  
B.A./Master of Public Administration, 225
- J2EE Programming, 101
- Juvenile Offenders, 215
- 
- ## K
- Knowledge Management in Public Administration, 229
- K–4 Literature for Struggling Readers, 137
- 
- ## L
- Lab: Advanced Microbiology, 57
- Lab: Advances in Ecology, 58
- Lab: Biotechniques, 58
- Lab: Molecular Biology Techniques, 59
- Lab: Topics in Bioinformatics, 58
- Laboratory: Molecular Cell Biology, 57
- Language Acquisition and Language Disorders, 133
- Language Acquisition in Bilingual/Bicultural Contexts, 130
- Language and Communication, 95

- Language and Culture in the Classroom, Behavioral Science for Teachers:, 134  
 Language, Culture and the Community, 135  
 Language Development and Literacy I, II, 138  
 Language Development Through Mathematics/ Science, 138  
 Language Structure, Advanced, 133  
 Lasers, 146  
 Late Payment Charges, 22  
 Latin America and Globalization, 46  
 Latin America, Current Issues in, 50  
 Latin American Studies Certificate, 41  
 Latino/a, Foundations of Modern America:, 140  
 Law and Administration, 227  
 Law and Administrative Practice, 43  
 Law and Public Safety Administration Certificate, 41  
 Law and Student Affairs, The, 238  
 Law Courses, 79  
 Law-enforcement Executive Leadership Seminar, 44  
 Law, Ethics and Policy for Health and Human Services, 45  
 Leadership and Change Management, 80  
 Leadership Development Project, 80  
 Leadership: Global Advanced Scholarship and Practice, 46  
 Leadership (Homeland Security) Concentration, 158  
 Leadership in Learning Community and School, 135  
 Leadership in the Service Industry, Current Concepts of, 232  
 Leadership/Organizational Analysis, 182  
 Leadership Plus, 44  
 Leadership, Principles of, 112  
 Leadership Seminar, Advanced, 136  
 Leadership Studies, 206  
 Leadership Theory and Practice Certificate, 41  
 Leadership Tutorial, 206  
 Leading Culturally Diverse Workplaces, 47  
 Leading in Times of Crisis, 45  
 Leading Volunteers in Organizations, 51  
 Lean Six Sigma, An Introduction to, 195  
 Lean Six Sigma, Introduction to, 155, 156  
 Learning, Cognition and Emotion, 211  
 Learning Disabilities, 122–125  
   Admission Requirements, 122  
   Center for Clinical Teaching, 125  
   Courses, 130–143  
   Dyslexia Specialist Program, 124–125  
   Learning Disabilities Teacher Consultant Certification (Nondegree Program), 124  
   Master of Arts in Learning Disabilities/ Learning Disabilities Teacher Consultant (LDTC) Certification, 123–124  
   Master of Arts in Learning Disabilities/ Teacher of Students with Disabilities Certification, 122–123  
   Orton-Gillingham Certificate Programs, 124–125  
   Teacher of Students with Disabilities Certification (Nondegree Program), 123  
   Learning Disabilities Teacher Consultant Certification (Nondegree Program), 124  
 Learning Environment and Effective Management of Teaching and Learning, 137  
 Learning, Motivation and Emotion, 217  
 Learning Process, Behavioral Science for Teachers:, The, 134  
 Learning Theories and Practice, 50  
 Leave of Absence, Academic, 35  
 Legal and Ethical Issues in Health Care and Life Sciences Management, 76  
 Legal and Professional Ethics in Sports, 235  
 Legal Environment Administration Certificate, 41  
 Legal Issues in Domestic College Sports, 239  
 Legal Issues in the Domestic and International Sports Industry, 235  
 Legal Research Methods and Analysis, 44  
 Libraries, 29–30  
 Licensure as a Professional Counselor (LPC), 90  
 Licensure as a Student Assistant Coordinator (SAC), 90  
 Lifestyle and Career Counseling, 91  
 Linear Systems I, II, 145  
 Linguistics for Language Teachers, Applied, 131  
 Linux System Administration, 103  
 Literacy Development for Second-language Learners, 134  
 Literacy/Reading and Multisensory Reading, Dual Program in, 118  
 Literacy/Reading Specialist Certification (LRS) Program, 117–118  
 Literary Review, The, 32  
 Literary Topics, 136  
 Literary Translation, 108  
 Literary Translation Concentration, 106  
 Loans, 17–19  
 Local Area Networks, 99  
 Logic System Design, 145  
 Logistics Management, 74  
 Long Term Care I, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 198  
 Long Term Care II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 199
- 
- M**
- Macroeconomic Analysis, 77  
 Maintenance of Matriculation Status, 35  
 Major Religious Holy Days, 4, 36  
 Malware Investigations, 49  
 Managed Care I, II, Advanced Pharmacy Practice Experience (APPE) VII: Elective –, 201  
 Managed Care and Provider Reimbursement, 76  
 Management, 63  
   Admission Requirements, 61  
   Courses, 79–80  
   Degree Requirements, 61  
   Post-M.B.A. Graduate Certificate, 65  
   Specialization Requirements, 63  
 Management I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 203  
 Management Concentration, 54  
 Management for Executives, 67–68  
   Admission Requirements, 68  
   Courses, 77–78  
   Degree Requirements, 68  
   General Management, 68  
   Health Sector Management, 68  
 Management, Foundations of, 79  
 Management, Fundamentals of, 77  
 Management Graduate Certificate, 65  
 Management, Graduate Independent Study, 80  
 Management Information Systems, 165–167  
   Admission Requirements, 165  
   Courses, 166–167  
   Degree Requirements, 165–166  
   Management Information Systems Certificate, 166  
 Management Information Systems Certificate, 166  
 Management Information Systems (Course), 99  
 Management of Production, Purchasing and Quality Control in the Pharmaceutical Industry, 82  
 Management of Research and Technology in the Pharmaceutical Industry, 82  
 Managerial Accounting Applications, 72, 73  
 Managerial Applications, Advanced, 73  
 Managerial Economics, 75, 78  
 Managing a Healthy Workforce, 80  
 Managing Media Relations: From Local to Global, 48  
 Managing Organizational Change, 46, 227  
 Managing Responses to Environmental Emergencies, 160  
 Managing Service Industry Financial Systems, 232  
 Managing Sustainability for Competitive Advantage, 78  
 Managing Sustainability in a Global Environment, 80  
 Managing the Continuum of Care, 228  
 Managing the Value Proposition, 82  
 Maps, 262–265  
 Marine Ecology, 55  
 Marketing, 64  
   Admission Requirements, 61  
   Courses, 80–81  
   Degree Requirements, 61  
   Post-M.B.A. Graduate Certificate, 66  
   Specialization Requirements, 64  
 Marketing I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 202  
 Marketing, Advanced Special Projects:, 81  
 Marketing and Promotion for College Sports, 239  
 Marketing Communications, 81  
 Marketing Concentration, 54  
 Marketing, Fundamentals of, 77  
 Marketing Graduate Certificate, 66  
 Marketing, Graduate Independent Study, 81  
 Marketing of Public, Private and Not-for-Profit Organizations, 43  
 Marketing Principles, 80  
 Marketing Research, 81  
 Marketing Social Change, 45  
 Mass Communication Theories, 51

