Graduate Catalog
2005 - 2007

THE GRADUATE SCHOOL
MONTCLAIR STATE UNIVERSITY
MONTCLAIR, NJ 07043

July 2005
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GRADUATE DEGREES OFFERED**

DOCTOR OF EDUCATION

Education

*Pedagogy/Mathematics Education (EPME)
*Pedagogy/Philosophy for Children (EPPC)

DOCTOR OF ENVIRONMENTAL MANAGEMENT

Environmental Management (ENVM)

MASTER OF ARTS

Administration and Supervision (ADSU)

*Educator/Trainer (Training Personnel) (ADET)

Applied Linguistics (APLN)

Applied Sociology (APSO)

Child Advocacy (CHAD)

*Public Child Welfare (CAPW)

Communication Sciences and Disorders

*Speech-Language Pathology (CMLP)

Communication Studies

*Organizational Communication (CSOC)
*Public Relations (CSPR)
*Speech Communication (CSSC)

Counseling

*Addictions Counseling (CNAC)
*Community Counseling (CNCC)
*School Counseling (CNSC)
*Student Affairs/Counseling in Higher Education (CNSA)

Educational Psychology (EPSY)

*Child/Adolescent Clinical Psychology (EPCP)
*Clinical Psychology for Spanish-English Bilinguals (EPSB)

English (ENGL)

Environmental Studies

*Environmental Education (ESED)
*Environmental Health (ESEH)
*Environmental Management (ESEM)
*Environmental Science (ESES)

Fine Arts

*Art History (FAAH)
*Fine Arts Education (FAED)
*Museum Management (FAMM)
*Studio (FAST)

* Area of Concentration
** Please refer to the index for page numbers on specific programs.
Please refer to the Graduate School website (www.montclair.edu/graduate) for names of current faculty serving as Graduate Program Coordinators.
French
  *French Literature (FRLI)
  *French Studies (FRFS)
Health Education (HLED)
Legal Studies (LSTD)
  *Dispute Resolution (LSDR)
  *Governance, Compliance, and Regulation (LSGC)
  *Legal Management, Information, and Technology (LSMG)
Music
  *Music Education (MUED)
  *Music Therapy (MUMT)
  *Performance (MUPF)
  *Theory Composition (MUTC)
Physical Education
  *Coaching and Sports Administration (PECS)
  *Exercise Sciences (PEEX)
  *Teaching and Supervision of Physical Education (PETA)
Psychology (PSYC)
  *Industrial and Organizational Psychology (PSIO)
Reading (READ)
Social Sciences
  *Economics (SSEC)
  *History (SSHI)
Spanish (SPAN)
Teaching Middle Grades Mathematics (TMGM)
Theatre
  *Arts Management (THAM)
  *Production/Stage Management (THPS)
  *Theatre Studies (THTS)

MASTER OF ARTS IN TEACHING
Teaching major plus an Instructional Certificate

MASTER OF BUSINESS ADMINISTRATION
Business Administration (BSAD)
  *Accounting (BAAC)
  *Business Economics (BABC)
  *Finance (BAFN)
  *International Business (BAIB)
  *Management (BAMG)
  *Management Information Systems (BAMI)
  *Marketing (BAMK)

* Area of Concentration
** Please refer to the index for page numbers on specific programs.
Please refer to the Graduate School website (www.montclair.edu/graduate) for names of current faculty serving as Graduate Program Coordinators.
MASTER OF EDUCATION
Early Childhood Special Education (ECSE)
Educational Technology (EDTC)
Education (EDUC)
  *Critical Thinking (EDCT)
  *Philosophy for Children (EDPC)
Learning Disabilities (LRDI)

MASTER OF FINE ARTS
Studio Art (STAR)

MASTER OF SCIENCE
Biology (BIOL)
  *Biology Science Education (BISE)
  *Molecular Biology (BIMO)
Chemistry (CHEM)
  *Biochemistry (CHBI)
Computer Science (CPSC)
  *Applied Mathematics (CPAM)
  *Applied Statistics (CPAS)
  *Informatics (CPIN)
Geoscience (GEOS)
Mathematics
  *Computer Science (MACS)
  *Mathematics Education (MAED)
  *Pure and Applied Mathematics (MAPM)
  *Statistics (MAST)
Nutrition and Food Science (NUFS)
Statistics (STAT)

BACHELOR OF SCIENCE/MASTER OF SCIENCE
Chemistry (CHBM) (Combined undergraduate and graduate program culminating with the award of both the BS and MS degrees.)

MASTER OF SCIENCE/MASTER OF BUSINESS ADMINISTRATION
Chemistry MS/Master of Business Administration MBA (CHBU) (Combined graduate program culminating with the award of both the MS and MBA degrees.) Also available with concentrations in Accounting (CHAC), Business Economics (CHBE), Finance (CHFI), International Business (CHIB), Management (CHMG), Management Information Systems (CHMI), and Marketing (CHMK).

Additional Instructional, Educational Services and Administrative Endorsements are available in many of the above areas.

* Area of Concentration
** Please refer to the index for page numbers on specific programs.
Please refer to the Graduate School website (www.montclair.edu/graduate) for names of current faculty serving as Graduate Program Coordinators.
### ACADEMIC CALENDAR*

#### FALL 2005-SPRING 2006

<table>
<thead>
<tr>
<th>FALL SEMESTER 2005</th>
</tr>
</thead>
</table>
| Labor Day Holiday (No Classes) | Monday, September 5  
| Opening Day (No Classes) | Tuesday, September 6  
| Classes Begin | Wednesday, September 7  
| University Day | Wednesday, October 19  
| (Classes Follow Regular Schedule) |  
| Thanksgiving Holiday (No Classes) | Thursday - Sunday, November 24-27  
| Wednesday Designated As A Friday (for Friday day classes only; Wednesday day and evening classes do not meet) | Wednesday, December 14  
| Classes End | Thursday, December 15  
| Examination Period | Friday-Thursday, December 16-22  
| End of Semester | Thursday, December 22  

<table>
<thead>
<tr>
<th>SPRING SEMESTER 2006</th>
</tr>
</thead>
</table>
| Martin Luther King Holiday (No Classes) | Monday, January 16  
| Classes Begin | Tuesday, January 17  
| Spring Recess (No Classes) | Monday-Sunday, March 13-19  
| University Day | Wednesday, March 22  
| (Classes Follow Regular Schedule) |  
| Easter Holiday (No Classes) | Friday-Sunday, April 14-16  
| Tuesday Designated As A Friday (for Friday day classes only; Tuesday day and evening classes do not meet) | Tuesday, May 2  
| Classes End | Tuesday, May 2  
| Examination Period | Thursday-Wednesday, May 4-10  
| End of Semester | Wednesday, May 10  
| Commencement | Friday, May 19 (tentative)  

*Montclair State University reserves the right to modify this calendar. Please refer to the Montclair State University web site [www.montclair.edu](http://www.montclair.edu) for the most recent published calendar information.*
### ACADEMIC CALENDAR*

**SUMMER 2006 - FALL 2006**

<table>
<thead>
<tr>
<th>Session</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>Pre-Session (Three Weeks, No Friday Classes)</td>
<td>Monday, May 15-Thursday June 1 (11 sessions)</td>
</tr>
<tr>
<td>Pre-Session (Four Weeks, No Friday Classes)</td>
<td>Monday, May 15-Thursday June 8 (15 Sessions)</td>
</tr>
<tr>
<td>Twelve-Week Session (No Friday Classes)</td>
<td>Monday, May 15-Thursday, August 3 (extended hours Monday, 11 sessions)</td>
</tr>
<tr>
<td>Memorial Day Holiday (No Classes)</td>
<td>Monday, May 29</td>
</tr>
<tr>
<td>Saturday Classes</td>
<td>Saturday, June 3-August 5 (10 sessions)</td>
</tr>
<tr>
<td>Eight-Week Session (No Friday Classes)</td>
<td>Monday, June 12-Thursday, August 3</td>
</tr>
<tr>
<td>First Four-Week Session (No Friday Classes)</td>
<td>Monday, June 12-Thursday, July 6</td>
</tr>
<tr>
<td>Six-Week Session (No Friday Classes)</td>
<td>Monday, June 26-Thursday, August 3</td>
</tr>
<tr>
<td>Independence Day Holiday (No Classes)</td>
<td>Tuesday, July 4</td>
</tr>
<tr>
<td>Second Four-Week Session (No Friday Classes)</td>
<td>Monday, July 10-Thursday, August 3</td>
</tr>
<tr>
<td>Post-Session (No Friday Classes)</td>
<td>Monday, August 7-Thursday, August 24 (12 sessions)</td>
</tr>
</tbody>
</table>

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<tr>
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<th>Dates</th>
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<td>Labor Day Holiday (No Classes)</td>
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<td>Tuesday, September 5</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Wednesday, September 6</td>
</tr>
<tr>
<td>University Day (Classes Follow Regular Schedule)</td>
<td>Wednesday, October 18</td>
</tr>
<tr>
<td>Thanksgiving Holiday (No Classes)</td>
<td>Thursday-Sunday, November 23-26</td>
</tr>
<tr>
<td>Wednesday Designated as a Friday (for Friday day classes only; Wednesday day and evening classes do not meet)</td>
<td>Wednesday, December 13</td>
</tr>
<tr>
<td>Classes End</td>
<td>Thursday, December 14</td>
</tr>
<tr>
<td>Examination Period</td>
<td>Friday-Thursday, December 15-21</td>
</tr>
<tr>
<td>End of Semester</td>
<td>Thursday, December 21</td>
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# ACADEMIC CALENDAR*

## SPRING 2007 - SUMMER 2007

### SPRING SEMESTER 2007

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<td>Monday-Sunday, March 12-18</td>
</tr>
<tr>
<td>University Day</td>
<td>Wednesday, March 21</td>
</tr>
<tr>
<td>(Classes Follow Regular Schedule)</td>
<td></td>
</tr>
<tr>
<td>Easter Holiday (No Classes)</td>
<td>Friday-Sunday, April 6-8</td>
</tr>
<tr>
<td>Tuesday Designated As A Friday</td>
<td>Tuesday, May 1</td>
</tr>
<tr>
<td>(for Friday day classes only; Tuesday day and evening classes do not meet)</td>
<td></td>
</tr>
<tr>
<td>Classes End</td>
<td>Tuesday, May 1</td>
</tr>
<tr>
<td>Examination Period</td>
<td>Thursday-Wednesday, May 3-9</td>
</tr>
<tr>
<td>End of Semester</td>
<td>Wednesday, May 9</td>
</tr>
<tr>
<td>Commencement</td>
<td>Friday, May 18 (tentative)</td>
</tr>
</tbody>
</table>

### SUMMER SESSIONS 2007

<table>
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<tr>
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<tr>
<td>Pre-Session (Four Weeks, No Friday Classes)</td>
<td>Monday, May 14-Thursday June 7 (15 Sessions)</td>
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<tr>
<td>Twelve-Week Session (No Friday Classes)</td>
<td>Monday, May 14-Thursday, August 2 (extended hours Monday, 11 sessions)</td>
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<tr>
<td>Memorial Day Holiday (No Classes)</td>
<td>Monday, May 28</td>
</tr>
<tr>
<td>Saturday Classes</td>
<td>Saturday, June 2-August 4    (10 sessions)</td>
</tr>
<tr>
<td>Eight-Week Session (No Friday Classes)</td>
<td>Monday, June 11-Thursday, August 2</td>
</tr>
<tr>
<td>First Four-Week Session (No Friday Classes)</td>
<td>Monday, June 11-Thursday, July 5</td>
</tr>
<tr>
<td>Six-Week Session (No Friday Classes)</td>
<td>Monday, June 25-Thursday, August 2</td>
</tr>
<tr>
<td>Independence Day Holiday (No Classes)</td>
<td>Wednesday, July 4</td>
</tr>
<tr>
<td>Second Four-Week Session (No Friday Classes)</td>
<td>Monday, July 9-Thursday, August 2</td>
</tr>
<tr>
<td>Post-Session (No Friday Classes)</td>
<td>Monday, August 6-Thursday, August 23 (12 sessions)</td>
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ABOUT MONTCLAIR STATE UNIVERSITY

Montclair State is New Jersey’s second largest and fastest growing university, offering the advantages of a large university—a broad undergraduate curriculum with a global focus, a wide variety of superior graduate programs, and a diverse faculty and student body—combined with a small college’s attention to students.

Montclair State’s mission reflects its expanded role in educating the students of New Jersey, conducting research, and providing service to the community, the region, the state and beyond. The key goals of the University’s strategic plan are:

• to be a recognized center for excellence in teaching and learning;
• to be a source of new knowledge and to apply knowledge;
• to provide expanded opportunities to students within a richly diverse setting;
• to provide the facilities, equipment and funding to support the University’s expansion;
• to embrace the pervasive and transforming use of technology;
• to be a center for global study and understanding;
• to foster a vibrant sense of community in which each student will be challenged to attain her or his full potential; and
• to serve as an important resource for the local and regional community.

The University is in the midst of an ambitious expansion program that will enable it to accommodate at least 18,000 students by 2008, the year of its centennial. The program includes the recruitment of outstanding new faculty and approximately $250 million in capital construction. Following are just some of the major building projects:

• The Village at Little Falls, a state-of-the-art housing complex with apartments for 850 students, which opened in fall 2003. With five buildings named for famous New Jerseyans, MSU’s signature Spanish mission architecture, an outdoor swimming pool and a fitness center, it has been featured on MTV, on television’s “Inside Edition,” and in newspapers all over the country.
• A new women’s softball stadium, which opened in spring 2004.
• The Alexander Kasser Theater, a 500-seat, state-of-the-art performance venue for music, dance and theater events. It will also be used by school-aged children from MSU’s Music Preparatory Program, as well as musicians studying at the New Music Institute, housed in the theater’s lower level alongside the unique Harry Partch Instrument Collection.
• A new New Jersey Transit train station and parking garage, opened in 2004, gives Montclair State students a one-seat ride into the heart of midtown Manhattan.
• The Children’s Center, an innovative setting for two of the University’s most highly respected and nationally recognized children’s programs, the Psychoeducational Center and the Child Care Center. By uniting typical preschoolers with special-needs students, this facility, scheduled to open in September 2005, creates a unique experience for both children and educators.
• A $45-million, state-of-the-art academic building, the home of the College of Education and Human Services, as well as Information Technology. Included will be the Center for Teacher Preparation and Learning Technologies, which will allow Montclair State to double the capacity of its teacher preparation programs and provide expanded access to continue professional development for educators. The building is scheduled to open in fall 2005.
Also new on campus:

- A fleet of new vans replacing the University’s old shuttle buses. The vans were purchased with a $1.5-million grant from the United States Department of Transportation.
- The Joseph and Elda Coccia Institute for the Italian Experience in America, established with a significant gift from Mr. and Mrs. Coccia to foster instruction, research and outreach in Italian and Italian-American studies.
- A doctoral program in environmental management, master’s degrees in early childhood special education, teaching middle grades mathematics, and child advocacy; and bachelor’s degrees in science informatics and in hospitality management.

With more than 250 majors, minors and concentrations, the nation’s only doctorate in pedagogy and a unique interdisciplinary doctorate in environmental management, MSU provides a comprehensive array of academic programs while remaining accessible and affordable. Through its six schools and colleges—the College of Humanities and Social Sciences, the College of Science and Mathematics, the College of Education and Human Services, the School of the Arts, the School of Business, and the Graduate School and Research—Montclair State University prepares its students to lead productive and rewarding lives, and to participate responsibly in civic society.

Montclair State’s strong commitment to public service is evidenced by its wide variety of noncredit programs offered to varied constituencies. Each year, more than 1,200 academically gifted youngsters take part in advanced instructional programs offered weekends and during the summer on campus, and close to 500 talented children receive instruction through the Preparatory Center for the Arts. The School of Conservation, a 240-acre facility in Stokes State Forest, is one of the largest university-operated environmental education centers in the world, providing two- to five-day programs for 10,000 elementary and secondary school students from around the state, as well as graduate education for students from throughout the world. The University’s Service Learning Program, in which students work with community groups throughout the area as part of their academic course work, has provided services to several communities in the area, and the New Jersey Network for Educational Renewal, a school-University partnership dedicated to the simultaneous renewal of the schools and teacher education, serves numerous school districts in northern New Jersey.

From its founding in 1908, the history of Montclair State University has been one of change, growth and distinction. Proud of its heritage and prepared to respond to the challenges and opportunities of the 21st century, Montclair State continues to be a major contributor to the cultural, economic and educational life of the region.

**ACCREDITATIONS, APPROVALS, AND MEMBERSHIPS**

Montclair State University is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, telephone (215) 662-5606. In addition, the National Council for the Accreditation of Teacher Education has granted accreditation for the preparation of elementary and secondary school teachers as well as administrative and school service personnel. Those programs leading to certification are approved by the New Jersey Department of Education using the standards of the National Association of State Directors of Teacher Education and Certification.

Other academic accreditations include the following:

- AACSB International - The Association to Advance Collegiate Schools of Business—baccalaureate and graduate degree programs in business, School of Business
• American Speech-Language-Hearing Association – Communication Sciences and Disorders, major, concentration in Speech-Language Pathology, MA, Department of Communication Sciences and Disorders, College of Humanities and Social Sciences
• National Association of Schools of Art and Design – Fine Arts major, concentrations in Art History, Fine Arts Education, and Studio, MA; Studio Art major, MFA, Department of Art and Design, School of the Arts
• National Association of Schools of Music, Music major, concentrations in Music Education, Music Therapy, Performance, and Theory/Composition, MA, Department of Music, School of the Arts
• National Association of Schools of Theatre – Theatre major, concentrations in Arts Management, Production/Stage Management, and Theatre Studies, MA, Department of Theatre and Dance, School of the Arts

Program approvals include the following:
• American Bar Association: Post-baccalaureate Certificate Program in Paralegal Studies
• American Chemical Society: Chemistry major, MS; Chemistry major, Biochemistry concentration, MS
• Council for Exceptional Children: Early Childhood Special Education major, MEd; Learning Disabilities major, MEd.; Learning Disabilities Teacher-Consultant post master’s certification; Communication Sciences and Disorders major, Speech-Language Pathology concentration, MA

The University maintains membership in the following professional organizations:
• AACSB International - The Association to Advance Collegiate Schools of Business
• American Association for Paralegal Education
• American Association of Colleges for Teacher Education
• American Association of State Colleges and Universities
• American Council on Education
• Association for Gerontology in Higher Education
• Association of American Colleges and Universities
• Council of Graduate Schools
• Middle Atlantic Association of Colleges of Business Administration
• National Association of Graduate Admissions Professionals
• National Association of State Universities and Land-Grant Colleges
• National Association of Student Personnel Administrators
• National Network for Educational Renewal
• New Jersey Association of State Colleges and Universities
• New Jersey Association of Colleges for Teacher Education
• North American Association of Summer Sessions
• Northeastern Association of Graduate Schools

ACADEMIC ORGANIZATION

Montclair State University is organized into three colleges and three schools: the College of Education and Human Services, the College of Humanities and Social Sciences, the College of Science and Mathematics, the School of the Arts, the School of Business, and the Graduate School.

Reporting to the Provost, the Vice Provost for Research and Dean of the Graduate School works with the Graduate Council, the academic deans, colleges and schools, and departments in the development, promotion and review of graduate programs; the recruitment, admission, matriculation and advisement of graduate students; and the
administration of programs that enhance the quality of graduate education, including the appointment of Graduate Assistants.

The Graduate Council is the primary all-university body for the development of graduate policy and curriculum advisement. Its decisions and recommendations are made through the Graduate Dean to the Provost. Consistent with policies established by the Board of Trustees, the Graduate Council:

1. recommends general graduate admission requirements,
2. recommends guidelines for the admission of students to graduate programs,
3. recommends guidelines for the admission of faculty to graduate faculty status,
4. reviews and makes recommendations about new graduate programs, concentrations or any revisions in graduate programs,
5. initiates discussions on and/or reacts to any and all matters affecting graduate faculty, students and programs.

HUMAN RELATIONS STATEMENT ON CAMPUS CLIMATE FOR CIVILITY AND HUMAN DIGNITY

Montclair State University recognizes its responsibility to foster an atmosphere of respect, understanding and good will among all individuals and groups, with special sensitivity to those most likely to be subjected to disrespect, abuse and misunderstanding because of their race, ethnicity, religion, gender, sexual preference, age or disabling condition.

The goal is to create an unbiased community where all individuals feel free to express themselves in ways that are appropriate in a multiethnic and multicultural society, and to pursue their work and study in an atmosphere that values individuality and diversity.

Underlying this statement is a respect for differences of opinion and freedom of speech. We must be diligent, however, to assure that differences do not degenerate into name-calling or insulting of individuals or groups. Such behavior can be destructive of courtesy and civility and endangers the environment needed for engaging in productive dialogue.

Montclair State condemns any behavior that devalues persons and endangers the learning and work environment. Such acts include, but are not limited to, threats or acts of physical violence, verbal abuse, harassment, and discrimination.

Montclair State encourages the practice of this human relations statement in every aspect of campus life.

SMOKING REGULATION

Montclair State University is subject to NJSA 26:3D-15 through 21 on smoking in public places (Health and Vital Statistics). In compliance with this law, MSU prohibits the smoking or carrying of lighted cigars, cigarettes, pipes, or any matter or substance which contains tobacco in all indoor spaces on the University campus.

Indoor smoking is permitted only in private, fully-enclosed student residence halls. If the room is jointly occupied, smoking is permitted only by consensus of all individuals occupying the room.

Any member of the campus community may ask an individual to comply with the provisions of this regulation or may file a complaint with University Police, who may issue a summons. Any individual who fails to comply is subject to a fine as determined by the local court where the summons is filed.
The College of Education and Human Services includes seven departments, each of which offers the Master of Arts, Master of Science, or Master of Education degree in a variety of fields for professionals in private industry, government and community agencies, non-profit organizations, and public and non-public schools. In addition, the Center of Pedagogy houses the Doctor of Education (Ed.D.) degree in Pedagogy and oversees several projects designed to enhance our teacher preparation program, recruit students, foster partnerships with district schools, and provide professional development for faculty. The College offers a broad array of education and human service degrees and certificates that include Counseling, Administration and Supervision, Teaching, Special Education, Learning Disabilities, Early Childhood and Elementary Education, Reading, Educational Technology, Physical Education, Health Education, Nutrition and Food Science, Critical Thinking, and Philosophy for Children. Graduate students in these programs benefit from well-supervised field experiences and internships. All of the College of Education and Human Services programs are characterized by a commitment to critical thinking, social justice, and democratic practice. The College’s dedicated, student-oriented faculty values teaching as well as research and strives to create a supportive and rewarding experience for graduate students.

In January 2006, the College will move into its new academic building that boasts state-of-the-art instructional labs and classrooms, the ADP Center for Teacher Preparation and Learning Technologies, and community spaces that will enrich graduate student life at Montclair State University.

Centers, departments, programs, and concentrations within the College are:

- **Center of Pedagogy**
  - Pedagogy (Ed.D.)
- **Counseling, Human Development and Educational Leadership**
  - Counseling (M.A.)
    - Addictions Counseling*
    - Community Counseling*
    - School Counseling*
    - Student Affairs/Counseling in Higher Education*
  - Administration and Supervision (M.A.) (Required for Principal Certification)
    - Educator Trainer (Training Personnel)*
Counseling, Human Development and Educational Leadership (continued)
Certification Programs for: School Administrator (Superintendent), Supervisor, School Business Administrator, School Counselor, Substance Awareness Coordinator eligibility, Licensed Professional Counselor, NJ eligibility

Curriculum and Teaching
Master of Arts in Teaching (M.A.T)
Master of Education (M.Ed.)
Master of Education in Learning Disabilities (M.Ed.)
Master of Education in Educational Technology (M.Ed.)
Post-baccalaureate Certification
Post MA certification program in Learning Disabilities Teacher-Consultant
Post BA certification program in Special Education
Certificate Program: Collaborative Teaching for Inclusive Settings
Certification Programs for: Associate School Library Media Specialist, School Library Media Specialist

Early Childhood, Elementary and Literacy Education
Master of Arts in Teaching (M.A.T.)
Post BA Certification
  Teacher of Preschool through Grade 3
  Elementary School Teacher
Master of Education (M.Ed.)
  Early Childhood Special Education
  Reading (M.A.)
Certificate Program for: Reading Specialist

Educational Foundations
Master of Education (M.Ed.)
  Critical Thinking*
  Philosophy for Children*
  Philosophy for Children Specialization within the Ed.D. in Pedagogy
Certificate Program: Philosophy for Children

Exercise Science and Physical Education
Physical Education (M.A.)
  Coaching and Sports Administration*
  Exercise Sciences*
  Teaching and Supervision of Physical Education*
Certificate Program: Nutrition and Exercise Science

Family and Child Studies
Health and Nutrition Sciences
Health Education (M.A.)
Nutrition and Food Science (M.S.)
Certificate Program: Food Safety Instructor
Certificate Program: Nutrition and Exercise Science
Certificate Program: Health Education

*Area of Concentration
Graduate programs in the College of Humanities and Social Sciences are designed with the career-oriented student in mind. The College offers a number of programs that are applied in nature and which provide learning experiences that are applicable to the work environment. We also provide programs that advance students’ theoretical understanding, which serves to enhance the learning and career development of public school educators or prepare students for doctoral study in the liberal arts.

The fields of study open to graduate students in the College of Humanities and Social Sciences range from speech/language acquisition and language processing to child advocacy, dispute resolution, and law management; from child/adolescent and industrial psychology, to applied sociology; from English, French, and Spanish literature, to anthropology, economics, and history. Each of these programs helps prepare students for a professional world that requires us to be broadly educated and simultaneously to attain a high level of expertise in a given field. Our low faculty-student ration ensures that students receive the quality instruction and excellent mentoring that graduate students expect and deserve. A number of graduate assistantships and other on-campus employment opportunities are available to qualified students in several fields.

Departments, programs, and concentrations within the College are:

*Anthropology*

*Center for Child Advocacy*
- Child Advocacy (M.A.)
- Public Child Welfare*
- Certificate Program: Child Advocacy

*Communication Sciences and Disorders*
- Communication Sciences and Disorders (M.A.)
- Speech-Language Pathology*

*English*
- English (M.A.)

*French, German, and Russian*
- French (M.A.)
- French Literature*
- French Studies*

*History*
- Social Sciences (M.A.)
- History*
Legal Studies
Legal Studies (M.A.)
  Dispute Resolution*
  Governance, Compliance, and Regulation*
  Legal Management, Information, and Technology*
Certificate Program: Paralegal Studies

Linguistics
Applied Linguistics (M.A.)
Certificate Program: Teaching English to Speakers of Other Languages

Psychology
Educational Psychology (M.A.)
  Child/Adolescent Clinical Psychology*
  Clinical Psychology for Spanish-English Bilinguals*
Psychology (M.A.)
  Industrial and Organizational Psychology*
  School Psychologist Certification

Sociology
Applied Sociology (M.A.)

Spanish/Italian
Spanish (M.A.)
Certificate Program: Translation and Interpretation in Spanish

*Area of Concentration
The College of Science and Mathematics is strongly committed to graduate programs that provide a balance between theoretical and applied approaches to the study of advanced topics. Through interaction with dedicated faculty, graduate students have a unique opportunity to learn how mathematics, science and computing are performed and utilized to solve problems. Faculty consult with industry and do research in areas such as animal behavior, applied mathematics, biochemistry, bioinformatics, botany, computer science, conducting polymers, entomology, environmental issues, immunology, microbiology, molecular biology, aquatic science, and statistics. Interactions with corporations such as the petroleum and pharmaceutical industries enrich classes and provide opportunities for the support of graduate students through research assistantships. Students are strongly encouraged to pursue the research thesis option as a logical approach to their pursuit of knowledge. Non-thesis alternatives are also available in most programs. Graduate assistantships and scholarships are available on a limited basis for qualified students.

Modern laboratory equipment for research and teaching include Fourier Transform Infrared Spectroscopy, Fourier Transform Nuclear Magnetic Resonance Spectroscopy, x-ray diffraction, greenhouse, automated sequencer, animal facilities, digital exploration seismography, ground penetrating radar, resistivity survey equipment, Gas Chromatography-Mass Spectroscopy, High Performance Liquid Chromatography, Scanning Electron Microscopy, Transmission Electron Microscopy, and Ultracentrifugation. Since scientific computing has unique requirements, the College is continually enhancing its fiber optic network (SCInet). The network includes student access to UNIX based Sun servers and workstations, PCs, Macs and the Internet. Also, students in the College have access to courses and research opportunities at the New Jersey School of Conservation in Stokes State Forest and the New Jersey Marine Science Consortium in Sandy Hook. The College of Science and Mathematics houses the newly created Passaic River Institute, a center for the study and remediation of the river and adjacent brownfields.

The College contributes to the Ed.D. in Pedagogy by offering a specialization in Mathematics Education. It offers numerous M.S. and M.A. degree programs with concentration options to prepare students for careers in education, research, industry, government, and future study in Ph.D. or professional programs, a combined M.B.A./M.S. in Chemistry and a Doctorate in Environmental Management, as well as several subject areas which lead to the Master of Arts in Teaching (M.A.T.).

Departments, programs and concentrations within the College are:

*Biology and Molecular Biology*
- Biology (M.S.)
  - Biology Science Education*
  - Molecular Biology*
- Certificate Program: Molecular Biology
Chemistry and Biochemistry
Chemistry (M.S.)
   Biochemistry*
Combined Chemistry /Business Administration (M.S./M.B.A.)
   Accounting*
   Business Economics*
   Finance*
   International Business*
   Management*
   Management Information Systems*
   Marketing*

Computer Science
Computer Science (M.S.)
   Applied Mathematics*
   Applied Statistics*
   Informatics*
Certificate Program: Cisco
Certificate Program: Object Oriented Computing

Earth and Environmental Studies
Environmental Management (D.Env.M.)
Environmental Studies (M.A.)
   Environmental Education*
   Environmental Health*
   Environmental Management*
   Environmental Science*
Geoscience (M.S.)

Mathematical Sciences
Education (Ed.D.)
   Pedagogy*/Mathematics Education Specialization
Mathematics (M.S.)
   Computer Science*
   Mathematics Education*
   Pure and Applied Mathematics*
   Statistics*
Statistics (M.S.)
Teaching Middle Grades Mathematics (M.A.)
Certificate Program: Teaching Middle Grades Mathematics

*Area of Concentration
The School of the Arts (SART) offers more than fifty majors, minors and concentrations in art and design, broadcasting, communication studies, dance, music and theatre. Twice designated as a Center of Excellence, our school maintains a commitment to quality programs, providing professional training and education for students seeking careers as practitioners, educators, public servants and managers of the arts.

Students in the School study and create with some of the finest artist-teachers in the New York metropolitan area. Our faculty includes working composers, designers, fine artists, actors, musicians, directors, choreographers, conductors, broadcasters and communication specialists, including Fulbright, Guggenheim and Howard award winners. What’s more, because we are only minutes from Manhattan, internationally recognized guest artists know the School well and come year after year to direct master classes, perform in staged productions, conduct student ensembles and teach what it takes to succeed in the arts.

For both our campus and community, SART provides arts events and community services, offering cultural enrichment of all kinds. The division of Arts and Cultural Programming produces programs that include the presentation of national and international artists plus contemporary works that challenge the boundaries of convention. Events can be found in as many as six professionally equipped performance spaces on campus, including the new state-of-the-art Alexander Kasser Theater—a venue like no other in the region, offering exceptional acoustics and an over-sized proscenium stage in an intimate and comfortable setting.

Departments, programs, and concentrations within the School are:

**Art and Design**
- Fine Arts (M.A.)
  - Art History*
  - Fine Arts Education*
  - Museum Management*
  - Studio*
- Studio Art (M.F.A.)

**Communication Studies**
- Communication Studies (M.A.)
  - Organizational Communication*
  - Public Relations*
  - Speech Communication*

**Music**
- Music (M.A.)
  - Music Education*
  - Music Therapy*
  - Performance*
  - Theory Composition*
Music (continued)
Certificate Program: Artist Diploma
Certificate Program: Performer’s Certificate

Theatre and Dance
Theatre (M.A.)
   Arts Management*
   Production/Stage Management*
   Theatre Studies*

*Area of Concentration
The School of Business offers a range of graduate programs that prepare students to be decision-makers, leaders, and entrepreneurs, ready for broad-spectrum managerial responsibilities or for success as higher-level professional specialists. As a School of Business of a regional state university that provides quality education to a diverse student body, our goal is to graduate students who are immediately effective in cutting-edge business organizations. The School is accredited by AACSB International—The Association to Advance Collegiate Schools of Business.

The Master of Business Administration (MBA) and Master of Arts in Social Sciences, concentration in Economics programs enable students to build on their backgrounds and assist graduates to advance in their chosen careers.

The goal of the Montclair MBA is to prepare management generalists who have the knowledge, techniques and attitudes to analyze complex issues; establish logical goals; evaluate alternatives; form reasoned judgments; and effectively implement chosen options. The program’s structure emphasizes the development of analytical capacities that are tempered by a concerned awareness of obligations to the greater social environment.

The MBA program stresses the theoretical foundations of management-oriented disciplines; practical applications of research findings; and current managerial practices. This blend of theory and practice builds a strong foundation for immediate application as well as post-graduate professional growth.

The Master of Arts in Social Sciences, Economics concentration, provides a study of economic theory within a programmatic framework that emphasizes the importance and interdisciplinary nature of the social sciences. Where appropriate, business-oriented applications are developed; however, the primary purpose of the program is to develop a knowledge of economics which enhances the student’s understanding of the formulation, evaluation, and implementation of public decision making. Although an undergraduate major in Economics is not a prerequisite, candidates must present an undergraduate record with at least 30 semester hours in the social sciences and/or history. Candidates who do not meet minimum requirements may be required to enroll in certain prerequisite courses which do not provide graduate credit.

Departments, programs, and concentrations within the School are:

**Accounting, Law and Taxation**
- Business Administration (MBA)
- Accounting*

**Economics and Finance**
- Business Administration (MBA)
- Business Economics*
- Finance*
- Social Sciences (MA)
- Economics*
International Business
   Business Administration (MBA)
      International Business*

Management and Information Systems
   Business Administration (MBA)
      Management*
      Management Information Systems*

Marketing
   Business Administration (MBA)
      Marketing*

*Area of Concentration
THE GRADUATE SCHOOL

Vice Provost for Research and Dean: To Be Announced
Associate Dean: Kim C. O’Halloran, Ph.D.
Assistant Dean: To Be Announced

The Graduate School has responsibility for all education at the post-baccalaureate level. The Graduate School provides leadership and direction for the University’s graduate programs. It strives to create a learning environment that will ensure the highest quality graduate programs in keeping with the University’s overall mission of teaching, research, and public service. Working with the faculty, the Graduate School is committed to providing access to programs and services for qualified students of all racial, cultural, and ethnic backgrounds, and to meet the needs of the State of New Jersey and the region.

In concert with the Graduate Council, the Graduate School:

- continuously reviews the University’s graduate programs and policies;
- establishes and maintains appropriate admission and academic standards;
- encourages student inquiry and critical thinking;
- provides enhanced levels of professional competence;
- fosters research and scholarly activity;
- supports interdisciplinary endeavors.

There are 38 different graduate degree programs leading to a range of degrees including the Doctor of Education, Doctor of Environmental Management, Master of Fine Arts, Master of Business Administration, Master of Arts, Master of Science, Master of Arts in Teaching and Master of Education.
ACADEMIC FACILITIES

Montclair State University’s 247-acre campus includes 13 academic buildings, including the newest and largest at 275,000 square feet, a state-of-the-art facility that will house the College of Education and Human Services, a technology hub and a conference center.

The Harry A. Sprague Library contains more than 40,000 volumes and materials, and subscribes to more than 2,600 periodicals. A wireless facility, the library also contains a faculty and graduate student study room on its lower floor.

There are four performance venues (the 500-seat Alexander Kasser Theater, the 1,000-seat Memorial Auditorium, the L. Howard Fox Studio Theater and the Life Hall Dance Studio).

Montclair State has three art spaces—the University Gallery, Gallery One and a Sculpture Garden, where at least one international show is presented each season.

There are a variety of dining options on campus—from several cafeterias and the Rathskeller to the 24-hour Red Hawk Diner, complete with Internet access at every booth.

Accessible parking is available in the 1,100-space Red Hawk Deck or in the 1,300-space deck at the New Jersey Transit Train station, which is conveniently located across from the residential village and provides express service to and from midtown Manhattan.

The University has eight residential facilities that provide a variety of lifestyles, including an apartment community that houses its own recreation center, in-ground outdoor swimming pool and police substation.

The newest of Montclair State’s sports facilities is a softball stadium that can accommodate 260 fans. Other facilities include Yogi Berra Stadium, home of the NCAA Champion Red Hawk baseball team and the minor league New Jersey Jackals; football’s Sprague Field; Soccer Park at Pittser Field; tennis courts; an ice arena; an Olympic-size indoor swimming pool; gymnasium; and a fitness center. Plans are underway to build a student recreation center.

The Children’s Center, scheduled to open in 2005 serving approximately 500 children annually, will be a national model for inclusive early childhood education where children with disabilities learn, play and grow alongside their same-age peers.

Students have access to numerous computer labs on campus, including a 24-hour facility with wireless access.

THE ADP CENTER FOR TEACHER PREPARATION AND LEARNING TECHNOLOGIES

The ADP Center for Teacher Preparation and Learning Technologies functions as a hub for research in pedagogy, curriculum planning, professional development and education technology within the Center of Pedagogy in the College of Education and Human Services.

The ADP Center mission is to improve the quality of education for teacher education students, practicing teachers, counselors, administrators, and others in professional careers in pre-K through secondary schools and post secondary education by providing access to more than 30,000 curriculum and teaching resources located in its Curriculum Resource Center (CRC) including professional books, textbooks curriculum guides, assessment tests, instructional activities, education focused journals/periodicals, an instructional video library with private viewing room, and several of the most commonly
used educational software titles available today. In addition to media resources, the ADP Center also provides student and faculty access to several teaching tools including a 27” laminator, bookbinding machine, Scantron scorer, Ellison letter/number/shape cutter, photocopies, scanning and color printing capability, VHS/DVD conversion and duplicating machines as well as the ability to borrow digital cameras, LCD projectors and other audio/visual equipment.

In its roles as a hub for educational technology, the ADP Center maintains three state-of-the-art “Classrooms of the Future” equipped with digital video conferencing equipment, multiple visual displays, wireless computing opportunities and real-time student response mechanisms. Faculty may use these classrooms to conduct distance learning based courses, to experiment with emerging instructional technology, and to offer students access to multimedia resources not available in typical university teaching spaces.

In addition to the Classrooms of the Future, the ADP Center maintains a Macintosh and Windows based instructional technology lab that includes digital video and audio authoring capabilities, desktop publishing, and Internet research tools. This lab is open to students and faculty more than 12 hours per day.

Finally, in order to offer convenient access for P-12 educator, and the opportunity to participate in high quality workshops and seminars offered by CEHS faculty and staff, the ADP Center maintains a professional development lab capable of broadcasting interactive video content through the Internet to remote sites.

The ADP Center is open Monday through Thursday between 9:00 a.m. and 10:00 p.m., Monday through Thursday and 9:00 a.m. to 4:00 p.m. on Friday and Saturday during the fall and spring semesters. Hours are limited during the winter and Summer Sessions. To learn more, please call at 973-655-5220 or visit the CRC website www.montclair.edu/crc.

CHILDREN’S CENTER
Opening September 2005, the Children’s Center offers inclusive early childhood services for children birth through 6 years. The Center will bring together the programs formerly operated by the Child Care Center, the Psychoeducational Center, the Demonstration Preschool and the Jeffrey Dworkin Early Intervention Program.

The Children’s Center has been designed to be an exciting, inviting, safe and nurturing environment where children and teachers can investigate and explore a wide variety of materials and activities. The Center will also provide the environment and opportunities for University students to observe and develop the pedagogy of teaching and learning.

The Children’s Center is open to University students, faculty and staff as well as to the community. The Children’s Center, located on Clove Road next to the New Jersey Transit Train Station, will be open from 7:30 a.m. to 6:30 p.m. For further information, contact Co-Directors Janey DeLuca at (973) 655-7586 or Toni Spiotta at (973) 655-4255.

COMMUNICATION DISORDERS CENTER
The Communication Disorders Center is the clinical education and training facility for the master’s degree program in speech-language pathology offered by the Department of Communication Sciences and Disorders. Student-clinicians, under the supervision of department faculty and professional staff, apply the diagnostic and treatment methods
they have learned in their courses to assist children and adults of all ages who have disorders of communication. The Center is in operation all year, including 12 weeks during the summer. Services are provided to children and adults from the communities surrounding the campus and to students and staff of the university. The services available include the evaluation and treatment of disorders of articulation, voice, language, and fluency (stuttering) and for the communication problems related to hearing impairment, stroke, cleft palate, cerebral palsy, or cognitive deficits. Assistance with accent reduction is also available. For further information contact the clinic coordinator, Heidi Fuld, telephone, (973) 655-6917; fax, (973) 655-7072.

GLOBAL EDUCATION CENTER

The Global Education Center at Montclair State University oversees all international endeavors on campus, plans new efforts and enhances international programs at the University. The Center encourages faculty to develop international expertise in their disciplines, participate in teaching exchanges, scholarly collaborators and international conferences. Through partnerships with international institutions, it assists in developing collaborative undergraduate and graduate programs. The Center provides opportunities for students to travel and study in every continent through semester-long study abroad programs and summer institutes. Students who study abroad are eligible to apply for scholarships through the Center. International scholars visiting MSU are housed in The Scholars International Guest Apartments which are administered by the Global Education Center. The Center, located at 22 Normal Avenue, features a print and video library of international study programs and is open between 8:30 a.m. and 4:30 p.m.

The Office of International Services (OIS) is responsible for the general growth and welfare of all international students, scholars, and faculty. The OIS provides advising on legal matters pertaining to Immigration and Naturalization Service (INS) regulations, and individual advising and workshops in the areas of adjustment to Montclair State University and the United States. In addition, orientation sessions are held twice each year for students and scholars, and immigration workshops are scheduled throughout the year. The OIS publishes A Students’ Guide to Immigration and Crossroads, a newsletter for international students. Liaison services for students, faculty, and scholars with the U.S. State Department, the U.S. Immigration and Naturalization Service, and U.S. Embassies and Consulates also are provided. All new international students, scholars, and faculty should contact this office located at The Global Education Center, 22 Normal Avenue, (973) 655-4253, within the first two weeks of the semester for information. Visit us on the web at www.montclair.edu/International. Montclair State University has been authorized under federal law to enroll non-immigrant alien students.

INFORMATION TECHNOLOGY

The Office of Information Technology (OIT) provides the hardware, communications infrastructure and training and computing support for all students, faculty and staff. More detailed information concerning technology services available to the University community may be obtained by visiting http://oit.montclair.edu. Effective January 1, 2006 all of the operating units that comprise the OIT will move from College Hall to the fifth and sixth floors of the New Academic Building. The Technology Solutions Center, the Help Desk, and an Information Commons public computing facility will be located on the fifth floor of the New Academic Building.
Technology Solutions Center
The Technology Solutions Center (TSC) located in College Hall, room 124, provides technology support for the entire University community. The TSC is organized to provide one-stop technology support services to all MSU students, faculty, and staff. Among those support services most frequently utilized by MSU students are the following:

Computer Labs
MSU currently has four (4) public computing labs that all MSU students can access with a current MSU ID. These four labs contain a total of 145 state of the art computers, replete with a variety of software applications that are available to students. MSU also provides approximately 95 internet-only stations in the Library and Student Center for student use. The hours of operation are posted outside of each lab, at the Technology Solutions Center, and http://oit.montclair.edu/cale/labschedule.html.