# Index

- Master of Arts in Learning Disabilities/  
Learning Disabilities Teacher Consultant  
(LDTC) Certification, 123–124
- Master of Arts in Learning Disabilities/  
Teacher of Students with Disabilities  
Certification, 122–123
- Master of Arts in Teaching, see Teaching
- Master of Business Administration
- Accounting, 62
  - Admission Requirements, 61
  - Business Administration, 62
  - Capstone, 62
  - Courses, 72–84
  - Degree Requirements, 61
  - Finance, 63
  - General Management Specialization, 68
  - Graduation, 62
  - Health Sector Management Specialization, 68
  - International Business, 63
  - International Student Requirement, 62
  - Management, 63
  - Management for Executives, 67–68
  - Marketing, 64
  - M.B.A. Core, 61
  - Pharmaceutical Management Studies, 64
  - Post-M.B.A. Graduate Certificate, 65–66
  - Saturday M.B.A., 66–67
  - Transfer Credit, 61
- Master of Public Administration, 224–230
- Admission Requirements, 225
  - B.A./M.P.A. Combined Degree, 225
  - Bilingual Administration Specialization, 224
  - Courses, 225–230
  - Degree Requirements, 225
  - Global Transportation Management  
Specialization, 224
  - Health Services Administration  
Specialization, 224
  - Honor Society, 224
  - International Relations and Diplomacy  
Specialization, 225
  - Nursing Management Specialization, 225
  - Public Management Certificate, 224
  - Public Management Specialization, 225
  - Sustainability Specialization, 225
  - Transportation Management Certificate, 224
- Master Project Seminar (Nursing), 177
- Master Project (Student Services  
Administration), 238
- Master's Research Project (Service Innovation  
and Leadership), 231
- Master's Seminar in Early Childhood  
Education, 141
- Master's Seminar: Research in Specialization,  
141
- M.A.T., See Teaching
- Mathematical Foundations, 125
- Admission Requirements, 125
  - Courses, 143
  - Degree Requirements, 125
- Mathematics, Advanced Special Projects, 143
- Mathematics Courses, 104, 143
- Mathematics Education, Special Topics in,  
104, 143
- Mathematics for Computer Science and MIS,  
99, 166
- Mathematics, M.A.T., 127–128
- Mathematics of Operations Research, 104
- Mathematics, Special Topics in, 104
- Matriculated Students, Admission of, 15
- Maxwell Becton College of Arts and  
Sciences, 11
- Faculty & Staff, 11
  - Programs, 11
- M.B.A. Core, 61
- M.B.A. — Management for Executives, 67–68
- Admission Requirements, 68
  - Courses, 77–78
  - Degree Requirements, 68
  - General Management, 68
  - Health Sector Management, 68
- M.B.A. — Saturday M.B.A.
- Admission Requirements, 66–67
  - Courses, 72–84
  - Degree Requirements, 67
- Medical and Clinical Report Writing, 156, 196
- Medical Communication and Technical  
Writing, 188
- Medical Device/Patient Safety I, II, Advanced  
Pharmacy Practice Experience (APPE)  
VII: Elective –, 201
- Medical Spanish for the Pharmacy  
Professional, 195
- Medical Technology, 167–169
- Admission Requirements, 167
  - Courses, 168–169
  - Degree Requirements, 167–168
- Medical Technology, Advanced Research,  
168
- Medical Technology, Research Seminar, 169
- Medication Safety, 195
- Medication Safety I, II, Advanced Pharmacy  
Practice Experience (APPE) VII:  
Elective –, 201
- Medication Therapy Management I, Advanced  
Pharmacy Practice Experience (APPE) V:  
Elective –, 197
- Medication Therapy Management II,  
Advanced Pharmacy Practice Experience  
(APPE) V: Elective –, 198
- Medicinal Chemistry, 89, 155
- Medicinal Chemistry, Introductory, 86, 154
- Mental Health Law, 215
- Mentoring Students for Success, 239
- Mergers and Acquisitions, 79
- Methodology in Bilingual/Bicultural  
Education, 130
- Methodology of Second Language Acquisition,  
229
- Methods ELL Content Areas, 137
- Metropolitan Campus, 8
- Microbiology, Advanced, 58
- Microbiology and Infectious Diseases, 168
- Microeconomics, Principles of, 77
- Microprocessor Design, 145
- Microtoxology and Biochemistry, 89
- Microwave and Optical Communications, 146
- Middle School Endorsement Certification  
Program, 129
- Mind-controlled Devices with Robotics, 101
- MIS 1: Project Management and Systems  
Analysis, Development of, 166
- MIS 2: Systems Design, Implementation and  
Maintenance, Development of, 166
- Mission Statement, FDU, 6
- Mobile Marketing Strategies, 81
- Modeling and Simulation of Continuous  
Systems, 100
- Modern Latin America, 51
- Modern Poetry, 110
- Modules (Creative Writing), 107
- Molecular Biology Techniques, 59
- Molecular Biology Techniques, Lab., 59
- Molecular Cell Biology, 57
- Molecular Cell Biology, Laboratory., 57
- Molecular Endocrinology, 58
- Molecular Genetics, Advances in, 168
- Montessori Approach to Learning, The, 139
- Motivation and Performance, 236
- M.P.A. See Public Administration
- M.P.A. Project Report, 226
- M.P.A. Thesis, 226
- Multicultural Classroom, The, 134
- Multicultural Counseling, 92
- Multiculturalism, Diversity and Difference:  
Theory, Research and Practice in Student  
Affairs, 238
- Multimedia Production, 141
- Multirate Systems and Filter Banks, 147
- Multisensory Approach to Teaching in the  
Content Areas, 133
- Multisensory Instructional Methods for  
Students with Learning Disabilities/  
Dyslexia, History of, 133
- Multisensory Mathematics Instruction for  
Students with Disabilities, 138
- Multisensory Mathematics Skills, 133
- Multisensory Reading I, II, 132
- Multisensory Reading III, IV, 140
- Multisensory Reading V, VI, 142
- Multisensory Reading Instruction for Students  
with Reading Disabilities, 137
- Mycology, 54
- Mycology Laboratory, 54

---

## N

- Narrative Communication, 95
- Natural Medicines, 190
- Negotiation and Conflict Management, 80
- Network Security, 102
- Network Security Administration  
Concentration, 114
- Neural Networks and Fuzzy Logic Systems,  
145
- Neurobiology, 56
- Neurodevelopmental/Medical Conditions  
Associated with Learning Disabilities,  
132
- Neurology, Psychiatry and Anesthesiology,  
Integrated Pharmacotherapy V., 189
- Neuropharmacology, 86, 212
- Neurophysiological Basis of Learning  
Problems, 133
- Neuropsychology, 211
- Neuroscience, 59, 212
- New Challenges of Leadership in a Global  
Society, 47
- New European Map, The, 46
- New Jersey Teacher Certification, 126
- New Media Literacies, 50
- New Venture Management, Advanced, 164



- Nonclinical Track in Nursing Administration, 171–172
- Nonclinical Track in Nursing Education, 172
- Nonclinical Track in Nursing Information Systems, 172
- Nondegree- and Noncertificate-seeking Students, Admission of, 15–16
- Nondiscrimination and Equal Opportunity, 28
- Nonmatriculated Students, Admission of, 15
- Nonprofit Organization Development Certificate, 41
- Nontraditional Academic Calendar, 5
- Nurse Faculty Loan Program, 17–18
- Nursing, 169–178
- Accelerated D.N.P. Programs, 173, 180–181
  - Admission Requirements, 169
  - Adult Gerontology Nurse Practitioner Clinical Track, 169–170
  - Adult Gerontology Nurse Practitioner — Education or Administration Focus Clinical Track, 170
  - Adult Gerontology Nurse Practitioner — Forensic Focus Clinical Track, 170
  - Adult Gerontology Nurse Practitioner Post-Master's Certificate, 172
  - Courses, 173–178
  - Degree Requirements, 169–173
  - Family Nurse Practitioner, Clinical Track in, 170–171
  - Family Nurse Practitioner Post-Master's Certificate, 173
  - Family Psychiatric/Mental Health Nurse Practitioner, Clinical Track in, 171
  - Family Psychiatric/Mental Health Nurse Practitioner Post-Master's Certificate, 173
  - Nursing Administration Nonclinical Track, 171
  - Nursing Education Nonclinical Track, 172
  - Nursing Information Systems Nonclinical Track, 172
- Nursing Administration, Nonclinical Track in, 171
- Nursing, Administrative Practicum, 177
- Nursing Education, Nonclinical Track in, 172
- Nursing Education, Seminar in, 178
- Nursing Informatics Practicum II, 177
- Nursing Informatics, Practicum in, 177
- Nursing Informatics Role, 177
- Nursing Information Systems, Nonclinical Track in, 172
- Nursing Management Specialization, 225
- Nursing: Philosophies and Theories, Introduction to Advanced, 174
- Nursing Practice, 178–182
- Accelerated D.N.P. Programs, 180–181
  - Admission Requirements, 178–179
  - Bridge Program to the D.N.P., 179
  - Clinical Leadership Track, 179
  - Courses, 181–182
  - Degree Requirements, 179
  - Organizational Leadership Track, 179
  - Post-Baccalaureate Nursing to D.N.P., 180–181
  - Post-master's D.N.P., 181
  - Pre-Baccalaureate Nursing to D.N.P. with Gerontology Focus, 180
  - Specialty Tracks, 179
- Nursing Practice, Residency I, II, 182
- Nursing Role Development, Advanced Practice, 178
- Nursing, Teaching Practicum, 177
- Nutrition for Sports and Fitness, 236
- Nutrition Support I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 200
- 
- O**
- Obesity, 194
- Object-oriented Programming, 101
- Office of Student Life, 24
- Official University Photography, 10
- On-campus Student Administration Certificate, 237
- On-campus Student Administration Specialization, 237
- Oncology I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 199
- Online Graduate Degree and Certificate Programs, 42
- Operating Systems, 99
- Operating Systems Audit and Hardening, 103
- Operations Administration, 45
- Operations Analysis, 74
- Operations Management (Decision Sciences), 74
- Optical Imaging, 147
- Optical Signal Processing, 146
- Optics, 146
- Optics, Current Topics in, 147
- Optimum Leadership, 46
- Oracle SQL Performance and Tuning, Advanced, 103
- Oral Dosage Forms and Biopharmaceutics/ Pharmacokinetics, Pharmaceutics II –, 188
- Oral Language Reading Connection, The, 136
- Organic Chemistry, Advanced, 89
- Organic Synthesis, Advanced, 87, 90, 156
- Organization and Administration of Sports, 236
- Organizational Behavior, 233
- Organizational Behavior and Leadership, 78, 80
- Organizational Behavior Concentration (Low-residence Program), 205
- Organizational Communication, 161
- Organizational Communication and Conflict Management, 163, 232
- Organizational Communication and Conflict Resolution, 43
- Organizational Decision Making, 43
- Organizational Leadership, 160
- Organizational Leadership and Team Development, 235
- Organizational Leadership, Certificate in, 205
- Organizational Leadership Track, 179
- Organizational Performance Assessment, 227
- Organizational Planning and Risk Communications, 45
- Organizational Planning for Emergency Situations, 160
- Organizational Psychology, 205
- Organization Theory, 225
- Orientation to School Testing, 133
- Orton-Gillingham Certificate Programs, 124–125
- Dyslexia Specialist, 124
  - Teacher, 124
  - Teacher Trainer, 124
  - Therapist, 125
  - Therapist Trainer, 125
- Orton-Gillingham for Resource Center Teaching Workshop, 134
- Orton-Gillingham Internship, 142
- Orton-Gillingham Practicum I, II, Advanced, 142
- Orton-Gillingham Resources for Administrators, 136
- Orton-Gillingham Topics, 133
- Other Veterans' Affairs Educational Benefits, 18
- Outcome Assessment, 176
- Overseas Studies
- Vancouver Campus, Canada, 241–243
  - Wroxton College, England, 240
- 
- P**
- Parallel and Fault-tolerant Systems, 101
- Partnership Taxation, 83
- Pathophysiology, 55
- Pathophysiology, Advanced, 176
- Patient Advocacy I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 202
- Pattern Recognition, 102
- Payment Schedule, 21
- Pediatric Psychology, 220
- Penetration Testing and Vulnerability Analysis, 102
- Performance Requirements (Clinical Psychology Ph.D.), 209
- Perfumery, 89
- Personality Assessment, 209
- Personality Assessment, Advanced, 211
- Personality, Theories of, 216
- Personnel Administration, 43
- Personnel Selection, 206
- Perspectives on Leadership from Films, 47
- Peter Sammartino School of Education, 115
- Petrocelli College of Continuing Studies, Anthony J., 13
- Pharmaceutical Analysis, 87, 89
- Pharmaceutical Calculations I, II, 188
- Pharmaceutical Chemistry Concentration, 85, 88
- Pharmaceutical Discovery Informatics, 89
- Pharmaceutical Management Graduate Certificate, 66
- Pharmaceutical Management Studies, 64
- Admission Requirements, 61
  - Courses, 81–82
  - Degree Requirements, 61
  - Post-M.B.A. Graduate Certificate, 66
  - Specialization Requirements, 64
- Pharmaceutical Management Studies, Graduate Independent Study, 82
- Pharmaceutical Marketing and Product Development, 81