Help Desk
The Help Desk provides technical assistance to all faculty, staff, administration, and students. The OIT Help Desk is open from 8 a.m. – 12 midnight, Monday through Sunday during the fall and spring semesters. Alternate schedules exist during the winter and summer sessions.

Due to vendor warranty policies, the Help Desk is unable to provide hardware support to non-MSU equipment. Please contact your hardware vendor for further information and assistance on hardware support.

Due to campus site license agreements, OIT is unable to provide students with the Microsoft Office Suite Application. The OIT does provide a number of software applications for the use of students, faculty, staff, and administration. Please visit https://oit.montclair.edu/oit/softwarearchive.html for further information.

Media Services
Equipment from the loan pool must be reserved 2-3 business days in advance by contacting the Help Desk in person, or via telephone at x7971. Only faculty, staff or an on-campus GA is allowed to reserve a data projector, camcorder, video projector, PA system, karaoke unit, or a mobile presentation system (MPS). On loan equipment can be picked up during normal business hours in College Hall, room 124.

Email Accounts
All Montclair State University students are provided with, and are expected to utilize, an MSU email account. The MSU email system is an official communications channel to the University community. Students may visit any public computing lab, or visit http://webmail.montclair.edu, for further information about using an MSU email account.

Various instructional support services are also provided through the Technology Solutions Center. Foremost among these is the Faculty and Staff Development Program, which provides support and training to MSU faculty and staff desiring to integrate technology into instructional programs and departmental activities. The Development Program includes:

- Technology-related activities, materials, and training for MSU faculty and staff.
- One-on-one support, project advisement, semi-structured workshops, and support of campus events.
- Assistance to faculty with the integration of technology into instructional programs.
- Staffing CO123, which serves as both a training room and an educational technology-learning laboratory.
• Support for web-based course management systems and publishing.
• Coordination of OIT staff development.
• Communication of OIT projects, announcements and websites.
• Creation and development of online courses using the Black Board course management system.

The TSC also provides maintenance and support for educational equipment such as projection devices, mobile presentation systems and The Distance Learning Room (located in CO310), which provides for real time interactive 2-way radio, audio and video transmission and can be used as a satellite downlink site. Instruction on how to use educational equipment or The Distance Learning Room is available through the TSC.

Management Information Systems
Management Information Systems (MIS) maintains and manages the campus systems including the Student Information System. These systems house information pertaining to all students, including grading and financial records. MIS also provides support and service to the groups on campus that use, maintain and generate reports from these systems. MIS can be contacted through the Help Desk or through the main office at (973) 655-4040.

Systems, Security, Networking and Telecommunications
Systems, Security, Networking and Telecommunications (SSNT) provides infrastructure services to the campus including the campus network, Internet access from both on and off campus telephone services and systems including campus-wide e-mail. Networking maintains the campus fiber optic system, the internal building wiring, and the wired and wireless networking equipment and software.

RESnet, part of Systems, Security, Networking and Telecommunications, provides networking connections to students within the residence halls. These connections provide access to the Internet. RESnet can be contacted through the Internet at http://resnet.montclair.edu or through the Help Desk at (973) 655-7971.

Telecommunications, also part of Systems, Security, Networking and Telecommunications, provides all telephones to the campus, including the student residence halls. All residents have access to the telephone system, using individual authorization codes that allow individualized billing for each student. Telecommunications can be contacted through the Help Desk at (973) 655-7971 or at (973) 655-4107.

INSTITUTE FOR THE ADVANCEMENT OF PHILOSOPHY FOR CHILDREN
The Institute for the Advancement of Philosophy for Children (IAPC) publishes curriculum materials for engaging young people (pre-school through high school) in philosophical inquiry and provides teacher preparation in the pedagogy of the classroom community of inquiry. The IAPC conducts philosophical and empirical research about children’s philosophical thinking and the educational uses of philosophy—including critical and creative thinking, social democracy and ethical judgment. Each year the IAPC conducts numerous workshops, conferences and colloquia on the theory and practice of Philosophy for Children, at Montclair State University and abroad. The IAPC publishes Thinking: The Journal of Philosophy for Children and supports the University’s masters and doctoral degree programs in Philosophy for Children. Since 1974 the IAPC and its affiliate centers in other states and over 40 countries have been largely responsible for the mutual encounter of children and philosophy. Visit the IAPC website at www.montclair.edu/iapc.
LIBRARY

The Harry A. Sprague Library provides print, media, and electronic resources and offers many services to students, faculty, staff, and the public.

The collections of the Library contain more than 400,000 volumes, and materials in diverse formats such as microforms, video and audio cassettes, CDs and software. The Library subscribes to periodicals in print, microform, and online. The Library is a depository for US and NJ government documents that are available in print, microform, CD ROM, and online formats. The Library’s website provides access to the Sprague Library Catalog, and to other information about the Library’s resources and services. Through the Library’s website, many online index and abstract databases may be accessed that provide access to thousands of full-text periodical articles.

Librarians are available for assistance at the Reference Desk. Upon request by the faculty, orientation sessions and classes on research methodology and resources in a specific discipline are given by librarians. Students may request individual consultations regarding research papers or presentations.

Materials not held in the Library are obtained through interlibrary loan from other libraries. MSU students may borrow from the libraries of state colleges and universities in New Jersey and the New Jersey Institute of Technology by presenting their current validated MSU ID card. MSU graduate students may also borrow from other academic libraries in New Jersey through the VALE Reciprocal Borrowing program, http://www.valenj.org.

Information Technology maintains a computer lab on the Upper Level of the Library that is used for word processing, electronic mail, accessing the Internet, and other computing needs.

A validated ID is needed to borrow materials from and use some of the services of the Library.

A faculty and graduate student study room is available for quiet study on the Lower Level of the Library.

Hours are posted in the Library, on the Library’s website, or call (973) 655-4298 for changes in opening hours for summer sessions, intersessions, holidays, and for inclement weather closings.

For more information, please call one of the following numbers:

General Library Information ................................................................. (973) 655-4291
Library Hours .......................................................................................... 4298
Dean of Library Services ....................................................................... 4301
Circulation and Reserve ....................................................................... 4288
Computer Lab .......................................................................................... 7701
Government Documents ...................................................................... 7145
Interlibrary Services .............................................................................. 7143
Multimedia Resources .......................................................................... 5119
Periodicals .............................................................................................. 5270
Reference and Information ................................................................... 4291
Sprague Library Website: ................................................................. http://library.montclair.edu/
LITERACY ENRICHMENT CENTER
The Literacy Enrichment Center provides study skill support, tutoring and literacy development for students enrolled in Basic Skills classes. In addition, the Literacy Enrichment Center provides specialized literacy services for the community through the literacy clinic for ages 6-18. The Literacy Enrichment Center also provides clinical and education experiences for both undergraduates and graduate students in both on and off campus locations. Literacy@mail.montclair.edu.

MARINE SCIENCES CONSORTIUM
The facilities of the New Jersey Marine Sciences Consortium, including the field station and laboratories at Sandy Hook, are available to Montclair State students. The consortium sponsors an extensive summer program of regular and independent study courses in the marine sciences at the graduate level.

PASSAIC RIVER INSTITUTE
Established in 2004, the mission of the Passaic River Institute is to further environmental research and eduction and to seek solutions for environmental problems within the Passaic River basin. The River and its tributaries have been heavily impacted by urbanization and industrial development and the margins of the River, especially in the lower reaches, continue to be surrounded by heavy industry and dense human habitation. The PRI will thus nurture environmental advocacy groups.

   The long-term PRI research goals include the study of contaminant biological uptake, regional toxicity, pollutant fate, transport and distribution, and ecosystem degradation and restoration. The PRI’s mission harmonizes with several current major federal initiatives, such as the Lower Passaic River Restoration Project, Water Resources Development Act (WRDA) programs, the NY/NJ Harbor Estuary Program, and the Natural Resources Damage Assessment and Restoration program.

   Both public and private sectors including federal and state agencies, corporation and environmental advocacy groups concerned with the current and future status of the Passaic River will be invited to become institution affiliates.

TELEVISION CENTER
The DuMont Television Center functions as a support facility to the University and community. It serves as a laboratory for departments within MSU which instructs about television. The center assists with television services, including maintenance, repair, duplication of video tapes, advisement, consultation, video satellite viewing, distance learning, and video teleconferences. For the convenience of the community, a limited number of international standards conversion (VHS only) and video/CD/DVD duplication/creation is available. It also supports projects in television production for the University administration, instructional programs, students and co-curricular activities. Whenever possible, assistance is provided to the outside community. The DuMont Television Center is located at the south end of Life Hall, Room 117, telephone (973) 655-4341
ADMISSION AND MATRICULATION

To be admitted to graduate study at Montclair State University, an applicant must have a baccalaureate degree from an accredited college or university in the United States or its equivalent from a foreign institution of higher education. An applicant must also have an appropriate academic background for the program or degree desired. To be matriculated in a particular degree program, the applicant must submit all required credentials and be offered admission by the Graduate School.

Applicants are evaluated on several criteria (e.g., grades, test scores, recommendations, essays and/or standardized portfolios, auditions, interviews) to enable the University to identify those students who demonstrate the greatest promise of scholarly achievement and ability to benefit from their proposed program of study.

Applications/Enrolling in Graduate Classes: For many programs, Montclair accepts applications on a rolling basis. However, a number of programs have specific deadlines for the receipt of the application as well as all necessary credentials. Applicants should consult the current graduate application packet or the Graduate School web site for specific information about this and other important information and directions regarding the application process.

Obtaining Graduate Admissions Information: Please contact the Graduate School, College Hall 203, (973) 655-5147 or (800) 955-GRAD, or visit our website at: http://www.montclair.edu/graduate or e-mail: Graduate.School@Montclair.edu. The Graduate School office is open from 8:30 a.m.-5:30 p.m., Monday through Thursday and until 4:30 p.m. on Friday during the academic year (please visit the website for summer hours.) These hours are subject to change. Please contact the Graduate School for up-to-date information.

When enrolling as a matriculated graduate student, it is critical that a student receive advisement prior to registering for courses. For graduate information and/or to be directed to the appropriate graduate program coordinator check the Graduate School web site.

APPLICATION REQUIREMENTS

Transcripts: One copy of an official transcript must be submitted from each college and university attended. Exception: Montclair State University transcripts will be obtained by the Graduate School directly from the Office of the Registrar, upon signed authorization of the student on the graduate application. (See below for special requirements for international applicants.)

Standardized Test Scores: The Graduate Record Examination (GRE) is required of all students applying for admission to a degree program, except: applicants to the MBA program who are required to take the Graduate Management Admission Test (GMAT); applicants to the Counseling area of the Department of Counseling, Human Development and Educational Leadership, and to the M.A. in Fine Arts or the M.Ed. who are required...
to take the GRE or the Miller Analogies Test. Some departments also require a GRE subject test in the applicant’s proposed field of study. GRE scores are not required of applicants to the M.F.A. in Studio Art, but a portfolio is required. Students should check the current graduate application packet for specific information.

Students should arrange to have official notification of their test scores sent directly to the Graduate School. Information regarding the GRE is available from (609) 771-7670, (800) GRE-CALL, or www.gre.org. Information regarding the GMAT is available from (609) 771-7330, (800) GMAT-NOW, or www.gmat.org. Information may also be obtained from the Office of Career Services at Montclair State, (973) 655-5194. For general information about the Miller Analogies Test, contact The Psychological Corp., San Antonio, Texas 78204, (800) 622-3231.

**Recommendations:** Recommendations from at least two persons who are qualified to evaluate the applicant’s promise of academic achievement are required for admission to all degree programs, except the program leading to certification as a school psychologist and the doctoral programs, which require three recommendations.

**Statement of Objectives:** All students applying for admission are asked to provide a statement outlining their goals and purposes in the graduate study they wish to pursue.

**International Applicants:** As proficiency in spoken and written English is prerequisite to graduate study at Montclair State, TOEFL (Test of English as a Foreign Language) scores are required for all applicants who have degrees from institutions where English is not the language of instruction. TOEFL is administered world-wide by the Educational Testing Service (E.T.S.) of Princeton, New Jersey. Scores from this test should be sent to the Graduate School directly from E.T.S.. Please contact ETS or your local ETS representative for more information about the TOEFL. Additional information may also be found at the following web address: [www.toefl.org](http://www.toefl.org). The ETS code for sending TOEFL score reports to Montclair State University is 2520.

The Graduate School does not evaluate international academic credentials. All international applicants must request a course-by-course evaluation from World Education Services (WES), P.O. Box 745, Old Chelsea Station, New York, NY 10113-0745, USA, (212) 966-6311; [www.wes.org](http://www.wes.org). A copy of the report must be sent by WES to the Graduate School at Montclair State University.

It is necessary for all non-citizens who have not earned a degree in the United States to take an English language proficiency test, which is separate from the TOEFL. Such students will be permitted to register only after results from this English test have been received. Students who earned undergraduate (or graduate) degrees in a country where English is not the official language are required to take the MSU ESL placement test and score at a level of IV or higher. Students who do not place at this level will be required to take ESL courses up to and including ESOL 154. Students will be issued an ESL checklist that specifies courses to be followed; graduate advisors will include this information on the student’s work program. All ESL courses should be completed as quickly as possible and no later than the beginning of the third semester of graduate study.
Teaching Certificate: A copy of an applicant’s teaching certificate(s) is required of all students seeking admission to a program leading to advanced certification or certification in an additional teaching field. Some graduate degree programs require applicants to submit copies of any teaching certificates. Please refer to the current graduate application or the Graduate School web site for specific information.

ADMISSION AND ENROLLMENT

Acceptance Procedure: Only complete application files are reviewed for admission, i.e. all required credentials are on file. Applicants who meet the standards for admission will be advised by letter from the Graduate School to meet with the appropriate program coordinator to complete the admission review process. Once the applicant meets with the appropriate graduate program coordinator, final notice of the admission status is sent by letter from the Graduate School.

Matriculation: Students who are fully accepted into a degree program will be formally matriculated and advised of their program of study by the graduate program coordinator. The student will receive official notification of matriculation from the Graduate School.

Deferred Matriculation: Applicants with inadequate undergraduate preparation may be admitted to study on a deferred matriculation basis with the understanding that eligibility for matriculation will be established in a manner prescribed by the department in which the student wishes to matriculate. Course work and other study undertaken to remedy the ability to do graduate-level coursework may be in addition to the regular program requirements.

Conditional Matriculation: Applicants with marginal qualifications may be admitted to study on a conditional matriculation basis with the understanding that eligibility for full matriculation will be established in a manner prescribed by the department in which the student intends to matriculate. Coursework and other study undertaken to demonstrate the ability to do graduate-level coursework may be in addition to the regular program requirements.

Non-Degree Students: Individuals who have a baccalaureate degree and want to enroll in particular courses without admission to a degree, certificate, or certification program may apply for admission as non-degree students. However, some degree programs (i.e., the Ed.D., the D.Env.M., the M.B.A., the M.F.A., and the M.A. in Communication Sciences and Disorders, Speech-Language Pathology concentration) do not allow non-degree students to enroll in program courses.

There are two classifications of non-degree: professional or general. The general non-degree classification is used for students who are not sure which graduate program to pursue but are interested in taking one or two classes. General non-degree students are eligible to take up to six credits of coursework. Students may only transfer a maximum of six credits of general non-degree coursework to a graduate degree program (12 credits for the MFA).
The professional non-degree classification is used for those students who are not interested in earning a graduate degree and belong to one of the following categories:

- seeking career advancement or professional development;
- satisfying accreditation/licensure requirements;
- applying for certification through the State of New Jersey; or
- taking undergraduate courses to prepare for a graduate degree program.

Admission on a non-degree basis does not imply acceptance in or eligibility for matriculation in any degree program. A maximum of six graduate credits may be applied toward a degree program (12 credits for the MFA).

Admission of Veterans: Veterans/dependents seeking admission to a graduate program can apply on line at www.gov.va/education or contact the veterans representative at 973-655-4462. Our office is located in College Hall, Room 208. To qualify for VA benefits, students must maintain satisfactory academic progress. Please note the Veterans Administration education benefits are not payable for courses previously completed. If a veteran/dependent adds, drops, or withdraws from a course, he or she should immediately forward a copy of the appropriate forms to the Office of Financial Aid.

Undergraduate Seniors in Graduate Courses: Montclair State University undergraduate seniors within 16 semester hours of completing baccalaureate degree requirements, who possess at least a 2.70 grade point average and have taken all required prerequisites, may apply to take up to 6 hours of 500 level coursework for either undergraduate or graduate credit, if prior permission is granted through the Graduate School. A form to request permission is available in the Graduate School office or on its website.

Qualified undergraduates taking graduate courses for graduate credit must pay appropriate fees and tuition at the graduate student rates. Admission of an undergraduate to courses at the graduate level does not imply future acceptance into a graduate degree program.

Visiting Students: Graduate students matriculated at another college should consult the Schedule of Courses booklet via the internet from the MSU home page, www.montclair.edu, by selecting Courses and Catalogs for the application form and details on how to register for courses. The application for visiting student status is submitted to the Graduate School for each term of registration requested by the student.
ACADEMIC POLICIES AND REGULATIONS

Policies and regulations governing graduate students at Montclair State University are found in a number of publications such as the Course Schedule Booklet and the Student Handbook, as well as the Montclair State website (www.montclair.edu). Some of the most relevant academic policies are listed here.

Audit Policy: To “audit” a course at Montclair State University is to attend class regularly, without the obligation of participating in classroom discussions, laboratory work, examinations, performances, or any class activity other than listening. A course may be audited under the following conditions:

1. Students auditing a course are required to establish eligibility for admission, register, and pay full tuition and fees.
2. A course may be audited on a space-available basis only and requires approval and signature of the department chairperson.
3. Montclair State’s attendance policy applies to audited courses.
4. Audited courses are considered as part of the student’s regular course load.
5. Audited courses do not carry academic credit.
6. Any student electing the audit option must complete an “Audit Application” and return it to the Office of the Registrar prior to the end of the third week of classes for regularly scheduled courses or its equivalent for short term and summer courses. An “audit” may not be changed to “credit”, nor a “credit” to “audit” after the first three weeks of the semester.
7. The student’s record will show a grade of “AU” for the course if the instructor certifies that the regulations, including required attendance, have been met.
8. A student who has audited a course may take the course at a later date for credit.

Course Load: Nine semester hours constitute a full-time course load. Graduate assistants are required to carry a minimum of nine semester hours for full-time status, and to maintain their assistantship.

Course Numbering and Scheduling: Selected courses numbered from 400 through 499 are undergraduate courses. They may be taken for graduate credit only with the permission of the program coordinator in the student’s major department and only to the extent approved by regulations governing graduate studies. At this time, no more than two courses for a master’s program may be numbered from 400 through 499. No courses numbered 400-499 may be applied to doctoral degree programs. Courses numbered below 400 are not acceptable for graduate credit.

Courses numbered 500 to 699 are open only to graduate students. (Refer to index for page number for section on Undergraduate Seniors in Graduate Courses.) Courses are scheduled weekdays in the late afternoon and evening during the fall and spring semesters and on Saturday mornings and afternoons for most programs. Summer Sessions graduate courses are scheduled in both the day and evening.

Courses numbered from 700 to 899 are doctoral-level courses and are open only to matriculated doctoral students.
Grades and Standards: Effective fall semester 1989 the grading system for graduate courses at the 500 level or above, shall include:

- \( A = 4.0 \)  \( C = 2.0 \)  WP Withdrew Pass
- \( A- = 3.7 \)  \( C- = 1.7 \)  WF Withdrew Fail
- \( B+ = 3.3 \)  \( F = 0.0 \)  NC No Credit
- \( B = 3.0 \)  IN Incomplete  AU Audit
- \( B- = 2.7 \)  IP In Progress  RF Repeated “F” Course
- \( C+ = 2.3 \)  WD Withdraw

Effective fall semester 1989, grades of “D+” and “D” or “D-” were eliminated as a possibility for graduate students in graduate courses.

The mark “F” signifies: (1) academic failure; (2) failure of the student to submit written notice of withdrawal; or (3) unofficial withdrawal after the final withdrawal deadline. The mark “WD” is given to those who submit in writing their intention of withdrawing from a course before the withdrawal deadline.

The grade “IN” is intended to indicate that the student has not completed the course and that a grade is being withheld until the work is performed and approved. Students must enter into a formal contract with the faculty prior to the end of the semester, using the form available in the Office of the Registrar. The “IN” if not replaced with a final grade by the established deadline, will become an “F”. Exceptions can be granted only upon petition to the appropriate College/School Dean.

A change of grade request from other than an “IN” grade must be processed by faculty and approved by the appropriate College/School Dean no later than the end of the next full semester following the semester in which the grade was earned. For students completing degree and certification programs, all required course work must be completed by the appropriate conferment/graduation date. The instructor must submit the final grade to the Office of the Registrar no later than 30 days thereafter in order for the diploma/certificate to be awarded. No changes will be made to the academic record beyond 30 days of the conferment/graduation date. The only exception to this policy is for Incomplete grades in electives beyond the number of credits required for the degree or program which may be changed according to the time frames for Incompletes as outlined above.

The grade “IP” is intended to indicate that a student is continuing to work toward completion of a course and is registering for subsequent courses to maintain continuous matriculation/enrollment.

For purposes of determining the grade point average (GPA) for graduation, academic probation and all other situations which require a specific GPA, Montclair State University maintains GPA’s to three decimal places. No additional rounding will occur.

In order to qualify for the doctoral and master’s degrees, a student must have a 3.000 grade point average within their program of study.

Graduate students who receive a grade of “F” are not permitted to repeat the course. The Dean of the Graduate School will have the discretion to make exceptions to this policy in special cases and extenuating circumstances. This policy became effective on September 1, 1997, and applies to all graduate students regardless of their date of entry to MSU.

If a course in which the student previously earned a grade of “C-” or higher at MSU is repeated at MSU (other than on an official Audit basis -- see section on Audit Policy) the second grade will be posted as “NC” (No Credit). It is the student’s responsibility to ensure that his/her registration does not include ineligible courses.
Any degree student whose grades fall below 3.000 grade point average within the courses that make up their program of study and any student not in a degree program whose GPA falls below 2.500, will be placed on academic probation. Failure to obtain the required average within the prescribed period of time leads to final review which may result in the termination of graduate studies. A student may appeal such action in writing to the Dean of the Graduate School.

A degree student who receives three “C” grades (e.g. C, C+, or C-) in his/her academic program will be dismissed from the program. Dismissal actions will be made on a case-by-case basis by the Dean of the Graduate School in consultation with the student’s graduate advisor.

Students can obtain their grades for any semester through WESS, Web Enrollment Services for Students.

Grade Grievance Procedure: It is the responsibility of any student wishing to pursue an academic grade grievance involving a faculty member to first discuss the matter privately with the professor involved. In the event that the student is unable to contact the professor within a two week period, an appointment should be arranged through the departmental secretary for the first time available. The initiation of the student grade grievance must take place within three weeks from the beginning of the next regular (Fall or Spring) semester. For more information, and to see the entire Grade Grievance Procedure, please see the Undergraduate and Graduate Student Handbook, available at www.montclair.edu.

Prerequisite Courses: It is the student’s responsibility to satisfactorily complete a prerequisite course before scheduling a dependent course.

Registration Procedure: Registration is processed through WESS, the Web Enrollment Services for Students. Registration procedures, regulations, and deadlines can be found in each semester’s Schedule of Courses book, obtainable from the Office of the Registrar or via the Internet from the MSU home page, www.montclair.edu, by selecting Courses and Catalogs.

Restrictions for Graduate Credit: No credit is granted toward the Master of Arts degree for certain 400 level courses which are required for instructional certification.

Courses taken ten or more years prior to the date of the student’s matriculation will not be accepted for credit toward the master’s degree, except upon recommendation to the Graduate School by the major department and approval of the Graduate Dean.

Credit is not allowed for courses taken on an audit basis.

It is the obligation of each student to ensure that no course undertaken for graduate credit duplicates a course previously taken by that student. Courses may not be taken more than once for credit regardless of any change in the course number or title.

Time Limit: Requirements for all master’s degrees except the Master of Business Administration must be completed within six years from the date of matriculation unless there is an approved extension. In the case of the MBA, students must complete this program within eight years of the date of matriculation unless there is an approved
extension. Doctoral students are required to complete all degree requirements within ten years. All requirements for post-baccalaureate/post-master’s degree certification programs must be completed within five years of the date of matriculation. Students enrolled in graduate certificate programs must complete all requirements within three years. Written applications for extension will be reviewed and evaluated by the Graduate School on the basis of the student’s progress toward the degree and in accordance with established graduate policy at the time of application. The Dean of the College/School involved will be consulted in reaching a decision.

**Transfer Credit:** No more than six semester hours of credit may be allowed for courses completed at Montclair State prior to matriculation for the master’s degree, except in special circumstances as approved by the Graduate School.

A student may transfer up to six semester hours of graduate credit (12 credits for the MFA) previously earned at an accredited college or university toward a degree program at Montclair State University. Students in the MBA program are limited to transfer credit from AACSB accredited institutions only. The student must obtain approval from the department graduate program coordinator at the time of admission and from the Graduate School. These credits must not have been previously applied to any degree, must not be not more than ten (10) years old, and must be applied to the student’s program of study at the time of admission.

No graduate credit is allowed for courses taken at other colleges while the student is enrolled at Montclair State unless the student obtains prior approval from the appropriate program coordinator and the Graduate School. A form for this purpose is available in the Graduate School and on their web site and should be completed well before the transfer credit is needed. Students are limited to a total of six semester hours of transfer credit after matriculation in a Master’s degree program.

Doctoral students may request that up to a third of the required semester hours for the Program be transferred into their doctoral program from coursework completed prior to their matriculation either from Montclair State University or another accredited university. These courses must have been taken for graduate credit, cannot be more than five (5) years old, and cannot have been used toward another degree.

Grades below B are not accepted for transfer credit, nor are courses below graduate level in the originating institution. Grades earned at other institutions are not included in the MSU cumulative grade point average.
GRADUATION REQUIREMENTS

Program of Study: A minimum of thirty-two semester hours of graduate credit is required for all master’s degree programs. A minimum of sixty credits is required for all doctoral programs. Additional hours may be required to satisfy prerequisites or special programmatic purposes.

Students are required to complete the curriculum prescribed in the University catalog in effect, or as reflected in the academic program of study, when they matriculate. Graduate students are required to maintain a grade point average of 3.000 within the courses that make up their program of study. A graduate student cannot present more than two grades of “C” (e.g. C, C+, or C-) toward their degree at final audit. Inquiries pertaining to an individual’s program of studies should be referred to the appropriate program coordinator. It is the student’s responsibility to meet all graduation requirements.

Degree, certification, and certificate candidates are required to file an Application for Final Audit with the Office of the Registrar prior to the intended graduation date. All degree requirements must be completed by the respective graduation dates.

All degree students with the exception of MBA students must pass a culminating experience in their field. These include: comprehensive examinations (written and oral), theses, written projects, treatises, capstone courses, culminating activities, fieldwork, field projects, and internships. Some programs may require more than one comprehensive experience (e.g. comprehensive examination and written project). It is the student’s responsibility to be familiar with the comprehensive experience requirement(s) of their program of study. Student failure to complete the culminating experience requirement will result in dismissal from the program and the degree will not be awarded.

Thesis and Dissertation: Those interested in or required to write a thesis or dissertation must obtain a copy of the Guidelines from the Graduate School web site or their major department, and consult the program coordinator before beginning any part of the process. Students are responsible for following these guidelines in selecting an advisor and a topic, registering, completing, and typing the thesis or dissertation, defending, and applying for graduation. The Approval for Writing a Master’s Thesis or Doctoral Dissertation must be signed by all parties concerned and the appropriate section turned in at the initial registration with an outline of the thesis or dissertation attached. There will be no registration for thesis or dissertation without written permission.

Comprehensive Examination: The comprehensive examination is open only to fully matriculated students in good standing and is usually administered once in the fall semester and once in the spring semester by the individual program departments. Students should check with their departmental program coordinator to determine the date and time of the examination.

It is the student’s responsibility to file the Application to Take Graduate Comprehensive Examination form with the appropriate department at the beginning of the semester the examination is to take place. The form is available in the Graduate School or departmental offices.

Students who fail the departmental comprehensive examination are allowed to retake it twice but must reapply each time as described above.
Application for Final Audit: It is the student’s responsibility to complete the curriculum prescribed in the University catalog in effect, or as subsequently modified, when he/she matriculates.

Students who will be completing their curriculum requirements for degrees, teacher certification, or Post-BA certificates must file an Application for Final Audit in the Office of the Registrar. In order to be evaluated for completion of requirements, students must adhere to the following deadlines:

- **June 1 for the following January graduation**
- **October 1 for the following May graduation**
- **March 1 for the following August graduation**

Prior to the final opportunity to change registration for the final semester, the student will be mailed a copy of the final audit listing requirements that must be completed in order to meet the intended date of graduation. Students should confirm receipt of their Application for Final Audit by the Office of the Registrar by consulting the list posted outside the office during the month immediately following the filing deadline.

Commencement and Diploma: Commencement exercises are held in the spring of each year. In addition to the May degree candidates, students who have earned degrees in the preceding January or August will be invited to participate in the spring commencement exercises. In order to participate in Commencement, a student must have completed all degree requirements before the degree conferral date.

Diplomas will be mailed by the Office of the Registrar to those students who are academically clear and have no outstanding financial obligations to the University.

Certification (Teacher): Master’s degree candidates and Post-BA certification candidates who have passed the required PRAXIS II test and who have been evaluated through the Office of the Registrar for New Jersey certificates must complete an Application for Certification and pay the required fees by the following deadlines:

- **November 15 for January graduation**
- **April 15 for May graduation**
- **August 1 for August graduation**

Application forms will be mailed to candidates approximately six weeks prior to the deadline. Completed applications must be notarized and returned with payment to the Office of the Registrar. Certificates will be sent to students from the State Department of Education in Trenton.

New Jersey Teacher Testing Program: The New Jersey State Board of Education and the University require that applicants for most certificates pass the appropriate Praxis II test. Printed information about the test requirement is available by calling the New Jersey State Department of Education at (609) 292-2070 or visiting the NJDOE website.

Other Certification: Students seeking certification through professional associations (e.g. American Dietetic Association, National Association of Music Therapy, Inc.) should apply directly to the appropriate association.
TUITION AND FEES

The rates for tuition and fees listed below represent 2005-2006 rates. Rates are subject to change, without prior notice, by action of the Montclair State University Board of Trustees.

Tuition: (per semester hour of credit)

- Graduate Students: New Jersey Resident ...................................................... $409.26
- Graduate Students: Non-Resident of New Jersey ......................................... $603.58
- MBA Students: New Jersey Residents .......................................................... $469.54
- MBA Students: Non-Resident of New Jersey ............................................... $628.20
- MFA Students: New Jersey Residents .......................................................... $456.84
- MFA Students: Non-Resident of New Jersey ............................................... $666.02
- Doctoral Students: New Jersey Resident ...................................................... $467.45
- Doctoral Students: Non-Resident of New Jersey .......................................... $660.55

Fees:

- Computer Technology Fee (per semester hour of credit) ....................... $  7.00
- Facilities Fee (per semester hour of credit) ................................................ $ 10.65
- General Service Fee (per semester hour of credit) .................................... $ 12.65
- Student Union Building Fee (per semester hour of credit) ...................... $ 11.25
- Wellness Fee (per semester hour of credit) ............................................... $  6.50
- Recreation Fee (per semester hour of credit) ............................................ $  7.60
- Transportation Fee (flat fee, per semester) ............................................... $ 20.00
- Late Registration Fee for all students who register after the regular registration period (non-refundable fee) ....................................................... $  50.00
- Late Payment Fee - If payment is not received by the due date specified on the bill, or online at WESS, a late fee will be charged........................................ $100.00
- Older Adult Program Fee ........................................................................... $ 40.00
- International Student Fee ........................................................................... $ 60.00
- Internship Fee (covers general liability insurance) ..................................... $ 15.00
- Visiting Student Fee .................................................................................... $ 25.00
- Special Course Fees (Variable) ................................................................. $10.00 - $400.00

Graduate students registering for applied music courses and private study in composition pay regular tuition and fees, plus $400 per applied music course.

In order to qualify for the in-state tuition rate, the student/parent must have resided within the State of New Jersey for a continuous period of twelve months prior to first enrolling at Montclair State University. Those students who do not meet the preceding criteria may still qualify for the in-state tuition rate provided the student/parent can document that residency in the State of New Jersey is not for the sole purpose of attending Montclair State University. Requests for in-state tuition rates must be made in writing. A list of approved supporting documentation can be obtained from the University Bursar's office, College Hall, room 218c. The University's determination regarding eligibility for in-state tuition rates is final.
Parking
(Decals purchased are valid from September 1 through August 31.)
Automobile or truck or motorcycle ................................................................. $57.50

Application for Graduate Admission (non-refundable fee) ............... $60.00

Application for Admission to Doctoral program
(non-refundable fee) .............................................................................. $60.00

Change of Program (non-refundable fee) ........................................... $30.00

Application for Certification (non-refundable fee)
Per each New Jersey Administrative, Educational Services or Instructional Certificate
(depending upon the specific certificate) ........................................ $50.00 or $60.00

Transcripts
Per copy (MSU undergraduate and graduate records for the same student are
considered one copy) .................................................................................. $6.00
Same day processing service is available at a charge of $12.00 for the first copy and
$8.00 for each additional copy on that day.

Payment
Billing statements are mailed the beginning of July for the fall term, mid November
for the spring term and mid April for summer sessions. Statements will be mailed
periodically throughout the semester. After the initial billing it is the responsibility of
students to check their Wess accounts. Student account statements are available on-line at wfs.montclair.edu. If a student does not receive a statement, the student is still
accountable to pay by the due date, which can be viewed on the student’s Wess account
with the link Account Summary. If a class schedule is changed or if a student is
registering for the first time after the statements are mailed, the week prior to the first
day of class, or after the first day of school but during the add/drop, payment is due
immediately. It is the student’s responsibility to access their Wess account for the
amount due by viewing the Account Summary. A student can also visit the Bursar’s
office located in College Hall, Room 218. A late payment fee will be assessed if full
payment is not received by the due date as indicated on the invoice or on-line.

Payments can be made:
• Cash - in person at the Cashier’s Office, College Hall, Room 216
• Check or Money Order - in person or by mail made payable to Montclair State
  University and must be drawn from a United States financial institution.
• Monthly Payment Plan - offered through Tuition Management Systems (TMS) at
  1-800-722-4867 or www.afford.com. These plans allow all students and families to
  pay educational costs for the academic year (or per semester) in equal monthly
  installments. The interest free monthly payment option is available for a small
  enrollment fee. You may enroll in the plan after the payment start date, by making
  up any past due balances.
Credit Cards - Montclair State University no longer accepts credit cards for payment of student account charges. We remain sensitive to student needs, however, and have contracted with TMS to offer students the option of paying using VISA, Master Card, Discover or American Express. Please be aware that TMS charges the cardholder a convenience fee.

Refund and Withdrawal
Withdrawal and refund dates are published in the Schedule of Courses book for the fall and spring semesters and in the Summer Sessions catalog for the summer sessions. Upon withdrawal, tuition and fees will be refunded according to the schedule listed below and on a course by course basis.

- Tuition and fee charges are refunded in full if classes are discontinued by University authorities.
- 100% refund if official student withdrawal is during the first week of classes for full term courses and prior to the third class meeting for all short term or mini courses.
- 50% refund if official student withdrawal is after first week but during first third of course.
- No Refund if official student withdrawal is after first third of course.

In computing refunds, the percentage of refund is based on the date on which the Office of the Registrar receives written notice of withdrawal from the student (or the date of the U.S. postmark for those received through the U.S. Mail) and not on the circumstances which necessitate withdrawal.

No withdrawals are accepted after the midpoint of the course.
Several kinds of financial aid are available to graduate students who meet all admission requirements. Some of these sources provide an opportunity for desirable professional experience as well. Conditions for assistantships, loans and other financial aid are subject to change.

Any questions regarding graduate assistantships, or doctoral assistantships should be directed to the Graduate School at 973-655-5147 or e-mail gradstudentservices@montclair.edu.

Graduate Assistant Information: The Graduate School offers approximately 200 assistantships for graduate students who are interested in an opportunity to gain professional experience through research, instructional activities and field work experiences with faculty at Montclair State University. Graduate assistantships are a form of financial support for degree seeking graduate students. Each assistant receives a tuition and university fee remission, as well as a stipend, while completing the assistantship responsibilities for twenty hours per week. Fees that are specific to courses or individual students are not included in the remission (e.g. supplies for courses in Art, Music, etc.). Assistantships are not available to students seeking any type of certificate or certification only, who are teaching or completing their in-service supervised training as an M.A.T. student (student teaching), students maintaining a non-degree status or students with a conditional matriculation. Assistantships are awarded for one full academic year, beginning September 1 and ending June 30. The duties and responsibilities vary with each appointment and are closely tied to the program of study. Graduate assistants are considered full-time students if registered for at least 9 semester hours.

Graduate Assistants must:
• Be fully matriculated into a master’s degree program at Montclair State
• Be a full-time student, maintaining a minimum of nine (9) semester hours, and a maximum of twelve (12) semester hours
• Maintain at least a 3.00 GA during each semester of the assistantship.

Students are considered for a graduate assistantship during the admission review process. To ensure full consideration, students should complete an admission application as early as possible.

Any student who has been fully accepted into a graduate program leading to a graduate degree is eligible to compete for a graduate assistantship. Please note that simply completing the application and being admitted to the University does not in any way guarantee that an Assistantship award will be received. Graduate programs and departments will contact those students directly and make their recommendations for appointment to the Graduate School. An offer of a graduate assistantship position is only official when it is sent to the student from the Graduate School.

Doctoral and Research Assistantships: The Graduate School offers assistantships at the doctoral level for students who are interested in an opportunity to gain professional or research experience while participating in the academic life of Montclair State University. All assistantships are diverse in nature and encompass a wide variety of responsibilities and duties while allowing students to achieve their academic goals.

Assistantships are awarded for one full academic year, beginning September and
ending June 30. The duties and responsibilities vary with each appointment. Only students fully accepted (matriculated) into a doctoral degree program at Montclair State University are eligible for an assistantship. Applications will be considered during the admission review. Assistantship recipients typically will be notified at the time of admission into the doctoral program.

Assistants are considered full-time students, fulfilling twenty hours per week. Tuition and fee remissions cover tuition and University-wide fees for the specific semester during which the student is in the assistantship position. The remission covers only those courses that lead to the doctoral degree. Fees that are specific to course are not included in the remission (e.g. supplies for courses in Art, Music, etc.). Each year there are many more qualified students that assistantship positions available at the doctoral level.

**Appointments:** To be awarded an assistantship the following are required:
- A current assistantship application, filed with the Graduate School,
- An acceptance into a doctoral program at Montclair State University,
- A recommendation for appointment, signed by the appointing supervisor; and
- an offer-of-appointment letter from the Graduate School.

Students may obtain an application from the Graduate School website at: [http://www.montclair.edu/graduate/pdf/docgaApp.pdf](http://www.montclair.edu/graduate/pdf/docgaApp.pdf). Applications must be submitted by February 1 for the following academic year. Applications received after this date will be accepted, but will be distributed for review only if there are open positions. One-semester appointments may be made to fill a vacancy.

**The following programs are administered by the Office of Student Financial Aid. All inquiries should be directed to (973) 655-4461.**

**PROGRAM DESCRIPTIONS:**

**Federal Subsidized Stafford Loan:** Applicants must demonstrate financial need. The maximum amount of a subsidized loan is limited to $8,500 annually for fully matriculated Masters’ and doctoral candidates and $5,500 for deferred Masters’ candidates and Teacher Certification candidates. Conditionally matriculated Master’s students are not eligible for any federal loans. In addition, students eligible for the interest subsidy from the federal government may also receive an unsubsidized Stafford Loan to equal $10,000 for Masters’ candidates and $5,000 for deferred matriculated Masters’ and Teacher Certification candidates. There is no interest charged while attending Montclair State, but it is charged at the time of repayment. The interest rate is variable, but is capped at 8.25%. Repayment is deferred during at least half-time enrollment. The student is permitted one six-month grace period once half-time enrollment is discontinued or terminated.

**Federal Unsubsidized Stafford Loans:** These loans are available to students who do not meet the eligibility criteria for the federal interest subsidy. Masters’ candidates are eligible for combined subsidized and unsubsidized loan of $18,500 annually. Masters’ candidates who are not fully matriculated and/or Teacher Certification candidates are eligible for a maximum combined subsidized and unsubsidized Stafford of $10,500 annually. Conditional matriculated Master’s students are not eligible for any federal unsubsidized Stafford Loans. Interest accrues while the student is in attendance. The interest rate is variable, capped at 8.25%. Repayment of principal is the same as the subsidized Stafford loans.
<table>
<thead>
<tr>
<th>Who may borrow?</th>
<th>How much can I borrow and under which program?</th>
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| • Matriculated Ed.D., MA, MAT, MBA, MEd, MFA, and MS students.               | **Federal Stafford Loan**: subsidized (max $8,500) and unsubsidized combined, up to $18,500 but not more than the cost of attendance. Loan limits are lower for part-time students.  
**Private Educational Loan**: may borrow up to the cost of attendance minus other financial assistance; co-signer may be required. |
| • Deferred-matriculation master's students can borrow for one academic year. | **Federal Stafford Loan**: subsidized (max $5,500) and unsubsidized combined up to $10,500 but not more than the cost of attendance. Loan limits are lower for part-time students.  
**Private Educational Loan**: may borrow up to the cost of attendance minus other financial assistance; co-signer may be required. |
| • Teacher Certification                                                     | **Private Educational Loan**: may borrow up to the cost of attendance minus other financial assistance; co-signer may be required. |
| • Graduate students in all other certificate programs (Administrative and Educational Services Certificates) | **Federal Stafford Loans**: subsidized (max $5,500) and unsubsidized combined, up to $10,500 but not more than the cost of attendance up to 24 semester credit hours. Loan limits are lower for part-time students.  
**NJCLASS Loan**: may borrow up to the cost of attendance minus other financial assistance; co-signer may be required. |
| • Paralegal Certificate                                                     | **Federal Stafford Loans**: annual allowable maximum according to grade level (subsidized and unsubsidized combined); cannot borrow more than the aggregate maximum for undergraduate study.  
**Federal PLUS Loan**: parents of dependent students may borrow up to the cost of attendance minus other loans.  
**Private Educational Loan**: may borrow the cost of attendance minus other financial assistance; co-signer may be required. |
| • Second BA and BS students (undergraduate loan limits apply)               | Not eligible for any financial aid including student and parent loans. |
| • Non degree program students,                                              |                                                                                                               |
| • Students with incomplete admission status,                               |                                                                                                               |
| • Conditionally matriculated students, OR                                   |                                                                                                               |
| • ADA and Music Therapy Certification and students seeking an additional certification |

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Private Educational Loans: NJCLASS or Sallie Mae Signature Loans are private credit loan programs. Students may borrow up to the COST OF ATTENDANCE in these loan programs. Credit history is considered for eligibility. A co-signer may be required. Interest accrues while student is in attendance. Students may select an active repayment or deferred principal repayment option. Those who defer repayment must maintain at least half-time status. Private Educational Loans are an alternative to unsubsidized Stafford loans. Students who are not in academic programs eligible for Federal Stafford Loan funding may be eligible to receive a Private Educational loan.

Federal Work-Study: Graduate students may qualify for part-time jobs at the University at an hourly rate under the Federal Work-Study program. The eligibility will be based under the current Federal guideline.

Educational Opportunity Fund Grants (EOF): Residents of New Jersey who received undergraduate EOF grants, or who were qualified for EOF but did not attend undergraduate colleges with EOF programs, may apply for EOF grants. Those interested should contact the EOF Office at (973) 655-4384.