# Index

- Pharmaceutical Science: Pharmacology, Medicinal Chemistry, Pharmacokinetics, Foundations in, 186
- Pharmaceutical Sciences, Advanced Topics in, 194
- Pharmaceuticals, Chemical Analysis of, 89
- Pharmaceutics I: Physical Pharmacy, 187
- Pharmaceutics II – Oral Dosage Forms and Biopharmaceutics/Pharmacokinetics, 188
- Pharmaceutics III: Dosage Form and Drug Delivery Systems, 190
- Pharmaceutics IV: Sterile Products and Biopharmaceutics, 190
- Pharmacists' Careers in Pharmaceutical Industry, 194
- Pharmacoepidemiology, Pharmacoeconomics and Health Outcomes, 194
- Pharmacogenomics and Personalized Medicine, 193
- Pharmacokinetics, 87
- Pharmacology, 86, 154, 155
- Pharmacology, Advanced, 174
- Pharmacology, Advances in, 58
- Pharmacotherapy I, Advanced Topics in, 192
- Pharmacotherapy II – Geriatric and Pediatrics, Advanced Topics in, 193
- Pharmacotherapy III – Critical Care, Advanced Topics in, 193
- Pharmacotherapy IV – Infectious Diseases, Advanced Topics in, 193
- Pharmacy, 185–203
- ACPE Accreditation Status, 184
- Admission Requirements, 183–184
- Courses, 186–203
- Degree Requirements, 184–186
- FDU School of Pharmacy and Health Sciences Outcomes, 184
- Pharmacy Capstone, 203
- Pharm.D., see Pharmacy
- Pharmacy, History of, 190
- Pharmacy Leadership and Management, Professional Pharmacy Practice IV:, 195
- Pharmacy Practice Law, 188
- Ph.D. in Clinical Psychology, see Clinical Psychology
- Philosophy of Education, 141
- Phonemic Awareness, 137
- Phonics, Project Read., 136
- Phonology, Reading and Spelling, 134
- Physical Biochemistry, 87, 90
- Physical Chemistry, 89
- Physical Chemistry II, 86
- Physical Organic Chemistry, 86, 89
- Physical Pharmacy, Pharmaceutics I, 187
- Physical Science, M.A.T., 127–128
- Physics Course, 90, 105
- Physics, M.A.T., 127–128
- Physiological Basis of Physical Fitness, 236
- Physiological Ecology, 58
- Physiology of Disease, 59
- Placement Testing (English for Professional Success), 149
- Plagiarism Described, 33
- Planning and Budgeting, 73
- Planning and Marketing for Managers, 227
- Planning and Program Development, 44
- Planning for Change in Information Technology, 47
- Poetry Concentration, 106
- Poetry Writing, 108
- Political and Administrative Theory, Development of, 227
- Political and Economic History of Latin America, 51
- Political Environment of Public Administration, The, 226
- Politics and Policies of Criminal Justice, 112
- Politics, Ideologies and Religion in the Middle East, 50
- Polymer Chemistry, 89
- Portfolio Management, 79
- Post-Baccalaureate Nursing to D.N.P., 180–181
- Postbaccalaureate Respecialization Program in Psychology, 207
- Admission Requirements, 207
- Course Sequence, 207
- Personalized Advisement, 207
- Transfer Credits, 207
- Postdoctoral M.S. in Clinical Psychopharmacology, 212–213
- Post-graduate Certificate in Public and Nonprofit Leadership, 42
- Post-Master's Certificate, Adult Gerontology Nurse Practitioner, 172–173
- Post-Master's Certificate, Family Nurse Practitioner, 173
- Post-Master's Certificate, Family Psychiatric/Mental Health Nurse Practitioner, 173
- Post-master's D.N.P., 181
- Post-master's Principal Certification Program, 121–122
- Post-M.B.A. Graduate Certificate, 65–66
- Accounting Graduate Certificate, 65
- Admission Requirements, 65
- Finance Graduate Certificate, 65
- International Business Graduate Certificate, 65
- Management Graduate Certificate, 65
- Marketing Graduate Certificate, 66
- Pharmaceutical Management Graduate Certificate, 66
- Requirements, 66
- Post 9/11 GI Bill, 18
- Post-secondary Student Affairs Issues and Management, 238
- Practical Politics and Pharmacy, 191
- Practice Nursing Role Development, Advanced, 178
- Practice of Elementary Science Education, Seminar:, 139
- Practicum I, II, Advanced (School Psychology), 221
- Practicum (Clinical Mental Health Counseling), 92
- Practicum, Clinical Psychopharmacology, 212
- Practicum for Teaching Composition: Theory and Practice, 108, 110
- Practicum, Hospitality Education, 163
- Practicum in Diagnostic and Remedial Techniques I, II, 142
- Practicum in Nursing Informatics, 177
- Practicum in School Psychology I–VI, 222
- Practicum Model (M.A.T.), 128
- Pre-Baccalaureate Nursing to D.N.P. with Gerontology Focus, 180
- Preparing for Catastrophic Emergencies, 159
- Prerequisite Program for Non-hospitality Majors (Hospitality Management Studies), 162
- Preschool Through Grade 3 Certification (Teaching), 127
- Presentation Methods, 94
- Preventing Future Columbines, 47
- Prevention and Intervention with Children and Adolescents, 221, 223
- Primary Care III, 177
- Primary Care III Practicum, 177
- Primary Care of the Adult Gerontology I Practicum, 175
- Primary Care of the Adult Gerontology I – Theory, 175
- Primary Care of the Adult Gerontology III Practicum, 177
- Primary Care of the Adult Gerontology III – Theory, 177
- Principal Certification, 121–122
- Principles and Practices of Collaboration and Inclusion, 137
- Principles and Practices of Communication, 94
- Principles of Curriculum Construction, 141
- Principles of Finance, 77, 78
- Principles of Information and Intelligence Collection, 47
- Principles of Information Systems, 43
- Principles of Leadership, 112
- Principles of Microeconomics, 77
- PR in the Modern Organization, 95
- Privately Funded Scholarships, 17
- Probability and Statistics I, II, 104
- Problem-based Strategies for Elementary Mathematics, 138
- Product Development, 89
- Productivity and Human Performance, 43
- Professional Counselor:, Ethical Issues, The, 92
- Professional Counselor Licensure, 90
- Professional Development (Clinical Psychology), 211
- Professional Development Seminar, 113
- Professional Issues and Practice Management, 212
- Professional Pharmacy Practice I: Health Care Delivery, 188
- Professional Pharmacy Practice II: Communication in Health Care, 188
- Professional Pharmacy Practice III: Drug Information, Informatics and Toxicology, 191.
- Professional Pharmacy Practice IV: Pharmacy Leadership and Management, 195
- Professional Seminar in Criminal Justice, 112
- Professional School Psychology Practice and Ethics, Seminar in, 220, 223
- Professional Studies Concentration, 118–119
- Professional Writing and Editing, 94
- Program Design and Instructional Strategies for Adults in Higher Education, 238
- Program Design and Strategies for Special Populations in Higher Education, 238
- Program Planning and Evaluation: Prevention and Education, 92

- Programming for the Internet, 101  
 Programming for the Internet, Advanced, 101  
 Programming Languages, 99  
 Programs  
   Anthony J. Petrocelli College of Continuing Studies, 13  
   Maxwell Becton College of Arts and Sciences, 11  
   Silberman College of Business, 12  
   University College: Arts • Sciences • Professional Studies, 14  
 Prohibited Discrimination, Harassment and Related Misconduct, 28  
 Project Management, 74, 78, 156, 177, 196  
 Project Management in the Service Sector, 164  
 Project Read: Phonics, 136  
 Project Read: Reading Comprehension (Report Form), 139  
 Projects Based on the Web, 142  
 Pro-Seminar, Externship in, 215  
 Protein Chemistry, 87, 90  
 Psychiatric/Mental Health Nursing I:  
   Assessment and Differential Diagnoses, Advanced, 175  
 Psychiatric/Mental Health Nursing I:  
   Assessment and Differential Diagnoses Practicum, Advanced, 175  
 Psychiatric/Mental Health Nursing II:  
   Individual Therapeutics, Advanced, 175  
 Psychiatric/Mental Health Nursing II:  
   Individual Therapeutics Practicum, Advanced, 175  
 Psychiatric/Mental Health Nursing III: Group and Family Therapeutics, Advanced, 175  
 Psychiatric/Mental Health Nursing III: Group and Family Therapeutics Practicum, Advanced, 175  
 Psychiatric/Mental Health Nursing Practicum I: Families, Children and Adolescents, Advanced, 174  
 Psychiatric/Mental Health Nursing Practicum II: Adults, Advanced, 174  
 Psychiatric/Mental Health Nursing Practicum III: Geriatrics, Advanced, 174  
 Psychiatric/Mental Health Nursing Theory I: Families, Children and Adolescents, Advanced, 174  
 Psychiatric/Mental Health Nursing Theory II: Adults, Advanced, 174  
 Psychiatric/Mental Health Nursing Theory III: Geriatrics, Advanced, 174  
 Psychodynamic Psychotherapy, 210  
 Psychodynamic Psychotherapy, Advanced, 211  
 Psychoeducational Assessment, 210  
 Psycholegal Analysis of Forensic Cases, 215  
 Psychological Bases of Criminal Behavior, 214  
 Psychological Profiling, 215  
 Psychological Services, Center for, 25  
 Psychological Services, Student Counseling and, 23, 24  
 Psychological Statistics, 205  
 Psychology  
   Florham Campus, 204–206  
     Courses, 205–206  
     Industrial/Organizational Psychology (M.A.), 204–206  
     Organizational Behavior Concentration (Low-residence Program), 205  
     Organizational Leadership Certificate, 205  
     Requirements, 204  
   Metropolitan Campus, 207–224  
     Clinical Psychology (Ph.D.), 208–211  
     Clinical Psychopharmacology (Postdoctoral M.S.), 212–213  
     Courses, 209–211, 212–213, 214–215, 216–217, 220–222, 223–224  
     Forensic Psychology (M.A.), 213–215  
     General/Theoretical Psychology (M.A.), 216–217  
     Postbaccalaureate Respecialization Program in Psychology, 207  
     School Psychology (M.A.), 222–224  
     School Psychology (Psy.D.), 217–222  
   Psychology, Advanced Special Projects, 206  
   Psychology and Law Enforcement, 215  
   Psychology, Clinical, 208–211  
     Admission Requirements and Information, 208  
     Courses, 209–211  
     Degree Requirements, 208–209  
     Forensic Track, 209  
     Performance Requirements, 209  
   Psychology/Counseling Concentration (Biology), 54  
   Psychology, Developmental, 217  
   Psychology, Forensic, 213–215  
     Admission Requirements, 213–214  
     Courses, 214–215  
     Degree Requirements, 214  
   Psychology for the Medical Sciences, 155  
   Psychology, General/Theoretical, 216–217  
     Admission Requirements, 216  
     Courses, 216–217  
     Degree Requirements, 216  
   Psychology, Industrial/Organizational, 204–206  
     Admission Requirements, 204–205  
     Courses, 205–206  
     Degree Requirements, 205  
     Organizational Behavior Concentration (Low-residence Program), 205  
     Organizational Leadership Certificate, 205  
   Psychology, Pediatric, 220  
   Psychology (Psy.D.), Independent Study in, 222  
   Psychology, Research and Thesis, 206  
   Psychology, School (M.A.) Plus Certification, 222–224  
     Admission Requirements, 222  
     Courses, 223–224  
     Degree and Certification Requirements, 222–223  
     Professional Accreditation, 222  
   Psychology, School (Psy.D.), 217–222  
     Admission Requirements and Information, 218, 219  
     Advanced Psy.D., 219  
     Courses, 220–222  
     Degree Requirements, 218, 219  
     Five-year Psy.D., 217–218  
   Psychometrics, 206  
   Psychopathology, 209, 216  
   Psychopharmacology, 92, 175, 211  
     Psychopharmacology, Clinical, 212–215  
     Psychosexual Development, 55  
     Psychotherapy, Introduction to, 210  
     Psy.D., see School Psychology  
   P–3 Curriculum and Assessment, 139  
   Public Administration, 224–230  
     Admission Requirements, 225  
     B.A./M.P.A. Combined Degree, 225  
     Bilingual Administration Specialization, 224  
     Courses, 225–230  
     Degree Requirements, 225  
     Global Transportation Management Specialization, 224  
     Health Services Administration Specialization, 224  
     Honor Society, 224  
     International Relations and Diplomacy Specialization, 225  
     Nursing Management Specialization, 225  
     Public Management Certificate, 224  
     Public Management Specialization, 225  
     Sustainability Specialization, 225  
     Transportation Management Certificate, 224  
   Public Administration, Independent Study in, 226  
   Public Administration, Knowledge Management in, 229  
   Public and Educational Administrators in the Metropolitan Area, Seminar for, 229  
   Public and Nonprofit Leadership, Postgraduate Certificate in, 42  
   Public and Nonprofit Management, 225  
   Public Health I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 202  
   Public Health and the Global Mission of Pharmacy, 194  
   Public Management Certificate, 224  
   Public Management Internship, 226  
   Public Management Specialization, 225  
   Public Policy Administration, 226  
   Public Presentations and Media Strategies, 48  
   Public Purchasing, 228  
   Public Relations Administration Certificate, 41  
   Public Services, Delivery of, 227  
   Pulmonary, Eye, Ear, Nose and Throat, Integrated Pharmacotherapy VII:, 189
- 
- Q**
- Quantitative Analysis, Advanced, 100, 166  
 Quantitative Methods for Administrators, 226  
 Quantitative Methods for Health Administration, 227  
 Quantum Chemistry, 86, 89
- 
- R**
- Race, Immigration and Education in Contemporary America (1960s to the Present), 139  
 Radiochemistry, 86  
 Random Processes in Communications, 145  
 Reading I, II, Foundations in, 132  
 Reading Comprehension, 133