Eligibility: Students must meet all established eligibility criteria for financial aid funds. Financial aid recipients must maintain at least half time (5 credits per semester) status. In addition, applicants must be accepted into an eligible institutional program for Title IV Loans on a program specific basis. The following chart provides information about this regulation. Note: Regulations regarding student eligibility are subject to change without notice.

Satisfactory Academic Progress: All graduate students who receive financial aid administered by the Financial Aid Office must maintain “satisfactory academic progress” as defined by the University.

The FAFSA (Free Application for Federal Student Aid) form is used to determine eligibility for all Student Loans and the Federal Work-Study Program. The FAFSA is available from the Financial Aid Office. Students who have a Renewal FAFSA application may complete that form. To complete the form on line, go to: www.fafsa.ed.gov. In order to receive award notification for Fall semester billing the FAFSA must be filed by March 1 of the prior academic year.

International Students (Non-Resident Tuition Waiver): A remission of non-residential tuition may be made to active students from other countries who demonstrate financial need. Those interested should apply by November 1 for the following spring semester and by May 1 for the following fall semester. For further information and/or applications please contact the International Student Advisor at (973) 655-4253.

Part-Time Employment: Career Development Center, located in the Morehead Hall, third floor, (973) 655-5194, lists thousands of part-time, summer, and temporary positions each year. Students may check current listings between 8:30 a.m. and 4:30 p.m., Monday through Friday and on Monday and Thursdays until 7 p.m. during the semester. In addition, they can confer with a career counselor, attend workshops on job hunting, and access the computerized job listing services via the Career Development website, http:/montclair.edu/careerservices/.
Veterans Benefits: The Office of Student Financial Aid provides information and advice to students regarding federal and state Veterans Administration (VA) benefit programs. Eligible veterans, dependents, National Guard, and reservists, may apply to receive educational assistance while enrolled at Montclair State University. To qualify for VA benefits, students must maintain satisfactory academic progress. Please note that VA education benefits are not payable for courses previously completed. If a veteran adds, drops, or withdraws from a course he or she should immediately forward a copy of the appropriate form to the Student Financial Aid Office. For further information contact the Student Financial Aid Office, CO-208, College Hall; telephone (973) 655-4462.

Scholarships:
(For a complete list of scholarships available to graduate and undergraduate students, consult the current undergraduate catalog, available in the Office of Admissions.)

Graduate Studies
HAROLD C. BOHN FELLOWSHIP
Amount: Varies
Criteria: MSU senior who shows promise in any academic discipline and presents a bona fide plan for graduate study.
Contact: Dean of Students

WILLIAM P. DIOGUARDI FELLOWSHIP
Amount: Varies
Criteria: Graduating MSU senior with a minimum 2.80 cumulative GPA who competed in intercollegiate athletics as a member of a varsity team and has been accepted into a post-baccalaureate degree program at Montclair State University.
Contact: Director of Athletics

SAUL AND ADELAIDE GOLDFARB GRADUATE SCHOLARSHIPS
Amount: The scholarships include awards ranging from $1,500 to $7,000 per year, which must be used for tuition remission.
Criteria: The Saul and Adelaide Goldfarb Graduate Scholarships are available to qualified new students at Montclair State University who have not previously earned a master’s degree. To be eligible, students must have accumulated 8 credits or less and be fully matriculated into a graduate degree program either on a full- or part-time basis.
Contact: Graduate School (Application deadline: April 1 each year.)

ALBERT WANG THESIS SCHOLARSHIP
Amount: Up to $2,000
Criteria: Fully matriculated full- or part-time doctoral students at Montclair State University who are enrolled in courses for dissertation advisement for the semester of the award. Must maintain a minimum of 3.0 GPA.
Contact: Dean, Graduate School
Biology and Molecular Biology
AL STEIN AWARD
Amount: Varies
Criteria: Graduate students pursuing a degree in a program offered in the Biology and Molecular Biology Department. Minimum 3.00 cumulative GPA.
Contact: Chair, Biology and Molecular Biology

College of Education and Human Services
ANNE KIRBY MEMORIAL SCHOLARSHIP
Amount: Varies
Criteria: Matriculated M.Ed. or M.A.T. students preparing for a career in teaching. Must have completed 9 credits of graduate work in good academic standing.
Contact: Dean, College of Education and Human Services.

RITA J. BURKE McLEISH MEMORIAL SCHOLARSHIP
Amount: Varies
Criteria: Undergraduate or graduate degree student at Montclair State University who is pursuing studies leading towards working with children who have developmental delays. Financial support is to be used for tuition.
Contact: Dean, College of Education and Human Services

MIANO GRADUATE SPECIAL EDUCATION SCHOLARSHIP
Amount: $1,000
Criteria: Graduate student enrolled in a program leading to work with children who have Pervasive Developmental Disorders. Must have completed 18 semester hours of graduate course work with a 3.5 GPA at MSU.
Contact: Director, Psychoeducational Center

NICHOLAS AND SUSAN MICHELLI MEMORIAL AWARD
Amount: $500 tuition scholarship.
Criteria: A $500 tuition scholarship awarded to a student who demonstrates a commitment to a career in urban education.
Contact: Dean, College of Education and Human Services

ALLAN AND MARGUERITE D. MOREHEAD SCHOLARSHIP AWARD
Amount: Varies
Criteria: A one semester tuition and fees award presented to a full-time student from the inner city or one who is committed to teaching in an inner city school after graduation. Preference is given to Paterson residents.
Contact: Dean, College of Education and Human Services
College of Humanities and Social Sciences

DR. HARRY BALFE II SENIOR AWARD
Amount: Varies
Criteria: Graduating senior or recent graduate from the College of Humanities and Social Sciences who has been accepted to law school and has a minimum cumulative GPA of 3.2.
Contact: Chair, Legal Studies

College of Science and Mathematics

MARGARET AND HERMAN SOKOL AWARD FOR INTERNATIONAL GRADUATE STUDY/RESEARCH
Amount: $5,000 ($2,500 per semester)
Criteria: Graduate student matriculated in a science program offered by College of Science and Mathematics, who has completed at least 64 semester hours at MSU, with at least 24 semester hours completed in a scientific major, and completed at least 6 semester hours in a foreign language or demonstrate language equivalent proficiency.
Contact: Dean, College of Science and Mathematics

MARGARET AND HERMAN SOKOL GRADUATE FELLOWSHIP IN SCIENCE
Amount: $10,000
Criteria: Senior chemistry major pursuing a doctorate in chemistry or a closely allied field at an approved graduate school. Must show academic excellence and potential for success in doctoral studies and research.
Contact: Dean, College of Science and Mathematics

MARGARET AND HERMAN SOKOL SUMMER GRADUATE RESEARCH FELLOWSHIP
Amount: $5,000
Criteria: Science graduate students who have completed one year of graduate study, are working on a research thesis, and will return to MSU for the subsequent fall semester.
Contact: Dean, College of Science and Mathematics

Communication Sciences and Disorders

HAROLD M. SCHOLL SCHOLARSHIP
Amount: Varies
Criteria: Matriculated graduate student in the Department of Communication Sciences and Disorders who has completed 15 credits and has a minimum GPA of 3.5 in the major. Must show potential for making an outstanding contribution in the field of language and learning.
Contact: Chair, Communication Sciences and Disorders
MARYANN PEINS SCHOLARSHIP
Amount: Varies
Criteria: Matriculated graduate students enrolled in the Department of Communication Sciences and Disorders with a concentration in Speech-Language Pathology. Must have completed 15 credits in the Department with a GPA of 3.50 in the major. Must provide evidence of participating in professional activities or community service relating to communication disorders. Must show potential for success in doctoral studies and research in communication disorders.
Contact: Chair, Communication Sciences and Disorders

Communication Studies
ELLEN KAUFFMAN TRAVEL GRANT FUND
Amount: Varies
Criteria: Undergraduate and graduate student majoring in a program offered by the Department of Communication Studies or Theatre and Dance; minimum GPA of 3.0 in major courses.
Contact: Chair, Communication Studies or Theatre and Dance

English
MARY BONDON SCHOLARSHIP
Amount: $1,500
Criteria: Qualified English Department graduate student pursuing a teaching career in English Literature.
Contact: Chair, English

LAWRENCE H. CONRAD MEMORIAL SCHOLARSHIP
Amount: Varies
Criteria: MSU graduate, pursuing a graduate degree in American Literature or Creative Writing at the University. Selection based on value of thesis proposal and financial need.
Contact: Chair, English

French, German, and Russian
FRENCH DEPARTMENT SCHOLARSHIP FOR GRADUATE STUDY
Amount: $1,000
Criteria: Student who shows financial need and demonstrates merit.
Contact: Chair, French, German, and Russian

Mathematical Sciences
AUDREY VINCENTZ LEEF SCHOLARSHIP
Amount: Varies.
Criteria: Fully matriculated full-time or part-time, undergraduate or graduate students in good academic standing who are enrolled in at least one mathematics course. Candidates must provide evidence of financial need and must have completed the Free Application for Federal Student Aid (FAFSA) form with results on file at MSU.
Contact: Chair, Mathematical Sciences
MAX A. SOBEL FELLOWSHIP  
Amount: Amount and frequency varies.  
Criteria: Graduate student in mathematics education; nominated by mathematics education faculty.  
Contact: Chair, Mathematical Sciences

WESTERDAHL SCHOLARSHIP  
Amount: Tuition Waivers (maximum of 4 courses) Book/Equipment/Travel Awards (maximum of 4 courses)  
Criteria: Awards are for graduate education in mathematics and/or mathematics education.  
Contact: Graduate Advisor, Mathematical Sciences

Music  
FRANK AND LYDIA BERGEN FOUNDATION SCHOLARSHIP HONORING JEAN HOOPER  
Amount: $5,000  
Criteria: Outstanding and talented undergraduate or graduate music students. Recipient must demonstrate financial need and/or a talent which will enhance the department's program.  
Contact: Chair, Music

DAVID OTT FELLOWSHIP  
Amount: A total of $4,000 awarded at the rate of $1,000 per semester.  
Criteria: Incoming fully matriculated graduate student enrolled in the Music Therapy Program. Recipient must remain a matriculated student in good standing.  
Contact: Coordinator, Music Therapy Program

School of the Arts  
JOHN AND ROSE CALI SCHOLARSHIP FOR THE ARTS  
Amount: Varies  
Criteria: Prospective or currently enrolled full-time or part-time undergraduate or graduate students enrolled in the School of the Arts. Must have a minimum GPA of 2.5.  
Contact: Dean, School of the Arts

DONALD AND JUDITH MILLER SCHOLARSHIP FOR FINE ARTS  
Amount: Varies  
Criteria: Prospective or currently enrolled full-time undergraduate and graduate African American and Latino students enrolled in the Art and Design Department of the School of the Arts. Must have a minimum GPA of 2.5 at the time of application.  
Contact: Dean, School of the Arts
ARTHUR NEWMAN MEMORIAL FUND
Amount: Varies
Criteria: Undergraduate or graduate students enrolled in programs offered through Montclair State University’s School of the Arts to participate in programs or activities which will provide professional development in the arts.
Contact: Dean, School of the Arts

F. PAUL SHIELDS FUND
Amount: Varies
Criteria: Full-time student in the Master’s of Fine Arts program at MSU. Based on academic achievement, student must maintain a minimum GPA of 3.2 and provide evidence of demonstrated leadership and participation in extra curricular activities.
Contact: Chair, Art and Design

School of Business
SOVEREL BOOK AWARD
Amount: $200-$400
Criteria: Undergraduate or graduate student in one of the programs within the School of Business who is an employee of a banking organization in the community.
Contact: Dean, School of Business

Special Education
MIANO GRADUATE SPECIAL EDUCATION SCHOLARSHIP
Amount: $1,000
Criteria: Graduate student enrolled in a program leading to work with children who have Pervasive Developmental Disorders. Must have completed 18 semester hours of graduate course work with a 3.5 GPA at MSU.
Contact: Director, Psychoeducational Center

Theatre and Dance
ELLEN KAUFFMAN TRAVEL GRANT FUND
Amount: Varies
Criteria: Undergraduate and graduate student majoring in a program offered by the Department of Communication Studies or Theatre and Dance; minimum GPA of 3.0 in major courses.
Contact: Chair, Communication Studies or Theatre and Dance

DENNIS K. McDONALD SCHOLARSHIP AND AWARD IN THEATRE
Amount: $100
Criteria: Theatre graduate student with a minimum of 3.0 GPA in theatre courses. Must exhibit performance quality, professional potential, evidence of continued development.
Contact: Chair, Theatre and Dance
Alumni Association: Inspired by gratitude and dedication to the Montclair State community, members of the earliest graduating classes created the Alumni Association. Today, alumni of a Montclair State University number over 80,000. This proud group has the power to influence legislation, recruit deserving students and attract critical resources that open doors for other alumni. MSU has always been at the forefront, serving our state and the world by educating hard working, accomplished professionals.

The Montclair State University Alumni Association (MSUAA) works to keep all alumni connected—to friends and classmates, University resources and other alumni who share geographic and professional interests.

The MSUAA provides opportunities, discounts, services, and timely information to alumni. The Alumni Job Bank, College Central—which alumni gifts support—allows alumni to post resumes and search job listings from thousands of employers. The MSUAA also provides support to current students through scholarships, awards and grants.

Throughout the year, alumni are invited to return to campus for social gatherings, reunions, career networking events, lectures and performances. In addition, alumni are invited to meet and speak with President Susan A. Cole at regional alumni gatherings throughout the country.

The Montclair State Alumni Magazine, the on-line Alumni Directory and Connections, the e-newsletter for alumni, bring alumni insider news about the University, the faculty and campus activities.

Alumni Association membership is open to all alumni of Montclair State University. Membership privileges include: access to Sprague Library and on-line access to the Ebsco database, discounts for theater and campus events, access to computer labs and discounts on MSU clothing and gifts at the Bookstore.

The Alumni Relations office is located on the second floor of the Alumni House at 34 Normal Avenue, across from the football field. Telephone: (973) 655-4141.

Auxiliary Services: The Office of Auxiliary Services, located at 855 Valley Road in Clifton, represents the University for services contracted from outside sources such as the University Book Store. The Office of Auxiliary Services also administers “Red Hawk Dollars”, the University’s debit card, campus photocopying, and the convenience copier operation. For more information, please call (973) 655-7431.

Bookstore: The University Bookstore is located on the lower level of the Student Center. Normal hours of operation are Monday through Thursday, 8:30 a.m. - 8:00p.m., Fridays, 8:30 a.m. - 4:00 p.m., and Saturdays, 10:00 a.m. - 2:00 p.m. The hours shown are for the fall and spring semesters. Extended hours are available at the beginning of each semester. Telephone: (973) 655-5460.

The bookstore carries required textbooks and supplies as well as a wide variety of other merchandise. In many cases, textbooks are available for purchase several weeks prior to the beginning of the semester. It is recommended that students bring their course schedules to the bookstore to aid in the selection of books, which should be purchased early. During the fall and spring semesters, undamaged books may be returned within 15 calendar days of the first day of class provided that students produce sales receipts. “Red Hawk Dollars”, the University debit card, may be used in the bookstore. Contact the Office of Auxiliary Services at (973) 655-7431 for further information. The bookstore can
also be reached on their website: www.montclair.bkstr.com.

**Campus Ministry:** The Montclair State University campus is served by a number of professional campus ministers, ordained chaplains and advisers representing major religious denominations who support their efforts here. Together they form the Campus Ministry Council (CMC) in liaison with the Dean of Students, as an ex-officio member of the CMC.

Student-led religious organizations, chartered by the SGA, Inc., serve the campus as well. While groups do meet on campus for religious celebrations, MSU does not have a House of Worship. However, there are many local places of worship which are listed in the Student Handbook.

*Campus Crusade for Christ* is an international, interdenominational organization committed to making Jesus Christ known on campus. There are weekly meetings on the MSU campus as well as monthly meetings in Hoboken and various conferences and retreats throughout the school year in places like Washington, D.C. and Panama City Beach, Florida. The campus minister can be reached at Mark.Scott@uscm.org or 732-968-1412.

*Hillel* is a social, cultural, and religious organization which offers varied activities to the entire University community throughout the year. Hillel is affiliated with the Jewish Student Services of Metropolitan New Jersey.

*The Chi Alpha Christian Fellowship* is a national organization of students in higher education who unite to express the person and claims of Jesus Christ to the campus community and call others into relationship with him. The campus minister can be reached at (973) 655-4258, Student Center Annex, Room 122.

*The InterVarsity Christian Fellowship* is an evangelizing, student-led fellowship that seeks to aid students in their growth as obedient disciples of Jesus Christ and in their proclamation of Christ to the campus. The campus minister can be reached at (973) 655-4258, Student Center Annex, Room 122.

*The Newman Catholic Campus Ministry* comes together for spiritual, educational, and social growth. The Newman Catholic Center, focus for many activities, is located at 894 Valley Road. It has a prayer chapel open weekdays. Mass is celebrated on campus Sundays, Holy Days, and during the week. The campus minister can be reached at (973) 746-2323 or (973) 655 7240, or faxed at (973) 783-3313.

**Career Development Center:** Career development is a lifelong process built on self-understanding, exploration of career interest, and acquiring skills in locating employment opportunities. The Career Development Center assists students with all phases of the career decision-making process, Students acquire skills to choose a major, find part-time work while attending school, plan long-term career goals and obtain full-time work after graduation.

Individualized counseling and testing help students learn more about themselves and the connection between their values, skills, interests and the world of work. Workshops are designed to teach student to write effective resumes, conduct successful interviews, and use the Internet for the job search. Other services include career fairs, web-based job listings and a career library.

The office has a library with extensive information about careers, employers and employment trends. Students also are urged to visit the office home page at http://www.montclair.edu/careerservices/ to learn about current office programs, graduate
schools, financial aid, information for students with disabilities, the alumni network, job listings all over the country and much more.

Career Development is located in Morehead Hall, Room 337 and is open Monday through Friday, 8:30 a.m. to 4:30 p.m. During the semester the office remains open on Monday and Thursdays until 7:00 p.m. Appointments with the counseling staff may be made by calling (973) 655-5194.

**Cultural Opportunities:** A number of significant series of cultural events adds to the pleasantness and interest of life on the campus. The Department of Theatre and Dance presents several plays each semester, and, in the spring, a major student dance concert. The Department of Art and Design and the division of galleries together operate exhibit spaces that are generally change monthly. Distinguished artists visit the campus to talk about their work at the Art and Design department’s Art Forum which takes place on most Thursday afternoons during the semester. The Music Department offers an extensive series of faculty and student concerts and recitals. The Office of Arts and Cultural Programming bring to the campus distinguished performers such as Emelyn Williams, Alwin Nikolais and Shapiro and Smith.

**Dining Services:** There are various locations on campus where food service is available: Blanton Hall, Freeman Hall, the College Hall Snack Bar, the Red Hawk Express outside Dickson Hall, and the Red Hawk Diner located behind the Student Center. Locations in the Student Center include the Cafeteria, Rathskeller, Goccia Cafe, the Convenience Store and Student Center Dining Room. Catering services are also available. Vending machines are located in many buildings across campus. Operating schedules are posted at each location. At various locations within this dining program, food services are available seven days a week.

Graduate students may choose from a traditional 14 meals per week or a 14 meals per week plus $100 Flex Dollars. Block plans consisting of 225 + $100 Flex Dollars, 175 + $100 Flex Dollars, 150 + $100 Flex Dollars, 125 + $250 Flex Dollars, 50 + $100 Flex Dollars, 50 + $250 Flex Dollars, or 2 meals plus $50 Flex Dollars are also available. Each plan may be used in conjunction with a “Red Hawk Dollars” account which is the University debit card. The card is available for use in all authorized dining locations in the Student Center and in Blanton and Freeman Dining Halls (hours vary by location). For information, please visit our website at [http://www.montclair.edu/pages/diningservices](http://www.montclair.edu/pages/diningservices). A student may also contact the MSU Food Services, Student Center, Café C, Room 202, (973) 655-7889, Monday through Friday, 8:30 a.m. - 4:30 p.m.

**Further Graduate Study:** Students interested in attending a university for study toward a doctoral degree may find information in Career Development located in Morehead Hall, third floor. Graduate Program Coordinators should be contacted for information related to their specific disciplines.

**Graduate Student Services at the Graduate School:** The staff of the Graduate School works to develop and implement programs and services that support the academic mission of the University’s graduate programs. Each of our programs aims to address the goal of providing a supportive, positive graduate experience where the student has the chance to develop intellectually, professionally and personally and successfully persist and complete his/her program.
Programs and services offered include:

- Tracking of student academic progress
- Orientation programs
- Graduate Student Workshops
- Graduate Student Council
- The Graduate Exchange newsletter
- Graduate Assistantships and Scholarships
- Alpha Epsilon Lambda Honor Society

To find out more about these programs and services, please visit www.montclair.edu/graduate and select “For Current Students.” You may also submit questions by sending an e-mail message to gradstudentservices@montclair.edu.

During the Fall and Spring semesters (mid-August through May) when classes are in session, the office is open Monday through Thursday, 8:30 a.m. - 5:30 p.m. and Friday, 8:30 a.m. - 4:30 p.m. During the Summer Sessions (late May-August), the Graduate School is open Monday, Tuesday, Wednesday and Thursday, 8:00 am - 5:15 p.m. Staff members are available to answer student questions during that time, but students seeking advising or having more complex issues are encouraged to make an appointment with a staff member. Students may reach the Graduate School by calling (973) 655-5147.

I.D.: Students, faculty and staff are required to have a University-issued Photo Identification Card. This card must be shown to borrow books or copies of tapes from the Library; to use a book on Library reserve; to use the field house; and to participate in various activities sponsored by the Student Government Association and Montclair State University.

All students holding photo I.D.-Cards will receive validation labels in College Hall, Office of the Registrar, CO- 204, or Cash Control, CO-216 or the I.D.-Card Office in the Student Center at the start of each semester. All new students must have their photo taken within one year from the date they are admitted. There is a $10.00 charge for replacement cards. Office hours are Monday through Friday, 8:30 a.m. - 4:30 p.m., and Thursday evenings until 7 p.m. during the fall and spring semesters while classes are in session only. Please bring two forms of personal identification, one with a picture, when applying for the I.D.-Card. For hours and further information, please call (973) 655-4147.

Older Adult Tuition Waiver Program (OLA): New Jersey residents 65 years of age or older are eligible to take courses on a space available, tuition-waiver basis. Students are only responsible for student fees plus a $25 administrative fee per semester enrolled. Students with an undergraduate degree must apply directly through the Graduate School and meet all of the Graduate School’s admission requirements to be considered for the OLA program. Students with an undergraduate degree may take undergraduate or graduate courses, but must pay graduate fees regardless of the course level. Students without an undergraduate degree must apply directly through the Office of Undergraduate Admissions. There is a section on the application for students to indicate that they would like to be considered for the OLA program. For more information, please contact the Center for Academic Advising and Adult Learning at adult.learning@montclair.edu or (973) 655-7114.

Residence Halls Facilities: The Office of Residence Life provides housing for graduate students in apartment-style accommodations. Montclair State University does not discriminate with regard to age in making housing assignments. Family housing is not
available on campus.

The Office of Residence Life (Bohn Hall, Room 437) is open on weekdays from 8:30 a.m. to 4:30 p.m., and open on all holidays when classes are in session. The office is closed on weekends. For further information, please call (973) 655-5188 or (973) 655-5252.

**Student Center/Annex:** The Student Center and Annex are a main gathering place for social, educational, and recreational activities. This large complex has a cafeteria, rathskeller, Goccia Cafe and Student Center Dining Room. Students and guests may enjoy the services of the bookstore, convenience store, flea market and 24/7 computer lab. Also centrally located in the Student Center is an information desk, study lounge, commuter lounge, classrooms, ballrooms, and several meeting rooms. In addition, the facility houses the Office of the Vice President for Student Development and Campus Life, and Offices of the Dean of Students, Student Activities, the Women’s Center, and the Student Government Association, as well as the Food Service Liaison office, and the ID Card office.

To schedule rooms or space in the Student Center, you must contact the Scheduling office. If you have any questions or special requests with regard to facilities or operation, please call the respective department.

Student Center Main Office ............................................................... (973) 655-7548
Scheduling ............................................................................................................... 4411
Building Manager ............................................................................................... 7546
Information Desk ............................................................................................... 5329
Computer lab ........................................................................................................... 6969
Dining Services ..................................................................................................... 7707

**Student Rights/Directory Information:** The Family Education Rights and Privacy Act of 1974 (FERPA), permits the University to release directory information about a student unless the student specifically requests that this information be withheld. Students who do not wish directory information to be released should notify the Office of Student Development and Campus Life, Room 400, Student Center, within the first two weeks of each semester. Montclair State University defines directory information as: Name and address, telephone number, e-mail address, date and place of birth, major field of study, participation in officially recognized activities and sports, height and weight of members of athletic teams, dates of attendance, degrees and awards received, photographs, most recent previous institution attended, date of degree conferment, career (UG/GR), status (full-time or part-time), and classification (freshman, sophomore, junior, senior, pre-matriculated, provisionally matriculated, matriculated, etc.).

Questions regarding the FERPA policy should be directed to the Vice President for Student Development and Campus Life, Student Center, room 403, telephone (973) 655-4311.

**Transportation and Parking Services:** All students eligible to bring a vehicle to campus must have their vehicle(s) registered with Parking Services in order to park in surface lots, and the parking permits must be appropriately displayed at all times when vehicles are parked in surface lots. On-line registration is available at the website listed below. Students may also park in the Red Hawk Deck or in metered spaces based upon hourly rates. It is the responsibility of students to be familiar with the Parking Regulations, which can be found at [http://www.montclair.edu/pages/ofo/Parking/index.shtml](http://www.montclair.edu/pages/ofo/Parking/index.shtml).
Students who fail to obey the parking regulations may receive either a municipal or University citation, and cars may be immobilized or towed for non-payment of tickets. In addition, failure to pay citations may lead to a hold being placed on a student’s account and restrict their ability to register for classes, and receive transcripts or a diploma.

A shuttle bus system is available to transport people to and from parking lots and the NJ Transit train station on Clove Road to the campus core. Questions regarding parking services should be directed to the Parking Services office in the Red Hawk Deck on Heating Plant Way, or by calling (973) 655-7581.

Transcripts: To obtain an official Montclair State University transcript, students must complete and sign a transcript request form, available through the Office of the Registrar or on the Montclair State University website at www.montclair.edu/transcript. A fee of $6.00 per copy (MSU undergraduate and graduate records for same student are considered one copy) is payable in advance to Montclair State University. Same day processing service is available at a charge of $12.00 for the first copy and $8.00 for each additional copy on that day. Transcripts will not be released for students who have a financial obligation (i.e., library, parking, loan, etc.) to Montclair State University.

At the conclusion of each semester, please allow ten working days for grade processing. Transcript requests which include grades from the immediately proceeding semester will be processed after the grading cycle is complete.

Students may also access their grades through Wess, the Web Enrollment Services for Students.

Tutorial Services: Tutorial Services provides academic support needed to assist students in a variety of subject areas. Emphasis is placed on mathematics, the natural sciences, business and humanities and social sciences. Graduate and undergraduate tutors provide a combination of individual and small group tutoring. No appointment is necessary as service is on a walk-in basis, and there is no charge for this service. Tutorial Services is located at 140 Morehead Hall, and is open Monday through Thursday from 9:00 a.m. - 7:00 p.m.

University Police: Montclair State University Police is responsible for ensuring the on-campus security and safety of students. Students are asked to cooperate with these officers and to bring any concerns to the attention of the dispatcher at (973) 655-5222. This is a full-fledged police department that is always open. This department provides protection, investigations, information and advice.

University Police will respond to all criminal activity, investigate all motor vehicle accidents, other incidents, and enforce all applicable laws and University regulations. Students are encouraged to report any incidents of a suspicious nature.

Some of the services offered to students by the University Police are: provide information on rape awareness, substance abuse, crime prevention and violence awareness.

In case of fire or a life threatening emergency, dial extension 5222 on the campus line. Emergency call boxes are located on light posts throughout the parking areas as well as buildings around campus. These phones provide a direct line to the police dispatcher; you are encouraged to familiarize yourself with these locations.
Emergency Medical Services

Emergency Medical Services (EMS) are available with emergency transport to local hospitals. Call University Police at extension 5222 for immediate assistance. MSU EMS also provides education in CPR, first aid, and safety. The Office of Emergency Medical Services is located in the Student Center, Room 105. Telephone (non emergency): (973) 655-7840.

University Health and Counseling Services: University Health and Counseling Services is composed of the Health Center on the first floor of Blanton Hall, Counseling and Psychological Services in Gilbreth House, the Alcohol and Drug Program in Gilbreth House, Services for Students with Disabilities in Morehead Hall, Suite 305, Wellness Education in Bohn Hall, the Drop-In Center (adjacent to the Student Center), and the Office of the Executive Director of University Health and Counseling Services in Bohn Hall. Each of these services has been designed to meet the health and wellness needs of students throughout the campus at MSU.

Our goals are to (1) teach you how to maintain your physical and psychological health and well being, (2) assist you in deciding when you need care, (3) provide care and preventive services in a convenient and sensitive manner when appropriate, (4) assist you in learning how to utilize the health care system, and (5) empower you to make informed decisions about your health.

University Health and Counseling Services provides direct care, individual health and psychological counseling, health maintenance and wellness promotion, assistance with alcohol and other drug issues including tobacco cessation, wellness education services and programs throughout the year, and services for students with disabilities designed to meet student needs and ADA requirements. The Office of the Director of University Health and Counseling Services is located in Bohn Hall (street level) with Wellness Education and is open Monday through Friday from 8:30 a.m. to 4:30 p.m. with evening hours scheduled as needed during the fall and spring semesters. During the summer, the office is open Monday through Thursday from 8:00 a.m to 5:15 p.m. and closed on Friday. Telephone: (973) 655-7555. Fax: (973) 655-6977.

For more information about University Health and Counseling Services, immunizations or insurance, go to www.montclair.edu/wellness.

Confidentiality

All patient/client records for services provided in the Health Center, Counseling and Psychological Services, the Alcohol and Drug Program, and Services for Students with Disabilities are strictly confidential and are not a part of other University records. No information is recorded on any permanent college record, so it cannot appear on a transcript or any other official document. No information about a student’s visit to these services will be released to anyone without specific written permission from the student, except in the event of an extreme emergency where a clear danger to self and/or others exists.

Health Center

The Health Center is a campus resource and service center for all students at MSU. The Center provides direct care by nurse practitioners and physicians including the treatment of illness, women’s health, HIV/STD/pregnancy screening, immunizations and health education. In addition, the staff works closely with Counseling and Psychological Services and Services for Students with Disabilities, as well as other campus and community resources for referral needs.

All registered students pay a wellness fee that entitles them to the use of the Health Center. There are no additional charges for the services at the center with the exception of minimal charges for medications and laboratory tests. However, no student will be refused care due to the inability to pay. Visits are by appointment only.
unless the problem is an emergency.

The Health Center is located in Blanton Hall (first floor) and is open Monday, Tuesday and Thursday from 9:00 a.m. to 8:00 p.m. and on Wednesday and Friday, 9:00 a.m. to 5:00 p.m. during the fall and spring semesters. During the summer, the Health Center is open Monday through Thursday from 8:00 a.m. to 5:15 p.m. and closed on Friday. Telephone: (973) 655-4361. Fax: (973) 655-4159.

**Counseling and Psychological Services (CAPS)**

Montclair State University’s Counseling and Psychological Services provides personal counseling and psychological services for Montclair State University students. CAPS helps students make the most of their academic education by helping them prevent future problems and assisting them in developing their fullest potential by learning new skills and resolving conflicts that may limit their performance.

All registered students pay a wellness fee that entitles them to the use of all services offered by CAPS. There are no additional charges for these services. However, a brief wait for services may occur at busier times of the year, as well as overall limitations on the number of sessions any one student is eligible to receive. Staff and faculty members are eligible for short-term consultation and referral.

The staff of CAPS consists of licensed psychologists, doctoral-level clinical and counseling psychologists, and selected graduate students who work under close supervision. The staff of CAPS has special expertise in areas such as: short-term counseling; coping with stress and depression; sexual abuse; eating disorders; relationship problems; family issues; alcohol and drug use; test-taking anxiety; and socio-cultural concerns.

CAPS is open Monday through Thursday from 9:00 a.m. to 5:00 p.m., and on Friday from 8:30 a.m. to 4:30 p.m. during the fall and spring semesters. During the summer the office is open Monday through Thursday from 9:00 a.m. to 5:00 p.m. and closed on Friday. Additionally, limited evening hours are available on Thursdays during the semester by appointment only. Urgency of need is always taken into consideration when scheduling appointments. The Center is located in the Gilbreth House (behind Freeman Hall, south end of campus). Please call for appointments. Telephone, (973) 655-5211.

**Alcohol and Drug Programs**

Alcohol and drug treatment and prevention services are available to all registered MSU students. These services are designed to address the misuse of alcohol, tobacco, and other drugs. Confidential assessments are available for students interested in examining the impact alcohol and other drugs have on their lives. Subsequent counseling and aftercare services are available as well as referral for more intensive treatment, if needed. Alcohol and other drug prevention education and programs are designed to assist students in developing healthy lifestyles, preventing the onset of substance related problems, and ameliorating existing ones.

The Alcohol and Drug Program is open Monday through Thursday from 9:00 a.m. to 5:00 p.m., and on Friday from 8:30 a.m. to 4:30 p.m.. Additionally, limited evening hours are available by appointment only. Urgency of need is always taken into consideration when scheduling appointments. The Center is located in the Gilbreth House (behind Freeman Hall, south end of campus). Please call for appointments. Telephone: (973) 655-5211.

**Services for Students with Disabilities**

Services for Students with Disabilities (SSD) provides counseling and academic accommodations to students with physical, psychological, learning, and sensory disabilities. The mission of the office is to provide full access to all curricular and
extracurricular activities sponsored by the University in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

The SSD serves as a liaison between the student with a disability and the rest of the University community. This includes Counseling and Psychological Services, the Health Center, Alcohol and Drug Programs, Residence Life, University Police, and all academic departments. These services are located in Morehead Hall, Suite 305 and are available Monday and Thursday from 8:30 a.m. to 7:00 p.m. and Tuesday, Wednesday, and Friday from 8:30 a.m. to 4:30 p.m. during the fall and spring semesters. During the summer, services are available Monday through Thursday from 8:00 a.m. to 5:15 p.m. and closed on Friday. Telephone: (973)-655-5431. Fax: (973) 655-5308.

Wellness Education

Wellness Education develops programs to address wellness issues that are pertinent to Montclair State University students. These include, but are not limited to, wellness maintenance, alcohol and drug use, smoking cessation, nutrition, eating disorders, body image awareness, safer sex practices, sexual advocacy, domestic violence, peer education, stress management, and mental health issues.

Wellness Education is located in Bohn Hall on the street level. Services are available Monday through Friday from 8:30 a.m. to 4:30 p.m. with scheduled programming on selected evenings during the fall and spring semesters. During the summer, services are available Monday through Thursday from 8:00 a.m. to 5:15 p.m. and closed on Friday. Telephone: (973) 655-7397. Fax: (973) 655-6977.

Drop-In Center (“Students Helping Other Students”)

The Drop-In Center is a student-run facility located adjacent to the Student Center. Specially trained student volunteers provide peer education and peer counseling services as they implement the Center’s philosophy of “students helping students.” Programming and outreach activities are coordinated through the Office of Wellness Education. Services are available Monday through Friday during the fall and spring semesters. Check current hours at www.montclair.edu/wellness. The Center is closed during the summer. Volunteer applications are accepted at the Drop-In Center when school is in session or in the Office of Wellness Education year round. Telephone: (973) 655-5271.

Immunization Requirements

1. Measles-Mumps-Rubella Immunization Requirements

All new or continuing full- and part-time undergraduate and graduate students born after 1956 enrolled in a program of study leading to an academic degree at any 4-year public or independent institution of higher education in New Jersey are required to provide evidence of immunization as a prerequisite to enrollment as follows:

Measles: Evidence of two doses of a live measles-containing vaccine, or any vaccine combination containing live measles vaccine that was administered after 1968 — first dose administered on or after the student’s first birthday and second dose administered no less than one month after the first dose, or documented laboratory evidence of measles immunity. A student vaccinated with a killed measles containing vaccine, or an unknown vaccine prior to 1969 shall be revaccinated or produce laboratory proof of measles immunity.

Mumps: One dose of live mumps virus vaccine, or any vaccine combination containing live mumps virus vaccine on or after the student’s first birthday, or documented laboratory evidence of mumps immunity.
Rubella: One dose of live rubella virus vaccine, or any vaccine combination containing live rubella virus vaccine on or after the student’s first birthday, or documented laboratory evidence of rubella immunity.

The only exemptions from these requirements are students born before 1957, students enrolled in a program for which students do not congregate on campus, whether for classes or to participate in institution-sponsored events (home study, distance learning), certain medical conditions in which immunizations pose a health risk, and clearly proscribed and documented religious exclusions. During an epidemic, the University may require students without proof of immunity to stay away from the campus until the epidemic is over.

The University must enforce student compliance within 60 days of enrollment. A student may be registered on a provisional basis for the first term if the required immunization documentation is not available at the time of registration. Prior to registration for the second term, a student shall either present documentation of immunization or proof of immunity as outlined above or be re-immunized. A registration hold that will prevent future registration activity will be placed on the records of all students who are not in compliance.

2. Meningitis Immunization Requirement

The State of New Jersey requires that all full and part-time incoming college freshmen, transfer and graduate students be provided with information about meningitis and the availability and benefits of the meningitis vaccine. Each student must submit documentation of their decision whether or not to receive the vaccination. Each university must record this information.

All new students enrolled in a program of study leading to an academic degree at a public or private institution of higher education who live in campus housing, must receive a meningococcal vaccination as a condition of residence and as a condition of attendance at that institution. Students who fail to submit this information will not be assigned a space in campus housing and will not be permitted to move into any campus residential facilities.

3. Documentation of Proof of Immunity

Documented proof of immunity must be submitted to the Health Center. Forms for this purpose are available from the Admissions Office and the Health Center or can be downloaded at www.montclair.edu/wellness. Students can send or fax original documentation signed by a licensed health care provider, a copy of a signed and authorized school record, or the completed and signed MSU Immunization Information form to the Health Center. Telephone: (973) 655-4361. Fax: (973) 655-4159.

Montclair State University
Health Center, Blanton Hall
Montclair, NJ 07043

Go to www.montclair.edu/wellness for forms and more information about immunization requirements.

Health Insurance

New Jersey state law mandates that all full-time undergraduate and graduate students have accident/sickness insurance. MSU has arranged for a plan to be available for students who have no other coverage. In addition, this plan is also optionally available for part-time students and their dependents. The Bollinger Insurance Company provides this coverage to MSU students. The cost for this insurance is automatically billed to all full-time students with the tuition bill for full-time students and is currently $97.00 for the full year and $58.00 for spring semester
Part-time students may also enroll in the plan by contacting Bollinger Insurance directly at 1-800-526-1379. This Bollinger plan is a basic accident/illness policy with minimal coverage. Students covered by this policy are encouraged to seek care at the Health Center prior to using outside services to reduce out-of-pocket expenses.

Students who currently have health insurance under another plan may have the Bollinger Insurance plan and the premium deduction on the tuition bill waived by completing a waiver card and returning it to the Student Accounts office, College Hall, Room 218. Waiver cards can be obtained from the Student Accounts office or printed from the Bursar web page at: http://www.montclair.edu/pages/bursar/policies.htm#health insurance.

Claim forms for Bollinger Insurance coverage are available on the Bollinger Insurance website and at the MSU Health Center. For more information, call the Bollinger Insurance Company at (800) 526-1379, or visit their website at: www.BollingerInsurance.com/MSU.

**Women’s Center:** The Women’s Center aids in the education of women and men with respect to their changing roles, rights and responsibilities in today’s world. Different programs, workshops and weekly discussion groups are offered each semester and are developed to address the current needs of the campus community. A reference library and a referral service are available to Montclair State University students. We encourage the personal growth and empowerment of women through personal coaching, mentoring service and advocacy. The Women’s Center serves as a safe space on campus for all women.

Interested students may have a chance to work as student staff and coordinate activities, contribute to the newsletters and learn to facilitate discussions and workshops in such areas as sexual harassment and sexual assault, domestic violence, leadership, assertiveness training, media literacy and self-esteem.

**Equity and Diversity Programs**, housed in the Center, serves students, cultural organizations and the Montclair community by promoting an environment that fosters and values human understanding. It is a reflection of the University’s commitment to living in a global community. Our aim is to internationalize our curriculum, improve intercultural communication and collaboration as we enhance our student’s experience via the exploration of the many cultures found on our campus. The program seeks to provide services and events that will instill university-wide appreciation and tolerance for diverse perspectives, equitable participation and inclusion for all of the campus community. You are encouraged to, as Mahatma Ghandi once said, “Be the change you wish to see in the world” and embrace global citizenship. Interested students are invited to join our Conversations On Race study circles, join the Diversity Council and participate in our interfaith “Building Bridges” dialogue series.

For further information, please contact the Women’s Center located in the Student Center, Room 421, telephone (973) 655-5114 or visit our website, www.Montclair.edu/womenscenter.

**Writing Center:** The Writing Center, located in Dickson Hall, Room 285, offers consultation and tutorial help to all students who are interested in developing as writers. There is no charge for this service. For more information, call (973) 655-7442.
DOCTORAL PROGRAMS

EDUCATION (Ed.D.)

Telephone: (973) 655-4262

CENTER OF PEDAGOGY

Montclair State University’s Center of Pedagogy is the first center of its kind in the nation. The Center coordinates and oversees all aspects of teacher education. Its mission is to promote the continuous development of all educators, new and experienced, field and university-based, through the simultaneous renewal of the schools and the education of educators. Policy-making and governance in the Center rest on the collaboration of the tripartite: faculty and administrators from the schools, the College of Education and Human Services, and faculty from arts and science. Our overarching goal is to support the abilities of current and new generations of students and teachers to engage actively and productively in democratic communities.

DOCTOR OF EDUCATION DEGREE, CONCENTRATION IN PEDAGOGY

Montclair State University’s first doctoral program, the Ed.D. in Pedagogy, is designed for those who aspire to be models of teaching excellence, leaders among their colleagues and spokespersons for education. Although primarily designed for teachers who wish to remain in the classroom, it can meet the needs of educators with other career goals such as teaching in two-year colleges, working with state and federal departments of education, or serving as curriculum development specialists. This Ed.D. provides the highest level of expertise in teaching, leadership, and educational reform. The program also recognizes the indisputable role of teachers at all levels in renewing our educational system and the critical importance of P-16 education in the nation’s quest for improving our social and political democracy.


We expect to prepare educational leaders who will:

• understand the epistemology of the specific disciplines and the relationships among school subjects;
• be fully knowledgeable about the public purposes of schooling in a democratic society;
• be effective researchers, capable of conducting significant, original, theoretically based research in order to explore solutions to difficult problems and pressing needs confronting American education;
• be masters of pedagogy, both general and subject-specific, that is discipline-appropriate and nurturing;
• demonstrate advanced competence in the disciplines that are the bases for their teaching specialization;
• be masters of change theory, enabling students to become effective stewards of best practice in their school settings and the agents for change;
• understand both policy issues and the politics of policy in order to transcend local concerns and become effective spokespersons for systemic change;
• understand the concept of access to knowledge, including its moral implications;
• build sophisticated curriculum plans that lead to critical thinking and high levels of learning; and
• be able to plan effective educational experiences designed to promote good citizenship and democratic practice.