# Index

- Reading Contemporary African Writers, 110  
Reading Like a Writer, 109  
Readmission, 16  
Real-time Systems, Introduction to, 102  
Refund Schedules, 21  
Regional Organizations, 52  
Registration, Tuition and Billing Information, 20–22  
    Collection Fee, 22  
    Corporate Reimbursement Deferred Payment Plan, 21  
    Credit Cards, 21  
    Employee Educational Tuition Grants, 22  
    Late Payment Charges, 22  
    Refunds, 21  
    Registration: Fall, Spring and Summer, 20  
    Terms of Payment, 21  
    Tuition and Fees, 20  
    Tuition Reimbursed From Employers, 20  
    Withdrawals/Refunds, 21  
Regulatory I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 203  
Regulatory Affairs Capstone, 157  
Regulatory Compliance for Pharmaceuticals, 154, 157, 196  
Regulatory Science Track, 151–152  
Relational Leadership, 50  
Religious Holy Days, Major, 4, 36  
Renal Physiology, 56  
Renewal, Financial Aid, 19  
Repeated Courses, 36  
Reporting of Complaint, 28  
Reproductive Biology, 55  
Research, 31–32  
Research I, II, Advanced Pharmacy Practice Experience (APPE) VIII: Elective –, 202  
Research I: Research Methodology, 181  
Research II: Evidence-based Research, 181  
Research and Evidence-based Practice, Advanced, 176  
Research and Policy Analysis, 159  
Research and Thesis  
    (Biology), 56, 59  
    (Chemistry), 87  
    (Computer Science), 101  
    (Electrical Engineering), 147  
    (Psychology), 206  
Research Design and Analysis I, II, 210  
Research in Curriculum Development, 142  
Research in Specialization, Master's Seminar:, 141  
Research, Introduction to, (Chemistry), 89  
Research Methodology I, II, 162  
Research Methods and Data Analysis, 194  
Research Methods and Design, 205  
Research Methods and Psychometrics, 217  
Research Methods (Communication), 94  
Research Methods for Workforce Professionals, 51  
Research Methods in Criminal Justice and Criminology, 112  
Research Methods (Student Services Administration), 238  
Research Seminar (Medical Technology), 169  
Residence Halls, 25  
Residence Life, Office of, 24  
Residency I, II (Nursing Practice), 182  
Residency Requirement (Creative Writing and Literature for Educators), 109  
Resolving Conflict in Organizations, 161  
Response to Intervention (RTI): Strategies for Struggling Readers, 137  
Robotics Engineering, 145  
Russia: Past, Present and Future, 52
- 
- S**
- Sammartino Scholarship, 17  
Sanctions, 33–34  
Satisfactory Academic Progress (for Financial Aid), 19  
Saturday M.B.A., 66–67  
    Admission Requirements, 66–67  
    Courses, 72–84  
    Degree Requirements, 67  
Scholarship Program for Graduate Study, University Provost's, 17  
Scholarships, 17  
School-based Consultation with Practicum, 221, 224  
School-based Research, Final Project:, 136  
School Change, Seminar in, 221  
School-Community Mental Health, 221, 224  
School Finance, Facilities and Scheduling, 136  
School Law, 136  
School Learning Problems, Introduction to, 225  
School Learning Problems I, Introduction to, 220  
School Learning Problems II, Introduction to, 220, 225  
School of Pharmacy and Health Sciences, see Pharmacy  
School Psychology I, II, Externship in, 221, 224  
School Psychology I–VI, Practicum in, 222  
School Psychology, Administration and Supervision in, 221  
School Psychology, Advanced Practicum I, II, 221  
School Psychology (Advanced Psy.D.), 219  
    Admission Requirements and Information, 219  
    Courses, 220–222  
    Degree Requirements, 219  
School Psychology (Five-year Psy.D.), 217–218  
    Admission Requirements and Information, 218  
    Courses, 220–222  
    Degree Requirements, 218  
School Psychology (M.A.) Plus Certification, 222–224  
    Admission Requirements, 222  
    Courses, 223–224  
    Degree and Certification Requirements, 222–223  
    Professional Accreditation, 222  
School Psychology (Psy.D.), 217–222  
    Admission Requirements and Information, 218, 219  
    Advanced Psy.D., 219  
    Courses, 220–222  
    Degree Requirements, 218, 219  
    Five-year Psy.D., 217–218  
School Psychology, Dissertation, 220  
School Psychology, Dissertation Maintenance, 221  
School Psychology, Dissertation Seminar, 220  
School Psychology, Internship, 221  
School Psychology, Internship Maintenance, 221  
School Psychology, Special Topics in, 220  
School Security and Safety Administration Certificate, 41  
Schools, Communities and Substance Abuse, 138  
Science, Technology and Society, 134  
Scientific Basis for D.N.P. Practice, 181  
Search Engine Optimization and Advertising, 81  
Secondary Education Area Certification Program in Art, Biological Sciences, Chemistry, Earth Science, English, Mathematics, Physical Science, Physics and Social Studies (Teaching), 127–128  
Second Language Acquisition, Final Project:, 141  
Second Language Acquisition: Internship I, II, 131  
Second Language Acquisition: Methods and Curriculum, 131  
Second-year Clinical Practicum I, II (Clinical Psychology), 210  
Secure Software Development and Analysis, 102  
Secure Software Development Concentration, 114  
Security and Transportation Systems, Issues of, 228  
Selected Accounting Topics, 73  
Selected Studies in Biology, 55, 57, 59  
Selected Studies, Taxation of S Corporations:, 84  
Selected Topics, Corporate Communication (Psychology), 206  
Seminar: Accounting and Auditing Case Studies, 73  
Seminar, Biology, 59  
Seminar for Public and Educational Administrators in the Metropolitan Area, 229  
Seminar in Career Orientation for Administrators, 229  
Seminar in Child/Adolescent Assessment, 221  
Seminar in Child/Adolescent Intervention, 221  
Seminar in Clinical Psychology, 211  
Seminar in Corporate Finance, 79  
Seminar in Gaming/Casino Management, 163  
Seminar in Instructional Technology, 141  
Seminar in Nursing Education, 178  
Seminar in Professional School Psychology Practice and Ethics, 220, 225  
Seminar in School Change, 221  
Seminar in Strategic Management, 226  
Seminar in Strategic Management (Capstone), 43  
Seminar, Law-enforcement Executive Leadership, 44  
Seminar: Practice of Elementary Science Education, 139  
Sensory Evaluation of Cosmetic Products, 105

- Service Innovation and Leadership, 231–233  
 Admission Requirements, 231  
 Courses, 232–233  
 Degree Requirements, 231
- Service, Innovation and Leadership, Capstone for, 232
- Service Innovation and Leadership, Master's Research Project, 231
- Service Learning: Culturally Competent Approach to Geriatric Populations, 191
- Service Learning: Culturally Competent Approach to Low-income Families and Homeless Populations, 191
- Service Learning: Culturally Competent Approach to Pediatric Populations, 191
- Service Management, 163, 232
- Sex Offenders, Evaluation and Treatment of, 215
- Sexual Issues, Counseling, 92
- Shakespeare, 110
- Silberman College of Business, 12  
 Courses, 72–84  
 Faculty & Staff, 12  
 Major Programs of Study, 12
- Single Concentration: M.F.A. Option, 106
- Skin-care Raw Materials and Formulations, 105
- Small Business Management, 76
- Smartboards in the Classroom, 132
- Social Entrepreneurship, 77
- Social Issues in Higher Education, 238
- Social Justice Advocacy, 112
- Social, Legal and Ethical Issues, 77
- Social Media Marketing, 51
- Social Media Strategy, 81
- Social Problems and Solutions, 46
- Social Psychological Applications, 216
- Social Psychology, Applied, 210, 217
- Social Studies, M.A.T., 127–128
- Society and Mass Communication, 51
- Society, Ethics and the Legal Environment of Business, 79
- Sociological Effects of Disaster, 160
- Sociological Perspectives of Disaster, 46
- Sociology of Multicultural Identity Development, 140
- Software Engineering, 99
- Specialized Research and Argument, 50
- Special Project (Hospitality Management), 162
- Special Topics:  
 Administrative Research, 48  
 Creativity, Change and 21st-century Leaders, 49  
 Dissonant Issues Seminar, 49  
 Elder Care: Legal Issues, 50  
 First-responder Stress Awareness and Management, 49  
 Global Terrorism and Emergency Management Preparation, 49  
 Introduction to Diplomacy and International Relations, 43  
 Leading Out of the Mainstream, 49  
 Lifestyle Modification for Leaders, 49  
 Metropolitan America: Influence of the Past and Future, 49
- Special Topics Chemistry: Drugs of Abuse, 155
- Special Topics in  
 Chemistry, 87, 89  
 Computer Science, 101  
 Education, 130  
 Electrical Engineering, 147  
 Forensic Psychology, 215  
 Instructional Technology, 142  
 Mathematics, 104  
 Mathematics Education, 104, 143  
 School Psychology, 220
- Specialty Pharmacy I, II, Advanced Pharmacy Practice Experience (APPE) VII: Elective –, 201
- Speculative Fiction, 108
- Sports Administration, 235–236  
 Admission Requirements, 235  
 Coaching Theory and Strategies Certificate, 234  
 Coaching Theory and Strategies Specialization, 234  
 Courses, 235–236  
 Degree Requirements, 235–234  
 Sports Administration Certificate, 234  
 Sports Administration Specialization, 234
- Sports Administration Certificate, 234
- Sports Administration, Internship II, 236
- Sports Administration Research and Policy Analysis, 235
- Sports Administration Specialization, 234
- Sports in a Social Context, 235
- Sports, Legal and Professional Ethics in, 235
- Sports Marketing and Promotions, 235
- Sports Risk Assessment, 235
- Sports Security, 236
- Standards-based Curriculum and Methodology: Secondary English, 130
- Standards-based Curriculum and Methodology: Secondary Mathematics, 131
- Standards-based Curriculum and Methodology: Secondary Science, 131
- Standards-based Curriculum and Methodology: Secondary Social Studies, 131
- Standards-based Curriculum and Methodology: Visual Arts, 131
- Standards-based Curriculum and Methodology: World Languages, 131
- Standards-based Strategy: Elementary Science, 139
- State and Local Taxation: Constitutional Issues, 83
- State and Local Taxation: Corporate and Individual Income Taxation, 84
- State and Local Taxation: Sales, Use and Property Taxes, 84
- Statistical Communication Theory, 146
- Statistical Data Analysis, 74
- Statistical Programming, 99, 104
- Statistical Thinking and Methods, 77
- Statistics and Data Analysis, 112
- Statistics and Research Methods, 216
- Statistics, Applied, 181
- Statistics I, II, Applied, 104
- Sterile Pharmacy Dispensing and Compounding, Advanced, 193
- Sterile Products and Biopharmaceuticals, Pharmaceuticals IV, 190
- Strategic Communication, 95
- Strategic Financial Decisions, 79
- Strategic Health Services Management Seminar, 226
- Strategic Human Resource Management, 80
- Strategic Innovation Management, 76
- Strategic Management (Capstone), Seminar in, 43
- Strategic Management of Information Systems, 78
- Strategic Management, Seminar in, 226
- Strategic Marketing, 78, 80
- Strategic Planning and Crisis Management, 206
- Strategic Planning for Intelligence-led Policing, 47
- Strategic Planning, Implementation and Evaluation, 159, 235
- Strategic Processes in Service Firms, 235
- Strategies in Fundraising and Development, 235
- Stress Awareness and Management, 160
- Structural Inorganic Chemistry, 89
- Structure, Regulation and Strategy of the Pharmaceutical Industry, 82
- Student Assistant Coordinator Certification, 90
- Student Counseling and Psychological Services, 23, 24
- Student Health Services, 25
- Student Life, 23–28
- Student Life, Office of, 24
- Student Regulations, 27
- Student Services Administration, 237–239  
 Admission Requirements, 237  
 Admissions and Financial Aid Administration Certificate, 237  
 Admissions and Financial Aid Administration Specialization, 237  
 Courses, 238–239  
 Curriculum, 237–238  
 Degree Requirements, 237  
 Institutional Risk Administration Certificate, 237–238  
 Institutional Risks Administration Specialization, 237–238  
 Intercollegiate Sports Administration Certificate, 237  
 Intercollegiate Sports Administration Specialization, 237  
 Master's Capstone Project, 238  
 On-campus Student Administration Certificate, 237  
 On-campus Student Administration Specialization, 237
- Student Services Administration, Master Project, 238
- Student Services Internship, 238
- Students Enrolled in Classes for Credit, Admission of, 15
- Students with Disabilities, 32
- Students with Disabilities and Autistic Spectrum Disorders, Introduction to, 137
- Students with Disabilities in School and Community, Introduction to, 137
- Students with Learning Disabilities: Social and Emotional Issues, 133
- Study Skills (Education), 133

# Index

Substance Abuse Treatment Research: Clinical Implications for Pharmacists, 190  
Summer Sessions  
  Refunds/Withdrawals, 21  
Supervised Practicum in Correction of Reading Problems, 134  
Supervised Practicum in Reading, 133  
Supervision of Instruction: Personnel and Evaluation, 135  
Supervision in Counseling, Fundamentals of, 92  
Supervisor Certification, 121  
Supply Chain Management (Course), 70–71  
  Admission Requirements, 70–71  
  Courses, 72–84  
  Degree Requirements, 71  
Supply Chain Management (Course), 78  
Supply Chain Security and Systems Certification, 102  
Supply Chain Strategies, 74  
Supply Chain Technologies, 74  
Survivors' and Dependents' Educational Assistance Program, 18  
Sustainability Capstone, 230  
Sustainability, Introduction to, 230  
Sustainability Specialization, 225  
Sustainable and Lean Six Sigma, 74  
Sustainable Development, 52  
Syntax: Its Role in Writing and Comprehension, 137  
Switching Internet Routing, Advanced, 100  
System Management and Planning, 155, 196  
Systems Programming, 102

## T

Tactical and Operational Management, 47  
Tax Accounting, 82  
Tax-exempt Organizations, 85  
Tax Practice and Procedure I, II, 85  
Tax Research, 82  
Taxation, 71–72  
  Admission Requirements, 71  
  Courses, 82–84  
  Degree Requirements, 72  
  GMAT Waiver, 71  
Taxation of Financial Products, 84  
Taxation of S Corporations: Selected Studies, 84  
TCP/IP and Routing, Advanced Network:, 99  
Teacher of Students with Disabilities Certification, 120, 123, 129  
Teachers as Researchers and Educational Leaders, 135  
Teaching and Learning with iPad, 132  
Teaching, Apprenticeship, 131  
Teaching Composition: Theory and Practice, 108, 110  
Teaching Composition: Theory and Practice, Practicum for, 108, 110  
Teaching (Master of Arts in Teaching), 126–130  
  Admission and Matriculation Requirements, 128  
  Apprenticeship Teaching Model, 126–128  
  Courses, 130–143  
  Elementary Education Certification, 127