Vision: The Ed.D. is characterized by a strong theoretical base and a comprehensive perspective on the nature of schools, education in a democracy, and effective teaching and learning for social change. Four major themes give coherence to the program, and support both the purposes of schools and the professional needs of educators. These themes closely correspond to the research agenda of the twenty university-school partnerships that form the National Network for Educational Renewal. They represent MSU’s vision of educators’ responsibilities:
• to provide access to knowledge for all students;
• to enculturate students into our multicultural political and social democracy;
• to create and sustain appropriate and nurturing pedagogy;
• to commit themselves to educational leadership based on stewardship of best practice.

Specialization Areas: Two areas of specialization are offered to enable educators to pursue a comprehensive, interdisciplinary, advanced degree as part-time or full-time, students:

• Mathematics Education: This program is designed for those who already have a strong background in mathematics or mathematics education. The program will add both depth and breadth to their subject matter and pedagogical knowledge. The curriculum will reflect both state and national recommendations, as well as issues related to the appropriate use of technology. It integrates mathematical topics across the mathematics curriculum and with other disciplines, encourages alternative approaches to the teaching and learning of mathematics, and includes both qualitative and quantitative methods of research in mathematics education.

• Philosophy for Children: This program is designed for those who have a strong background in philosophy. The program will add both depth and breadth to both their subject matter and pedagogical knowledge. In addition, this specialization builds on and extends the understandings developed in the core courses, thereby carrying forward the major themes of the Ed.D. It includes the role of philosophy in reasoning, concept formation, and sound judgment. Philosophy-based children’s literature is used to develop critical thinking, and develops skills in research methods in philosophy for children.
ADMISSION REQUIREMENTS

Initial admission status requires that students meet the minimum admissions criteria. Prospective students must submit the following for consideration:

1. A completed and signed application for doctoral study
2. A personal essay describing their view of the relevance of doctoral education to their personal and professional development
3. A statement discussing areas of potential research interest
4. Transcripts of undergraduate and graduate work, (WES evaluation, if necessary)
5. GRE scores; TOEFL scores if necessary
6. Three letters of recommendation, including at least two from professional colleagues or college/university faculty who can attest to the candidate’s potential for advanced study and research
7. Application fee.

In addition, the Ed.D. program also requires the following:

1. Specialization in Mathematics Education requires a Master’s Degree in Mathematics Education, Mathematics or its equivalent
2. Specialization in Philosophy for Children requires a Master’s Degree in Philosophy, Philosophy for Children or its equivalent
3. A personal interview with a committee representing both the education core faculty, and the specialization faculty
4. Teaching experience is preferred.

Application: Applicants to the Ed.D. program must complete a self-managed application. “Self-managed” refers to the process by which the applicant gathers all required documentation and submits it in one packet to the University for review. Montclair State University requires applicants to collect and submit transcripts and letters of reference with the application in the envelope provided in the application package. International students should refer to the additional information included in the application packet. The application deadline is February 1st for U.S. residents. Please note: International application deadline is November 15th to allow time to obtain a student visa. We encourage you to begin gathering the required admission documents (official transcripts, letters of recommendation, GRE scores, etc.) as soon as possible.

These materials will be reviewed by an admissions committee composed of at least three faculty, representing both the core and specialization areas, who will recommend candidates to initial admission status.

Either before or immediately following admission, students must complete any required examinations to assess competence and/or other prerequisite knowledge identified for the program. Examination results may require that students take courses beyond the standard requirements for the degree. In addition, faculty may recommend supplementary coursework for students selecting a particular specialization without sufficient undergraduate or master’s preparation. A formal program of study will be developed by each student and his/her advisor. The program of study must be approved by the Graduate School in order for the student to matriculate.

Basic Degree Requirements: Students must complete a minimum of 60 credits beyond the master’s degree, including five core courses (15 credits), seven courses in an area of
specialization (21 credits), four courses of research (12 credits), and a minimum of 12 credits of dissertation. All work for the doctoral degree must be completed within ten (10) years from the date of the start of the program. Every student must fulfill a residency requirement, which typically will require the student to be registered for courses as a full-time student for two consecutive semesters or for two consecutive summer sessions for part-time students.

**Candidacy for the Degree:** The qualifying assessment for candidacy for the Ed.D. in Pedagogy degree will be the development, presentation, and evaluation of a working portfolio that is organized around a set of pedagogical goals selected in consultation with a doctoral advisor. It is designed to be tangible and authentic evidence of the wide range of knowledge, dispositions, and skills that doctoral degree candidates should possess. The portfolio is characterized by a systematic, reflective collection of selected artifacts that constitutes evidence of learning, growth, and mastery in the essential dimensions of the doctoral program. All candidates will be required to present their portfolio for assessment in a forum designed for this purpose.

Students whose portfolios meet established criteria will then have their records reviewed by a faculty committee who will recommend advancement to candidacy. Successful candidates will then be able to complete their remaining coursework and the dissertation.

**Dissertation:** Once candidacy is established, students will be permitted to enroll in the dissertation seminar and form a dissertation committee. The dissertation must be original, theoretically-based, applied research that has the potential to contribute knowledge about the processes of teaching, learning and schools. It should demonstrate mastery of a body of existing literature and theory and its application to an educational problem. The research must include a focus on one or more of the core dimensions of the program or the candidates area of specialization. The dissertation requirement is intended to provide candidates with the opportunity to explore an important applied issue in a scholarly fashion and investigate the ways of teaching and learning may benefit from that exploration.

**General Information:** A limited number of graduate assistantships and graduate scholarships are available. Applications for these are included in the application packet. For general information and application:

Call: (973) 655-5147
(800) 331 9207
Fax: (973) 655-7869

For further information on the academic program:

Call: (973) 655-4262
Fax: (973) 655-7776

Visit the website: www.montclair.edu/Graduate

Completed applications will be reviewed beginning February 1st. International applicants must apply by November 15th. Candidates meeting basic admissions criteria may be called for an in-person interview. Candidates are encouraged to begin gathering the required admission documents as soon as possible. Candidates accepted for admission are required to pay a deposit prior to registering. Students are expected to begin their coursework during the summer.
## REQUIREMENTS FOR THE DOCTOR OF EDUCATION DEGREE WITH A CONCENTRATION IN PEDAGOGY

<table>
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<th>Semester Hours</th>
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### I. Required Courses in Education (12 semester hours)
- EDCO 801 Democracy and Education ....................................................... 3
- EDCO 802 Access to Knowledge ............................................................... 3
- EDCO 803 Pedagogy: The Art and Science of Teaching and Learning ....... 3
- EDCO 804 Organizational Change, Policy, and Leadership ....................... 3

### II. Required Courses in Research (11 semester hours)
- EDCO 820 Qualitative Research Methods for Educational Research... 2
  (first half)
- EDCO 820 Qualitative Research Methods for Educational Research... 2
  (second half)
- EDCO 821 Quantitative Research Methods for Educational Research (first half) ........................................ 2
- EDCO 821 Quantitative Research Methods for Educational Research (second half) .................................... 2
- EDFD 825 Research in Philosophy for Children
  OR
- MATH 825 Research in Mathematics Education ........................................ 3

### III. Specialization (21 semester hours)
In addition to the required courses above, students must complete 21 semester hours in one of the following specializations:

#### A. Mathematics Education ................................................................. 21
- Required Courses (15 semester hours)
  - MATH 811 Mathematics Education Leadership ....................................... 3
  - MATH 812 Mathematical Modeling for Middle Level and High School Grades ......................................................... 3
  - MATH 813 Geometry for Middle Level and High School Grades ............. 3
  - MATH 814 Algebra and Analysis for Middle Level and High School Grades ................................................................. 3
  - MATH 815 Critical Thinking and Cognitive Development in Mathematics ................................................................. 3
- Elective Courses (6 semester hours)
  - MATH 740 Accessing and Processing Information Through Technology ................................................................. 3
  - MATH 741 Historical and Multicultural Foundations of Mathematical Thought ......................................................... 3
  - MATH 742 Connecting Mathematics and Science ....................................... 3
  - MATH 745 The Use of Teacher Knowledge in Mathematics Teaching

#### B. Philosophy for Children .................................................................. 21
- Required Courses (15 semester hours)
  - EDFD 811 Philosophy, Philosophy for Children and the Educational Experience ......................................................... 3
EDFD 812 Contemporary Social and Political Philosophy and Philosophy for Children ...................................................... 3
EDFD 814 Recent American Philosophy and Philosophy for Children .............................................................................. 3
EDFD 815 Philosophy of Mind, Cognitive Science, and Philosophy for Children ...................................................... 3
EDFD 816 Ethical Inquiry Through Narrative ........................................... 3

Elective Courses (6 semester hours) Choose two of the following:
EDFD 740 The Role of Logic in Philosophy for Children .............. 3
EDFD 742 Hermeneutics of Childhood ................................................ 3
EDFD 744 Philosophy of Body ............................................................ 3
EDFD 745 Philosophy for Children and Ancient Greek Philosophy ... 3
EDFD 750 Selected Topics in Philosophy for Children .................... 3
EDFD 770 Doctoral Independent Study .............................................. 1-3
EDFD 813 Education for Global Citizenship .................................. 3

IV. Elective Course in Education (3 semester hours) ......................... 3
EDCO 711 Classroom Community of Inquiry .................................. 3
EDCO 712 Implications of Race and Ethnicity in United States Schools . 3

V. Qualifying Portfolio

VI. Required Dissertation Courses
EDFD 830 Dissertation Proposal Seminar
OR
EDCO 830 Dissertation Proposal Seminar
OR
MATH 830 Dissertation Proposal Seminar ..................................... 1-3

Dissertation Advisement—12 semester hours required
EDCO 900 Dissertation Advisement
OR
EDFD 900 Dissertation Advisement
OR
MATH 900 Dissertation Advisement ......................................... 3 each semester

Minimum semester hours: 60

PEDAGOGY

Course Descriptions

EDCO 711 THE CLASSROOM COMMUNITY OF INQUIRY 3
This course provides students with an opportunity to move into the theory and practice of community of inquiry, in the context of classroom and other environments (e.g. school communities, child care centers, prisons). Participants will construct a general theory of communal dialogue, with particular emphasis on its application to the structure of classroom discourse.

Prerequisite: Matriculation in Ed.D. in Pedagogy.
EDCO 712  IMPLICATIONS OF RACE AND ETHNICITY IN UNITED STATES SCHOOLS 3

This course is designed to explore the dynamics of race and ethnicity as well as the ways in which they potentially impact democracy. The course will analyze the historic legacies of race and ethnicity within the United States and the ways in which they manifest and impact different sociopolitical systems globally. Further, a goal of this course is to heighten participants’ awareness of such issues and examine the relationships between race/ethnicity and education, schooling, democratic practice and literacy development.

Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDCO 801  DEMOCRACY AND EDUCATION 3

This course will examine the concept of democracy and a range of interrelated issues inherent in the public purposes of schooling in social and political democracies. Students will inquire into the meaning of citizenship in a democracy, and the role of the schools in fostering its development and expression. This inquiry will be conducted comparatively. Varying domestic and international socio-cultural and political contexts will be examined. Students will examine various curricular and pedagogical designs and governance structures which can be associated with models of democratic schooling. The moral obligations of pedagogy and stewardship which fall to teachers in the conduct of educating for democratic citizenship will also be examined.

Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDCO 802  ACCESS TO KNOWLEDGE 3

This course addresses the concept of access to knowledge through an examination of multiple literacies and a range of epistemological and ethical perspectives. Knowledge construction by the learner, in literacy and subject area disciplines will be examined. Students will develop an understanding of the epistemological dimensions undergirding the various school subjects. Foundational epistemological theories and current thinking in the psychological, social, and cultural underpinnings of literacy will be related to fundamental disciplinary groups such as arts, humanities, social and natural sciences and mathematics. Students will be encouraged to critically analyze and evaluate standard school texts and curriculum units.

Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDCO 803  PEDAGOGY: THE ART AND SCIENCE OF TEACHING AND LEARNING 3

This course examines the art and science of teaching and learning in an evolving social and political democracy. It aims at developing an understanding that teaching and learning occur in socio-cultural contexts. Themes to be explored include competing views of knowledge and their implications for curriculum construction; current theories of learning and assessment; strategies to ascertain students’ prior knowledge and experience; and pedagogical practices that build upon students’ cultural capital. The course will examine diverse pedagogical strategies and their relationships to the structure and epistemology of the disciplines. Special attention will be given to the moral dimensions of the teaching-learning process.

Prerequisite: Matriculation in Ed.D. in Pedagogy.
EDCO 804 ORGANIZATIONAL CHANGE, POLICY AND LEADERSHIP  3
In this course, doctoral students will learn to analyze complex organizational patterns, situations and policies that define and affect diverse educational settings in the U.S. and in other places. Students will examine various models of leadership, theories and research on change models, and the processes of educational policy formation. Students will develop an understanding of their own role as change agents. There will be a field component for this course in which students will conduct research on the development, implementation and/or evaluation of a plan for change in an educational setting.  
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDCO 820 QUALITATIVE METHODS FOR EDUCATIONAL RESEARCH  4
This course examines the theoretical and conceptual foundations of qualitative approaches to social science research and engages students in designing and conducting qualitative research in education. Students will develop a doctoral-level qualitative research proposal that provides a conceptual framework, specifies procedures for sample selection, data collection, and data analysis, and addresses issues of ethics, reliability, and validity. They will then conduct a small-scale research project, involving the design of qualitative data collection instruments, collection of qualitative data, analysis of the data, and writing a report of findings. Students will examine social, cultural, political, and ethical dimensions of qualitative research. They will be introduced to computer packages used for qualitative data analysis. They will also critically examine published qualitative research articles. Full year course.  
Prerequisite: Matriculation in Ed.D. in Pedagogy and a course in research methods or equivalent.

EDCO 821 QUANTITATIVE METHODS FOR EDUCATIONAL RESEARCH  4
This course provides students with an advanced critical understanding of the epistemological and methodological foundations of quantitative approaches to empirical research in education. It will also develop students’ skills as critical consumers and effective producers of knowledge in various methods of educational research. The course will examine experimental design, methods and techniques, sampling procedures, methodologies, instrumentation, design, and data analysis utilized in quantitative research, and will examine the statistical techniques and procedures most commonly used in quantitative educational research. Designs studied will include one-way ANOVA, factorial and randomized complete block. Other topics will include analysis of covariance, simple linear regression and multiple regression. Students will be introduced to the use of SPSS or other computer packages utilized in quantitative research for treatment of data and the development of a research report. Students will gain experience in preparation for an acceptable doctoral dissertation which relies on the analysis of quantitative data. Full year course.  
Prerequisite: Matriculation in Ed.D. in Pedagogy and a course in research methods or equivalent.
EDCO 830  DISSERTATION PROPOSAL SEMINAR  1-3
Students will work with their dissertation advisors to develop and refine their dissertation proposals. The seminar is a supplement to the formal dissertation proposal approval process which is outlined in the handbook. Successful completion of this course does not imply approval of the dissertation proposal. Cross listed with Educational Foundations, EDFD 830 and Mathematical Sciences, MATH 830. This course will be offered as pass/fail only.
Prerequisite: Matriculation in Ed.D. in Pedagogy; admission to candidacy.

EDCO 900  DISSERTATION ADVISEMENT  3-12
While enrolled in Dissertation Advisement, students will work with their dissertation advisor and dissertation committee. Credits are reported as IP (In Progress) while the dissertation is being written. At the successful conclusion of the dissertation defense, a final grade of pass will be recorded.
Prerequisite: Matriculation in Ed.D. in Pedagogy, advancement to candidacy.

MATHEMATICAL SCIENCES
Course Descriptions

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td></td>
<td>MATH 740</td>
<td>TECHNOLOGICAL TOOLS FOR EDUCATION IN MATHEMATICS 3</td>
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<tr>
<td></td>
<td>MATH 741</td>
<td>HISTORICAL AND MULTICULTURAL FOUNDATIONS OF MATHEMATICAL THOUGHT 3</td>
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MATH 740 TECHNOLOGICAL TOOLS FOR EDUCATION IN MATHEMATICS
This course will explore the research literature on technology tools for education in mathematics and science in order to create a richer and more egalitarian learning environment. Classroom practices and state and national science and mathematics standards will be examined in light of research knowledge on technology in education. The scholarly literature on other issues related to technological literacy, such as equity, will be discussed and explored.
Prerequisites: Matriculation in Ed.D. in Pedagogy or permission of the graduate program coordinator and MATH 512 or MATH 513.

MATH 741 HISTORICAL AND MULTICULTURAL FOUNDATIONS OF MATHEMATICAL THOUGHT
This course will trace the historical evolution of major themes and concepts in mathematics and the role and influence of various cultures in the development of these ideas. Multicultural perspectives will survey the impact of non-European cultures, including those of Asia, Africa, the Americas, and the Middle East, on the development of mathematical thought. The course will also trace major curriculum reform movements in the teaching and learning of mathematics throughout the United States during the nineteenth and twentieth centuries and their impact on contemporary school programs.
Prerequisite: Matriculation in Ed.D. in Pedagogy.
General and mathematics-specific domains of teacher knowledge are defined, critiqued, compared and contrasted. In addition, they are applied in analyzing and determining the domains’ roles in lesson planning, responding to students’ questions, addressing students’ misconceptions, and assessing student understanding. The research history on teacher knowledge is examined and critiqued with an eye towards understanding the introduction and use of the domains of knowledge being employed by current educators and researchers. The role of these knowledge domains in implementing the NCTM Standards also is examined. Articles on teacher knowledge are discussed and analyzed. These ideas are employed in analyzing classroom or interview videotapes, audiotapes, and transcripts to determine the potential use of teacher knowledge as it is instantiated in more practical situations.

*Prerequisite: Matriculation in Ed.D. in Pedagogy.*

**MATH 811  MATHEMATICS EDUCATION LEADERSHIP  3**

Students will gain experience working for systemic change in educational programs and thus become capable of assuming a leadership role for such change. This course is designed to provide a long-term experience with nurturing pedagogy, leadership development, and stewardship of best practices. Candidates will work closely with faculty to develop goals and expectations for specific change in their work settings, where appropriate, then evaluate progress towards these goals. Candidates will conduct fieldwork in this area, including experimental design, implementation, and evaluation of results. The course includes reading, seminars, and portfolio development, as well as presentations from visiting faculty and other leaders in mathematics education.

*Prerequisite: Matriculation in Ed.D. in Pedagogy.*

**MATH 812  MATHEMATICAL MODELING FOR MIDDLE LEVEL AND HIGH SCHOOL GRADES  3**

This course will examine mathematical modeling as a process of identifying a problem, determining a mathematical core, working within that core, and reexamining the problem to ascertain what mathematics reveals about the original problem. Specific models related to various areas of mathematics will be explored, developed, and applied in the solution of contemporary problems, and the models will serve as unifying structures in the secondary curriculum.

*Prerequisite: Matriculation in Ed.D. in Pedagogy.*
MATH 813 GEOMETRY FOR MIDDLE LEVEL AND HIGH SCHOOL GRADES
This course discusses specific topics from geometry, their impact on the changing geometry curriculum in the schools, their application through technology, and their connection to other areas within and outside mathematics. Examples include dimension, scaling, measurement, and fractal dimension, with their use as unifying themes that can be studied from several different points of view, that make use of current visualization technology, and that can be applied across disciplines. Additional topics may be selected from finite and projective geometries, spherical and other non-Euclidean geometries. The roles these topics play in enhancing mathematical thinking and visualization skills, both in these classroom teachers and, ultimately, in the students whom these teachers teach, are emphasized. Classroom materials, activities, and techniques are discussed and developed and concepts explained and explored through various modes, such as hands-on manipulatives, interactive computer software, and graphing calculators.
Prerequisite: A background in undergraduate geometry comparable to MATH 350 and matriculation in Ed.D. in Pedagogy.

MATH 814 ALGEBRA AND ANALYSIS FOR MIDDLE LEVEL AND HIGH SCHOOL GRADES
Topics from algebra and analysis will be used to explore and unify a variety of topics in the changing school curriculum. For example, the topic of linear transformations can be used to motivate the connection between geometric transformations and the related algebra. Topics will be selected to provide students with the tools to approach algebra numerically with middle school students as well as more abstractly with advanced senior high school students. Other topics, such as the Fundamental Theorem of Algebra, complex numbers, sequences, and series will be used to bridge the gap between algebra and topics in analysis. Then topics from analysis will be used to build a firm foundation on the structure of various number systems such as real and complex numbers. Part of the course will be axiomatic and theoretical development in the classical sense. Applications of these theoretical results to the school mathematics curriculum and to other academic fields, such as physics, will be explored.
Prerequisites: MATH 425 and MATH 431 and matriculation in Ed.D. in Pedagogy.

MATH 815 CRITICAL THINKING AND COGNITIVE DEVELOPMENT IN MATHEMATICS
This course focuses on cognitive development and the application of critical thinking and problem solving strategies to the teaching and learning of mathematics. Mathematical models as unifying structures will be examined together with investigations into methods of acquiring mathematical knowledge and the nature of mathematical proof. Contemporary learning theories in mathematics will be surveyed and applied in specific classroom situations.
Prerequisite: Matriculation in Ed.D. in Pedagogy.
MATH 825 RESEARCH IN MATHEMATICS EDUCATION 3
This course will examine the nature of research in mathematics education, its designs and methodologies, and its impact on school curricula. Research studies in cognitive development, curriculum and instruction, the teaching-learning process, language and communication in mathematics classrooms, and critical contemporary issues in mathematics education will be examined, analyzed, and discussed from the perspective of the classroom teacher.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

MATH 830 DISSERTATION PROPOSAL SEMINAR 1-3
Students will work with their dissertation advisors to develop and refine their dissertation proposals. The seminar is a supplement to the formal dissertation proposal approval process which is outlined in the handbook. Successful completion of this course does not imply approval of the dissertation proposal. Cross listed with Educational Foundations EDFD 830 and Center of Pedagogy, EDCO 830. This course will be offered as pass/fail only.
Prerequisite: Matriculation in Ed.D. in Pedagogy; admission to candidacy.

MATH 900 DISSERTATION ADVISEMENT 3-12
While enrolled in Dissertation Advisement, students will work with their dissertation advisor and dissertation committee. Credits are reported as IP (In Progress) while the dissertation is being written. At the successful conclusion of the dissertation defense, a final grade of pass will be recorded.
Prerequisite: Matriculation in Ed.D. in Pedagogy, advancement to candidacy.

EDUCATIONAL FOUNDATIONS
Course Descriptions

EDFD 740 THE ROLE OF LOGIC IN PHILOSOPHY FOR CHILDREN 3
The philosophy of logic is dealt with in this course in a special relationship to Philosophy for Children. Consideration is given to alternative logics such as the logic of dialogue, the logic of relations, and informal logic such as analogical reasoning, as well as induction and deduction.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 742 HERMENEUTICS OF CHILDHOOD 3
This course focuses on the role of dialogue, interpretation, and judgment in the study of childhood. Childhood is considered from the standpoints of history, philosophy, law, mythology, psychoanalysis, ethnography, cognitive science, art, literature and film. Special attention is given to the indigenous development of childhood philosophies.
Prerequisite: Matriculation in Ed.D. in Pedagogy.
EDFD 744 PHILOSOPHY OF BODY
This course focuses on the richly varied aspects of the concept of the human body as these have been expressed and codified through history. It provides a site for the linkage of philosophical, psychological, anthropological, historical, political, religious, and social perspectives on corporeity and the phenomenon of embodiment. Its larger goal is to explore ways in which philosophy of the body offers opportunities for moral and ethical inquiry in classroom communities of inquiry.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 745 PHILOSOPHY FOR CHILDREN AND ANcient GREEK PHILOSOPHY
This course focuses on the role of some core concepts established and developed by ancient Greek philosophers, the most important of which for Philosophy for Children are philosophy, childhood, dialogue, citizenship, and the education of virtue.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 750 SELECTED TOPICS IN PHILOSOPHY FOR CHILDREN
This course will focus on selected theoretical and practical issues in Philosophy for Children, including but not limited to research topics, pedagogical theory and strategy, curriculum assessment and development, the relationship of Philosophy for Children to various philosophical traditions, and related topics in critical thinking, moral education, and philosophy of education. May be repeated for a maximum of 6 semester hours.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 770 DOCTORAL INDEPENDENT STUDY
Student investigates selected topic(s) under the guidance of a doctoral faculty member. May be repeated for a maximum of 6 semester hours.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 811 PHILOSOPHY, PHILOSOPHY FOR CHILDREN, AND THE EDUCATIONAL EXPERIENCE
This course is an exploration of the philosophical and pedagogical assumptions that found educational theory and practice, and Philosophy for Children. The practice of philosophy as exemplified by Philosophy for Children represents, not just an academic discipline which is new to the education of children, but an approach to that discipline with significant implications for curriculum and pedagogy in general. Students will reflect as a community of inquiry on the philosophical assumptions of various models of education, and explore the implications of Philosophy for Children’s curriculum and methodology for educational renewal.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 812 CONTEMPORARY SOCIAL AND POLITICAL PHILOSOPHY AND PHILOSOPHY FOR CHILDREN
This course provides the participants (instructor and students) the opportunity to use contemporary social and political theory as a means of discerning the social and political dimensions of ordinary experience, and of making political analyses of the materials and methods of Philosophy for Children. This course also provides the opportunity to experiment with the community of inquiry as a forum for political inquiry and action. We will select a number of social and political issues to confront, work toward constructing personal and collective responses, and experiment in putting our convictions into action.
Prerequisite: Matriculation in Ed.D. in Pedagogy.
EDFD 813  EDUCATION FOR GLOBAL CITIZENSHIP  3
This course is a collaborative, dialogical inquiry into the relationship between education and the ideal of participatory global citizenship. It explores the concept of citizenship, what we mean by a “good” citizen, the relationship between local and global citizenship, and issues of indoctrination, group allegiance, forms of community, and the ethics of pluralism; all in the context of educational form, content and methodology.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 814  RECENT AMERICAN PHILOSOPHY AND PHILOSOPHY FOR CHILDREN  3
This course examines the major concepts of North American philosophy, including philosophy of education, from the late nineteenth century to the present, and their influence on the development of Philosophy for Children. These concepts include experience, judgment, inquiry, community, dialogue and democracy. Students will engage in critical study of selected works of Peirce, W. James, Royce, Santayana, Dewey, Mead, Buchler, C.I. Lewis and Beardsley, in addition to works by contemporary American philosophers.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 815  PHILOSOPHY FOR CHILDREN AND PHILOSOPHY OF MIND  3
This course explores a range of advanced topics in which the philosophy of mind and the philosophy of psychology intersect with Philosophy for Children. It deals with psychological concepts and theories of mind and mental formation that have a significant influence on Philosophy for Children. It investigates mind as both a natural and social formation. It examines everyday thinking about human psychology and its relation to children’s developing knowledge of mind. It relates philosophical theories of self and self-knowledge to materials and methods in Philosophy for Children. And it examines theories of creative thinking for potential insight into productive thinking in the Community of Inquiry.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 816  ETHICAL INQUIRY THROUGH NARRATIVE  3
This course provides students with an opportunity to engage in communal ethical inquiry through the medium of novels and short stories. Emphasis is placed on the narrative contextualization of ethical problems in literature, and in the latter’s relation to ethics as philosophical discourse.
Prerequisite: Matriculation in Ed.D. in Pedagogy.

EDFD 825  RESEARCH LITERATURE IN PHILOSOPHY FOR CHILDREN  3
An extensive inquiry into the appropriate uses of quantitative, qualitative and theoretical research in Philosophy for Children, and the identification of as yet unexplored areas for future study. The course is designed to provide necessary resources to students who are preparing their dissertations. It includes an exhaustive review and critique of the research literature in Philosophy for Children and closely related fields.
Prerequisite: Matriculation in Ed.D. in Pedagogy.
EDFD 830 DISSERTATION PROPOSAL SEMINAR 1-3
Students will work with their dissertation advisors to develop and refine their dissertation proposals. The seminar is a supplement to the formal dissertation proposal approval process which is outlined in the handbook. Successful completion of this course does not imply approval of the dissertation proposal. Cross listed with Center of Pedagogy, EDCO 830 and Mathematical Sciences, MATH 830. This course will be offered as pass/fail only. 
Prerequisite: Matriculation in Ed.D. in Pedagogy; admission to candidacy.

EDFD 900 DISSERTATION ADVISEMENT 3-12
While enrolled in Dissertation Advisement, students will work with their dissertation advisor and dissertation committee. Credits are reported as IP (In Progress) while the dissertation is being written. At the successful conclusion of the dissertation defense, a final grade of pass will be recorded.

Prerequisite: Matriculation in Ed.D. in Pedagogy, advancement to candidacy.
The Environmental Management doctoral program seeks to foster an emerging interdisciplinary approach to the study of the environment and humankind’s impact on natural resources. Broadly defined, the interdisciplinary program fosters understanding of the structure and function of environmental systems and their management. More specifically, the program focuses on the causes, impacts, and responses to environmental change in major urban areas. The doctoral program meets the urgent need for highly qualified, trained personnel in the private and public sectors to solve the world’s growing environmental problems. Because a deep understanding of environmental issues and solutions to environmental problems requires the knowledge and analytic approaches of several disciplines, the program’s faculty includes a wide range of natural, social and management scientists.

The doctoral program is centered on three separate yet interlocking research themes. Graduate students trained through the doctoral program focus on the intersections of these themes. The themes to be studied are:

- Water-Land Systems - Interactions between hydrological systems, including aquatic, estuarine, and coastal environments, and landscape structure and pattern.

  The waterland systems approach considers the interactions of fluvial, estuarine, marine, groundwater, and wetland systems with patterns of human settlement and industry. The highly urbanized northeastern region of New Jersey, while compact geographically, is part of a complex coastal environment in which such interactions can readily be observed. Since the region has a long history of coastal industrial activity, land- and water-use impacts over time can be readily studied. MSU is situated in the heart of the region; consequently students can conveniently conduct doctoral research projects and training exercises there.

- Sustainability, Vulnerability, and Equity - conceptualization and operationalization of these emerging areas of study within the context of urban environmental management.

  The concepts of sustainability, vulnerability, and equity have become critical for understanding urban environmental management. A primary objective of the doctoral program research mission is to more formally integrate these theoretical advancements into urban environmental change and management theory and practice. The themes of sustainability, vulnerability and equity constitute an interdisciplinary approach to urban environmental management that is based on the study of organizations and institutions. Research approaches within this component of the program are as follows: 1. Analysis of natural systems for the construction of indicators and establishing models for monitoring urban systems (e.g., water supply, material-use, waste systems) and associated environmental improvement or degradation; 2. Research into existing conditions and opportunities for enhancing the conditions of sustainability and equity, and vulnerability reduction in organizations and institutions, i.e., business, education, government-
tal, and non-governmental organizations (NGOs); and 3. Research into the dynamics of public policy and environmental sustainability, vulnerability, and equity.

- Modeling and Visualization - State-of-the-art computer-assisted techniques and methods to study the process of environmental change.

Modeling and visualization have become critical tools for environmental managers in advancing their understanding of how the major elements of the complex physical and human environment interact, particularly with respect to the urban environment. More sophisticated data gathering and processing devices, and updated software packages are the cutting-edge research tools for the environmental analysis and modeling community. This component of the doctoral program facilitates the integration of these new techniques and methods into the analysis of urban environmental issues. Within the program, there are several main research modeling and visualization themes. They include for example: 1. Linking environmental models to remote sensing and GIS for application to landscape dynamics; 2. Marine sediment and associated contaminant transport and chemodynamic modeling; and 3. Integration of modeling with other technologies like optical sensors and data acquisition electronics.

Goals of the doctor of Environmental Management Program: The overall mission is to emphasize research that is grounded in an interdisciplinary, systems-based approach to address environmental management issues. The specific objectives of the program are:

- To prepare environmental management professionals who will use research in a data based decision-making process that is firmly rooted in current scientific knowledge and methodology.
- To prepare environmental professionals who will recognize and analyze the relationships among the scientific, technological, societal and economic issues that shape environmental research and decision-making.
- To provide professionals already working in the environmental industry with an opportunity to pursue a rigorous, research-based, advanced degree as part-time, and evening students.

For more information about the academic program; e-mail: mcnicholasp@mail.montclair.edu, taylorj@mail.montclair.edu; call: (973) 655-7273; or fax: (973) 655-4072.

For general graduate school information and graduate application: e-mail Graduate.School@montclair.edu; call: (973) 655-5147; or fax: (973) 655-9207
Visit the website: www.montclair.edu/graduate

ADMISSION REQUIREMENTS

Admission Requirements. Applicants must meet the university’s graduate admissions criteria and submit the following for consideration:

1. A completed and signed application for doctoral study.
2. A personal essay describing your view of the relevance of doctoral study to your scholarly development, and your areas of potential research interest. Please also indicate any program faculty with whom you might work and with whom you have already communicated.
3. Official transcripts of undergraduate and any graduate work
4. GRE scores; TOEFL scores if necessary.
5. Three letters of recommendation from college/university faculty or professional colleagues who can attest to your potential for advanced study and research

6. Application fee.

**Financial Aid:** Several kinds of financial aid are available to graduate students who meet all admission requirements (see Financial Aid section in the front of the Graduate Catalog). A limited number of graduate assistantships including full tuition waivers, are available on a competitive basis for full-time D.Env.M. students. Applications for assistantships are included in the application packet.

**Deadlines:** The deadline for receipt of all application materials, including assistantship, is February 1st for admission in the following fall semester. Admission for Spring semester will be considered.

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**REQUIREMENTS FOR THE DOCTOR OF ENVIRONMENTAL MANAGEMENT DEGREE**

**Basic Degree Requirements:** Students with a bachelor’s degree will be required to take a minimum of 72 semester hours for the doctorate: 15 semester hours of required core courses, 24 semester hours of elective courses and 30-36 semester hours of research project and dissertation, which includes six semester hours of Research Project in Environmental Studies where a student develops research skills by working with one of several ongoing resident research groups. Following successful completion of the research seminar, a student must then complete a minimum of 24 semester hours of dissertation research. Up to 24 credits of previous graduate work may be applied towards the doctoral program when appropriate. Other requirements will include a doctoral qualifying examination and dissertation defense.

**Residency:** Doctoral program policies approved by the MSU Graduate Council require a year of full-time residency, defined as registration for 9 credits per semester. An alternative experience, outlined by the graduate program coordinator and approved by the program coordinator and the Graduate Dean, may fulfill the residency requirement. The program provides a specially designed residency experience for the student who is both working and engaged in graduate study. As an alternative experience, students will be placed in an intensive one-year research seminar linked to one of several ongoing research communities comprised of faculty and students working on related research. These research communities, linked by common interests; that include common space and equipment, structured meetings and seminars, and by electronic methods, create a support system of peers and mentors that is commonly lacking in part-time, non-residential graduate programs. The immersion in a team research project for a year with regular peer and mentor support and feedback satisfies the intent of residency.

**Retention:** It is essential that all students make continuing and regular progress toward their degree. Students are expected to maintain an overall 3.2 (out of 4.0) grade point average in all courses. Students take a qualifying exam appropriate to their course of study no sooner than completion of the first 36 credits of course work toward the doctoral degree. This exam will be developed and graded by the student’s dissertation committee.
Students also have to pass an oral examination and defense of their research plans prior to starting research and gaining admission to candidacy for the degree.

Full-time students are required to complete all core courses (15 semester hours and 6 hours of research seminar) and 3 elective courses (minimum 9 semester hours) within the first 3 years following matriculation. Following completion of regular coursework, 12 semester hours of dissertation research must have completed within 2 years. Once research has started students must register each fall and spring semester for 3 credits of dissertation research until the dissertation is successfully defended. Research credits also can be generated during the summer.

**Degree Candidacy:** In order to advance to candidacy, the student must pass the retention requirements, and prepare and defend a dissertation research proposal. The dissertation committee may accept the research proposal, accept the proposal with modification, reject the proposal pending significant changes and a second oral defense, or reject the proposal completely. A student whose defense is rejected will be granted one additional opportunity to defend. Following acceptance of a research proposal, the student is expected to register for a minimum of 3 semester hours of dissertation research with her/his principal research advisor for consecutive semesters until the dissertation has been defended.

**Dissertation:** Each doctoral dissertation in the Environmental Management program will address an environmental problem in an integrative, interdisciplinary, original and unique manner. The dissertation must include the discovery of new knowledge relevant to the environmental problem, integration of new and prior knowledge and finally application of this knowledge to the solution of the problem. The dissertation must communicate the discovery, integration and application effectively in a form that can be readily disseminated to the environmental management community.

It is expected that a student will select a principal research advisor, dissertation committee and develop a research proposal prior to completion of coursework. The dissertation committee will generally be multidisciplinary, reflecting the nature of the interdisciplinary research. The committee must include at least 3 members of the Montclair State University Doctoral Faculty and must include a 4th member from outside the university. Committee members from outside the University must be approved according to existing Graduate School policy.

**Final Defense:** A public defense of the dissertation must be completed in accordance with current Graduate School policy, following which the dissertation committee can approve the dissertation, approve with modification, or reject. It is expected that all dissertations will be published in one or more national/international peer reviewed journals.
REQUIREMENTS FOR THE DOCTOR OF ENVIRONMENTAL MANAGEMENT DEGREE

Semester Hours

I. Required Core Courses (15 semester hours)
   ENVR 721 Research Methods ................................................................. 3
   ENVR 770 Earth Systems Science ............................................................ 3
   LSLW 590 Environmental Law and Policy .............................................. 3
   BIOL 570 Ecology .................................................................................. 3
   Select one of the following:
      ENVR 760 Organizational Environmental Management ....................... 3
      MGMT 505 Management Process and Organizational Behavior ............ 3

II. Research Requirement (30-36 semester hours)
    (Minimum 24 semester hours of dissertation; maximum 30 semester hours of
dissertation allowed to degree)
    ENVR 895 Research Project in Environmental Management I ............... 3
    ENVR 896 Research Project in Environmental Management II ............... 3
    ENVR 900 Dissertation Advisement .................................................... 3

III. Electives (21-27 semester hours of courses selected with committee approval)

   Management and Social Science Courses
   CNFS 510 Environmental Impact of Recreation on Natural Areas .......... 2
   ECON 501 Economic Analysis ................................................................. 3
   ECON 503 Economic Problems of the Third World .................................. 3
   ECON 508 Economics of Public Management ......................................... 3
   ECON 544 Government and Business .................................................... 3
   ENVR 508 Environmental Problem Solving ........................................... 3
   ENVR 509 Environmental Change and Communication .......................... 3
   ENVR 551 Natural Resource Management ............................................ 3
   ENVR 610 Seminar in Environmental Management ............................... 3
   ENVR 704 Special Topics ................................................................. 1-4
   EUGS 603 Reading Seminar in Geography and Urban Studies .............. 2
   GEOS 509 Water Resource Management ............................................ 3
   INBS 501 International Business: Concepts and Issues .......................... 3
   INBS 511 Issues in International Management ....................................... 3
   INBS 520 Managing the Global Workforce .......................................... 3
   MGMT 510 Human Resource Management ........................................... 3
   SOCI 581 Sociological Perspectives on Health and Medicine ................ 3

   Physical Science Courses
   BIOL 532 Advanced Entomology .......................................................... 3
   BIOL 550 Topics In Microbiology ......................................................... 3
   BIOL 553 Microbial Ecology ................................................................. 4
   BIOL 571 Physiological Plant Ecology ................................................. 4
   BIOL 572 Wetland Ecology ................................................................. 4
   BIOL 573 Shoreline Ecology ............................................................... 4
   BIOL 574 Behavioral Ecology ............................................................... 3
   BIOL 580 Evolutionary Mechanisms ................................................... 3
   BIOL 595 Conservation Biology .......................................................... 3

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### CHEM 534 Chromatographic Methods: Theory and Practice 3

### ENVR 704 Special Topics 1-4

### GEOS 501 Air Resource Management 3

### GEOS 513 Waste Management 3

### GEOS 525 Environmental Geoscience 3

### GEOS 530 Paleocology 3

### GEOS 552 Applied Groundwater Modeling 4

### GEOS 560 Advanced Marine Geology 3

### GEOS 571 Geophysics 3

### GEOS 575 Geochemistry 3

### HLTH 502 Determinants of Environmental Health 3

### HLTH 565 Foundations of Epidemiology 3

### PHMS 565 Tidal Marsh Ecology 4

### PHMS 581 Coastal Geomorphology 4

**Methods Courses (Must take at least 1 course.)**

- **ENVR 655 Advanced Environmental Remote Sensing and Image Processing** 3
- **ENVR 704 Special Topics** 1-4
- **ENVR 775 Modeling in Environmental Science** 3
- **EUGS 680 Spatial Analysis** 3
- **EUGS 770 Advanced Geographic Information Systems** 3
- **STAT 541 Applied Statistics** 3

### IV. Additional requirements (6 semester hours)

(6 credits may be used for courses or research, depending on student need.)

Minimum semester hours: 72

**EARTH AND ENVIRONMENTAL STUDIES**

**Course Descriptions**

**ENVR 508 ENVIRONMENTAL PROBLEM SOLVING 3**

The purpose of this course is to train students to define environmental problems, develop their skills in solving these problems, as well as commitment to work toward their solution. Each lesson consists of student preparation of reading selected articles, classroom orientation, field trips, and the student-instructor follow-up. Field trip topics include pedestrian/vehicle conflict, school site development, plants as a city resource, urban/rural recreation, sign ordinances, transportation and similar topics.

**ENVR 509 ENVIRONMENTAL CHANGE AND COMMUNICATION 3**

Prepare students as professional environmentalists: communication and journalism strategies, theory of persuasion, and roles as catalyst, solution giver, process helpers, and resource person.

**ENVR 551 NATURAL RESOURCE MANAGEMENT 3**

Provide background in natural resource management; wildlife, fisheries, forests, water and related components. Includes field trips.
ENVR 610  SEMINAR IN ENVIRONMENTAL MANAGEMENT  3
This is a methods seminar focusing on the techniques of managing a project with environmental significance. Students will design and plan in detail a project to improve an existing environmental problem or to implement an economically important project that would minimize environmental problems.

ENVR 655  ADVANCED ENVIRONMENTAL REMOTE SENSING AND IMAGE PROCESSING  3
This course provides a forum to explore cutting edge advances in remote sensing of the environment afforded by new satellite and aircraft based imaging platforms and to provide facility with image processing (IP) and geographic information systems (GIS) software. Topics covered include multispectral, hyperspectral and multiangular reflectance data, very high resolution panchromatic imagery, active radar and lidar systems, microwave imagery, advanced spatial and statistical raster analysis, and interfaces to GIS.
Prerequisite: Matriculation in a graduate program or departmental approval.

ENVR 721  RESEARCH METHODS  3
Advanced research techniques, beginning with census reports, government surveys and reports from other agencies. Field research, both cultural and physical; mapping techniques; the design of appropriate scale and data transformation to familiarize the range of possibilities and the need for careful choice of data and maps. Computer applications in geographic problem solving.

ENVR 760  ORGANIZATIONAL ENVIRONMENTAL MANAGEMENT  3
This course examines the impact of profit, non-profit and public organizations on the natural environment. It analyzes the pressures, the types, and the procedures for implementing an environmental management system (EMS); and case studies from various organizations. It also studies the internal and external strategies of organizations relative to environmental sustainability goals.
Prerequisite: Matriculation in a graduate program or departmental approval.

ENVR 770  EARTH SYSTEMS SCIENCE  3
This course investigates geosystems. In studying processes within the atmosphere, hydrosphere, biosphere, and lithosphere, the course provides a holistic understanding of earth’s historical, present and future systems. Current techniques and tools for data collection and analysis, such as field methods, GIS, Remote Sensing, are included in the course.
Prerequisite: Matriculation in a graduate program or departmental approval.

ENVR 775  MODELING IN ENVIRONMENTAL SCIENCE  3
This course introduces fundamental concepts of interphase and interphase transfer and transport related to our living environment. It focuses more on natural interphase transfer, including pathways and fate, and is mainly designed to understand the mechanisms and processes. (3 hour lecture.)
Prerequisite: One-year college level courses in mathematics, physics, geology, biology or chemistry; or departmental approval.
ENVR 895  RESEARCH PROJECT IN
ENVIRONMENTAL MANAGEMENT I 3
The course is structured to provide doctoral students with the opportunity to develop or
update the research skills needed to design and complete a dissertation. Students can
either develop an independent topic for their research project in consultation with faculty
advisors or they can choose to work on one of the University’s on-going environmental
studies research projects.
Prerequisite: Departmental approval.

ENVR 896  RESEARCH PROJECT IN
ENVIRONMENTAL MANAGEMENT II 3
The course is structured to provide doctoral students with the opportunity to develop or
update the research skills needed to design and complete a dissertation. Students can
either develop an independent topic for their research project in consultation with faculty
advisors or they can choose to work on one of the University’s on-going environmental
studies research projects.
Prerequisite: ENVR 895

ENVR 900  DISSERTATION ADVISEMENT 3
While enrolled in Dissertation Advisement, students will work with their dissertation
advisor and dissertation committee to write their dissertation. Credits are reported as IP
(In Progress) while the dissertation is being written. At the successful conclusion of the
dissertation defense, a final grade of pass or fail will be recorded. May be repeated without
limit.
Prerequisite: Advancement to candidacy.

EUGS 603  READING SEMINAR IN GEOGRAPHY AND
URBAN STUDIES 2
Required of all master’s degree candidates concentrating in Geography and Urban
Studies. This semester entails directed independent study in preparation for a 3-hour
written comprehensive examination.

EUGS 680  SPATIAL ANALYSIS 3
This course will introduce students to techniques for the analysis of spatial data. The
course will heavily utilize GIS and Remote Sensing data with particular attention to
applications and manipulation techniques. Topics include characterizing spatial data,
data sampling, visualization, data modeling, point pattern analysis, and spatial data
interaction.
Prerequisite: A GIS course, EUGS 470 or higher level.
EUGS 770 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS 3
This course will allow students with demonstrated knowledge and skills in the geographic information sciences (GIS and/or Spatial Analysis and/or Remote Sensing) to expand on the range of techniques at their disposal for analyzing and visualizing geographic and other spatial data sets. Students are expected to develop and effect a small but well-defined research project which will result in a paper and an oral presentation. The course will make much use of industry standard GIS and Remote Sensing software packages in data application, manipulation and visualization. The course will cover programming in 3GLs, 4 GLs and macro languages for processing and analyzing extensive spatial data sets as well as the construction of customized graphical user interfaces for specific applications.
Prerequisites: One of the following or equivalent: EUGS 470, EUGS 680, ENVR 455, ENVR 655, GEOS 455 or departmental approval

GEOS 501 AIR RESOURCE MANAGEMENT 3
Spatial distribution of energy in the atmosphere treated in terms of natural factors and man’s induced changes (atmospheric pollution). Incoming sun energy as modified by man is traced through the atmosphere, vegetation, soil and water.
Prerequisite: For majors in the College of Science and Mathematics.

GEOS 509 WATER RESOURCE MANAGEMENT 3
The spatial patterns of the water resource both as surface water and ground-water. Processes affecting availability and techniques of estimation are stressed.
Prerequisite: For majors in the College of Science and Mathematics.

GEOS 513 WASTE MANAGEMENT 3
This course examines liquid waste management (sewage, sewerage, septic, and acid mine drainage) and solid waste management (composting, incineration, dumps, sanitary landfills, ocean dumping, and resource recovery). Management of radioactive wastes is included.
Prerequisite: For majors in the College of Science and Mathematics.

GEOS 525 ENVIRONMENTAL GEOSCIENCE 3
In-depth study of the relationships between man and the physical environment of atmosphere, hydrosphere and lithosphere. Particular attention to problems of mineral resource and fossil-fuel depletion; pollution of air, water and soils and waste disposal and recycling, simple computer modeling of environmental situations. (3 hours lecture)
Prerequisite: Graduate standing in either the Environmental Studies-Physical or Geo-science Program, or instructor’s permission.

GEOS 530 PALEOECOLOGY 3
Distribution and association of fossils as interpreted from the evidence presented in the geologic record. Detailed paleoecological field study made of selected faunal assemblages. (2 hours lecture; 2 hours lab)
Prerequisite: Course in invertebrate paleobiology.

GEOS 552 APPLIED GROUNDWATER MODELING 4
Introduction to groundwater flow and contaminant transport modeling, using a variety of current software packages. Saturated and unsaturated media will be considered. Emphasis is on application of models to the solution of common problems encountered in hydrology industry and research. (3 hours lecture; 2 hours lab.)
Prerequisites: Undergraduate hydrogeology course and college-level calculus or departmental approval.
GEOS 560  ADVANCED MARINE GEOLOGY  3
Development and evolution of the ocean basins; marine sedimentation; shoreline development and classification; submarine topography; mineral resources of the sea. Laboratory analysis of marine sediments and fossil assemblages. Required field trips. (2 hours lecture; 2 hours lab.)
Prerequisites: Courses in physical geology and one 400 level course in marine geology or oceanography.

GEOS 571  GEOPHYSICS  3
Theory and application of conventional geophysical methods: seismology, magnetism, electricity and gravity. Laboratory includes the collection and interpretation of geophysical data. Field trips. (3 hours lecture.)
Prerequisites: Courses in physical geology and College Physics II and Calculus A.

GEOS 575  GEOCHEMISTRY  3
Chemical laws and principles applied to the earth, chemical composition of the earth, distribution and relative abundance of the elements. Radioactive materials, atmospheric precipitation of geochemicals, the geochemistry of polluted water (including solid and liquid wastes), study of meteorites. Required field trips. (3 hours lecture)
Prerequisites: General chemistry, petrology.

PHMS 565  TIDAL MARSH ECOLOGY  4
Salt marsh development and pycnography: community structure, energetics, and interrelationships. The role of slat marshes in estuarine and marine systems. The impact of man on the marsh. Offered at N.J. Marine Sciences consortium.
Prerequisite: Departmental approval.

PHMS 581  COASTAL GEOMORPHOLOGY  4
Coastlines and their evolution; processes and materials of the coastal zone; shore zone hydrodynamics and sedimentation: beach and barrier systems with special emphasis on the New Jersey shoreline. Offered at New Jersey Marine Sciences Consortium.
Prerequisite: Departmental approval.

BIOLOGY AND MOLECULAR BIOLOGY
Course Descriptions

BIOL 532  ADVANCED ENTOMOLOGY  3
Examination of insects as model systems for biological inquiry. Topics include an integrative treatment of insect molecular biology, genetics, physiology, behavior, evolution and ecology.
Prerequisite: Matriculation in M.S. Biology program or permission of instructor.

BIOL 550  TOPICS IN MICROBIOLOGY  3
Coverage of selected topics such as the microbial genetics, antibiotic action, bacteriophage, virus, cancer and microbial metabolism. Emphasis will be placed on practical applications of modern research in specific areas.
Prerequisite: Microbiology.
BIOL 553 MICROBIAL ECOLOGY 4
Exploration of the essential role of microorganisms in the ecosystem. Lecture, field trips and laboratory will demonstrate the ubiquitous and highly adaptive evolution of microorganisms, their interrelationships and their profound influence on the biosphere. 
Prerequisites: Microbiology.

BIOL 570 ECOLOGY 3
Basic ecological principles and concepts. Habitat approach to field exercises in fresh water and terrestrial ecology. Intra- and interspecific relationships with all living members of the ecosystem, problems in plant and animal biology. 
Prerequisites: Botany and zoology.

BIOL 571 PHYSIOLOGICAL PLANT ECOLOGY 4
The effects of soil, light, and water on plant growth, as well as, toxic effects of metals and salinity are measured using growth chamber and greenhouse facilities. 
Prerequisite: Botany and one course in field biology. Special fee.

BIOL 572 WETLAND ECOLOGY 4
Important biotic, chemical and physical parameters of New Jersey’s estuaries. Evolution and successional trends of estuarine communities. Ecology of individual communities studies by field trips to Delaware Bay shore and to some Atlantic coast bays, marshes and offshore barrier islands. Also offered at the New Jersey Marine Sciences Consortium. 
Prerequisites: Botany and zoology, and field biology. Special fee.

BIOL 573 SHORELINE ECOLOGY 4
Community structure, trophic dynamics, species diversity and distribution of bottom dwelling organisms in relationship to their environment; lectures, laboratory work and field investigations of marine benthos. Also offered at the New Jersey Marine Sciences Consortium. 
Prerequisites: Botany, and zoology, and field biology.

BIOL 574 BEHAVIORAL ECOLOGY 3
This seminar course explains the ecological consequences of animal behavior, viewed within the context of how behavior evolves and how populations adapt to their environments. 
Prerequisites: Field biology and zoology.

BIOL 580 EVOLUTIONARY MECHANISMS 3
This course will provide students the opportunity to read primary resource material and interpret the findings of the data. This course will also teach students how to read, critique and present scientific data to a peer group. Students will analyze, discuss and present primary research articles with respect to scientific content, accuracy of the data and significance of the experiments. 
Prerequisite: Matriculation in the M.S. Biology program or permission of instructor.
BIOL 595  CONSERVATION BIOLOGY:  
THE PRESERVATION OF BIOLOGICAL DIVERSITY  
3
This course addresses concerns about the loss of biological diversity and genetic resources through species extinctions. Students will learn about the importance of maintaining biological diversity, the problems involved in monitoring and protecting sensitive and crucial habitat, the impact of human societies on biodiversity, the alternatives to the destruction of habitat/species, the prospects of restoration, and the policies needed to prevent the loss of biological diversity. Students will also learn about population processes that are directly related to species survival. This course is cross listed with CNFS 595.

Prerequisite: Botany, and zoology, and field biology.

CHEMISTRY AND BIOCHEMISTRY

CHEM 534  CHROMATOGRAPHIC METHODS: THEORY AND PRACTICE  
3
A combined lecture/hands-on course in the theory and practice of chromatography; including GC, HPLC, GC-MS, GPC, and SFC, as well as computerized instrument control, data acquisition, and processing.

Prerequisites: CHEM 310 (Analytical Chemistry) and 311 (Instrumental Analysis) or equivalents.

ECONOMICS AND FINANCE

ECON 501  ECONOMIC ANALYSIS  
3
The resource allocation and distribution of income implications of a market oriented economy operating under various degrees of competition. Also analyzed are the determinants of consumer and market demand, and, the theoretical cost structure of firms.

ECON 503  ECONOMIC PROBLEMS OF THE THIRD WORLD  
3
A survey of major economic problems of the Third World; examination of the economic structure of developing countries and of general theories of economic development; critical evaluation of various policy alternatives for their development; analysis of possible economic relationships between First and Second Worlds with the Third World.

Prerequisite: ECON 501.

ECON 508  ECONOMICS OF PUBLIC MANAGEMENT  
3
Computer-based applications of capital theory to the decision-making process of government. Analysis of alternative approaches to public sector project evaluation. Spreadsheet applications of project analysis in physical and human resource management areas covering water resources, public health, and education.

Prerequisite: ECON 501.

ECON 544  GOVERNMENT AND BUSINESS  
3
The evolution of government influences on the functioning of the American economy. The causes and consequences of government regulation and control. The importance of economic analysis in the foundation of public policies.

Prerequisites: ECON 501.
HEALTH AND NUTRITION SCIENCES

Course Descriptions

HLTH 502 DETERMINANTS OF ENVIRONMENTAL HEALTH 3
Advanced study of health and safety aspects of the environment: air, water, industrial pollution and the impact of expanding population on health problems.

HLTH 565 FOUNDATIONS OF EPIDEMIOLOGY 3
Provides an understanding of the epidemiologic method of identifying disease-causing agents. Emphasizes the generation of hypotheses based on descriptive epidemiologic data, the testing of hypotheses by analytical epidemiologic research design, the determination of causality and value of epidemiologic research in developing disease prevention programs.

LEGAL STUDIES

Course Descriptions

LSLW 590 ENVIRONMENTAL LAW AND POLICY 3
The goal of this course is to provide students with the theoretical foundations and practical applications of Environmental Law. The course will utilize a model and method approach, which will present theory and procedure in a case problem context. The course will acquaint students with various traditional legal theories and compare and contrast them with law as it has evolved to meet new changes in society.

MANAGEMENT AND INFORMATION SYSTEMS

Course Descriptions

MGMT 505 MANAGEMENT PROCESS AND ORGANIZATIONAL BEHAVIOR 3
Review of classical and modern approaches to the managerial process as it relates to the manager’s functions of planning, organizing, staffing, leading, and controlling. These reviews will be tied to the open-system model and the contingency approach as an overall framework for understanding the management of organizations.
Prerequisite: M.B.A. and D.Env.M. degree students only.

MGMT 510 HUMAN RESOURCE MANAGEMENT 3
This course examines how managers can utilize modern human resource practices in order to improve company performance and efficiencies. Topics include staffing for quality, outsourcing, use of core and contingent workforce, managing workforce commitment and performance, legal issues, managing careers, and reward systems. A case study approach is used.
Prerequisite: MGMT 505.
INTERNATIONAL BUSINESS
Course Descriptions

INBS 501 INTERNATIONAL BUSINESS: CONCEPTS AND ISSUES 3
Provide a conceptual and analytical framework of the nature, the process and organizational aspects of the international business. Business students will be acquainted with the dynamics of global business environment, international competition in the domestic and foreign markets and strategic issues relating to international business. The course will provide basics in international economics, foreign exchange, monetary systems and financial markets, the role of multinationals, international marketing and logistics, taxation and accounting systems, cultural challenge, management styles and practices across the nations.
Prerequisite: ECON 501; M.B.A. degree students only.

INBS 511 ISSUES IN INTERNATIONAL MANAGEMENT 3
An in-depth analysis of all components of international business management. Major emphasis is placed upon multi-national business operations including foreign profit centers, national and cultural differences, and comparative management systems with consequent impact on profitability. These are studied in terms of their influence on all areas of international trade. Cross listed with Management, MGMT 511.
Prerequisites: MGMT 505.

INBS 520 MANAGING THE GLOBAL WORKFORCE 3
The objective of the course is to increase knowledge about managing a global workforce. The course provides a framework for understanding how individual, group and organization factors impact global businesses and how organizations respond to them. Some focus will be placed on understanding cross-cultural issues within this context. Practical application, case analysis, and effective management practices of international companies are emphasized. Cross listed with Management, MGMT 520.
Prerequisite: MGMT 505.

MATHEMATICAL SCIENCES (STATISTICS)
Course Descriptions

STAT 541 APPLIED STATISTICS 3
Review of estimation and hypothesis testing for one sample and two sample problems; introduction to non-parametric statistics, and linear regression; fundamental principles of design, completely randomized design, randomized block design, Latin square, and 2 factor designs.
Prerequisite: STAT 440 Fundamentals of Modern Statistics or 443 Introduction to Mathematical Statistics and permission of graduate coordinator.
CNFS 510 ENVIRONMENTAL IMPACT OF RECREATION ON NATURAL AREAS

Students will examine the impact of recreation on natural areas in four of New Jersey’s major ecosystems: upland forest, pine lands, salt marsh and barrier beach. Investigation of recreation records and plans will allow for comparison and contrast of heavily used sites with those which have been relatively undisturbed. Students develop “recreation impact statements”. CNFS 511 must be taken concurrently.

Prerequisite: Special fee.
Corequisite: CNFS 511.

CNFS 511 FIELD INVESTIGATION OF ENVIRONMENTAL IMPACT OF RECREATION ON NATURAL AREAS

The field experiences in this one-credit course are designed to support and supplement the theoretical foundations communicated in the course, “Environmental Impact of Recreation on Natural Areas” (CNFS 510), and to provide practical exercises in measuring impact on recreational areas. CNFS 510 must be taken concurrently.

Corequisite: CNFS 510.

SOCIOLOGY
Course Descriptions

SOCI 581 SOCIOLOGICAL PERSPECTIVES ON HEALTH AND MEDICINE

This course will introduce the student to the interesting and complex relationships that exist between society, health, and health care. Class lecture discussions will focus on the connections between social structure, the quality of the physical and social environment, and health. Special attention will be given to work environments. This course will also deal with the effects of social factors on the experience of one’s body, the perception of disease, and the construction of medical knowledge.
Theory and practice inform one another in the Department of Anthropology at Montclair State University. Building on a long tradition of public/applied anthropology in urban, multicultural settings, the Department of Anthropology insures that students have strong training in theory, method, and practice. Field based experiences in public and private institutions are central to the department’s curriculum, and are designed such that students gain knowledge of grant writing, analysis and practice by working in research teams under collaborating faculty and community mentors. Urban and Medical anthropology, public health, environmental anthropology and social movements in local and global contexts are key themes in the Department of Anthropology. The department is dedicated to providing students with knowledge and skills that will serve the public in ways that reduce social inequalities and create citizen scholars. Consult our website for updates about additional programmatic and departmental information, http://chss2.montclair.edu/anthropology/home.html.

**ANTHROPOLOGY**

**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
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<tbody>
<tr>
<td>ANTH 510</td>
<td>ETHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A graduate introduction to anthropological field research, human evolution, cultural variation, and anthropological approaches to modern world problems.</td>
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<tr>
<td>ANTH 530</td>
<td>DEVELOPMENT ANTHROPOLOGY</td>
<td>3</td>
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<td></td>
<td>A critical review of theories of development with emphasis on anthropological contributions to development debates. Selected case study examination of the role of anthropologists in formulating, executing, and evaluating development programs and projects.</td>
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<tr>
<td>ANTH 536</td>
<td>CULTURAL DIVERSITY</td>
<td>3</td>
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<tr>
<td></td>
<td>Descriptive, historical and theoretical anthropological works provide the basis for studying likenesses and differences among folk and urban cultures, their historic development, and interrelationships between differing aspects of culture.</td>
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<tr>
<td>ANTH 540</td>
<td>ANTHROPOLOGY OF CITIES</td>
<td>3</td>
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<td></td>
<td>This course constitutes an examination of urbanism and the process of urbanization from a cross-cultural, comparative perspective. The course is designed to expose the student to the major conceptual models of urban communities, cities, nation states and the world system. We will study the works of scholars who have engaged in debates about these complex sociocultural formations.</td>
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<tr>
<td>ANTH 541</td>
<td>CULTURE AND THOUGHT</td>
<td>3</td>
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<tr>
<td></td>
<td>How different peoples organize and use their cultures; data from formal ethnography, semantic analysis, ethnoscience and componential analysis for purposes of studying culture and building culture theories.</td>
<td></td>
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ANTH 550  CULTURE CHANGE  3
Emphasis on the dynamics of cultural change and continuity. Factors and conditions which stimulate and reward culture change are reviewed. Particular attention is given to how the cultural, economic, political and social interests of major international powers produce change and conflict throughout the developing world.

ANTH 560  APPLIED MEDICAL ANTHROPOLOGY  3
This course surveys selected theoretical and practical problems encountered by applied medical anthropologists in the cross-cultural identification of disease and delivery of health care services. Special emphasis is placed on the role of applied medical anthropologists in local and international health care institutions and programs. The course includes consideration of ethical problems encountered by anthropological practitioners.
The Department of Art and Design provides graduate study in an intensively visual arts focused environment. Two distinctive professional degrees are offered: The Master of Fine Arts in Studio Art (MFA) and the Master of Fine Arts in Fine Arts (MA). Further the MA offers a range of specialized concentrations: Fine Arts Education, Art History, Studio and Museum Management. All programs encourage a focus on interdisciplinary visual arts and issues beyond the academic settings of the classroom and studio.

**MASTER OF FINE ARTS DEGREE IN STUDIO ART (MFA)**

The Master of Fine Arts in Studio Art addresses the needs of students who are preparing themselves for careers as artists in the contemporary art world. The Department has designed a flexible program that allows students to work in any MFA studio in any given semester providing that it relates to the student's ongoing project. This gives the student greater access to a diversified faculty. Our program will also include interdisciplinary courses that allow the students and the faculty to introduce concepts that are not rooted in a specific discipline. The focus in all studio courses is working with a particular faculty member/artist.

A Master of Fine Arts degree in Studio Art will be awarded to those students who successfully complete the 60 credit program requiring a minimum of two years of full-time study in residence at the University. The program defines a student as having full-time status if he/she is enrolled for 15 semester hours per semester. All course schedules must be approved by the MFA graduate program coordinator. While University policy permits students six years to complete the degree, MFA students are strongly encouraged to complete the degree during the two year time period that they are assigned studio space on campus. An extension of course work beyond two years will be considered in exceptional circumstances but studio space will not be provided beyond a two year maximum.

**ADMISSION REQUIREMENTS**

Applicants to the MFA program will be expected to possess a Bachelor of Fine Arts degree (BFA) or an undergraduate degree with a minimum of 40 semester hours of studio course work, or an MA in Studio Art. Prerequisites will include a minimum of 15 semester hours in art history. Official transcripts of all graduate and undergraduate work and two letters of recommendation are also required. The applicant's ability as an artist and competence in the history of art will be the primary considerations in making the admissions decision. The application file, a portfolio of recent work, and a statement of intent will be reviewed by the MFA committee.
**REQUIREMENTS FOR THE MASTER OF FINE ARTS DEGREE IN STUDIO ART (MFA)**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
</table>

**I. Required Courses (48 semester hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCR 501</td>
<td>MFA Seminar in Theory and Criticism I</td>
<td>3</td>
</tr>
<tr>
<td>ARCR 601</td>
<td>MFA Seminar in Theory and Criticism II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 501</td>
<td>MFA Seminar in Studio Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARST 601</td>
<td>MFA Seminar in Studio Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 502</td>
<td>Independent Study: Independent Studio Work I</td>
<td>3</td>
</tr>
<tr>
<td>ARST 506</td>
<td>Special Topics in Studio Art I</td>
<td>3</td>
</tr>
<tr>
<td>ARST 507</td>
<td>Special Topics in Studio Art II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 508</td>
<td>Independent Study: MFA Research Project I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Or ARST 512 or 514 or 516 or 518 or 520 or 522 or 524 or 526 or 528 or 530 or 532)</td>
<td></td>
</tr>
<tr>
<td>ARST 509</td>
<td>Independent Study: MFA Research Project II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Or ARST 513 or 515 or 517 or 519 or 521 or 523 or 525 or 527 or 529 or 531 or 533)</td>
<td></td>
</tr>
<tr>
<td>ARST 604</td>
<td>Independent Study: Project Criticism I</td>
<td>3</td>
</tr>
<tr>
<td>ARST 608</td>
<td>Independent Study: MFA Final Project I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Or ARST 612 or 614 or 616 or 618 or 620 or 622 or 624 or 626 or 628 or 630 or 632)</td>
<td></td>
</tr>
<tr>
<td>ARST 609</td>
<td>Independent Study: MFA Final Project II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(Or ARST 613, or 615 or 617 or 619 or 621 or 623 or 625 or 627, or 629, or 631, or 633)</td>
<td></td>
</tr>
<tr>
<td>ARST 650</td>
<td>Independent Study: MFA Exhibition, Paper and Final Review</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARST 503</td>
<td>Independent Study: Independent Studio Work II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 605</td>
<td>Independent Study: Project Criticism II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 606</td>
<td>Special Topics in Studio Art III</td>
<td>3</td>
</tr>
<tr>
<td>ARST 607</td>
<td>Special Topics in Studio Art IV</td>
<td>3</td>
</tr>
<tr>
<td>ARST ___</td>
<td>Additional 3 semester hours in Independent Study: MFA Research Project I</td>
<td>3</td>
</tr>
<tr>
<td>ARST ___</td>
<td>Additional 3 semester hours in Independent Study: MFA Final Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

**II. Studio Electives (select 6 semester hours from the following):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARST 503</td>
<td>Independent Study: Independent Studio Work II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 605</td>
<td>Independent Study: Project Criticism II</td>
<td>3</td>
</tr>
<tr>
<td>ARST 606</td>
<td>Special Topics in Studio Art III</td>
<td>3</td>
</tr>
<tr>
<td>ARST 607</td>
<td>Special Topics in Studio Art IV</td>
<td>3</td>
</tr>
<tr>
<td>ARST ___</td>
<td>Additional 3 semester hours in Independent Study: MFA Research Project I</td>
<td>3</td>
</tr>
<tr>
<td>ARST ___</td>
<td>Additional 3 semester hours in Independent Study: MFA Final Project II</td>
<td>3</td>
</tr>
</tbody>
</table>

**III. General Electives ................................................................. 6**

(Any graduate course, 500 level or above)

Minimum semester hours: 60
The Master of Arts in Fine Arts allows for a concentration in Studio, Art History, Fine Arts Education, or Museum Management. Areas of specialization in Studio are: painting, sculpture, photography, cinematography, drawing, ceramics, printmaking, fiber arts, and jewelry. Areas of specialization in art history are: Medieval, Northern Renaissance, Italian Renaissance, Baroque, Neo-classical, Nineteenth Century, and Twentieth Century. Areas of focus in Art Education are: Art History or Studio and either a project or thesis approach to inquiry. Areas of specialization in Museum Management are: fine arts, history, archaeology, anthropology/ethnology, natural history, and science.

ADMISSION REQUIREMENTS

The requirements established for all graduate studies and for matriculation at Montclair State University will be followed in respect to this program. Applicants to the Department of Art and Design are required to take the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT).

Eligibility for matriculation for a Concentration in Studio, Art History, or Fine Arts Education requires either an undergraduate degree in fine arts or the equivalent as determined by the department. Advice concerning all requirements, including art history requirements, writing samples, admission interviews, portfolio reviews, and suggested portfolio contents may be obtained from the department’s graduate program coordinator.

Candidates for admission to the Fine Arts Education Concentration must have certification in Art by the Department of Education of New Jersey or an equivalent and reciprocal certification from another state. Candidates must also have 15 semester hours of undergraduate art history and an undergraduate GPA of 3.00. A writing sample and a successful portfolio review by the department’s admissions committee is also required.

Candidates for Admission to the Museum Management Concentration must have an undergraduate degree in Studio Art, Art History, Archaeology, Anthropology, History, Science, Business, Legal Studies, or a related degree. A writing sample and a statement of intent are required for admission ad evidence of the applicant's ability and objectives. Advice concerning requirements may be obtained from the Department of Art and Design's Museum Management Coordinator.
## REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN FINE ARTS (MA)

### CONCENTRATION IN STUDIO

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Required Courses (12 Semester Hours):</strong></td>
<td></td>
</tr>
<tr>
<td>ARST 600 Seminar in Art I: Contemporary Art and Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>ARST 610 Seminar in Art II: Graduate Project</td>
<td>3</td>
</tr>
<tr>
<td>Art History (400-600 level) (to be selected with the approval of the graduate program coordinator)</td>
<td>6</td>
</tr>
<tr>
<td><strong>II. Specialization (15 semester hours):</strong></td>
<td></td>
</tr>
<tr>
<td>Studio courses 500-600 level with at least 12 semester hours in one studio area (to be selected with the approval of the graduate program coordinator)</td>
<td>15</td>
</tr>
<tr>
<td><strong>III. Free Electives</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>IV. Final Oral Examination and Graduate Project and Paper Review:</strong></td>
<td></td>
</tr>
<tr>
<td>Information concerning this requirement may be obtained from the graduate program coordinator.</td>
<td></td>
</tr>
</tbody>
</table>

Minimum semester hours: 33

### CONCENTRATION IN ART HISTORY

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Required Courses (6 semester hours):</strong></td>
<td></td>
</tr>
<tr>
<td>ARHS 503 Graduate Resources and Methods of Research in the Arts</td>
<td>3</td>
</tr>
<tr>
<td>ARHS 698 Master's Thesis</td>
<td>3</td>
</tr>
<tr>
<td><strong>II. Art History Seminars</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>III. Art History Electives</strong></td>
<td>15</td>
</tr>
<tr>
<td>To be selected with the approval of the graduate program coordinator.</td>
<td></td>
</tr>
<tr>
<td>Courses may be chosen from ARHS 400 level (maximum 9 semester hours), ARHS 500-600 level courses, as well as ARST 600, ARGS 553 and ARGS 653 by approval of graduate program coordinator.</td>
<td></td>
</tr>
<tr>
<td><strong>IV. Free Electives</strong></td>
<td>6</td>
</tr>
<tr>
<td>Fine Arts courses or courses in other departments. Subjects pertinent to the candidate's Concentration in Art History are recommended, such as: photography, drawing, painting, sculpture, history, literature, foreign language, religion, philosophy. To be selected with approval of the graduate program coordinator.</td>
<td></td>
</tr>
<tr>
<td><strong>V. Final Oral Examination and Thesis Defense:</strong></td>
<td></td>
</tr>
<tr>
<td>Information concerning this requirement may be obtained from the graduate program coordinator.</td>
<td></td>
</tr>
</tbody>
</table>

Minimum semester hours: 33
CONCENTRATION IN FINE ARTS EDUCATION

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Required Courses:</td>
</tr>
<tr>
<td>ARED 501 Contemporary Viewpoints in Art Education .................. 3</td>
</tr>
<tr>
<td>ARED 502 Advanced Curriculum Construction in Art Education .......... 3</td>
</tr>
<tr>
<td>ARHS 590 Modern Philosophies of Art I .................................. 3</td>
</tr>
<tr>
<td>Any 400-600 level Art History course, except ARHS 503, to be selected with the approval of the departmental Graduate Program Coordinator .............. 3</td>
</tr>
<tr>
<td>II. Either A, B, or C:</td>
</tr>
<tr>
<td>A. Visual Project and Report - Studio</td>
</tr>
<tr>
<td>ARST 600 Seminar in Art I: Contemporary Art and Aesthetics .......... 3</td>
</tr>
<tr>
<td>ARST 610 Seminar in Art II: Graduate Project .......................... 3</td>
</tr>
<tr>
<td>ARED 550 Independent Study in Art Education ............................ 3</td>
</tr>
<tr>
<td>and</td>
</tr>
<tr>
<td>Studio courses .............................................................................. 6</td>
</tr>
<tr>
<td>500-600 level with 6 semester hours of sequential graduate-level study in one studio area listed below, to be selected with the approval of the graduate program coordinator. Prerequisite: Students must have the equivalent of 9 semester hours of undergraduate study in their intended graduate studio area.</td>
</tr>
<tr>
<td>Ceramics (ARCE 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Cinematography (ARFM 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Drawing (ARDW 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Fibers and Fabrics (ARFI 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Metalwork and Jewelry (ARMJ 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Painting (ARPA 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Photography (ARPH 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Printmaking (ARPM 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Sculpture (ARSC 500, 510, 600, 610)</td>
</tr>
<tr>
<td>B. Master's Thesis-Studio</td>
</tr>
<tr>
<td>ARED 698 Master's Thesis ............................................................ 3</td>
</tr>
<tr>
<td>ARED 550 Independent Study in Art Education ............................ 3</td>
</tr>
<tr>
<td>ELRS 503 Methods of Research ............................................... 3</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>ARHS 503 Graduate Resources and Methods of Research in the Arts ...... 3</td>
</tr>
<tr>
<td>and</td>
</tr>
<tr>
<td>Studio courses .............................................................................. 6</td>
</tr>
<tr>
<td>500-600 level with 6 semester hours of sequential graduate-level study in one studio area listed below, to be selected with the approval of the graduate program coordinator. Prerequisite: Students must have the equivalent of 9 semester hours of undergraduate study in their intended graduate studio area.</td>
</tr>
<tr>
<td>Ceramics (ARCE 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Cinematography (ARFM 500, 510, 600, 610)</td>
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<tr>
<td>Drawing (ARDW 500, 510, 600, 610)</td>
</tr>
<tr>
<td>Fibers and Fabrics (ARFI 500, 510, 600, 610)</td>
</tr>
</tbody>
</table>
Metalwork and Jewelry (ARMJ 500, 510, 600, 610)
Painting (ARPA 500, 510, 600, 610)
Photography (ARPH 500, 510, 600, 610)
Printmaking (ARPM 500, 510, 600, 610)
Sculpture (ARSC 500, 510, 600, 610)

C. Master's Thesis-Art History
ARED 698  Master's Thesis ......................................................................... 3
ARED 550  Independent Study in Art Education ......................................... 3
ELRS 503  Methods of Research ................................................................... 3
or
ARHS 503  Graduate Resources and Methods of Research in the Arts ...... 3
and
One graduate level art history course ............................................................ 3
One course at the 500 or above level in the same area of art history as one of the
above required art history courses (Ancient, Medieval, Renaissance, Modern or
non-Western)
and
One graduate level studio course .................................................................. 3
One course at the 500 level or above in one graduate studio area listed below to
be selected with the approval of the graduate program coordinator.
Prerequisite: Students must have the equivalent of 9 semester hours of under-
graduate study in their intended graduate studio area.
Ceramics (ARCE 500, 510, 600, 610)
Cinematography (ARFM 500, 510, 600, 610)
Drawing (ARDW 500, 510, 600, 610)
Fibers and Fabrics (ARFI 500, 510, 600, 610)
Metalwork and Jewelry (ARMJ 500, 510, 600, 610)
Painting (ARPA 500, 510, 600, 610)
Photography (ARPH 500, 510, 600, 610)
Printmaking (ARPM 500, 510, 600, 610)
Sculpture (ARSC 500, 510, 600, 610)

III. Electives: (6 semester hours):
Either A or B:
A.
Students following the Visual Project and Report course of study may select
graduate level courses (numbered 500 or above) from any department to satisfy
this elective requirement.
or
B.
Students intending to write a master's thesis must take a minimum of one 3
semester hours course in a non-fine arts discipline which will provide the student
with adequate background information to conduct interdisciplinary inquiry, such as:
Special Education (SPED 579; 588; 589)
Educational Leadership (ELAD 510; 521)
Law (LSLW 531; 554)
History (HIST 515; 518)
Sociology (SOCL 563; 566; 568; 569)
Philosophy (PHLC 508; 509; 615)
Anthropology (ANTH 510)

V. Final Oral Examination
Final oral examination in relation to Visual Project and Report or Master's Thesis. In addition to the successful completion of required course work all candidates are required to make a final presentation of either a project of visual work connected to their studio area and a related project report; or a Master's Thesis. Visual Project and Report or Master's Thesis must demonstrate direct links to classroom pedagogy. Advice concerning this requirement may be obtained from the departmental graduate program coordinator.

Minimum semester hours: 33

CONCENTRATION IN MUSEUM MANAGEMENT

Prerequisite: Any two undergraduate Art History courses.

I. Required Core Courses (12 semester hours)
   ARHM 583 The Business of Art .......................................................... 3
   MGMT 505 Management Process and Organizational Behavior .......... 3
   ACCT 501 Financial Accounting ..................................................... 3
   THTR 585 Grantsmanship and Fundraising ...................................... 3

   Required Departmental Courses (12 semester hours)
   ARHS 503 Graduate Resources and Methods of Research in the Arts ..... 3
   ARHM 501 Museum Management .................................................... 3
   ARHM 520 Exhibition Planning and Management ......................... 3
   ARHM 698 Master's Thesis in Museum Management ...................... 3

II. A. Electives (Select 2)
   Two graduate level courses in one area of specialization to be selected in consultation with Museum Management Coordinator and the graduate program coordinator of respective department)
   Courses in Art History (ARHS level 500 and above)
   Courses in Anthropology (ANTH level 500 and above)
   Courses in Archaeology (any course in the Archaeology Minor level 400 and above)
   Courses in History (HIST 500 level and above)
   Courses in Chemistry (CHEM level 500 and above)
   Courses in Biology (BIOL level 500 and above)
   Courses in Geology (GEOS level 500 and above)
   Courses in Earth and Environmental Studies (ENVR, CNFS level 500 and above)

   B. Business, Legal Studies and Communication (Select 2)
   MKTG 501 Marketing Management .............................................. 3
   INBS 501 International Business Concepts and Issues .................... 3
   INBS 530 Export Management ...................................................... 3
   MGMT 510 Human Resources Management ..................................... 3
MGMT 513  Leadership and Behavior .......................................................... 3
MGMT 525  Entrepreneurship and Small business Management
LSLW 599  Special Topics in Legal Studies (especially recommended when addressing legal issues for arts and museums)
LSLW 558  Cross-Cultural Conflict Resolution ........................................ 3
LSLW 537  Entertainment law ................................................................. 3
LSLW 551  Negotiation Theory and Practice ............................................. 3
SPCM 520  Introduction to Public Relations .............................................. 3
SPCM 555  Survey: Organizational Communication

Minimum semester hours: 33

ART AND DESIGN

MFA in Studio Art
Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCR 501</td>
<td>MFA SEMINAR IN THEORY AND CRITICISM I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An appropriate amount of written critical work and relevant required readings will be assigned, accompanied by regular discussions and critiques of student work in progress. Visits to area museums and galleries are required and such material evidenced in the level of conversation and student work. The seminar will be instructed by a visiting art critic. Offered fall semester.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: MFA majors only. Special fee.</td>
<td></td>
</tr>
<tr>
<td>ARCR 601</td>
<td>MFA SEMINAR IN THEORY AND CRITICISM II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Continuation of ARCR 501. Taken serially. Offered Fall semester.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: ARCR 501, a total of 30 semester hours in MFA degree program (ARCR, ARST, ARHS: 500 level), departmental approval, MFA majors only. Special fee.</td>
<td></td>
</tr>
<tr>
<td>ARST 501</td>
<td>MFA SEMINAR IN STUDIO ART I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Weekly seminars given by visiting artists, fine arts faculty and the visiting critic. Discussions on major issues in contemporary art and critiques of the students' ongoing projects. MFA seminars are coordinated by the visiting critic and the MFA Director. Offered Spring semester only.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: 15 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.</td>
<td></td>
</tr>
<tr>
<td>ARST 502</td>
<td>INDEPENDENT STUDY: INDEPENDENT STUDIO WORK I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Taken in the first year of the program, the student works independently under the guidance of a visiting or full-time faculty member selected by the student (different from the faculty member engaged in the MFA Research Project). The faculty member should be selected based on his/her particular interest in the student's Research Project. May be repeated three times for a maximum of twelve semester hours.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: Departmental approval; MFA majors only. Special fee.</td>
<td></td>
</tr>
<tr>
<td>ARST 503</td>
<td>INDEPENDENT STUDY: INDEPENDENT STUDIO WORK II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Continuation of ARST 502. Taken serially. May be repeated three times for a maximum of twelve semester hours.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: ARST 502; departmental approval; MFA majors only. Special fee.</td>
<td></td>
</tr>
</tbody>
</table>
ARST 506 SPECIAL TOPICS IN STUDIO ART I 3
Each course is a seminar/workshop experience which addresses a specific topic in the visual arts. Topics may be interdisciplinary in nature or speak to a particular studio discipline and may include an investigation of new media and processes. The topic for each course will be announced at registration time. May be repeated three times for a maximum of twelve semester hours as long as the topic is different.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 507 SPECIAL TOPICS IN STUDIO ART II 3
Taken serially. Each course addresses a new topic in the visual arts. Topics should not be repeated. May be repeated three times for a maximum of twelve semester hours as long as the topic is different.
Prerequisites: ARST 506; departmental approval; MFA majors only. Special fee.

ARST 508 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
PAINTING
The student will be guided toward the development of a consistent body of work. Exploration of a variety of approaches and techniques will be encouraged in order that the student can most fully realize his/her personal artistic aims.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 509 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
PAINTING
Continuation of ARST 508. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 512 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
DRAWING
This course allows the student to begin focusing on drawing as a fine art. It will explore the major applications of a variety of graphic media while stressing the drawing as a mode or art form unto itself.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 513 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
DRAWING
Continuation of ARST 512. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 514 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
PRINTMAKING
The student begins to research and develop a creative project under the guidance of a faculty mentor selected by the student. The student may work with traditional and nontraditional printmaking processes resulting in multiples or unique images such as monoprints.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 515 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
PRINTMAKING
Continuation of ARST 514. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.
ARST 516 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
PAPERMAKING
Individualized creative studies for the MFA candidate whose progress is reviewed weekly by a faculty mentor. Areas of inquiry include, but are not limited to: coloration, casting, sheet formation, etc.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 517 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
PAPERMAKING
Continuation of ARST 516. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 518 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
PHOTOGRAPHY
Individualized creative studies in photography under the guidance of a faculty mentor. Areas of inquiry include black and white, color, non-silver and multi-media applications in photography.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 519 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
PHOTOGRAPHY
Continuation of ARST 518. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 520 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
FILMMAKING
This course is intended to assist the advance student in developing unique and individualized approaches in motion picture making. Emphasis will be placed on exploration and experimentation in the production of short works.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 521 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
FILMMAKING
Continuation of ARST 520. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 522 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
VIDEO
Students produce video projects in 3/4 inch format, utilizing state-of-the-art facilities at the DuMont Television Center, including full three-camera studio set up, special effects, telecine, sound mixes and editing.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 523 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
VIDEO
Continuation of ARST 522. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.
ARST 524 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
SCULPTURE
The course is intended to allow the MFA candidate to explore a select variety of issues and media in the arena of sculpture. The specific concerns considered will be derived from close consultation between the student and his faculty mentor.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 525 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
SCULPTURE
Continuation of ARST 524. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 526 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
CERAMICS
Research and development of a creative project under the guidance of a faculty mentor.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 527 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
CERAMICS
Continuation of ARST 526. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 528 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
FIBER
Individualized creative studies for the MFA candidate whose progress is reviewed weekly by a faculty mentor. Areas of inquiry include on-loom, off-loom, surface design, textile design, felt, leather, wood, plastics, etc.
Prerequisites: Departmental approval; MFA majors only.

ARST 529 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
FIBER
Continuation of ARST 528. Taken serially.
Prerequisites: Departmental approval; MFA majors only.

ARST 530 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
JEWELRY/METALSMITHING
Research and development of a creative project under the guidance of a faculty mentor.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 531 INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3
JEWELRY/METALSMITHING
Continuation of ARST 530. Taken serially.
Prerequisites: Departmental approval; MFA majors only. Special fee.

ARST 532 INDEPENDENT STUDY: MFA RESEARCH PROJECT I: 3 or 6
MULTI-MEDIA
The student begins to research and develop a multi-media creative project under the guidance of a faculty mentor selected by the student. The project may include the investigation of a combination of traditional visual arts media, interdisciplinary media or new media.
Prerequisites: Departmental approval; MFA majors only. Special fee.
ARST 533  INDEPENDENT STUDY: MFA RESEARCH PROJECT II: 3 MULTI-MEDIA
Continuation of ARST 532. Taken serially.
Prerequisites: ARST 532; departmental approval; MFA majors only. Special fee.

ARST 601  MFA SEMINAR IN STUDIO ART II  3
Continuation of ARST 501. Taken serially. Offered spring only.
Prerequisites: ARST 501; 45 semester hours in MFA degree program; departmental approval, MFA majors only. Special fee.

ARST 604  INDEPENDENT STUDY: PROJECT CRITICISM I  3
Individualized guidance and critique of the student's final project by a second full-time faculty member on the student's project committee (not to be taken with the student's project advisor).
Prerequisites: 30 semester hours in MFA degree program (ARCR, ARST, ARHS: 500 level), taken with MFA Final Project I or II; departmental approval; MFA majors only. Special fee.

ARST 605  INDEPENDENT STUDY: PROJECT CRITICISM II  3
Continuation of ARST 604. Taken serially.
Prerequisites: ARST 604; departmental approval; MFA majors only. Special fee.

ARST 606  SPECIAL TOPICS IN STUDIO ART III  3
Taken serially. Each course addresses a new topic in the visual arts. Topics should not be repeated. May be repeated twice for a maximum of nine semester hours as long as the topic is different.
Prerequisites: ARST 507; departmental approval; MFA majors only. Special fee.

ARST 607  SPECIAL TOPICS IN STUDIO ART IV  3
Taken serially. Each course addresses a new topic in the visual arts. Topics should not be repeated. May be repeated twice for a maximum of nine semester hours as long as the topic is different.
Prerequisites: ARST 606; departmental approval; MFA majors only. Special fee.