  English as a Second Language Certification, 128  
  First Certification in Teaching English as a Second Language, 128  
  Instructional Technology Specialist Certificate, 117  
  Middle School Endorsement Certification, 129  
  New Jersey Teacher Certification, 126  
  Practicum Model, 128  
  Preschool Through Grade 3 Certification, 127  
  Secondary Education Certification in Art, Biological Sciences, Chemistry, Earth Science, English, Mathematics, Physical Science, Physics and Social Studies, 127–128  
  Teacher of Students with Disabilities, 129  
Teaching English as a Second/Foreign Language (TESL/TEFL) (M.A.), 129–130  
  Admission Requirements, 129–130  
  Courses, 130–143  
  Degree Requirements, 130  
  TESL/TEFL Specialist Certification Program, 130  
Teaching English as a Second Language, First Certification, 128  
Teaching Fellowships, 17  
Teaching in an Inclusive Classroom, 137  
Teaching Laboratory and Field Experience I, II, 138  
Teaching Laboratory and Field Experience III, 138  
Teaching Practicum (Nursing), 176  
Teaching Seminar (Clinical Psychology), 210  
Teaching Strategies for the Learning Environment, 176  
Teaching Strategies for the Secondary/Post-secondary Students in Learning Disabilities, 138  
Teaching Vocabulary to Students with Learning Disabilities, 139  
Technical and Scientific Writing, 154, 156  
Techniques of Interviewing, 206  
Technology Applications for Not-for-profit Management, 44  
Technology Foundations in Higher Education, 238  
Technology in the Reading/Writing Process, 141  
Technology in the Science Classroom, 132  
Technology in the Service Industry, 232  
Technology in the Social Science/Humanities Classroom, 141  
Technology in Visual/Performing Arts, 142  
Technology Management, Introduction to, 228  
Technology to Support Reading and Writing Instruction, 137  
Telecommunications and Distance Learning, 141  
Telecommunications and Networking Certificate, 96, 98, 144  
Telecommunications Engineering, 146  
Terms of Payment, 21  
Terrorism and Disaster Management, 160  
Terrorism and Security, Current Issues on, 48

Terrorism and Security Studies (Homeland Security) Concentration, 158  
Terrorism and Terrorist Acts, 52  
Terrorism Issues and Implications, 159  
TESL/TEFL, see Teaching English as a Second/Foreign Language  
TESL/TEFL Specialist Certification Program, 130  
The Literary Review, 32  
Theories of Analytical Chemistry, 86  
Theories of Personality, 216  
Theory and Practice of Administration, 42  
Thesis Module, 107  
Thesis (M.P.A.), 226  
Thesis Seminar (Chemistry), 87  
Third-year Clinical Practicum (Clinical Psychology) I, II, 211  
Threat Assessment and Risk Analysis in Higher Education, 239  
Topics in Bioinformatics, 58  
Topics in Bioinformatics, Lab:, 58  
Topics in Current Developments, 82  
Topics in Pharmaceutical Sciences, Advanced, 194  
Topics in Pharmacotherapy I, II, Advanced, 192  
Topics in Pharmacotherapy: Advanced Cardiology, Advanced, 193  
Topics in Pharmacotherapy II – Geriatric and Pediatrics, Advanced, 193  
Topics in Pharmacotherapy III – Critical Care, Advanced, 193  
Topics in Pharmacotherapy IV – Infectious Diseases, Advanced, 193  
Tourism Destination Management, 172  
Transcripts of Records, 36  
Transfer Credit, 16, 61  
Transitions of Care I, II, Advanced Pharmacy Practice Experience (APPE) VI: Elective –, 200  
Transportation Management Certificate, 224  
Treatment Issues in Clinical Psychopharmacology: Affective Disorders, 212  
Treatment Issues in Clinical Psychopharmacology: Anxiety Disorders, 212  
Treatment Issues in Clinical Psychopharmacology: Other Disorders, 212  
Treatment Issues in Clinical Psychopharmacology: Psychotic Disorders, 212  
Tropes of Reading — Reading Tropes, 110  
Tuition and Fees, 20  
Tuition Assistance, Federal, 18  
Tuition Payment Options, 19  
Tuition Reimbursed From Employers, 20

## U

U.N. Millennium Development Goals, The, 52  
U.N. Truths and Half Truths, 52  
Understanding Asperger Syndrome, 134  
Understanding IQ Testing, 139  
United States Culture, Introduction to, 134

## University

- Accreditation, 9–10
- Campuses, 8–9
- FDU Mission Statement, 6
- General Information, 6
- History, 6–7
- Impact, 7
- Official University Photography, 10
- University Vision, 6
- Value Statement, 6
- University College: Arts • Sciences • Professional Studies, 13–14
  - Faculty & Staff, 14
  - Programs, 14
- University Fellowships, 17
- University-funded Grant Programs, 17
- University-funded Programs (Financial Aid), 17
- University Provost's Scholarship Program for Graduate Study, 17
- University Vision, 6
- Unix Shell Programming, 103
- Unix System Administration, 103
- Updating LDTC Diagnostic Skills, 136
- U.S.A.-Latin America Relations, 53
- U.S.A. New Foreign Policy: Risks and Fears, 53
- U.S. Constitution: Public Policy and Criminal Justice, 112
- U.S. International Corporate Taxation, 82
- U.S. Presidential Campaigns: Foreign Perspectives, 52
- U.S. Regulatory New Drug Application and Submission and Dossier Preparation, 156, 157, 196
- Using Technology to Enhance Learning for Students with Dyslexia, 138
- UTAC (University Technical Assistance Center), 30

## V

- VA Vocational Rehabilitation, 18
- Values and Ethics for Decision Making, 161
- Value Statement, 6
- Valuing Diversity, 236
- Vancouver Campus, 9, 241–243
- Veterans' Affairs Educational Benefits, Other, 18
- Veterans' Educational Assistance Programs, Federal, 18
- Veterans' Education Benefits, 18
- Violence, Ethics and Human Rights Issues, 178
- Virology, 58
- Visiting Students, Admission of, 16
- VLSI Systems, 146
- Voice-over IP Technologies, 103

## W

- Weapons of Mass Destruction/Terrorism Awareness, 159
- Web Analytics, 81
- Web 2.0 Tools and Educational Applications, 132
- Weight Training and Conditioning, 236
- Wellness, 23
- Wetland and Watershed Resources, 59
- White-collar Crimes, 51
- Whole System Overview and Effecting Patient Care, Integrated Pharmacotherapy I–X: A, 192
- Wireless Communication, 146
- Wireless LANS, 100
- Withdrawal, 35
- Withdrawals/Refunds, 21
- Women and Crime, 215
- Women's Leadership in Today's Global World, 44
- Women's Rights, 52
- World Economy and Globalization, 49
- World of Mathematics: Algebra, 143
- World of Mathematics: Applications in the Real World, 143
- World of Mathematics: Data Analysis and Probability, 143
- World of Mathematics: Discrete Mathematics, 143
- World of Mathematics: Geometry, 143
- World of Mathematics: Integrating Technology in Mathematics, 143
- World of Mathematics: Mathematics in Science, 143
- World of Mathematics: Number, 143
- World of Mathematics: Seminar, 143
- World of Tomorrow, The, 52
- Writing and Critiquing Dramatic (and Cinematic) Writing, 109
- Writing and Critiquing Fiction, 109
- Writing and Critiquing (Creative) Nonfiction, 109
- Writing and Critiquing Poetry, 109
- Writing for Young Adults and Children's Literature, 108
- Writing for Young Adults and Children's Literature Concentration, 106
- Written Expression, 133
- Written Expression Practicum, 137
- Wroxton College, 8–9, 240
- Wroxton Experience — Global Perspective (Administrative Science), 41

## Y

- Young Adult Literature: Beyond Harry Potter, 110

# Notes

---







**FAIRLEIGH  
DICKINSON  
UNIVERSITY**





**FAIRLEIGH  
DICKINSON  
UNIVERSITY**

[www.fdu.edu](http://www.fdu.edu)

1000 River Road  
Teaneck, New Jersey  
07666-1914

# CATALOG

Non-Profit Org.  
U.S. Postage  
**PAID**  
Fairleigh Dickinson  
University