ARST 608  INDEPENDENT STUDY: MFA FINAL PROJECT I: 3 PAINTING
Intended as an opportunity for the MFA candidate to produce a body of original and cohesive work under the guidance of a project advisor selected by the student. Must be taken as a two semester sequence with ARST 609.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 609  INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6 PAINTING
The MFA candidate continues to develop a body of work under the guidance of his/her project advisor. The sequence of Final Project I and II will culminate in the MFA Thesis Exhibition which will demonstrate the candidate's abilities and level of artistic achievement.
Prerequisites: ARST 608; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.
ARST 612 INDEPENDENT STUDY: FINAL PROJECT I: DRAWING 3
The student develops a creative project under the guidance of a project advisor selected by the student. Must be taken as a two semester sequence with ARST 613.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 613 INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6 DRAWING
The student continues to develop a body of work under the guidance of his/her project advisor, concluding with the MFA Exhibition. This course will bring to fruition the students research and exploration of the various approaches to drawing. They will reach certain conclusions evidenced in their work about the possibilities of the art form and their personal use of graphic modes of expression.
Prerequisites: ARST 612; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.

ARST 614 INDEPENDENT STUDY: MFA FINAL PROJECT I: 3 PRINTMAKING
The student develops a creative project under the guidance of a project advisor selected by the student. Must be taken as a two semester sequence with ARST 615.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 615 INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6 PRINTMAKING
The student continues to develop a body of work under the guidance of his/her project advisor, concluding with the MFA Exhibition.
Prerequisites: ARST 614; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.

ARST 616 INDEPENDENT STUDY: MFA FINAL PROJECT I: 3 PAPERMAKING
The student develops a creative project under the guidance of a project advisor selected by the student. Must be taken as a two semester sequence with ARST 617.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 617 INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6 PAPERMAKING
The student continues to develop a body of work under the guidance of his/her project advisor, concluding with the MFA Exhibition.
Prerequisites: ARST 616; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.
ARST 618 INDEPENDENT STUDY: MFA FINAL PROJECT I: PHOTOGRAPHY
Individualized creative study for the MFA candidate under the guidance of a project advisor selected by the student. Areas of inquiry include black and white, color, non-silver and multimedia applications in photography. Must be taken as a two semester sequence with ARST 615.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 619 INDEPENDENT STUDY: MFA FINAL PROJECT II: PHOTOGRAPHY
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.
Prerequisites: ARST 618; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.

ARST 620 INDEPENDENT STUDY: MFA FINAL PROJECT I: FILMMAKING
This course is intended to assist the advanced MFA candidate develop a unique and individualized approach to his/her final project. Must be taken as a two semester sequence with ARST 621.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 621 INDEPENDENT STUDY: MFA FINAL PROJECT II: FILMMAKING
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.
Prerequisites: ARST 620; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.

ARST 622 INDEPENDENT STUDY: MFA FINAL PROJECT I: VIDEO
Individualized creative study for the MFA candidate under the guidance of a project advisor. Students produce video projects utilizing state-of-the-art facilities at the DuMont Television Center. Must be taken as a two semester sequence with ARST 623.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 623 INDEPENDENT STUDY: MFA FINAL PROJECT II: VIDEO
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.
Prerequisites: ARST 622; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.
ARST 624 INDEPENDENT STUDY: MFA FINAL PROJECT I: 3
SCULPTURE
The student develops a creative project under the guidance of a project advisor selected by the student. Must be taken as a two semester sequence with ARST 625.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 625 INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6
SCULPTURE
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.
Prerequisites: ARST 624; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.

ARST 626 INDEPENDENT STUDY: MFA FINAL PROJECT I: 3
CERAMICS
Development of a creative project based on each student's personal artistic interest/imagery under the guidance of a project advisor selected by the student. Must be taken as a two semester sequence with ARST 627.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.

ARST 627 INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6
CERAMICS
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.
Prerequisites: ARST 626; departmental approval; MFA majors only. Special fee.
Corequisites: ARST 604 or 605, ARST 650.

ARST 628 INDEPENDENT STUDY: MFA FINAL PROJECT I: 3
FIBER FORMS
Individualized creative study for the MFA candidate whose progress is guided by a project advisor selected by the student. Areas of inquiry include on-loom, off-loom, surface design, textile design, felt, leather, wood, plastics, etc. Must be taken as a two semester sequence with ARST 629.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only.

ARST 629 INDEPENDENT STUDY: MFA FINAL PROJECT II: 3 or 6
FIBER FORMS
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.
Prerequisites: ARST 628; departmental approval; MFA majors only.
Corequisites: ARST 604 or 605, ARST 650.

ARST 630 INDEPENDENT STUDY: MFA FINAL PROJECT I: 3
JEWELRY/METALSMITHING
The student develops a creative project under the guidance of a project advisor, selected by the student. Must be taken as a two semester sequence with ARST 631.
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.
ARST 631 INDEPENDENT STUDY: MFA FINAL PROJECT II:  
JEWELRY/METALSMITHING  
3 or 6  
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.  
Prerequisites: ARST 630; departmental approval; MFA majors only. Special fee. 
Corequisites: ARST 604 or 605, ARST 650.  

ARST 632 INDEPENDENT STUDY: MFA FINAL PROJECT I:  
MULTI-MEDIA  
3  
The student develops a multi-media creative project under the guidance of a project advisor selected by the student. The project may include the investigation of the combination of traditional visual media, interdisciplinary media or new media. Must be taken as a two semester sequence with ARST 633.  
Prerequisites: 30 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.  

ARST 633 INDEPENDENT STUDY: MFA FINAL PROJECT II:  
MULTI-MEDIA  
3 or 6  
The student continues to develop a creative project under the guidance of his/her project advisor, culminating in a Thesis Exhibition.  
Prerequisites: ARST 632; departmental approval; MFA majors only. Special fee. 
Corequisites: ARST 604 or 605, ARST 650.  

ARST 650 INDEPENDENT STUDY: MFA EXHIBITION, PAPER AND FINAL REVIEW  
3  
Independent study with the project advisor. In the final semester of the program the student is required to exhibit his/her final project and present a paper which describes his/her aesthetic position. The exhibition and paper will be reviewed by the student's project committee. 
Prerequisites: 45 semester hours in MFA degree program; departmental approval; MFA majors only. Special fee.  
Corequisite: MFA Final Project II  

ARST 651 INDEPENDENT STUDY: MFA PROJECT EXTENSION  
2  
Continuation of ARST 650. Must be taken if an incomplete grade is received in ARST 650. Independent study with the project advisor. The fee for 2 semester hours will be charged to the student but no credit will be given and no grade will appear on the transcript. May be repeated two times to complete ARST 650 (M.F.A. Exhibition, Paper and Final Review) but no credit given.  
Prerequisites: Departmental approval; MFA majors only. Special fee.
# MA in Fine Arts

**Concentration in Art History**

**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARHS 503</td>
<td>GRADUATE RESOURCES AND METHODS OF RESEARCH IN THE ARTS</td>
<td>3</td>
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<tr>
<td></td>
<td>Introduction to the approaches, methods and goals of art-historical research, including descriptive, bibliographic, stylistic, and iconographic analysis.</td>
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<tr>
<td>ARHS 579</td>
<td>THEORIES OF MEDIEVAL AND EARLY RENAISSANCE ART</td>
<td>3</td>
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<td>The ways in which art theory and methods of study affect our understanding of Medieval and Early Renaissance art will be the focus of this seminar. Topics to be discussed: the historiography of the two fields, nationalism in art historical studies, the social history of art, feminist interpretations, reception theory, semiotics, museum display, Panofsky, and Shapiro. Class discussions based on readings and student presentations.</td>
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<tr>
<td>ARHS 580</td>
<td>THE AMERICAN COLLECTOR AND NEW YORK MUSEUMS</td>
<td>3</td>
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<td>The history of American art collecting is studied using the private collections that are now incorporated into museums in New York City. The contents of these collections, the ways they are housed, and the role of museum as educational institution will be examined in light of social and cultural ideals. Discussions based on readings and field trips.</td>
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<tr>
<td>ARHS 581</td>
<td>SELECTED WRITINGS BY ARTISTS ON ART</td>
<td>3</td>
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<td>A selection of writings by artists on art are presented, including theoretical writings, excerpts from diaries and letters, manifestoes, interviews, etc. The class is designed as a seminar focusing on analysis, interpretation, and discussion of these primary sources.</td>
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<td>ARHS 590</td>
<td>MODERN PHILOSOPHIES OF ART I</td>
<td>3</td>
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<td>Major writers in art in the nineteenth and twentieth centuries. The nature of the creative experience; art in the life of the individual and of society; the creative process; new materials; institutions and sentiments affecting current thinking in the field. Discussions based on readings of philosophers, poets, social scientists and psychologists.</td>
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<tr>
<td>ARHS 591</td>
<td>MODERN PHILOSOPHIES OF ART II</td>
<td>3</td>
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<td>The writings of 19th and 20th century artists and their interpreters; such works as the &quot;Futurist's Manifesto&quot; and Kandinsky's &quot;The Spiritual in Art&quot;.</td>
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<tr>
<td>ARHS 592</td>
<td>SELECTED PROBLEMS ART HISTORY I</td>
<td>3</td>
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<td></td>
<td>Art problems, iconographic topics and themes of a historic, social and philosophical nature. Topic selection will depend upon the special areas of the professor or guest professor invited for the semester. May be repeated seven times for a maximum of 24 semester hours.</td>
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<tr>
<td>ARHS 593</td>
<td>SELECTED PROBLEMS ART HISTORY II</td>
<td>3</td>
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<tr>
<td></td>
<td>Continuation of ARHS 592. Taken serially. May be repeated three times for a maximum of twelve semester hours.</td>
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</table>

*Prerequisite: ARHS 592.*
ARHS 594  NORTHERN RENAISSANCE ART  3
15th and 16th century paintings in northern Europe - especially Italy, Flanders and Holland; the development of Realism and style in relation to social change and the general ideas of the period, including contemporary music. Jan Van Eyck, Van der Weyden, Bosch, Peter Breughel and Matthias Gruenewald.

ARHS 680  FIELD TRIP IN ART HISTORY  2 - 6
Travel courses to art sources in the United States and foreign countries not to exceed six graduate credits. First-hand contact with the historic art forms of the places visited and study of their monuments and works in their museums and galleries. Subject(s) to be defined by the professor. May be repeated for a maximum of twelve credits.
Prerequisite: Special fee.

ARHS 698  MASTER'S THESIS  3
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take ARHS 699 if they don't complete ARHS 698 within the semester.
Prerequisite: Departmental approval.

ARHS 699  MASTER’S THESIS EXTENSION  1
Continuation of Master's Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: ARHS 698.

MA in Fine Arts
Concentration in Studio
Course Descriptions

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Descriptions</th>
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<tbody>
<tr>
<td></td>
<td>ARCE 500  GRADUATE CERAMICS: POTTERY AND SCULPTURE I 3</td>
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<tr>
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<td>The emphasis of this course is on the development of a body of work that reflects a personal aesthetic and shows and imaginative, sophisticated application of ceramic studio technology. Prerequisites: Portfolio review, departmental approval. Special fee.</td>
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<tr>
<td></td>
<td>ARCE 510  GRADUATE CERAMICS: POTTERY AND SCULPTURE II 3</td>
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<tr>
<td></td>
<td>Continuation of ARCE 500. Taken serially. Prerequisites: Departmental approval. Special fee.</td>
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<tr>
<td></td>
<td>ARCE 600  GRADUATE CERAMICS: POTTERY AND SCULPTURE III 3</td>
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<tr>
<td></td>
<td>Continuation of ARCE 510. Taken serially. Prerequisites: Departmental approval. Special fee.</td>
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<tr>
<td></td>
<td>ARCE 610  GRADUATE CERAMICS: POTTERY AND SCULPTURE IV 3</td>
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<tr>
<td></td>
<td>Continuation of ARCE 600. Taken serially. May be repeated for a maximum of nine semester hours. Prerequisites: Departmental approval. Special fee.</td>
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<td>Course Code</td>
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<tr>
<td>ARDW 501</td>
<td>GRADUATE LIFE DRAWING I</td>
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<td>Advanced problems in drawing based upon a study of the human figure.</td>
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<td><strong>Prerequisite:</strong> Special fee.</td>
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<tr>
<td>ARDW 511</td>
<td>GRADUATE LIFE DRAWING II</td>
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<tr>
<td></td>
<td>Continuation of ARDW 501. Taken serially.</td>
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<td></td>
<td><strong>Prerequisite:</strong> ARDW 501. Special fee.</td>
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<tr>
<td>ARDW 601</td>
<td>GRADUATE LIFE DRAWING III</td>
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<tr>
<td></td>
<td>Continuation of ARDW 511. Taken serially.</td>
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<td></td>
<td><strong>Prerequisite:</strong> ARDW 511. Special fee.</td>
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<tr>
<td>ARDW 611</td>
<td>GRADUATE LIFE DRAWING IV</td>
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<tr>
<td></td>
<td>Continuation of ARDW 601. Taken serially. May be repeated for a maximum of nine credits.</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARDW 601. Special fee.</td>
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<tr>
<td>ARFI 500</td>
<td>GRADUATE FORM IN FIBER I</td>
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<tr>
<td></td>
<td>Designing with simple and four harness floor looms in a variety of techniques and materials. Taken serially.</td>
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<td></td>
<td><strong>Prerequisite:</strong> Special fee.</td>
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<tr>
<td>ARFI 510</td>
<td>GRADUATE FORM IN FIBER II</td>
</tr>
<tr>
<td></td>
<td>Primary emphasis on designing with simple and four harness table and floor looms. A variety of techniques and materials. Taken serially.</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARFI 500. Special fee.</td>
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<tr>
<td>ARFI 522</td>
<td>GRADUATE DECORATION OF FABRICS I</td>
</tr>
<tr>
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<td>Survey course in all aspects of fabric embellishment; tie-dye, batik, blockprint, tritik discharge, silkscreen printing, 3M matrix, etc. Taken serially.</td>
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<td></td>
<td><strong>Prerequisite:</strong> Special fee.</td>
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<tr>
<td>ARFI 600</td>
<td>GRADUATE FORM IN FIBER III</td>
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<tr>
<td></td>
<td>Continuation of ARFI 510. Taken serially.</td>
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<td></td>
<td><strong>Prerequisite:</strong> ARFI 510. Special fee.</td>
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<tr>
<td>ARFI 610</td>
<td>GRADUATE FORM IN FIBER IV</td>
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<td></td>
<td>Continuation of ARFI 600. Taken serially. May be repeated for a maximum of nine credits.</td>
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<td></td>
<td><strong>Prerequisite:</strong> ARFI 600. Special fee.</td>
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<tr>
<td>ARFI 632</td>
<td>GRADUATE DECORATION OF FABRIC IV</td>
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<tr>
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<td>Continuation of ARFI 622. Taken serially. May be repeated for a maximum of nine credits.</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARFI 622. Special fee.</td>
</tr>
<tr>
<td>ARFI 634</td>
<td>GRADUATE OFF-LOOM TEXTILES IV</td>
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<tr>
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<td>Intensive work in a chosen non-loom textile technique, e.g., knotting. Taken serially. May be repeated for a maximum of nine credits.</td>
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<tr>
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<td><strong>Prerequisites:</strong> ARFI 624.</td>
</tr>
</tbody>
</table>
ARFM 500  GRADUATE CINEMATOGRAPHY I  3
Techniques, materials and theories of motion picture production for visually experienced students.
Prerequisite: Special fee.

ARFM 510  GRADUATE CINEMATOGRAPHY II  3
Continuation of ARFM 500. Taken serially.
Prerequisite: ARFM 500. Special fee.

ARFM 600  GRADUATE CINEMATOGRAPHY III  3
Continuation of ARFM 510. Taken serially.
Prerequisite: ARFM 510. Special fee.

ARFM 610  GRADUATE CINEMATOGRAPHY IV  3
Continuation of ARFM 600. Taken serially. May be repeated for a maximum of nine credits.
Prerequisite: ARFM 600. Special fee.

ARGD 500  GRADUATE GRAPHIC DESIGN I  3
Techniques and principles of design of printed matter and displays, elements of layout, illustration, typography, printing process, and preparation of copy for the printer.
Prerequisite: Departmental approval. Special fee.

ARGD 510  GRADUATE GRAPHIC DESIGN II  3
Continuation of ARGD 500. Taken serially.
Prerequisite: ARGD 500 or instructor's permission. Special fee.

ARGS 553  INDEPENDENT STUDY, GRADUATE I  1-8
Under this course designation advanced students may either expand or extend their experience in a chosen field or medium. Direction, conduct and evaluation of the work are developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his/her prior work in the chosen media. Credits to be arranged. May be repeated for a maximum of nine semester hours.
Prerequisite: Departmental approval.

ARGS 560  GRADUATE VISUAL ARTS WORKSHOP  1 - 12
Selected studio topics which represent current concerns within the contemporary world of the visual arts. May be repeated for a maximum of 24 semester hours as long as the topic is different.
Prerequisite: Departmental approval. Special fee.

ARGS 653  INDEPENDENT STUDY, GRADUATE II  1 - 8
Under this course designation advanced students may either expand or extend their experience in a chosen field or medium. Direction, conduct and evaluation of the work developed in consultation with the instructor. As a basis for admission and planning, each student will present a representative selection of his/her prior work in the chosen medium. Credits to be arranged. May be repeated for a maximum of nine semester hours.
Prerequisite: Departmental approval.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARGS 680</td>
<td>FIELD TRIP IN STUDIO</td>
<td>2-6</td>
</tr>
<tr>
<td></td>
<td>Travel courses to art sources in the United States</td>
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<td></td>
<td>and foreign countries not to exceed six graduate</td>
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<tr>
<td></td>
<td>credits. First hand contact with the historic art</td>
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<tr>
<td></td>
<td>forms of the places visited and with artists and</td>
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<tr>
<td></td>
<td>craftsmen. Each student selects an area of study in</td>
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<td></td>
<td>which the places visited have rich art sources. As</td>
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<td>preparation for the course, the student outlines a</td>
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<td>chosen study problem, reads background material, and</td>
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<td>lists sources they expect to utilize. Subject(s) to</td>
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<td>be defined by the professor. May be repeated for a</td>
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<td></td>
<td>maximum of twelve credits.</td>
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<td></td>
<td><strong>Prerequisite:</strong> Departmental approval.</td>
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</tr>
<tr>
<td>ARMJ 500</td>
<td>GRADUATE METALWORK AND JEWELRY I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Designing jewelry and small sculpture in varied</td>
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<tr>
<td></td>
<td>metals; the techniques of flat sheet metal and</td>
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<td>casting.</td>
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<td></td>
<td><strong>Prerequisite:</strong> Special fee.</td>
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</tr>
<tr>
<td>ARMJ 510</td>
<td>GRADUATE METALWORK AND JEWELRY II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Continuation of ARMJ 500. Taken serially.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARMJ 500. Special fee.</td>
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<tr>
<td>ARMJ 600</td>
<td>GRADUATE METALWORK AND JEWELRY III</td>
<td>3</td>
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<tr>
<td></td>
<td>Continuation of ARMJ 510. Taken serially.</td>
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</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARMJ 510. Special fee.</td>
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<tr>
<td>ARMJ 610</td>
<td>GRADUATE METALWORK AND JEWELRY IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Designing jewelry and small sculpture in varied</td>
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<td>metals. The techniques of flat sheet metal and</td>
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<td>casting. Continuation of ARMJ 600. Taken serially.</td>
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<tr>
<td></td>
<td>May be repeated for a maximum of nine credits.</td>
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</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARMJ 600. Special fee.</td>
<td></td>
</tr>
<tr>
<td>ARPA 500</td>
<td>GRADUATE PAINTING I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Studio in painting to further the creative expression</td>
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</tr>
<tr>
<td></td>
<td>and technical knowledge of the student in various</td>
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<tr>
<td></td>
<td>painting media. Personal and professional development</td>
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<td>through studio work, trips and the study of the</td>
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<td>contemporary artists.</td>
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<td></td>
<td><strong>Prerequisite:</strong> Special fee.</td>
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<tr>
<td>ARPA 510</td>
<td>GRADUATE PAINTING II</td>
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<td></td>
<td>Continuation of ARPA 500. Taken serially.</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARPA 500. Special fee.</td>
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<tr>
<td>ARPA 600</td>
<td>GRADUATE PAINTING III</td>
<td>3</td>
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<tr>
<td></td>
<td>Continuation of ARPA 510. Taken serially.</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> ARPA 510. Special fee.</td>
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<tr>
<td>ARPA 610</td>
<td>GRADUATE PAINTING IV</td>
<td>3</td>
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<tr>
<td></td>
<td>Continuation of ARPA 600. Taken serially.</td>
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<tr>
<td></td>
<td>May be repeated for a maximum of nine credits.</td>
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<td></td>
<td><strong>Prerequisite:</strong> ARPA 600. Special fee.</td>
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<tr>
<td>ARPG 520</td>
<td>GRADUATE INTRODUCTION TO PAPERMAKING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to Western methods of hand</td>
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<tr>
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<td>papermaking as an art form including historic</td>
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<tr>
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<td>principles and current applications.</td>
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<td><strong>Prerequisite:</strong> Special fee.</td>
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</tbody>
</table>
ARPG 530  GRADUATE INTERMEDIATE PAPERMAKING I  3
Pigment and pulp preparation and vacuum table sheet forming.
Prerequisite: ARPG 520. Special fee.

ARPG 620  GRADUATE ADVANCED PAPERMAKING  3
Independent historical research combined with contemporary studio work. May be repeated for a maximum of nine credits.
Prerequisite: ARPG 530. Special fee.

ARPH 500  GRADUATE PHOTOGRAPHY BEGINNING I:  3
A CONTEMPORARY ART FORM
Provides for the in-depth study and practice of photography as a visual language. Encourages exploration beyond the camera through studio work, discussions, criticism, films, trips and demonstrations.
Prerequisites: Departmental approval. Special fee.

ARPH 510  GRADUATE PHOTOGRAPHY BEGINNING II:  3
A CONTEMPORARY ART FORM
The essential of the photographic process including developing, enlarging, portfolio creation, exhibition, trips, videos, discussion, lecture, critiques, and demonstrations. A continuation of ARPH 500.
Prerequisite: ARPH 500. Special fee.

ARPH 600  GRADUATE INTERMEDIATE PHOTOGRAPHY:  3
A CONTEMPORARY ART FORM
Workshop, discussion, lectures, criticism, demonstrations: photography for self expression and greater visual awareness. Creative controls, craftsmanship, perception, presentation and the fine points will be investigated.
Prerequisite: ARPH 510. Special fee.

ARPH 610  GRADUATE ADVANCED PHOTOGRAPHY:  4
A CONTEMPORARY ART FORM
Workshop, discussion, lecture, demonstrations, criticism: photography as an intensive learning experience. Light sensitive materials, controls, photographic approach, selection, zinc system and view camera will be investigated. May be repeated for a maximum of nine credits.
Prerequisite: ARPH 600. Special fee.

ARPH 660  GRADUATE SPECIAL PROCESSES IN PHOTOGRAPHY  4
Investigation of nontraditional light sensitive materials for use in the photographic image making process. Extending traditional boundaries of photography through new tools that permit greater manipulation: gum bichromate, cyanotype, platinum, photo etching, and others will be investigated.
Prerequisite: ARPH 610.

ARPM 500  GRADUATE PRINTMAKING I  3
Advanced work in various print processes; emphasis on the development of images and concepts as they relate to the printmaking media.
Prerequisite: Departmental approval. Special fee.
ARPM 510 GRADUATE PRINTMAKING II
Continuation of ARPM 500. Taken serially.
Prerequisite: ARPM 500. Special fee.

ARPM 600 GRADUATE PRINTMAKING III
Continuation of ARPM 510. Taken serially.
Prerequisite: ARPM 510. Special fee.

ARPM 610 GRADUATE PRINTMAKING IV
Continuation of ARPM 600. Taken serially. May be repeated for a maximum of nine credits.
Prerequisite: ARPM 600. Special fee.

ARSC 500 GRADUATE SCULPTURE I
The student explores independently one or two materials and techniques, and begins to find direction as a sculptor.
Prerequisite: Special fee.

ARSC 510 GRADUATE SCULPTURE II
Continuation of ARSC 500. Taken serially.
Prerequisite: ARSC 500. Special fee.

ARSC 600 GRADUATE SCULPTURE III
Continuation of ARSC 510. Taken serially.
Prerequisite: ARSC 510. Special fee.

ARSC 610 GRADUATE SCULPTURE IV
Continuation of ARSC 600. Taken serially. May be repeated for a maximum of nine credits.
Prerequisite: ARSC 600. Special fee.

ARST 600 SEMINAR IN ART I: CONTEMPORARY ART AND AESTHETICS
This course involves the graduate student in a consideration of major issues in contemporary art and aesthetics.
Prerequisite: M.A. majors only.

ARST 610 SEMINAR IN ART II: GRADUATE PROJECT
A continuation of ARST 600. Should be taken in the student’s last semester along with the completion of the Graduate Project.
Prerequisite: ARST 600, M.A. majors only.

MA in Fine Arts
Concentration in Fine Arts Education
Course Descriptions

ARED 501 CONTEMPORARY VIEWPOINTS IN ART EDUCATION
A study of literature which influences art educators and the communities of learners they serve. Readings will be in papers and books selected from art, philosophy, sociology, psychology and education that deal primarily with various issues within the discipline such as diversity, critical inquiry, democratic behavior, technology, assessment, integrated learning, creativity and special needs populations.
Prerequisite: Special fee.
overview of contemporary concerns in curriculum construction for visual arts teaching and learning. Philosophical nature and construction of a comprehensive and democratic visual arts curriculum for elementary and secondary schools.

Prerequisite: Special fee.

**ARED 550 INDEPENDENT STUDY IN ART EDUCATION** 3

Building upon their knowledge of applied classroom art education issues and concerns, students select an area of art teaching and learning and, with advisement, study the literature in the field, conduct in-depth observations of related programs and activities in schools, museums, and other centers of culture, conduct directed inquiry and write reports on findings in preparation for the Master's Thesis or the Seminar in Art II paper. Emphasis is placed upon systematically compiling and analyzing data from intra-, inter-, cross-, and mixed cultural art education norms and interdisciplinary arts practices. Regular conferences with instructor for guidance and evaluation. May be repeated once for a maximum of six semester hours.

Prerequisites: ARED 501 and ELRS 503, or ARHS 503. Departmental approval.

**ARED 698 MASTER'S THESIS** 3

Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take ARED 699 if they don't complete ARED 698 within the semester.

Prerequisite: Departmental approval.

**ARED 699 MASTER'S THESIS EXTENSION** 1

Continuation of Master's Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.

Prerequisite: ARED 698.

**ARTH 580 GRADUATE INTRODUCTION TO ART THERAPY** 3

Introduction to the historical and theoretical bases of art therapy as a profession. Exploration of the literature of art therapy and of current trends in the field.

Prerequisite: Special fee.

**MA in Fine Arts**

**Concentration in Museum Management**

**Course Descriptions**

**ARTHM 501 MUSEUM MANAGEMENT** 3

This course investigates museums of different disciplines, object- or collections-based organizations, private collections, and commercial galleries, auction and government organizations, their different missions and organizational structure. Students are acquainted with visitor analysis, budgeting, financing, marketing and public relations. Students are also familiarized with ethical and legal issues concerning the field. Students participating in this course are required to serve as interns in a museum or arts organization, if possible in their area of specialization.
the course investigates different types of exhibitions and discusses their usage and effectiveness in different disciplines, museums and other institutions which present animate or inanimate collections to the public. Students are familiarized with exhibition planning, preparation, management and maintenance. The course involves an internship component at the Montclair State Art Galleries which includes completion of praxis related assignments.

ARHM 583  THE BUSINESS OF ART  3
The course is designed to provide an overview of the economic, organizational and social factors that influence contemporary art organizations. The students will examine structures, practices and issues concerning the visual and performing arts in both the nonprofit, government and commercial sectors. Structures to be studies include theatres, dance companies, art galleries and museums, arts councils, presenting organization, orchestras and other music groups. The student will analyze the impacts of unions and professional organizations on these structures. With an introduction to various practices including audience development, fund-raising, grantsmanship, lobbying, advocacy, planning and organizational development, this course prepares the student for more extensive and advanced work in the Arts Management concentration. Cross listed with Theatre and Dance, THTR 583.

ARHM 698  MASTER'S THESIS IN MUSEUM MANAGEMENT  3
Independent research project done under faculty advisement. Students must follow MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take ARHM 699 if they don't complete ARHM 698 within the semester.

Prerequisite: Departmental Approval.

ARHM 698  MASTER'S THESIS EXTENSION  1
Continuation of Master's Thesis project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of pass or Fail will be given.

Prerequisite: ARHM 698.
The graduate programs in the Biology and Molecular Biology Department are designed to enable a student to develop his or her preparation for a career in biological fields requiring advanced training or for the teaching profession.

**MASTER OF SCIENCE DEGREE IN BIOLOGY**

Research facilities of the Biology and Molecular Biology Department are maintained in Science Hall and include specialized equipment for molecular biology, electron microscopy, botany, microbiology, immunology, aquatic biology, tissue culture, animal behavior, and cell physiology. Additionally, the facilities at the New Jersey Marine Sciences Consortium, New Jersey School of Conservation, and other departments in the College of Science and Mathematics are available for cooperative graduate research. Faculty research interests include aquatic and terrestrial ecology, developmental biology, parasitology, microbiology, immunology, cell physiology, molecular biology, plant physiology, entomology and evolutionary mechanisms. The Biology and Molecular Biology Department has a state-of-the-art molecular biology laboratory for teaching both introductory and advanced courses in molecular biology and biotechnology.

The Biology and Molecular Biology Department offers thesis and non-thesis students opportunity for graduate research under faculty supervision in selected areas of biology. Original research should not exceed 7 semester hours for thesis students and 5 semester hours for non-thesis students. Students must complete a minimum of 26 semester hours in biology and a maximum of 6 semester hours in approved electives, completing 32 semester hours in coursework.

**ADMISSION REQUIREMENTS**

Prior to matriculation for the Master of Science degree in biology, the student should have completed a subject matter core of at least twenty-four semester hours in biology and have adequate preparation in college chemistry, mathematics and physics.

In cases where there has been a weak undergraduate program in the major and/or collateral fields, prerequisite courses, which will not count towards graduate credit, may be assigned.

The matriculation program for MS candidates is prepared in consultation with the biology graduate program coordinator. Changes in the program can be made only with the written approval of the graduate program coordinator. It is the responsibility of the student to keep the graduate program coordinator informed of progress in the program.
REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN BIOLOGY

Semester Hours

I. Required Courses (9-10 semester hours):
   A. Organismic
      BIOL 520 Plant Physiology ................................................................. 4  
      or  BIOL 540 Mammalian Physiology ................................................. 3  
   B. Molecular
      BIOL 547 Molecular Biology I ......................................................... 3  
   C. Ecology
      BIOL 570 Ecology ............................................................................... 3  

II. Biology Areas of Emphasis (14-19 semester hours)
   A. Biology Courses at Montclair State University
   B. Biology Courses at NJ Marine Sciences Consortium ............ (Optional 0-4)
   C. Non-departmental Approved Electives ............................ (Optional 0-6)
      (With approval of graduate program coordinator and Graduate Studies)

III. Research, Laboratory, or Field Requirement
   A. Thesis Option (5 or 7 semester hours)
      BIOL 597 Research in Biological Literature ..................................... 1  
      BIOL 698 Master’s Thesis ................................................................ 4 or 6
      
      Preliminary Examination: Students selecting this option will be required to take a Preliminary Examination. Preliminary Examination must be taken prior to submission of thesis proposal.

   B. 1. Non-Thesis Research Option (5 semester hours)
      BIOL 597 Research in Biological Literature ..................................... 1  
      BIOL 599 Introduction to Biological Research .................................... 4  
      (Open only to non-thesis students.)

   2. Non-Thesis Laboratory or Field Option (4-5 semester hours)
      BIOL 597 Research in Biological Literature ..................................... 1  
      Approved Biology Laboratory or Field Course .............................. 3-4  
      (With approval of graduate program coordinator and Graduate Studies)

      The student will establish a 3 faculty member committee who will propose a semester long literature research paper. At the end of the semester, the student will submit the paper and orally defend it to the committee.

      Minimum semester hours: 32
MASTER OF SCIENCE DEGREE IN BIOLOGY, BIOLOGY SCIENCE EDUCATION CONCENTRATION

The MS in Biology with a concentration in Biology Science Education is intended for certified Biology teachers interested in enhancing and updating their content expertise, exploring and conducting research on biology learning, and expanding their insights into pedagogy. Students will complete 32 semester hours of coursework in biology, biology education, and curriculum and teaching and/or educational foundations. Students must take a minimum of 20 credits in biology and 6 credits in College of Education and Human Services courses and can take a maximum of 6 credits outside the department including BIOL courses taken as a non-matriculated student, courses taken in other MSU departments, and courses transferred from other institutions. Students must receive a B or better in these courses and the credits can not have counted toward another degree.

This is a non-thesis program that can include graduate research under faculty supervision. Introduction to Biological Research (BIOL 599) as well as Research in Biological Literature (BIOL 597) within this concentration will focus on science education as it applies to Biology. Original research (BIOL 599) should not exceed 4 credits.

ADMISSION REQUIREMENTS

In addition to the admission requirements listed for the MS in Biology, candidates for admission to the Biology Science Education Concentration must have teaching certification in Biology.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN BIOLOGY, BIOLOGY SCIENCE EDUCATION CONCENTRATION

<table>
<thead>
<tr>
<th>Semester Hours</th>
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</table>

I. Required Courses (9-10 semester hours):

A. Organismic
   - BIOL 520 Plant Physiology ................................................................. 4
   - or
   - BIOL 540 Mammalian Physiology ...................................................... 3

B. Molecular
   - BIOL 547 Molecular Biology I ............................................................ 3

C. Ecology
   - BIOL 570 Ecology ................................................................................. 3

II. Required Biology Science Education Concentration (12 semester hours)

A. BIOL 510 Biology Pedagogy for Secondary Teachers ............................ 3
B. BIOL 601 Advanced Biology Science Education Pedagogy .................... 3
C. CURR 530 Principles of Curriculum Development ............................... 3
D. EDFD 550 Critical Thinking and Learning
   - OR
   - CURR 551 Problem Solving and Critical Inquiry in Curriculum Development ......................................................... 3
III. Electives in Biology (9-10 semester hours)

It is recommended that the student select appropriate electives from the following courses reflecting the student’s professional interest. Only nine credits at the 400 level may be used in the Master’s program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 512</td>
<td>Topics in Modern Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 520</td>
<td>Plant Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 521</td>
<td>Field Studies of Flowering Plants</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 523</td>
<td>Mycology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 531</td>
<td>Medical Parasitology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 532</td>
<td>Advanced Entomology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 540</td>
<td>Mammalian Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 544</td>
<td>Comparative Animal Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Topics in Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 548</td>
<td>Molecular Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 549</td>
<td>Topics in Developmental Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 550</td>
<td>Topics in Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 551</td>
<td>Intermediary Metabolism I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 552</td>
<td>Biology of Lipids</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 553</td>
<td>Microbial Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 554</td>
<td>Microbial Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 571</td>
<td>Physiological Plant Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 572</td>
<td>Wetland Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 573</td>
<td>Shoreline Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 599</td>
<td>Introduction to Biological Research</td>
<td>4</td>
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</tbody>
</table>

With the approval of the graduate program coordinator and the Graduate School, other 500-level courses in Biology or in other departments may be acceptable.

IV. BIOL 597 Research in Biological Literature ........................................... 1

V. Comprehensive Examination

Minimum semester hours: 32

MASTER OF SCIENCE DEGREE IN BIOLOGY,
MOLECULAR BIOLOGY CONCENTRATION

The MS in Biology with a concentration in Molecular Biology is intended to provide appropriate training for biology students in the area of theoretical and applied molecular biology. This training can be used to prepare for research careers in biotechnology or further post-graduate study in molecular biology, to provide a mechanism for re-training biologists who wish to re-tool their skills for these new industries or to provide a well-defined, comprehensive knowledge of the discipline of molecular biology so that biology educators may convey these concepts to their students in the classroom and teaching laboratory. Students will complete 32 semester hours of coursework in biology and molecular biology.
ADMISSION REQUIREMENTS

Candidates for admission must meet the minimum requirements for the Biology department of Montclair State University. Specifically, prior to matriculation for the Master of Science degree in biology, the student should have completed a subject matter of at least twenty-four semester hours in biology and have adequate preparation in college chemistry, mathematics and physics.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN BIOLOGY, MOLECULAR BIOLOGY CONCENTRATION

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td></td>
<td>BIOL 547</td>
<td>Molecular Biology I</td>
</tr>
<tr>
<td></td>
<td>BIOL 548</td>
<td>Molecular Biology II</td>
</tr>
<tr>
<td></td>
<td>BIOL 556</td>
<td>Molecular Biology of Proteins</td>
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<td></td>
<td>BIOL 592</td>
<td>Graduate Colloquium</td>
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</table>

II. Electives (14-16 semester hours)

<table>
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<tr>
<th>Semester Hours</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td></td>
<td>BICL 405</td>
<td>Cell Culture</td>
</tr>
<tr>
<td></td>
<td>BIOL 512</td>
<td>Topics in Modern Genetics</td>
</tr>
<tr>
<td></td>
<td>BIOL 513</td>
<td>Instrumentation and Techniques for Biological Science</td>
</tr>
<tr>
<td></td>
<td>BIOL 520</td>
<td>Plant Physiology</td>
</tr>
<tr>
<td></td>
<td>BIOL 531</td>
<td>Medical Parasitology</td>
</tr>
<tr>
<td></td>
<td>BIOL 533</td>
<td>Advanced Cell Biology</td>
</tr>
<tr>
<td></td>
<td>BIOL 540</td>
<td>Mammalian Physiology</td>
</tr>
<tr>
<td></td>
<td>BIOL 549</td>
<td>Topics in Developmental Biology</td>
</tr>
<tr>
<td></td>
<td>BIOL 550</td>
<td>Topics in Microbiology</td>
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<tr>
<td></td>
<td>BIOL 551</td>
<td>Intermediary Metabolism I</td>
</tr>
<tr>
<td></td>
<td>BIOL 552</td>
<td>Biology of Lipids</td>
</tr>
<tr>
<td></td>
<td>BIOL 598</td>
<td>Selected Techniques in Molecular Biology</td>
</tr>
<tr>
<td></td>
<td>CHEM 470</td>
<td>Biochemistry I</td>
</tr>
<tr>
<td></td>
<td>CHEM 471</td>
<td>Biochemistry II</td>
</tr>
<tr>
<td></td>
<td>CHEM 570</td>
<td>Selected Topics in Advanced Biochemistry</td>
</tr>
</tbody>
</table>

III. Non-thesis option (5 semester hours)/ Thesis option (7 semester hours)

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIOL 597</td>
<td>Research in Biological Literature</td>
</tr>
<tr>
<td></td>
<td>BIOL 599</td>
<td>Introduction to Biological Research</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 597</td>
<td>Research in Biological Literature</td>
</tr>
<tr>
<td></td>
<td>BIOL 698</td>
<td>Master’s Thesis</td>
</tr>
</tbody>
</table>

Minimum semester hours: 32
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 500</td>
<td>INTRODUCTORY MOLECULAR CELL BIOLOGY</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>This course will focus on an introduction to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>science and methods of cell and molecular</td>
<td></td>
</tr>
<tr>
<td></td>
<td>biology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite:</strong> Permission of graduate advisor.</td>
<td></td>
</tr>
<tr>
<td>BIOL 510</td>
<td>BIOLOGY PEDAGOGY FOR SECONDARY TEACHERS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Seminar and research course designed for study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of methods and practices being used in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>teaching of secondary school biology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisites:</strong> 24 semester hours in biology.</td>
<td></td>
</tr>
<tr>
<td>BIOL 512</td>
<td>TOPICS IN MODERN GENETICS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Seminar course. Selected topics from current</td>
<td></td>
</tr>
<tr>
<td></td>
<td>developments in genetic research, including</td>
<td></td>
</tr>
<tr>
<td></td>
<td>chromosome and gene fine structure, extra</td>
<td></td>
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<tr>
<td></td>
<td>chromosomal genetic elements, genetic</td>
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</tr>
<tr>
<td></td>
<td>engineering, and aspects of biomedical genetic</td>
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<tr>
<td></td>
<td>research. May be repeated once for a maximum of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>six semester hours as long as the topic is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>different.</td>
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<tr>
<td></td>
<td><strong>Prerequisites:</strong> Undergraduate course in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>genetics.</td>
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<tr>
<td>BIOL 513</td>
<td>INSTRUMENTATION AND TECHNIQUES FOR BIOLOGICAL</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>SCIENCE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course is designed to acquaint students</td>
<td></td>
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<tr>
<td></td>
<td>with modern analytical and research</td>
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<tr>
<td></td>
<td>techniques in biology, including manometry,</td>
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<tr>
<td></td>
<td>spectrophotometry, electrophoresis, chromatography,</td>
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<tr>
<td></td>
<td>microbial batch growth and assay techniques,</td>
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<tr>
<td></td>
<td>immunotechniques and evaluation of experimental</td>
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<tr>
<td></td>
<td>design and data.</td>
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<tr>
<td></td>
<td><strong>Prerequisite:</strong> 24 semester hours in biology.</td>
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<tr>
<td></td>
<td>Special fee.</td>
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<tr>
<td>BIOL 514</td>
<td>GRADUATE SEMINAR IN BIOLOGY</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Through a series of seminars delivered by</td>
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<tr>
<td></td>
<td>faculty and guests, students will survey a broad</td>
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<td></td>
<td>range of topics in modern biology, and be</td>
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<tr>
<td></td>
<td>introduced to the variety of specializations</td>
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<tr>
<td></td>
<td>represented within the department. Emphasis</td>
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<tr>
<td></td>
<td>shall be placed on recent advances in diverse</td>
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<tr>
<td></td>
<td>areas of biology.</td>
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<tr>
<td></td>
<td><strong>Prerequisites:</strong> Graduate biology majors only.</td>
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<tr>
<td>BIOL 518</td>
<td>STRATEGIES FOR TEACHING COLLEGE BIOLOGY</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Biology Teaching Assistants and upper-level</td>
<td></td>
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<tr>
<td></td>
<td>undergraduates with interests in teaching</td>
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</tr>
<tr>
<td></td>
<td>will interact with experienced teachers, but</td>
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<tr>
<td></td>
<td>more importantly will gain access to a forum for</td>
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<tr>
<td></td>
<td>discussing their experiences and concerns with</td>
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<tr>
<td></td>
<td>other prospective biology teachers. Students</td>
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</tr>
<tr>
<td></td>
<td>will discuss contemporary articles on science</td>
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<tr>
<td></td>
<td>teaching at the college level.</td>
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<tr>
<td></td>
<td><strong>Prerequisites:</strong> B.S. in Biology and</td>
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<td></td>
<td>departmental approval.</td>
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<tr>
<td>BIOL 520</td>
<td>PLANT PHYSIOLOGY</td>
<td>4</td>
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<tr>
<td></td>
<td>Investigation of physiology of plants. Plant</td>
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<tr>
<td></td>
<td>growth, development and reproduction as well as</td>
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<td></td>
<td>the new advances in plant physiology. Water</td>
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<td></td>
<td>relations of plants, mineral nutrition,</td>
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<tr>
<td></td>
<td>physiological significance of soil and soil</td>
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<tr>
<td></td>
<td>moisture, photosynthesis, respiration, plant</td>
<td></td>
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<tr>
<td></td>
<td>biosynthesis and dynamics of growth.</td>
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<tr>
<td></td>
<td><strong>Prerequisites:</strong> Organic chemistry, and botany.</td>
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<td></td>
<td>Special fee.</td>
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</tbody>
</table>
BIOL 521  FIELD STUDIES OF FLOWERING PLANTS  4
The taxonomy, evolutionary trends and ecological adaptations of the gymnosperms and angiosperms. A variety of habitats will be visited and analyzed.
Prerequisites: Botany and field course in biology.

BIOL 532  ADVANCED ENTOMOLOGY  3
Examination of insects as model systems for biological inquiry. Topics include an integrative treatment of insect molecular biology, genetics, physiology, behavior, evolution and ecology. Special fee.
Prerequisite: Matriculation in M.S. Biology program or permission of instructor.

BIOL 533  ADVANCED CELL BIOLOGY  3
Detailed analysis of cellular structure and function. Topics to be covered include the role of subcellular organelles in maintaining cell viability, analysis of cytoskeletal components, structure and function of the plasma membrane and cellular defects that lead to cancer and other disease states.
Prerequisites: Matriculation in the M.S. Biology program or permission of instructor.

BIOL 540  MAMMALIAN PHYSIOLOGY  3
A broad survey of the physiology of mammalian systems aimed at graduate students who lack an upper-level background in physiology at the undergraduate level. The principles of homeostasis mechanisms as they apply to various organ systems will be stressed.
Prerequisite: Graduate standing, but not open to students who have completed undergraduate upper division mammalian/human physiology classes.

BIOL 542  ADVANCED ENDOCRINOLOGY  3
A study of the physiology of the mammalian endocrine system with emphasis on hormonal control of homeostasis.
Prerequisites: Endocrinology and cell biology.

BIOL 543  ADVANCES IN IMMUNOLOGY  3
To study in detail selected topics in immunology.
Prerequisite: Immunology.

BIOL 545  EXPERIMENTAL ENDOCRINOLOGY  4
A seminar and laboratory course in endocrinology in which the various endocrine glands will be surgically removed or chemically destroyed and the morphologic and physiologic effects measured and observed. May be repeated once for a maximum of six semester hours as long as the topic is different.
Prerequisites: Endocrinology. Special fee.

BIOL 547  MOLECULAR BIOLOGY I  3
Central concepts at the cellular level will be emphasized. Contemporary viewpoints in the areas of biomolecules, energy yielding and energy requiring processes and transfer of genetic information.
Prerequisites: Cell Biology, and one year of organic chemistry.

BIOL 548  MOLECULAR BIOLOGY II  4
Central concepts at the cellular level will be emphasized. Contemporary viewpoints in the areas of biomolecules, energy yielding and energy requiring processes and transfer of genetic information. The laboratory will deal with up-to-date investigative procedures via selected experiments.
Prerequisite: BIOL 547. Special fee.
BIOL 549  TOPICS IN DEVELOPMENTAL BIOLOGY  3
Seminar in the regulation of developmental events, including both classical morphogenesis and recent advances using techniques of cell and molecular biology. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisites: Genetics and developmental embryology.

BIOL 550  TOPICS IN MICROBIOLOGY  3
Coverage of selected topics such as the microbial genetics, antibiotic action, bacteriophage, virus, cancer and microbial metabolism. Emphasis will be placed on practical applications of modern research in specific areas. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisite: Microbiology.

BIOL 552  BIOLOGY OF LIPIDS  3
Biological cycles, unity and diversity in metabolic paths, metabolic evolution, metabolic control mechanisms and other special topics. Primary emphasis is placed on the metabolism of lipids.

Prerequisites: Cell biology and organic chemistry.

BIOL 553  MICROBIAL ECOLOGY  4
Exploration of the essential role of microorganisms in the ecosystem. Lecture, field trips and laboratory will demonstrate the ubiquitous and highly adaptive evolution of microorganisms, their interrelationships and their profound influence on the biosphere.

Prerequisites: Microbiology.

BIOL 554  MICROBIAL PHYSIOLOGY  3
A study of microorganisms in terms of their morphology and metabolism. The significance of metabolic diversity and secondary metabolic products of various microorganisms will be explored through lecture topics. The economic significance of microbial metabolism in relation to industry and pathogenic diseases will be emphasized.

Prerequisite: Microbiology.

BIOL 555  MEDICAL GENETICS  3
A detailed study and analysis of human genetics, inborn genetic diseases, genomics, gene therapy, and the Human Genome project.

Prerequisite: A genetics course or permission of instructor.

BIOL 556  MOLECULAR BIOLOGY OF PROTEINS  3
Study of the molecular biology of biomolecules, including proteins. The course will examine how changes in the three dimensional structure of biomolecules affect their biological function. Protein engineering, enzyme catalysis, and site-directed mutagenesis will be discussed.

Prerequisite: Admission into the graduate biology program or departmental approval.

BIOL 557  VIROLOGY  3
This course will develop the fundamental principles of modern virology and examine the connection between viruses and disease. It will examine the molecular biology of virus replication, infection, gene expression, the structure of virus particles and genomes, pathogenesis, classification of viruses, and contemporary viral research.

Prerequisite: Satisfactory completion of a cell and molecular biology course or permission of instructor.
BIOL 558 MICROBIAL GENETICS
Microbial Genetics provides students with an understanding of the basis for genetic processes in microorganisms and the implication for higher organisms. The focus of the course will be on prokaryotes, particularly E.coli, and viruses, primarily bacteriophages. Current developments in microbial genetics, such as bioinformatics and genomics, will be presented.
Prerequisite BIOL 350, Microbiology.

BIOL 560 MOLECULAR GENETICS
A course that will focus on biological research problems that are being addressed in eucaryotic systems from a molecular genetics viewpoint.
Prerequisite: BIOL 547 with a grade of “B” or better.

BIOL 570 ECOLOGY
Basic ecological principles and concepts. Habitat approach to field exercises in fresh water and terrestrial ecology. Intra- and interspecific relationships with all living members of the ecosystem, problems in plant and animal biology.
Prerequisites: Botany and zoology.

BIOL 571 PHYSIOLOGICAL PLANT ECOLOGY
The effects of soil, light, and water on plant growth, as well as, toxic effects of metals and salinity are measured using growth chamber and greenhouse facilities.
Prerequisite: Botany and one course in field biology. Special fee.

BIOL 572 WETLAND ECOLOGY
Important biotic, chemical and physical parameters of New Jersey’s estuaries. Evolution and successional trends of estuarine communities. Ecology of individual communities studies by field trips to Delaware Bay shore and to some Atlantic coast bays, marshes and offshore barrier islands. Also offered at the New Jersey Marine Sciences Consortium.
Prerequisites: Botany, and zoology, and field biology. Special fee.

BIOL 573 SHORELINE ECOLOGY
Community structure, trophic dynamics, species diversity and distribution of bottom dwelling organisms in relationship to their environment; lectures, laboratory work and field investigations of marine benthos. Also offered at the New Jersey Marine Sciences Consortium.
Prerequisites: Botany, and zoology, and field biology. Special fee.

BIOL 574 BEHAVIORAL ECOLOGY
This seminar course explains the ecological consequences of animal behavior, viewed within the context of how behavior evolves and how populations adapt to their environments.
Prerequisites: Field biology and zoology.

BIOL 576 BIOLOGY OF EXTREME HABITATS
The course will describe the adaptations that allow the survival of plants and animals, as well as microorganisms, in a variety of extreme habitats. Some of these habitats include: deserts, arctic, grassland, estuaries.
A variety of different animals, ranging from protists to mammals, will be examined and compared to demonstrate the physiological adaptations they have evolved to successfully survive and reproduce.

Prerequisite: Graduate standing in Biology or departmental approval.

This course will provide students the opportunity to read primary resource material and interpret the findings of the data. This course will also teach students how to read, critique and present scientific data to a peer group. Students will analyze, discuss and present primary research articles with respect to scientific content, accuracy of the data and significance of the experiments.

Prerequisite: Matriculation in the M.S. Biology program or permission of instructor.

This course is designed to provide advanced biology graduate students with a literature intensive exploration of current developments and specialized content in the biological sciences. Topics will cover specific research areas in ecology, physiology, molecular biology, embryology and bioinformatics. This course is designed to fulfill elective requirements of the biology masters degree. May be repeated once for a maximum of eight semester hours.

Prerequisite: BIOL 520 or BIOL 540 or BIOL 547 or BIOL 570.

Students in this course will read primary resource material and interpret the data. This course will also teach students how to read, critique and present scientific data to a peer group. Students will analyze, discuss and present primary research articles with respect to scientific content, accuracy of the data and significance of the experiments.

Prerequisite: Matriculation in the M.S. Biology program or permission of instructor.

This course will cover various aspects of cellular signaling from the plasma membrane to the nucleus. Topics will include specific signal transduction systems, methods for studying these systems and the results of these signaling events on cell division, cell differentiation and cell function.

Prerequisite: BIOL 547 or permission of instructor.

This course addresses concerns about the loss of biological diversity and genetic resources through species extinctions. Students will learn about the importance of maintaining biological diversity, the problems involved in monitoring and protecting sensitive and crucial habitat, the impact of human societies on biodiversity, the alternatives to the destruction of habitat/species, the prospects of restoration, and the policies needed to prevent the loss of biological diversity. Students will also learn about population processes that are directly related to species survival. This course is cross listed with CNFS 595.

Prerequisite: Botany, and zoology, and field biology. Special fee.
BIOL 596  SELECTED TECHNIQUES IN BIOLOGY SCIENCE EDUCATION  1.5
A laboratory course that trains teachers in manipulatives suitable for secondary biology education. Students will be introduced to a variety of physiological, ecological, molecular biological techniques applicable for implementation in secondary school classrooms. May be repeated three more times for a total of six semester hours.
Prerequisite: Biology teaching certification or departmental approval.

BIOL 597  RESEARCH IN BIOLOGICAL LITERATURE  1
To allow the student to investigate and evaluate a specific topic in biology under the supervision of a faculty member and to develop the student’s skills in presenting current research in both the written and oral modes.
Prerequisites: Departmental approval.

BIOL 598  SELECTED TECHNIQUES IN MOLECULAR BIOLOGY  1.5
A laboratory course that trains students in advanced techniques in molecular biology. Students will learn how to perform a specific technique as well as learning the theory behind the technique. May be repeated three times for a total of six semester hours.
Prerequisites: Undergraduate or graduate molecular biology courses or equivalent and permission of instructor. Special fee.

BIOL 599  INTRODUCTION TO BIOLOGICAL RESEARCH  4
A research experience in which students will be exposed to current biologic techniques by working with scientific investigators in industry, or within the department. Students will work on projects involving research techniques, data collection and the analysis and interpretation of the data.
Prerequisites: Departmental approval Special fee.

BIOL 601  ADVANCED BIOLOGICAL SCIENCE EDUCATION PEDAGOGY  3
This course aims for the development of an understanding of the pedagogy of inquiry-based learning and of the processes of scientific investigation and reasoning, as well as other factors influencing effective teaching (e.g. equity issues, assessment methods, and communication skills). Modeling of the inquiry-based approach will be applied to a range of scientific concepts, focusing on biological concepts such as natural selection, meiosis and Mendelian genetics, and photosynthesis. As these concepts are explored, relevant science education literature will be examined in order to understand the nature of student conceptions as well as broader issues of constructivist and situated learning and implications of philosophy and sociology of science for science education.

BIOL 698  MASTER’S THESIS  4 or 6
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take BIOL 699 if they don’t complete BIOL 698 within the semester.
Prerequisite: Departmental approval.

BIOL 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: BIOL 698.
THE MONTCLAIR MBA

The goal of the MBA Program is to combine conceptual approaches to business with practical application in order to give students needed skills to prepare them for today’s global economy. Montclair State graduates are well-rounded, self-motivated and employed in many of the best companies in the region. Equipped with an education built upon standards of excellence, alumni enjoy tremendous opportunities for a rich and rewarding career.

The curriculum stresses the conceptual foundations of business disciplines and current managerial practices. This blend of theory and practice builds a strong foundation for immediate practical application as well as post-graduate professional growth.

The Montclair MBA provides individuals the opportunity to design unique programs to meet their specific needs and interests. Students may choose to concentrate in one of seven areas or they may select from an array of courses that provide a broad education. Full-time faculty with doctoral degrees teach 95 percent of MBA classes. The remaining classes are taught by persons with outstanding professional credentials.

The School of Business Administration invites applications from persons with baccalaureate or post-baccalaureate degrees. Because we actively seek a diverse student body, all previous academic majors are considered for admission. Both full- and part-time students are welcome. Courses are offered in the late afternoon, evenings and Saturdays.

CURRICULUM

The curriculum consists of 48 semester hours, of which 24 hours are devoted to a common body of knowledge, 18 hours are elected from advanced courses and 6 hours are allocated to integrating (Managing the Business Environment) and capstone courses. In planning a program, keep the following in mind:

• 18 semester hours of advanced courses: a student may choose to develop an area of concentration, or choose a general program. Concentrations consist of 9 or 12 hours of advanced courses in one particular discipline. There are no rigid course requirements for any given concentration except Management Information Systems, (i.e., from an area’s advanced course offerings, a student may select the 9 or 12 hours which best fulfill the student’s particular educational goals). Of the remaining hours, no more than 6 hours may be taken in any one discipline. If a concentration is not elected, no more than 6 hours can be taken in any discipline.

• An approved undergraduate calculus course is a program prerequisite. Applicants with undergraduate records that do not include such a course will be required to complete MATH 114 Mathematics for Business II: Calculus, (3 s.h.), or a similar course, prior to enrolling in INFO 501 Statistical Methods. This prerequisite calculus course does not count toward the total MBA graduate credit hours requirement.

• Students must complete the core courses prior to enrolling in the advanced courses. Exceptions are allowed only if appropriate core courses are not offered.
• All courses taken outside the School of Business must be approved by the MBA Director and the Graduate School prior to enrollment.
• All programs must be approved by the MBA Director. To qualify for graduation, you must adhere to your approved program.

ADVANCED ACADEMIC STANDING
AND TRANSFER STUDENTS

Through prior academic courses, challenge examinations and/or graduate level transfer credits, the 48 semester hour MBA requirement may be reduced by a maximum of 15 semester hours. The remaining 33 semester hours must be completed at Montclair State University and must meet the following minimum requirements:
• All advanced courses must be taken at Montclair State University.

ADMISSION INFORMATION

Candidates must submit an application for graduate admission which includes:
• Two official copies of the academic transcript from each college and/or university attended.
• Scores from the Graduate Management Admission Test.
• A statement of professional objectives.
• Two letters of recommendation from persons qualified to evaluate the applicant’s promise of academic achievement and potential for professional growth.
• A non-refundable fee of $60.00 must accompany each application. Application materials must be obtained from and/or returned to:
  Graduate School
  College Hall, CO-203
  Montclair State University
  Montclair, NJ 07043

Although prior work experience is not an admission requirement, it is strongly recommended for all MBA applicants.

APPLICATIONS MAY BE SUBMITTED AT ANY TIME OF THE YEAR.

GRADUATE MANAGEMENT ADMISSION TEST
(GMAT)

The GMAT is required of all students. No application will be considered without these scores. Under the auspices of the Educational Testing Service, the test is offered by various colleges and universities. For exact dates and locations contact:
The Education Testing Service, Box 966, Princeton, New Jersey 08541
Telephone: 1-800-GMAT-NOW (1-800-462-8669)
# REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION DEGREE

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>I. Managerial Decision Making (9 semester hours)</td>
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<tr>
<td>ECON 501 Economic Analysis</td>
<td>3</td>
<td></td>
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<tr>
<td>INFO 501 Statistical Methods</td>
<td>3</td>
<td>Calculus</td>
</tr>
<tr>
<td>INFO 503 Information Systems</td>
<td>3</td>
<td></td>
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<tr>
<td>II. Functional Core (15 semester hours)</td>
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<tr>
<td>ACCT 501 Financial Accounting</td>
<td>3</td>
<td>ACCT 501, ECON 501, INFO 501</td>
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<tr>
<td>FINC 501 Corporate Financial Management</td>
<td>3</td>
<td>INFO 501, 503 MGMT 505</td>
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<tr>
<td>INFO 505 Production/Operations Management</td>
<td>3</td>
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<tr>
<td>MGMT 505 Management Process and Organizational Behavior</td>
<td>3</td>
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<tr>
<td>MKTG 501 Marketing Management</td>
<td>3</td>
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<tr>
<td>III. Advanced Courses: Managing the Business Environment (3 semester hours)</td>
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<tr>
<td>INBS 501 International Business: Concepts and Issues</td>
<td>3</td>
<td>ECON 501,</td>
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<tr>
<td>IV. Concentration and Electives (18-24 semester hours)</td>
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<tr>
<td>All students must select 18-24 semester hours from among the advanced (non-core) courses. Students may design program concentrations to meet specific needs and interests; or, they may not choose to concentrate and select an array of courses which will provide a broad, general education. In either case, the student’s program must meet the breadth requirements.</td>
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<tr>
<td>Any student entering the MBA program without a course in Managerial or Cost Accounting will be required to take Managerial Accounting (ACCT 502) as an accounting concentration or advanced elective course.</td>
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<tr>
<td>Any student entering the MBA program without appropriate background in Macroeconomics will be required to take Aggregate Economics (ECON 505) as a business economics concentration or advanced elective course.</td>
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<tr>
<td>Concentrations consist of 9-12 semester hours. Of the remaining semester hours, no more than 6 s.h. may be taken in a single discipline. Students with a double concentration take two additional courses to meet those requirements for a total of 54 s.h.</td>
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<td>V. Capstone Course (3 semester hours)</td>
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<tr>
<td>Students must complete the business core courses and a minimum of 12 s.h. of advanced courses prior to enrolling in the capstone course.</td>
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<tr>
<td>MGMT 580 Advanced Strategic Management</td>
<td>3</td>
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</tbody>
</table>

The 48 s.h. requirement for the MBA may be reduced by a maximum of 15 s.h. through background, challenge examination and/or graduate level transfer credits not
previously applied to another degree. A minimum of 33 s.h. must be completed at MSU, with the following requirements:

- at least 18 semester hours must be earned in advanced courses
- all advanced courses must be taken at MSU.

Minimum semester hours: 48

ADVANCED COURSES AND FIELDS OF CONCENTRATION

Concentrations consist of 9 or 12 hours of advanced courses in one particular discipline. The following course groupings provide an approximate guide to the types of subjects considered complementary to the various noted fields. In all cases, your program must be approved by the MBA Director prior to enrolling in advanced courses.

**Accounting**

This field of concentration is designed to prepare students for careers in public accounting and financial management. It also will enhance the accounting knowledge of students whose career objectives include financial analysis and/or general management as well as preparing for the CPA exam. A typical program would emphasize courses in financial and quantitative analysis, as well as taxation and business law. 9 or 12 hours are chosen from among the following courses:

- ACCT 502 Managerial Accounting
- ACCT 508 Governmental and Not-For-Profit Accounting
- ACCT 510 Accounting Information Systems
- ACCT 512 Fundamentals of Federal Taxation
- ACCT 514 Advanced Taxation for Accountants
- ACCT 520 Contemporary Issues in Financial Accounting I
- ACCT 521 Contemporary Issues in Financial Accounting II
- ACCT 523 Financial Statement Analysis
- ACCT 524 Auditing Concepts and Techniques
- ACCT 525 International Taxation and International Management Accounting
- ACCT 526 Fraud Examination
- ACCT 540 International Accounting and Auditing
- BSLW 503 Business Law I
- BSLW 504 Business Law II

To be eligible to sit for the Certified Public Accountant (CPA) examination, students must have a baccalaureate degree with at least 60 semester hours of liberal arts courses and the following semester hours of credit:

- 15 semester hours of Accounting at the graduate level which includes course work in financial accounting, auditing, taxation and management accounting
- 24 semester hours of accounting at the undergraduate level
- 24 semester hours of business courses at the undergraduate or graduate level.

There are additional requirements. For further information contact the MBA Director.
Business Economics
This area prepares students to perform certain economic analyses for business or government (e.g., developing forecasts, cost-benefit analyses, public policy analyses, etc.). Students are provided with an institutional and theoretical understanding of the economic environment within which business and government form decisions. Topics include theories of pricing; the analysis of market demand; the economic role of money, credit, the Federal Reserve System, and Treasury Operations; the factors comprising aggregate demand and how they interact to determine employment, output and level of prices; the economic impact of international activity, etc. Also of importance is the development of an understanding of how governmental policies affect business performance. A typical program would emphasize courses in finance and quantitative analysis, and 9 or 12 hours chosen from among the following courses:

ECON 502 Financial Institutions and Monetary Policy
ECON 503 Economic Problems of the Third World
ECON 505 Aggregate Economics
ECON 508 Economics of Public Management
ECON 510 Urban Economics: Problems and Policy
ECON 533 Corporations and International Financial Markets
ECON 541 Foundations of Contemporary Economic Thought
ECON 542 Economic Fluctuations and Forecasting
ECON 543 United States and the International Economy
ECON 544 Government and Business
ECON 545 Economics of Labor
ECON 550 Technical Change and International Competition

Finance
This field prepares students for careers in the financial management of business and financial intermediaries (e.g., commercial banks, savings and loan institutions, investment banking, etc.). It also provides an excellent preparation for careers in brokerage and bond houses, financial counseling, and investment counseling. To develop an understanding of the role of finance in the administrative decision-making process, the field provides students with a knowledge of mechanisms, operations, and institutions of the financial system. A typical program would emphasize courses in accounting, business economics and quantitative analysis, and 9 or 12 hours chosen from among the following courses:

FINC 551 Investments, Portfolios and Security Analysis
FINC 552 International Financial Policy
FINC 553 Financial Derivatives
FINC 554 Advanced Financial Policy
FINC 570 Case Studies in Financial Management
FINC 576 Seminar in Financial Innovations

International Business
The graduate International Business concentration is designed to provide a comprehensive educational experience for those with career paths leading to self-employed entrepreneurship as well as instilling entrepreneurial skills and capabilities in those responsible for managing global corporate enterprises. As a means of achieving cross-functional integration among the disparate international business functions, the concentration draws faculty from each department working together to address the strategic imperatives
necessary in realizing sustainable competitive advantage. Building on a team-taught introductory foundation course (required in the common core). Students may select any 9 or 12 semester hour electives chosen from among the courses listed below. This concentration provides distinctive competitiveness resulting from the ancillary support structures at the School as well as University levels. The Center for International Business and the International Trade Counseling Center (ITCC) are complemented by the University’s Global Education Center in offering myriad conferences, seminars and workshops for business practitioners thus enabling the graduate student to enhance her/his expertise in a more applied fashion in the industry and corporate levels while gaining relevant networking contacts. Additionally, students may be granted assistantships to work with faculty engaged in consultancy to regional businesses, i.e., INBS 575 and INBS 577.

**INBS 511 Issues in International Management**
**INBS 520 Managing the Global Workforce**
**INBS 530 Export Management**
**INBS 533 Corporations and International Financial Markets**
**INBS 540 International Accounting and Auditing**
**INBS 550 International Business Study Abroad**
**INBS 552 International Financial Policy**
**INBS 575 Selected Topics in International Business**
**INBS 577 Independent Study in International Business**
**INBS 592 International Marketing Management**

**Management**
This concentration is designed for students preparing for managerial and leadership careers in organizations. The courses provide education in organization theory and behavior, and the management of human resources. In all areas the emphasis is upon developing a thorough comprehension of potential management problems and the effectiveness and limitations of analytical techniques employed in their solution. Courses include such topics as: employee motivation, team behavior, cross-cultural management, leadership, entrepreneurship and small business management, etc. A typical program would include 9 or 12 hours chosen from among the following courses:

**MGMT 510 Human Resource Management**
**MGMT 511 Issues in International Management**
**MGMT 512 Organizational Development**
**MGMT 513 Leadership and Behavior**
**MGMT 520 Managing the Global Workforce**
**MGMT 525 Entrepreneurship and Small Business Management**
**MGMT 530 Management of Technology in Organizations**
**MGMT 540 Executive Perspectives**

**Management Information Systems**
This concentration prepares students for information technology management careers. In addition to the common body of knowledge required in the MBA program, this concentration provides additional depth in analytical methods and techniques for business decision making and problem solving, and information systems applications in business. Courses include such topics as: decision support and expert systems for business, business data communications and networks, database systems for business, business systems analysis and design, etc. The concentration includes 3 required courses and one course from the list of electives.
Required Courses (9 s.h.):

- INFO 522 Business Data Communications and Networks
- INFO 523 Database Systems for Business
- INFO 524 Business Systems Analysis and Design

Elective Course - one of the following (3 s.h.):

- INFO 513 Emerging Information Technology
- INFO 514 Information Management
- INFO 521 Decision Support and Expert Systems for Business
- INFO 525 Electronic Commerce Managerial Perspective on New Business Models and Information Infrastructure Support
- INFO 575 Independent Study in Information Systems
- INFO 577 Selected Topics in Information Systems

Marketing

The Marketing concentration is designed to meet the needs of students interested in pursuing careers in a variety of marketing functions (e.g., product planning, marketing research, sales management, advertising, marketing planning, etc.). The courses are designed to provide students with a firm knowledge of the institutional and analytical aspects of the subject with a strong emphasis on decision making strategies and the development of solutions to practical marketing problems. A typical program would emphasize courses in business economics, management, and quantitative analysis, and 9 or 12 hours chosen from among the following courses:

- MKTG 530 Export Management
- MKTG 575 Independent Study in Marketing
- MKTG 577 Selected Topics in Marketing
- MKTG 589 Internet Marketing Management
- MKTG 591 Consumer/Buyer Behavior
- MKTG 592 International Marketing Management
- MKTG 593 Product Planning/New Product Management
- MKTG 594 Marketing Research and Information Systems
- MKTG 595 Seminar in Marketing Strategy
- MKTG 596 Integrated Marketing Communications (IMC)–Promotion Strategy

BUSINESS ADMINISTRATION

Course Descriptions

ACCOUNTING COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ACCT 501</td>
<td>3</td>
<td>FINANCIAL ACCOUNTING</td>
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</table>

A study of basic accounting concepts and their significance to the financial analyst and manager. Problems relating to income determination, valuation, reporting and analysis are stressed. Alternative conceptual foundations of reporting standards are presented and evaluated.

Prerequisite: M.B.A. degree students only.
ACCT 502  MANAGERIAL ACCOUNTING  3
This course examines the development of theory, concepts and practices of providing information for use within the organization. Cost concepts and classifications schemes, the use of accounting information for internal decision making, static and flexible budgeting for managerial control and activity based costing techniques are among the topics covered.
Prerequisites: ACCT 501, and ECON 501; M.B.A. degree students only.

ACCT 508  GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING  3
This course reviews the accounting and reporting concepts, standards and procedures applicable to the Federal government, state and local governments and not-for-profit institutions such as universities and hospitals.
Prerequisite: M.B.A. degree students only.

ACCT 510  ACCOUNTING INFORMATION SYSTEMS  3
Examines the theory and practice of developing and maintaining accounting based information systems. Systems development techniques, system control and documentation are emphasized. Transactional, data-based distributive and electronic data exchange concepts are developed. The auditing of computer based systems is structured.
Prerequisites: ACCT 501 and INFO 503; M.B.A. degree students only.

ACCT 512  FUNDAMENTALS OF FEDERAL TAXATION  3
The purpose of this course is to introduce students to a broad range of tax concepts for the individual and to emphasize the role of taxation in the business decision-making process. Coverage includes on a broad basis: the framework of the tax system, factors in selecting a choice of entity, type of income, deductions and losses, types of distributions to owners including their tax effect, tax impact of shifting ownership, different types of corporate compensation and professional responsibilities.
Prerequisite: M.B.A. degree students only.

ACCT 514  ADVANCED TAXATION FOR ACCOUNTANTS  3
The purpose of this course is to further expand on the basic concepts presented in “Basic Taxation for Accountants.” Formation, operation and dissolution of sole proprietorships, C Corporations, S Corporations, and partnerships are discussed. Coverage also includes limited liability entities, alternative minimum tax calculations for individuals and corporations related party transactions, estate and gift tax, fiduciary accounting, tax planning and ethics.
Prerequisites: ACCT 512; Accounting majors only.

ACCT 520  CONTEMPORARY ISSUES IN FINANCIAL ACCOUNTING I  3
The course builds on material presented in the financial accounting course ACCT 501. Students should gain an improved understanding of the techniques and underlying rationale of methods used to accumulate financial and operating data. Also improves skill in analyzing information provided in annual financial reports.
Prerequisites: ACCT 501; M.B.A. degree students only; course not open to any student with an undergraduate Accounting degree, except by permission of the Chair.
ACCT 521  CONTemporary Issues in Financial Accounting II  3
Continuation of Contemporary Issues in Financial Accounting I. Enables students to acquire an improved understanding of the composition and significance of various segments of the balance sheet, especially non-current assets, non-current liabilities, stockholders’ equity, and statement of cash flow.
Prerequisites: ACCT 520; M.B.A. degree students only, course not open to any student with an undergraduate Accounting degree, except by permission of the Chair.

ACCT 523  Financial Statement Analysis  3
From an accounting perspective, an in-depth discussion and analysis of financial statements as a basis for valuation of the firm. The real performance of the companies under consideration will be determined as students learn to decode information contained in corporate annual reports. The course leads to the ability to evaluate critically the key issues affecting a company’s valuation and operations utilizing accounting information. In addition, the valuation techniques introduced provide the opportunity for statistical modeling and empirical testing of the valuation procedures with accounting data.
Prerequisites: ACCT 501 and FINC 501; M.B.A. degree students only.

ACCT 524  Auditing Concepts and Techniques  3
A course in auditing principles, theory, design, and techniques. Theory, practice and techniques are integrated through the use of current auditing problems and student performance of a simulation audit of selected financial statement data.
Prerequisites: ACCT 520 or undergraduate degree with a concentration in accounting; M.B.A. degree students only.

ACCT 525  International Taxation and International Management Accounting  3
This course deals with the impact of international taxation on U.S. multinational corporations doing business abroad, foreign corporations doing business in the U.S., the U.S. residents working abroad, and nonresident aliens working in the U.S. It further concerns the tax rules for controlled foreign corporation and foreign sales corporation. The course also studies the aspects of international management accounting. It investigates the inflation accounting system in the world and the performance evaluation in multinational corporations. In addition, it covers the transfer pricing methods and investment analysis for multinational corporations. Related professional pronouncements and Internal Revenue Codes are integrated into the course contents.
Prerequisites: ACCT 501 and ACCT 502; M.B.A. degree students only.

ACCT 526  Fraud Examination  3
The course will cover the principles to be followed and techniques to be adopted to detect and prevent fraud especially in corporate context. Students will gain knowledge and ability to decipher the presence of fraud. Students will learn how to analyze and implement various types of fraud prevention and detection procedures. The course will provide a broad understanding of several major related topics such as skimming, larceny, billing schemes, check tempering, payroll schemes, corruptions and fraudulent financial statements, interviewing witnesses and occupational fraud and abuse.
Prerequisites: ACCT 501, INFO 503; M.B.A. degree students only.
ACCT 540  INTERNATIONAL ACCOUNTING AND AUDITING  3
This course deals with the measurement of operating results and financial position of multinational corporations involving transactions with foreign currencies. It focuses on the system of foreign exchange markets and the transaction gains or losses due to changes in foreign exchange rates. It teaches the techniques of foreign currency translations. It concerns the foreign exchange risk management in hedging activities. The course specifically investigates the risk aversion tool of forward exchange contracts. It also explores international accounting standards and accounting systems in other countries and the current developments in the harmonization process. Finally the course will focus on the role of internal and external auditing in the international context. Cross listed with Marketing, INBS 540.
Prerequisite: ACCT 501 and 502, M.B.A. degree students only.

ACCT 575  INDEPENDENT STUDY IN ACCOUNTING  1 - 3
Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline. Written permission of the appropriate department chair and the MBA Director must be secured prior to enrolling in this course.
Prerequisite: Departmental approval.

ACCT 577  SELECTED TOPICS IN ACCOUNTING  3
An in-depth study of a selected topic, issue, problem or trend in accounting. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book.
Prerequisite: M.B.A. degree students only.

BSLW 503  BUSINESS LAW I  3
The course introduces the student to the legal and regulatory environment of business and studies the law of contracts, agency and partnerships.
Prerequisite: M.B.A. degree students only.

BSLW 504  BUSINESS LAW II  3
The course introduces the student to the law of corporations, commercial paper, bailments, sales and secured transactions.
Prerequisite: M.B.A. degree students only.

BUSINESS ECONOMICS COURSES

ECON 501  ECONOMIC ANALYSIS  3
The resource allocation and distribution of income implications of a market oriented economy operating under various degrees of competition. Also analyzed are the determinants of consumer and market demand, and, the theoretical cost structure of firms.

ECON 502  FINANCIAL INSTITUTIONS AND MONETARY POLICY  3
This course analyzes the structure and functioning of the monetary and financial system. The component parts and the system as a unit will be examined as they interrelate to affect the economy. Topics include commercial banking system, Federal Reserve System, financial markets, financial intermediaries, determination of the level and structure of interest rates, and contemporary problems, both theoretical and applied, in the area of monetary policy. This course is cross listed with FINC 502
Prerequisites: ECON 501 and 505.
ECON 503  ECONOMIC PROBLEMS OF THE THIRD WORLD  3
A survey of major economic problems of the Third World; examination of the economic structure of developing countries and of general theories of economic development; critical evaluation of various policy alternatives for their development; analysis of possible economic relationships between First and Second Worlds with the Third World. 
Prerequisite: ECON 501.

ECON 505  AGGREGATE ECONOMICS  3
This course develops contemporary macroeconomic theories to explain aggregate employment, national income and the levels of interest rates and prices. Along with developing various models the course examines current research and reviews the economy’s recent macroeconomic performance.

ECON 508  ECONOMICS OF PUBLIC MANAGEMENT  3
Computer-based applications of capital theory to the decision-making process of government. Analysis of alternative approaches to public sector project evaluation. Spreadsheet applications of project analysis in physical and human resource management areas covering water resources, public health, and education. 
Prerequisite: ECON 501.

ECON 533  CORPORATIONS AND INTERNATIONAL FINANCIAL MARKETS  3
Discusses the economic theories and problems which confront business institutions when dealing in international financial markets. Analyzes the various market instruments and how a corporation may use them. Cross listed with Marketing, INBS 533. 
Prerequisite: ECON 501.

ECON 542  ECONOMIC FLUCTUATIONS AND FORECASTING  3
Theories to account for variations in business activity; macroeconomic models and other forecasting approaches; economic fluctuations in the United States; proposals for reducing fluctuations; Harrod Domar model and other modern theories of growth. 
Prerequisites: ECON 501 and 505.

ECON 543  UNITED STATES AND THE INTERNATIONAL ECONOMY  3
Principles of international finance, monetary relations and trade. Discussion of contemporary international monetary and trade problems and policies. Discussion of the economic aspects of current American foreign policy. 
Prerequisites: ECON 501 and 505.

ECON 545  ECONOMICS OF LABOR  3
Principal trends in the industrial and occupational distribution of labor; current developments in labor-management relations in both private and public sectors; market trends and institutional factors that determine employment, wage rates, fringe benefits and industrial peace. 
Prerequisite: ECON 501.
This course will discuss the theory productivity and technical change in the context of declining performance of U.S. manufacturing. It will focus attention on the nature of international competition and its effects on manufacturing productivity growth in the U.S. based on the analysis, a tentative set of policy suggestions will also be offered at the end for restructuring U.S. manufacturing sector and strengthening its competitive base.

Prerequisites: ECON 501.

ECON 570 BUSINESS AND THE SOCIOPOLITICAL ENVIRONMENT 3

Study of the increasingly complex set of interrelationships among business, government and other interest groups in the public policy process. It explores the economic and legal environment, and the social and political factors which affect organizations. A series of current corporate and public policy problems are discussed in order to raise major issues, including ethical issues, involved in managing the corporation’s relationships with its many publics.

Prerequisites: Completion of the Functional Core; M.B.A. students only.

ECON 575 INDEPENDENT STUDY IN ECONOMICS 1 - 3

Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline. May be repeated five times for a maximum of 18 semester hours as long as the topic is different.

Prerequisite: Departmental approval.

ECON 577 SELECTED TOPICS IN ECONOMICS 3

An in-depth study of a selected topic, issue, problem or trend in business economics. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book. May be repeated five times for a maximum of 18 semester hours as long as the topic is different.

Prerequisites: ECON 501 and 505.

FINANCE COURSES

FINC 501 CORPORATE FINANCIAL MANAGEMENT 3

An introductory course in corporate financial management which provides students with an understanding of the fundamental concepts of modern finance from an analytical and quantitative perspective and serves as a foundation course for further work in finance. The course stresses: valuation; capital budgeting decisions; capital structure and dividend decisions.

Prerequisite: ACCT 501, and ECON 501, and INFO 501; M.B.A. degree students only.

FINC 502 FINANCIAL INSTITUTIONS AND MONETARY POLICY 3

This course analyzes the structure and functioning of the monetary and financial system. The component parts and the system as a unit will be examined as they interrelate to affect the economy. Topics include commercial banking system, federal reserve system, financial markets, financial intermediaries, determination of the level and structure of interest rates, and contemporary problems, both theoretical and applied, in the area of monetary policy. This course is cross listed with Economics and Finance, ECON 502.

Prerequisites: ECON 501 and 505.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
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<tbody>
<tr>
<td>FINC 551</td>
<td>INVESTMENTS, PORTFOLIOS AND SECURITY ANALYSIS</td>
<td>3</td>
<td>Develops the analytical methods relevant to investment management. Techniques are presented for the evaluation of corporate equity, debt, and other securities. Portfolio theory is presented in the context of formulating and managing appropriate asset portfolios. Prerequisite: FINC 501.</td>
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<tr>
<td>FINC 552</td>
<td>INTERNATIONAL FINANCIAL POLICY</td>
<td>3</td>
<td>Analytically oriented introduction to the political, economic, operational and tax environment in which international business, particularly multinational corporations, functions. Stressing methods of analysis which enable defensive strategies against risk; the course is comprised of five major units: political and country risk; foreign exchange risk; long-run investments and financing; working capital management; and control performance evaluation and tax planning. Cross listed with Marketing, INBS 552. Prerequisite: FINC 501.</td>
</tr>
<tr>
<td>FINC 553</td>
<td>FINANCIAL DERIVATIVES</td>
<td>3</td>
<td>This course extends the array of financial instruments covered in the initial investment course to include modern hedging instruments such as futures, options and swaps. Included is a description, analysis, and use of these instruments by corporations, banks, and investors. Prerequisite: FINC 551.</td>
</tr>
<tr>
<td>FINC 554</td>
<td>ADVANCED FINANCIAL POLICY</td>
<td>3</td>
<td>Focuses on the application of valuation, investment, financing and dividend decisions to case studies. It examines various practical problems in capital budgeting, the valuation of different kinds of debt and options, and financial planning and strategy. Prerequisite: FINC 501.</td>
</tr>
<tr>
<td>FINC 556</td>
<td>MERGERS AND ACQUISITIONS</td>
<td>3</td>
<td>This course examines the process by which mergers and acquisitions take place. The focus of the course is on the environment surrounding mergers and acquisitions, including motivations for M&amp;A, how targets or buyers are found, M&amp;A as a step in the strategic planning process, valuation of the target company, ethical issues in the M&amp;A process, and implementation of the M&amp;A. Prerequisite: FINC 501.</td>
</tr>
<tr>
<td>FINC 570</td>
<td>CASE STUDIES IN FINANCIAL MANAGEMENT</td>
<td>3</td>
<td>Emphasizing the central theme of value creation and capital market efficiency that reappear throughout the course, students will analyze through a case-study method the way in which the subjects of financial analysis and forecasting, the cost of capital, capital budgeting, the management of shareholders equity and corporate debt, innovative financial instruments, and corporate restructurings (including mergers and buyouts contribute to creating firm value. Prerequisites: FINC 501.</td>
</tr>
<tr>
<td>FINC 575</td>
<td>INDEPENDENT STUDY IN FINANCE</td>
<td>1 - 3</td>
<td>Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline. Written permission of the appropriate department chair and the MBA Director must be secured prior to enrolling in this course. Prerequisite: Departmental approval.</td>
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</table>
FINC 576  SEMINAR IN FINANCIAL INNOVATIONS  3
Designed to describe and analyze the new developments in the field of finance - corporate, international, and financial markets and institutions - that have appeared over the last five years and the possible directions for the future. The content of the course is intended to be dynamic rather than static, as new financial instruments and institutions are introduced into this fast changing field.
Prerequisites: FINC 551 and FINC 552, or FINC 551 and FINC 554, or FINC 551 and FINC 570, or FINC 552 and FINC 554, or FINC 552 and FINC 570, or FINC 554 and FINC 570.

FINC 577  SELECTED TOPICS IN FINANCE  3
An in-depth study of a selected topic, issue, problem or trend in finance. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book. May be repeated once for a maximum of six semester hours as long as the topic is different.
Prerequisite: FINC 501.

International Business Courses

INBS 501  INTERNATIONAL BUSINESS: CONCEPTS AND ISSUES  3
Provide a conceptual and analytical framework of the nature, the process and organizational aspects of the international business. Business students will be acquainted with the dynamics of global business environment, international competition in the domestic and foreign markets and strategic issues relating to international business. The course will provide basics in international economics, foreign exchange, monetary systems and financial markets, the role of multinationals, international marketing and logistics, taxation and accounting systems, cultural challenge, management styles and practices across the nations.
Prerequisite: ECON 501; M.B.A. degree students only.

INBS 511  ISSUES IN INTERNATIONAL MANAGEMENT  3
An in-depth analysis of all components of international business management. Major emphasis is placed upon multi-national business operations including foreign profit centers, national and cultural differences, and comparative management systems with consequent impact on profitability. These are studied in terms of their influence on all areas of international trade. Cross listed with Management, MGMT 511.
Prerequisites: MGMT 505.

INBS 520  MANAGING THE GLOBAL WORKFORCE  3
The objective of the course is to increase knowledge about managing a global workforce. The course provides a framework for understanding how individual, group and organization factors impact global businesses and how organizations respond to them. Some focus will be placed on understanding cross-cultural issues within this context. Practical application, case analysis, and effective management practices of international companies are emphasized. Cross listed with Management, MGMT 520.
Prerequisite: MGMT 505.
INBS 530 EXPORT MANAGEMENT 3
To familiarize MBA students of export policies, programs and procedures and develop export/import management skills. The students will become knowledgeable about global sourcing, negotiation, pricing, export/import financing, documentation, international tenders and bidding, logistics and distribution. Cross listed with Marketing, MKTG 530. Prerequisite: INBS 501.

INBS 533 CORPORATIONS AND INTERNATIONAL FINANCIAL MARKETS 3
Discusses the economic theories and problems which confront business institutions when dealing in international financial markets. Analyzes the various market instruments and how a corporation may use them. Cross listed with Economics and Finance, ECON 533. Prerequisite: ECON 501.

INBS 540 INTERNATIONAL ACCOUNTING AND AUDITING 3
This course deals with the measurement of operating results and financial position of multinational corporations involving transactions with foreign currencies. It focuses on the system of foreign exchange markets and the transaction gains or losses due to changes in foreign exchange rates. It teaches the techniques of foreign currency translations. It concerns the foreign exchange risk management in hedging activities. The course specifically investigates the risk aversion tool of forward exchange contracts. It also explores international accounting standards and accounting systems in other countries and the current developments in the harmonization process. Finally the course will focus on the role of internal and external auditing in the international context. Cross listed with Accounting, Law and Taxation, ACCT 540. Prerequisite: ACCT 501 and 502, M.B.A. degree students only.

INBS 550 INTERNATIONAL BUSINESS STUDY ABROAD 3
This course is designed to prepare students to succeed in the global business environment by providing direct contact with foreign firms and governmental agencies through an international travel experience. Students will have a focused encounter with managers and markets outside the U.S., enabling practice of inter-cultural and inter-personal skills in foreign settings and the consideration of alternative business norms. Examination of personnel practices financial/accounting, retail, promotional, and marketing situations will enlarge perceptions of global business realities. Students will assimilate their travel encounters abroad through selected readings, cases, video tapes, and group discussions. Prerequisite: INBS 501.

INBS 552 INTERNATIONAL FINANCIAL POLICY 3
Analytically oriented introduction to the political, economic, operational and tax environment in which international business, particularly multinational corporations, functions. Stressing methods of analysis which enable defensive strategies against risk; the course is comprised of five major units: political and country risk; foreign exchange risk; long-run investments and financing; working capital management; and control performance evaluation and tax planning. Cross listed with Economics and Finance, FINC 552. Prerequisite: FINC 501.
INBS 575  INDEPENDENT STUDY IN INTERNATIONAL BUSINESS  3
Under faculty guidance and supervision, this tutorial course is open to students who wish
to pursue individual study and research in international business. Written permission of
the instructor, appropriate department chair, and the MBA director must be secured prior
to enrolling in this course. May be repeated once for a maximum of six semester hours.
Prerequisites: INBS 501; departmental approval.

INBS 577  SELECTED TOPICS IN INTERNATIONAL BUSINESS  3
An in-depth study of a selected topic, issue, problem or trend in international business.
The specific subject matter is not offered as an existing regular course or deserves more
time-emphasis than is possible in a regular course. When offered, topics and prerequisites
are announced in the course schedule book. May be repeated once for a maximum of six
semester hours.
Prerequisite: INBS 501; departmental approval.

INBS 592  INTERNATIONAL MARKETING MANAGEMENT  3
An examination of the various multinational and transnational issues confronting busi-
ness organizations marketing products and services in overseas markets. Attention will
be focused on problems such as identifying and evaluating markets, adapting marketing
strategies to specific market needs and coordinating strategies in world markets. Cross
listed with Marketing, MKTG 592.
Prerequisite: MKTG 501.

MANAGEMENT COURSES

MGMT 505  MANAGEMENT PROCESS AND ORGANIZATIONAL BEHAVIOR  3
Review of classical and modern approaches to the managerial process as it relates to the
manager’s functions of planning, organizing, staffing, leading, and controlling. These
reviews will be tied to the open-system model and the contingency approach as an overall
framework for understanding the management of organizations.
Prerequisite: M.B.A. and D.Env.M. degree students only.

MGMT 510  HUMAN RESOURCE MANAGEMENT  3
This course examines how managers can utilize modern human resource practices in
order to improve company performance and efficiencies. Topics include staffing for
quality, outsourcing, use of core and contingent workforce, managing workforce commit-
ment and performance, legal issues, managing careers, and reward systems. A case study
approach is used.
Prerequisite: MGMT 505.

MGMT 511  ISSUES IN INTERNATIONAL MANAGEMENT  3
An in-depth analysis of all components of international business management. Major
emphasis is placed upon multi-national business operations including foreign profit
centers, national and cultural differences, and comparative management systems with
consequent impact on profitability. These are studied in terms of their influence on all
areas of international trade. Cross listed with Marketing, INBS 511.
Prerequisite: MGMT 505.
MGMT 513 LEADERSHIP AND BEHAVIOR 3
The purpose of the course is to help students understand leadership behavior. The course reviews current theoretical and empirical literature from the behavioral sciences as it relates to leadership. Topics covered include leadership styles, power and leadership, leader-follower interactions, and the manager as leader.
Prerequisite: MGMT 505.

MGMT 520 MANAGING THE GLOBAL WORKFORCE 3
The objective of the course is to increase knowledge about managing a global workforce. The course provides a framework for understanding how individual, group and organization factors impact global businesses and how organizations respond to them. Some focus will be placed on understanding cross-cultural issues within this context. Practical application, case analysis, and effective management practices of international companies are emphasized. Cross listed with Marketing, INBS 520.
Prerequisite: MGMT 505.

MGMT 525 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT 3
This course is for students who want to start their own businesses or initiate new ventures in existing corporations. Topics include the importance of entrepreneurship in the United States, identifying business opportunities and formulating business plans.
Prerequisites: MGMT 505, and MKTG 501, and ACCT 501.

MGMT 530 MANAGEMENT OF TECHNOLOGY IN ORGANIZATIONS 3
This course focuses on the management of technology and the technological function in the modern corporation. Topics include the management of science and technology professionals, integration of the R&D function into the organization, the impact of national and global forces on innovation introduction and adoption, and technological change. Descriptions of new technologies in biotechnology, manufacturing, aerospace, and other fields are included. Delivered in a lecture format, the course includes case studies, guest speakers, and team-based pedagogical techniques.
Prerequisite: MGMT 505.

MGMT 540 EXECUTIVE PERSPECTIVES 3
This course complements the theoretical components by provided practical exposure to current management issues. This is accomplished by bringing to class business executives and leaders who discuss their most immediate and longer term management challenges. The course also examines several current issues facing senior executives.

MGMT 575 INDEPENDENT STUDY IN MANAGEMENT 1 - 3
Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline.
Prerequisite: Departmental approval.

MGMT 577 SELECTED TOPICS IN MANAGEMENT 3
An in-depth study of a selected topic, issue, problem or trend in management. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book. May be repeated once for a maximum of six semester hours as long as the topic is different.
MGMT 580  ADVANCED STRATEGIC MANAGEMENT  3
The focus of this course is on actual business situations and their impact on the total organization including the role of top management in dealing with these problems. The structure of the course is based on the strategic management process which includes identification, evaluation and implementation of policy and strategy.
Prerequisite: Completion of the Business Core and a minimum of 12 semester hours of advanced courses; M.B.A. students only.

Management Information Systems Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 501</td>
<td>STATISTICAL METHODS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to statistical techniques with applications in business decision making and problem solving. Topics include descriptive statistics, probability distributions, statistical estimation and hypothesis testing, regression and correlation, and introduction to analytical statistical methods including control charts.</td>
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</tr>
<tr>
<td></td>
<td>Prerequisite: Course in undergraduate calculus; M.B.A. degree students only.</td>
<td></td>
</tr>
<tr>
<td>INFO 503</td>
<td>INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Examines the information requirements of an organization. The differences in the kinds of information needed at the various organizational levels (operational, administrative and strategic) are emphasized. How to plan and implement a comprehensive information system is discussed as well as methods to measure its effectiveness.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: M.B.A. degree students only.</td>
<td></td>
</tr>
<tr>
<td>INFO 505</td>
<td>PRODUCTION/OPERATIONS MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Emphasizes human and mechanical productivity in planning a comprehensive and effective production or operations system. Employs a case approach to the study, formulation and solution of business problems through the application of managerial, quantitative and information systems methodology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: INFO 501, 503, MGMT 505; M.B.A. degree students only.</td>
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<tr>
<td>INFO 513</td>
<td>EMERGING INFORMATION TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course is designed to increase awareness of emerging technologies in information systems within a global business environment. Emphasis is placed on identifying current trends, forecasting their rate of diffusion, and evaluating their current and future impact on business.</td>
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<tr>
<td></td>
<td>Prerequisites: INFO 503; M.B.A. degree students only.</td>
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</tr>
<tr>
<td>INFO 514</td>
<td>INFORMATION MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study of computers and their use as management tools in information systems, research, control procedures, production, finance, modeling, and decision making. Topics include description of and application of different hardware and software components and programming concepts. Computer cost benefit analysis in all of the above and in systems applications.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: INFO 503.</td>
<td></td>
</tr>
</tbody>
</table>
INFO 521 DECISION SUPPORT AND EXPERT SYSTEMS FOR BUSINESS
Introduction to the fundamental principles, techniques and business applications of decision support systems (DSS) and expert systems (ES) from a managerial perspective. Provides practical knowledge of the ways to utilize decision support systems and expert systems to solve business problems involving complex decision-making processes.
Prerequisite: INFO 503; M.B.A. degree students only.

INFO 522 BUSINESS DATA COMMUNICATIONS AND NETWORKS 3
Primarily from a managerial perspective, provides a broad introduction to data communications, telecommunications networks, and business applications of telecommunications technology. While providing a reasonable foundation for appreciating technical concepts, focuses on the business aspects and practical applications of data communications and computer networks in modern organizations.
Prerequisite: INFO 503; some background in technology, networking, and project management is required.

INFO 523 DATABASE SYSTEMS FOR BUSINESS 3
Increases an understanding of how databases are developed and managed to effectively support business information systems in organizations. Having acquired conceptual knowledge as well as practical techniques, students also gain insights into other options in database management by reviewing the latest offerings in the field.
Prerequisite: INFO 503; some background in technology, programming, and project management is required.

INFO 524 BUSINESS SYSTEMS ANALYSIS AND DESIGN 3
Emphasis is on the application of tools and techniques of systems analysis and design, change management concepts, processes, and techniques are presented in the context of systems development projects. Pointers to managerial and organizational aspects of information technology projects are provided throughout the course. This course is for individuals aspiring to be analysts or better informed end users of information systems in business.
Prerequisite: INFO 503; M.B.A. degree students only.

INFO 525 ELECTRONIC COMMERCE MANAGERIAL PERSPECTIVE 3
ON NEW BUSINESS MODELS AND INFORMATION INFRASTRUCTURE SUPPORT
This course is designed to provide the student an understanding of the consequences of the introduction of the Internet in the way business is conducted. The electronic commerce world is viewed primarily from the point-of-view of MIS. The E-Commerce course will emphasize strategic planning, appreciating relevant information technology support issues, and sensitivity to analyzing and evaluating new business models evolving in the marketplace rapidly. Organizations have been profoundly affected by related network technologies. The student will learn about new forms of business practices in “virtual” organization business-to-business, consumer-to-business, person-to-person, and intraorganizational transactions. Specifically, activities in the areas of electronic shopping, publishing, distribution, and collaboration will be explored.
Prerequisite: INFO 503.
INFO 575 INDEPENDENT STUDY IN INFORMATION SYSTEMS FOR BUSINESS
Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline. May be repeated once for a maximum of six semester hours as long as the topic is different.
Prerequisite: Departmental approval.

INFO 577 SELECTED TOPICS IN INFORMATION SYSTEMS FOR BUSINESS
An in-depth study of a selected topic, issue, problem or trend in information systems for business. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book.
Prerequisite: Departmental approval.

MARKETING COURSES

MKTG 501 MARKETING MANAGEMENT
This business core requirement assumes little or no prior formal education in the discipline of marketing. As such, a solid introduction to the language of the discipline, body of knowledge, tools and techniques must necessarily be covered through a text and readings format supplemented with class lectures which are grounded in heavy case analysis and real-world illustrations. The pivotal distinctiveness of this graduate offering lies in drawing the student into issues that are industry and company specific (preferably drawn from the student’s career related industry/company).
Prerequisite: M.B.A. degree students only.

MKTG 530 EXPORT MANAGEMENT
To familiarize MBA students with export policies, programs and procedures and develop export/import management skills. The students will become knowledgeable about global sourcing, negotiation, pricing, export/import financing, documentation, international tenders and bidding, logistics and distribution. Cross listed with Marketing, INBS 530.
Prerequisite: INBS 501.

MKTG 575 INDEPENDENT STUDY IN MARKETING
Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline.
Prerequisite: Departmental approval.

MKTG 577 SELECTED TOPICS IN MARKETING
An in-depth study of a selected topic, issue, problem or trend in marketing. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book. May be repeated once for a maximum of six semester hours as long as the topic is different.
Prerequisite: Departmental approval.
Firms are experiencing dramatic shifts in marketing practices related to the emergence of the global electronic marketplace. This course is designed to help students and practitioners understand how to think about and implement effective Internet marketing and customer-centric communication programs. The course focuses on the various unique factors and issues that electronic tools bring to marketing, namely the ability to directly market to individuals, provide new information services, and to interact in ways that consumers find valuable. Issues examined are using the Internet to attract new customers, retain existing customers, build brand awareness, expand into new markets, develop customer relationships (CRM) programs and the metrics to assess these programs and tools.

Prerequisite: MKTG 501.

**MKTG 591 CONSUMER/BUYER BEHAVIOR**

An in-depth introduction to theories and models of how individual consumers, family units, and companies make buying decisions. Each step in the continuous decision cycle is covered in detail, in such models of consumer behavior as the high and low involvement models, information processing and attitude formation and change. Relevant psychological concepts on personality and life-style, self-concept, cognition and classical versus operant conditioning are also covered. Students also gain valuable perspective on how purchase decisions are made in their own households.

Prerequisite: MKTG 501.

**MKTG 592 INTERNATIONAL MARKETING MANAGEMENT**

This course is designed to aid students to plan and implement international marketing efforts in conjunction with global business strategy. The course will review processes of analyzing, developing, and implementing strategic marketing objectives within an international context which is now characterized by global sourcing, international alliances, highly competitive markets, regional trade areas, and multinational firms, with diminishing connection to their country of origin. Students will practice analytic techniques through research, readings, and case analysis, advancing their conceptual understanding of such issues as competitiveness, regional business clusters, and local sources of advantage. Students will learn to re-think assumptions about marketing mix factors as they apply in different cultural, political, economic, and legal environments. Cross listed with Marketing, INBS 592.

Prerequisite: MKTG 501.

**MKTG 593 NEW PRODUCT DEVELOPMENT**

This course examines product planning, new product and process development, and issues related to exploiting opportunities for successful innovation. Students will analyze product development and launch decisions through case studies, advancing their conceptual understanding of the problems and risks associated with designing new products and the importance of championing, project teams, and fast development cycle times. Students will formulate development and business plans to advance their capability of managing the marketing mix factors to increase the probability of a new product’s success.

Prerequisite: MKTG 501.
MKTG 594  MARKETING RESEARCH AND INFORMATION SYSTEMS

A comprehensive introduction to current methods used to collect consumer, business and market data and turn it into useful information for marketing decision-makers. Major topics include: secondary studies; quantitative surveys; data analysis (coding, tabulation, basic and multivariate analytical methods); modeling and simulation techniques; and effective communication of research findings (written reports, personal presentations, computer graphics and mapping). Each graduate student is required to design and carry out an original research project on a topic of their choice. Class discussions center on practical applications of marketing research and information systems in the companies in which students are employed.

Prerequisite: MKTG 501.

MKTG 595  SEMINAR IN MARKETING STRATEGY

This course is designed to introduce students to market planning, strategy formation and the process of implementing strategic objectives. Students will practice analytic techniques to understand and diagnose strategic imperatives, advancing their conceptual understanding of such issues as competitiveness, core competencies, statistical planning through case analyses and writing strategic plans, learning to relate and connect marketing mix factors to other strategic objects such as continuous improvement systems. Students will be introduced to benchmarking, strategic audits, and other tools used to measure firm performance and develop world-class standards.

Prerequisite: MKTG 501.

MKTG 596  INTEGRATED MARKETING COMMUNICATIONS (IMC) - PROMOTION STRATEGY

This course provides students with the tools and skills to make decisions involved in integrating the promotion mix into the overall marketing strategy for consumer and/or business-to-business target markets. Emphasis is given to the processes and challenges involved in developing effective marketing communication strategies enabling an organization to be successful in an ever changing competitive global marketplace. Students will learn how the various promotion elements (e.g., advertising, sales promotion) work from a persuasive perspective along with their applicability within an integrated promotions plan, offering strategic insights into their use. This strategic persuasive, integrated perspective is grounded in a consumer behavior fundamental understanding. Contemporary topics are discussed.

Prerequisite: MKTG 501.
The Chemistry and Biochemistry Department offers three options for the Master’s degree: the Master of Science in Chemistry, the Master of Science in Chemistry with Concentration in Biochemistry and the combined Master of Science in Chemistry/Master of Business Administration. The courses offered include advanced level courses in all major areas of chemistry and biochemistry, and include a number of highly specialized instrumentation courses, as well as individual research opportunities. Laboratories are housed in both Richardson Hall and Science Hall. Students may selectively take one or two courses as non-degree students to increase their professional competence in a particular area of chemistry or biochemistry, or may elect to enroll in one of the Master of Science programs as outlined below.

ADMISSION REQUIREMENTS

The minimum requirements for admission to the Graduate School, as set forth in this catalog, are essential for admission to one of the graduate programs in the Department of Chemistry and Biochemistry. When a student has been admitted, the graduate program coordinator for Chemistry and Biochemistry will evaluate the background in chemistry, biochemistry, other sciences and mathematics, and a specific program will be designed. An entering student should present at least twenty-four semester hours of undergraduate chemistry credits. In consultation with the graduate program coordinator, a program may be designed for a student with insufficient background to include prerequisites. Candidates for the Master’s degree should seek the guidance of the graduate program coordinator in selecting electives, and in fulfilling the research option.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN CHEMISTRY

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Chemistry courses (18 semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Organic and Inorganic (Select 6 semester hours)</td>
</tr>
<tr>
<td></td>
<td>CHEM 531 Advanced Topics in Organic Chemistry .................................. 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 532 Organic Synthesis .......................................................... 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 521 Advanced Topics in Inorganic Chemistry .................................. 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 550 Organometallic Chemistry .................................................. 3</td>
</tr>
<tr>
<td></td>
<td>B. Analytical and Physical (Select 6 semester hours)</td>
</tr>
<tr>
<td></td>
<td>CHEM 534 Chromatographic Methods: Theory and Practice .................. 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 536 Nuclear Magnetic Resonance: Theory and Practice ........ 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 540 Chemical Thermodynamics ................................................... 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 542 Theoretical Physical Chemistry ............................................ 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 544 Electrochemistry ................................................................. 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 546 Chemical Spectroscopy .......................................................... 3</td>
</tr>
<tr>
<td></td>
<td>CHEM 548 Chemical Kinetics ................................................................. 3</td>
</tr>
</tbody>
</table>
C. Electives (Select 6 semester hours)
   - CHEM 525 Bioinorganic Chemistry ...................................................... 3
   - CHEM 533 Biosynthesis of Natural Products ........................................ 3
   - CHEM 538 Drug Design in Medicinal Chemistry ....................................... 3
   - CHEM 570 Selected Topics in Advanced Biochemistry ............................. 3
   - CHEM 574 Protein Structure ................................................................... 3
   - CHEM 575 Enzyme Kinetics and Mechanisms ......................................... 3
   - CHEM 576 Lipid Biochemistry .................................................................. 3
   - CHEM 577 Nucleic Acid Biochemistry ................................................ 3
   - CHEM 578 Biochemistry Laboratory Techniques ..................................... 3
   - CHEM 590 Selected Topics-Advanced Chemistry .................................... 3

II. Research (Select option a. (2 semester hours) or b. (6 semester hours):
   a. CHEM 599 Graduate Literature Search in Chemistry ...................... 2
   or
   b. CHEM 595 Graduate Research ............................................................ 3
      and
      CHEM 698 Master’s Thesis .................................................................... 3
      
      *CHEM 595 is a variable credit course 1-3 s.h. It may be taken twice for maximum of 3 s.h. Recommended 2 s.h. + 1 s.h. in two consecutive semesters.*

III. Electives in chemistry, allied sciences or mathematics ......................... 6 or 2
   (Courses approved by graduate program coordinator only. The number of semester hours is determined by the option selected in II.)
   Courses at the 400 level or 500 level may be taken in this category in Chemistry, allied Sciences or Mathematics. A maximum of 6 semester hours total may be 400-level courses. these courses are to be approved by the graduate program coordinator.

IV. Comprehensive Examination (in conjunction with CHEM 599 or CHEM 698)
V. Graduate level free electives at the 500 level ........................................ 6
   Minimum semester hours: 32

**REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN CHEMISTRY/MASTER OF BUSINESS ADMINISTRATION**

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
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</tr>
</tbody>
</table>

I. Chemistry courses (18 semester hours)
   A. Organic and Inorganic (Select 6 semester hours)
      - CHEM 531 Advanced Topics in Organic Chemistry ......................... 3
      - CHEM 532 Organic Synthesis .................................................... 3
      - CHEM 521 Advanced Topics in Inorganic Chemistry ...................... 3
      - CHEM 550 Organometallic Chemistry ........................................... 3
   B. Analytical and Physical (Select 6 semester hours)
      - CHEM 534 Chromatographic Methods: Theory and Practice ........... 3
      - CHEM 536 Nuclear Magnetic Resonance: Theory and Practice ......... 3
      - CHEM 540 Chemical Thermodynamics .......................................... 3
      - CHEM 542 Theoretical Physical Chemistry .................................. 3
      - CHEM 544 Electrochemistry ....................................................... 3
      - CHEM 546 Chemical Spectroscopy ............................................... 3
C. Electives (Select 6 semester hours)

CHEM 525 Bioinorganic Chemistry ...................................................... 3
CHEM 533 Biosynthesis of Natural Products ........................................ 3
CHEM 538 Drug Design in Medicinal Chemistry ................................. 3
CHEM 570 Selected Topics in Advanced Biochemistry ....................... 3
CHEM 574 Protein Structure ................................................................. 3
CHEM 575 Enzyme Kinetics and Mechanisms ..................................... 3
CHEM 576 Lipid Biochemistry ............................................................. 3
CHEM 577 Nucleic Acid Biochemistry ................................................. 3
CHEM 578 Biochemistry Laboratory Techniques ................................. 3
CHEM 590 Selected Topics-Advanced Chemistry ................................ 3

II. Research

CHEM 599 Graduate Literature Search in Chemistry ......................... 2

III. Comprehensive Examination (in conjunction with CHEM 599)

IV. Managerial Decision Making (9 semester hours)

ECON 501 Economic Analysis ............................................................. 3
INFO 501 Statistical Methods .............................................................. 3
INFO 503 Management Information Systems ....................................... 3

Functional Core (15 semester hours)

ACCT 501 Financial Accounting .......................................................... 3
FINC 501 Corporate Financial Management ....................................... 3
INFO 505 Production/Operation Management .................................... 4
MGMT 505 Management Process and Organizational Behavior .......... 3
MKTG 501 Marketing Management ...................................................... 3

Advanced Courses: Managing the Business Environment (6 semester hours)

ECON 570 Business and the Sociopolitical Environment .................... 3
INBS 501 Advances in International Business ..................................... 3

V. Concentration and Electives (15 semester hours)

Students may design program concentrations to meet specific needs and interests, or they may not choose to concentrate and select an array of courses, which will provide a broad, general education.

Any student entering the MBA program without a course in Managerial or Cost Accounting will be required to take Managerial Accounting (ACCT 502) as an accounting concentration or advanced elective course.

Any student entering the MBA program without appropriate background in Macroeconomics will be required to take Aggregate Economics (ECON 505) as a business economics concentration or advanced elective course.

Concentrations consist of 9 or 12 hours of advanced courses in the following areas:

Accounting
Business Economics
Finance
International Business
Management
Marketing
Management Information Systems.

Please refer to the Master of Business Administration (MBA) program in
this catalog for specifics on concentrations and electives.

VI. Capstone Course (3 semester hours)

Students must complete the business core courses and a minimum of 15 semester hours of advanced courses prior to enrolling in the capstone course.

MGMT 580 Strategy and Business Policy .................................................. 3

Minimum semester hours: 68

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN CHEMISTRY,
CONCENTRATION IN BIOCHEMISTRY

The Biochemistry concentration provides a flexible program of study for those students who wish to emphasize Biochemistry and related areas in their Master’s degree. Those working in research in the pharmaceutical industry or interested in doing so, and individuals interested in pursuing an M.D. or a Ph.D. in Biochemistry or a related area would benefit from this program. It is most suited to students with an undergraduate degree in Biochemistry, but is also suitable for students with a major in chemistry who wish to broaden their knowledge in biochemistry. As indicated above, students with other backgrounds can also be accommodated.

Semester
Hours

I. Specialization (32 semester hours)

A. 21 semester hours of coursework in chemistry and biochemistry at the 500 level. A minimum of 12 s.h. in graduate level chemistry and biochemistry are to be taken from courses CHEM 525, 533, 538, and 570-579 .................. 21

CHEM 525 Bioinorganic Chemistry .................................................. 3
CHEM 533 Biosynthesis of Natural Products ........................................ 3
CHEM 538 Drug Design in Medicinal Chemistry ................................. 3
CHEM 570 Selected Topics in Advanced Biochemistry ....................... 3
CHEM 574 Protein Structure ................................................................. 3
CHEM 575 Enzyme Kinetics and Mechanisms ..................................... 3
CHEM 576 Lipid Biochemistry ............................................................. 3
CHEM 577 Nucleic Acid Biochemistry ................................................. 3
CHEM 578 Biochemistry Laboratory Techniques .................................. 3

B. Research (Choose either 1 or 2 for 2 or 6 semester hours:

1. CHEM 599 Graduate Literature Search in Chemistry .......................... 2
   (A Biochemistry topic must be selected and approved
   by the faculty advisor and graduate program coordinator.)
   or

2. CHEM 595 Graduate Research .......................................................... 3
   and
   CHEM 698 Master’s Thesis ............................................................. 3

C. Graduate level electives in chemistry, biochemistry or allied sciences (5-9 semester hours):

With the assistance and approval of the graduate program coordinator, select 5-9 s.h. from a list including 400-500 level chemistry, biochemistry and biology courses. Up to two courses may be at the 400 level. Students
without sufficient prior background in biochemistry will use these credits to take two 400 level biochemistry courses. Courses may include, but are not limited to the following:

CHEM 470 Biochemistry I ................................................................. 3
CHEM 471 Biochemistry II ............................................................... 3
CHEM 472 Experimental Biochemistry .......................................... 2
CHEM 473 Instrumental Biochemistry ............................................. 3
BIOL 405 Cell Culture ................................................................... 3
BIOL 547 Molecular Biology I ....................................................... 3
BIOL 548 Molecular Biology II ....................................................... 4
BIOL 512 Topics in Modern Genetics ............................................. 3
BIOL 598 Selected Techniques in Molecular Biology ..................... 1.5

In preparing the work program, the graduate program coordinator may approve other electives appropriate to the individual student. These courses may come from allied sciences and other new courses as they are developed.

II. Comprehensive examination (Research Project Presentation) ............... required

(A seminar presentation of the student’s research, from part I.B. above)

Minimum semester hours: 32

CHEMISTRY AND BIOCHEMISTRY

Course Descriptions

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>CHEM</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>521</td>
<td>ADVANCED TOPICS IN INORGANIC CHEMISTRY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current theories of inorganic structure, reactions and properties. May be repeated twice for a maximum of nine semester hours as long as the topic is different. Prerequisite: One year of physical chemistry.</td>
</tr>
<tr>
<td>3</td>
<td>525</td>
<td>BIOINORGANIC CHEMISTRY</td>
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<tr>
<td></td>
<td></td>
<td>Exploration of the vital roles that metal atoms play in biochemical processes. Transition metal interactions with proteins will be emphasized. The course will focus on the structural, regulatory, catalytic, transport, and oxidation-reduction functions of metal containing biomolecules. Prerequisite: CHEM 341 Physical Chemistry II or instructor’s permission.</td>
</tr>
<tr>
<td>3</td>
<td>531</td>
<td>ADVANCED TOPICS IN ORGANIC CHEMISTRY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modern theories of organic chemistry with emphasis on electronic theory and reaction mechanisms. May be repeated three times for a maximum of twelve semester hours as long as the topic is different. Prerequisite: CHEM 430 Advanced Organic Chemistry.</td>
</tr>
<tr>
<td>3</td>
<td>532</td>
<td>ORGANIC SYNTHESIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Detailed study of the art, methods, and the philosophy of organic synthesis beginning with a review of classical and modern synthetic methods, followed by the planning theory of synthesis and culminating in a study of elegant syntheses in the literature. Prerequisite: CHEM 430 Advanced Organic Chemistry.</td>
</tr>
</tbody>
</table>
CHEM 533  BIOSYNTHESIS OF NATURAL PRODUCTS  
A study of natural products with emphasis on the biosynthesis of primary and secondary metabolites.  
Prerequisite: CHEM 430 Advanced Organic Chemistry or equivalent.

CHEM 534  CHROMATOGRAPHIC METHODS: THEORY AND PRACTICE  
A combined lecture/hands-on course in the theory and practice of chromatography; including GC, HPLC, GC-MS, GPC, and SFC, as well as computerized instrument control, data acquisition, and processing.  
Prerequisites: CHEM 310 (Analytical Chemistry) and 311 (Instrumental Analysis) or equivalents.

CHEM 536  NUCLEAR MAGNETIC RESONANCE: THEORY AND PRACTICE  
A combination lecture/hands-on course utilizing the department’s FT-NMR to provide students with theoretical background and practical experience in modern 1-D and 2-D FT-NMR.  
Prerequisites: CHEM 310 Analytical Chemistry and 311 Instrumental Analysis or equivalents.

CHEM 538  DRUG DESIGN IN MEDICINAL CHEMISTRY  
A comprehensive course covering the design and action of pharmaceutical agents.  
Prerequisite: Matriculation into the graduate program or permission of instructor.

CHEM 540  CHEMICAL THERMODYNAMICS  
In-depth study of classical thermodynamics. Development of thermodynamic functions describing chemical systems in equilibrium, with emphasis on systems of variable composition.  
Prerequisite: CHEM 341 Physical Chemistry II or instructor’s permission.

CHEM 542  THEORETICAL PHYSICAL CHEMISTRY  
Theoretical development of quantum mechanics and statistical mechanics as applied to chemistry. Application of theoretical procedures to atomic and molecular structure and bonding.  
Prerequisites: CHEM 341 Physical Chemistry II and MATH 420 Differential Equations.

CHEM 544  ELECTROCHEMISTRY  
Principles and application of electrochemistry, relationship of electromechanical principles to classical thermodynamics, and practical applications of electrochemistry.  
Prerequisite: CHEM 341 Physical Chemistry II.

CHEM 546  CHEMICAL SPECTROSCOPY  
Introduction to the theory of molecular spectroscopy.  
Prerequisite: CHEM 341 Physical Chemistry II.

CHEM 548  CHEMICAL KINETICS  
Kinetics and its role of elucidating reaction mechanisms. Discussion of recent problems from the chemical literature including fast reactions and enzyme kinetics.  
Prerequisite: CHEM 341 Physical Chemistry II.
CHEM 550 ORGANOMETALLIC CHEMISTRY 3
The course will introduce students to organometallic chemistry, mainly involving transition metals, but also including some main group metals. The material covered will focus on the unique chemistry of these compounds and their uses in organic synthesis, material science, and as catalysts.
Prerequisites: CHEM 423 Advanced Inorganic Chemistry and 430 Advanced Organic Chemistry or equivalents.

CHEM 570 SELECTED TOPICS IN ADVANCED BIOCHEMISTRY 3
A detailed treatment of selected topics in biochemistry. Special emphasis upon recent developments. Protein structure, enzymology, metabolism, and nucleic acid chemistry are examples of topics. May be repeated without limit as long as the topic is different each time.
Prerequisite: CHEM 470 Biochemistry I or instructor’s permission.

CHEM 574 PROTEIN STRUCTURE 3
Primary, secondary and tertiary structure of proteins, protein structural motifs and protein structural families. Globular proteins, DNA binding proteins, membrane proteins, signal transduction systems, immune system protein structure, methods used for determination of protein structure.
Prerequisite: One semester of introductory biochemistry or similar background.

CHEM 575 ENZYME KINETICS AND MECHANISMS 3
The following properties of enzymes are considered: structure, specificity, catalytic power, mechanism of action, multienzyme complexes, kinetics, regulation, and multienzyme systems.
Prerequisite: CHEM 470 Biochemistry I or equivalent.

CHEM 576 LIPID BIOCHEMISTRY 3
Chemistry of plant and animal lipids, their occurrence, metabolism, and industrial uses.
Prerequisite: CHEM 470 Biochemistry I or equivalent.

CHEM 577 NUCLEIC ACID BIOCHEMISTRY 3
This course will present fundamental aspects of nucleic acid biochemistry including structure and biological function and will be organized according to a systematic consideration of techniques used in the study of nucleic acids. Current literature and key topics such as protein-DNA, protein-drug complexes and nucleic acid repair mechanisms will be considered.
Prerequisite: CHEM 470 Biochemistry I or equivalent.

CHEM 578 BIOCHEMISTRY LABORATORY TECHNIQUES 3
Fundamental techniques used to isolate, characterize, and study nucleic acids, proteins, carbohydrates, and lipids. Theory and application of buffers, spectrophotometry, tissue fractionation, centrifugation, extraction, chromatographic separations, electrophoresis, radioactivity, enzyme purification and kinetics, enzymatic assays, NMR and MS structure determination.
Prerequisite: CHEM 470 Biochemistry I or equivalent.
CHEM 579  BIOMOLECULAR ASSAY DEVELOPMENT  3
This course will provide the student with hands-on experience of state of the art
techniques used for drug discovery research in the pharmaceutical industry. These
techniques include assay development for high throughput screening and molecular
docking methods for lead discovery. Using these techniques will allow the student to
understand the drug discovery process, which includes a dialogue between crystallogra-
phers, medicinal chemists, biochemists, and biologists.
Prerequisites: CHEM 470, Biochemistry I or instructor’s permission.

CHEM 590  SELECTED TOPICS - ADVANCED CHEMISTRY  3
An in-depth study of selected areas in either analytical, inorganic, organic or physical
chemistry, with special emphasis upon recent developments in the field. May be repeated
three times for a maximum of twelve semester hours as long as the topic is different each
time.
Prerequisite: CHEM 341 Physical Chemistry II or instructor’s permission.

CHEM 595  GRADUATE RESEARCH  1-3
Directed individual laboratory investigation under guidance of faculty advisor. May be
elected once or twice, maximum credit allowed is 3 semester hours.
Prerequisite: Completion of 12 semester hours in this graduate program; instructor’s
permission.

CHEM 599  GRADUATE LITERATURE SEARCH IN CHEMISTRY  2
An individual, non-experimental investigation utilizing the scientific literature .
Prerequisite: Completion of 12 semester hours in this graduate program; instructor’s
permission.

CHEM 698  MASTER’S THESIS  3
Independent research project done under faculty advisement. Students must follow the
MSU Thesis Guidelines, which may be obtained from the Graduate School. Students
should take CHEM 699 if they don’t complete CHEM 698 within the semester.
Prerequisite: Departmental approval.

CHEM 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In
Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: CHEM 698.
The Master of Arts in Child Advocacy consists of 33-34 semester hours. There is a required core of 6 courses, and an additional 15 semester hours of electives divided into two groups of 9 and 6 semester hours respectively. Students electing to complete a master’s thesis will complete CHAD 698 in lieu of an elective course. A complete listing of these courses is found on the program of study.

Students may also complete the Master of Arts in Child Advocacy with a concentration in Public Child Welfare. They will be required to complete a core course requirement of 15 semester hours and a required concentration sequence of 9 semester hours. Three other courses (9 semester hours) are also required from a list of concentration electives. The same thesis option is found here.

Students completing CHAD 501, 502, 503, 504, 505 will receive a Post-BA Certificate in Child Advocacy.

Students must also pass a comprehensive examination.

ADMISSION REQUIREMENTS
To be admitted into the Master of Arts in Child Advocacy program, students must have a baccalaureate degree in any discipline. Students must also submit to the Graduate School a completed Graduate Application, which includes official transcripts from each college/university attended and a statement objectives along with two letters of recommendation and a copy of scores received on the Graduate Record Examination.

Courses are offered during the fall and spring semester and often during summer session.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN CHILD ADVOCACY

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Required Core Courses (21 semester hours)</td>
</tr>
<tr>
<td>CHAD 501 Introduction to Applied Child Advocacy .................. 3</td>
</tr>
<tr>
<td>CHAD 502 Child Abuse and Neglect ........................................ 3</td>
</tr>
<tr>
<td>CHAD 503 Current Social Issues in Child Advocacy .................. 3</td>
</tr>
<tr>
<td>CHAD 504 Children and Justice ............................................. 3</td>
</tr>
<tr>
<td>CHAD 505 Theoretical and Applied Models for Interviewing Children .... 3</td>
</tr>
<tr>
<td>CHAD 610 Selected Topics in Child Advocacy ............................ 3</td>
</tr>
<tr>
<td>CHAD 620 Practicum in Child Advocacy .................................... 3</td>
</tr>
</tbody>
</table>

(Students with applied experience in Child Advocacy are not required to take this course. An elective from Group I will be substituted).

II. Elective Courses (9-12 semester hours):
- Group I: Select 1 or 2 courses from among the following (students selecting the thesis option will take only 1 course from this group): ........................................
  - CHAD 520 Adolescents and the System ........................................ 3
  - CHAD 521 Substance Abuse and families in Crisis ........................ 3
  - CHAD 522 Family Empowerment Models for Child Advocates ............ 3
CHAD 530 Child Protective Service Investigation ........................................... 3
CHAD 540 Child Welfare Policy ........................................................................ 3

Group 2: Select 2 courses from among the following:
COUN 590 Counseling the Alcoholic and the Substance Abuser .................... 3
COUN 595 Multicultural Counseling ............................................................... 3
COUN 640 The Mentally Impaired and the Chemically Addicted Client .......... 3
COUN 652 Counseling the Family ..................................................................... 3
COUN 660 Selected Problems in Counseling Handicapped Persons ............... 3
LSLW 517 Evidence ......................................................................................... 3
LSLW 524 Juvenile Law .................................................................................... 3
ELAD 521 Education Law .................................................................................. 3
FCST 514 Child in the Family .......................................................................... 3
FCST 544 Intercultural Study of the Family ..................................................... 3

Minimum semester hours: 33-34

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN CHILD ADVOCACY, CONCENTRATION IN PUBLIC CHILD WELFARE

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>I.</td>
<td></td>
</tr>
<tr>
<td>Required Core Courses (15 semester hours)</td>
<td></td>
</tr>
<tr>
<td>CHAD 501 Introduction to Applied Child Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 502 Child Abuse and Neglect</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 503 Current social Issues in Child Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 504 Children and Justice</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 505 Theoretical and Applied Models for Interviewing Children</td>
<td>3</td>
</tr>
<tr>
<td>Required concentration sequence (9 semester hours):</td>
<td></td>
</tr>
<tr>
<td>CHAD 610 Selected Topics in Child Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 620 Practicum in Child Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 630 Externship in Public Child Welfare</td>
<td>3</td>
</tr>
<tr>
<td>Concentration electives (9 semester hours):</td>
<td></td>
</tr>
<tr>
<td>CHAD 520 Adolescents and the System</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 521 Substance Abuse and families in Crisis</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 522 Family Empowerment Models for Child Advocates</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 530 Child Protective Service Investigation</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 531 Permanency Planning</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 540 Child Welfare Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

A comprehensive examination is required. Students selecting the thesis option (CHAD 698) will take two courses instead of three from the list of Concentration electives.

Minimum semester hours: 33-34
**CHAD 501** INTRODUCTION TO APPLIED CHILD ADVOCACY  
This course will examine the maltreatment of children from both a historical and contemporary perspective. It will discuss the three major reform movements of the Progressive Era that shaped the field of child advocacy. Students will also explore recent trends in legislation that affect abused and neglected children. Emphasis will be on the historical and current role of the child advocate. Empirical and applied research will be reviewed.

**CHAD 502** CHILD ABUSE AND NEGLECT  
This course will take a comprehensive look at the social and psychological development of children caught in the child welfare system. It will compare normal and pathological models of child rearing. Special consideration will be given to the impact of family and social systems on the development and behavior of abused and neglected children.

**CHAD 503** CURRENT SOCIAL ISSUES IN CHILD ADVOCACY  
This course will focus on current social issues in the field of child advocacy. Poverty, drug abuse, illnesses and violence will be explored. Strategies for social change will be highlighted and discussed.

**CHAD 504** CHILDREN AND JUSTICE  
This course will provide students with a multisystems view of children’s rights and the justice system. Advocacy protocols and practice will be examined. Confidentiality, expert-testimony and child abuse reporting laws will be studied.

**CHAD 505** THEORETICAL AND APPLIED MODELS FOR INTERVIEWING CHILDREN  
This course will provide students with an understanding of various theoretical and applied models for interviewing children who may have been abused. Recent research on the communication process and the significance of integrating age-appropriate interviewing strategies and child development will be explored. Appropriate models for interviewing children of diverse backgrounds will be presented.  
Prerequisite: CHAD 501.

**CHAD 520** ADOLESCENTS AND THE SYSTEM  
This course will take a comprehensive approach to understanding the multitude of issues and circumstances that bring adolescents to the attention of the child welfare and juvenile justice systems. Placement options for adolescents and independent living programs will be reviewed. Variables of substance abuse, mental health disorders and educational deficits will be discussed in relation to outcomes for adolescents.  
Prerequisites: CHAD 501, CHAD 502, CHAD 503.

**CHAD 521** SUBSTANCE ABUSE AND FAMILIES IN CRISIS  
This course will explore the impact of substance abuse on families involved with the child welfare system. Current research regarding the connection between substance abuse, domestic violence and child abuse will be reviewed. Residential and outpatient models of treatment will be evaluated.  
Prerequisites: CHAD 501, CHAD 502, CHAD 503.
CHAD 522  FAMILY EMPOWERMENT MODELS FOR CHILD ADVOCATES  3
This course will focus on techniques that will empower families in crisis. Model programs grounded in a strengths-based approach will be analyzed. Strategies to help families utilize their unique human and social capital to build community and kinship support systems will be discussed.
Prerequisites: CHAD 501, CHAD 502, CHAD 503.

CHAD 530  CHILD PROTECTIVE SERVICE INVESTIGATION  3
This course will examine the investigatory process set down by Title 9 and Title 30. Methods and techniques for interviewing parents and children who come to the attention of the child protective service system will be reviewed. Proceedings such as the Order to Show Cause, Fact Finding, Permanency Hearings, and Termination of Parental Rights (TPR) will be discussed.
Prerequisites: CHAD 501, CHAD 502, CHAD 503.

CHAD 531  PERMANENCY PLANNING  3
This course will define and review the various meanings of permanency. Age appropriate and comprehensive plans for children in out-of-home placement will be explored. Consideration will be given to attachment and separation issues that result from broken familial bonds. Concurrent planning and adoption practices will be reviewed and critiqued.
Prerequisites: CHAD 501, CHAD 502, CHAD 503.

CHAD 540  CHILD WELFARE POLICY  3
This course will compare and contrast historical and contemporary trends in child welfare policy. Factors that contribute to legislative decision-making as well as the role of the media in shaping public opinion will be considered. Community perceptions of the child welfare system will be examined.
Prerequisites: CHAD 501, CHAD 502, CHAD 503.

CHAD 610  SEMINAR: SELECTED TOPICS IN CHILD ADVOCACY  3
The course will focus on current and relevant issues in child advocacy. It will rely on specialists in the field to present their research or area of expertise to interested students. It will also provide students with an opportunity to research the literature within their fields of interest. May be repeated once for a maximum of six semester hours.
Prerequisites: CHAD 501, CHAD 502, CHAD 503 and three other graduate courses in Child Advocacy.

CHAD 620  PRACTICUM IN PUBLIC CHILD WELFARE  3
The course will provide students with a supervised field placement at a child advocacy agency. The seminar will provide classroom instruction on issues related to the students’ experiences. Site supervisors will provide on the job guidance and supervision. May be repeated once for a maximum of six semester hours.
Prerequisites: CHAD 501, CHAD 502, CHAD 503 and matriculation in MA in Child Advocacy.
CHAD 630  EXTERNSHIP IN PUBLIC CHILD WELFARE  3
This course will provide students with a supervised field placement of 15 hours per week
where they will learn to integrate academic theory with applied work. The seminar
component, which will meet weekly as a group supervision "course," will focus on
developing relevant work skills and reviewing case practice.
Prerequisites: CHAD 501, CHAD 502, CHAD 503, five other courses in Child Advocacy,
and matriculation in MA in Child Advocacy.

CHAD 698  MASTERS THESIS  4
Independent research project done under faculty advisement. Students must follow the
MSU Thesis Guidelines, which may be obtained from the Graduate School. Students
should take CHAD 699 if they don’t complete CHAD 698 within the semester.
Prerequisite: Departmental approval.

CHAD 699  MASTERS THESIS EXTENSION  1
Continuation of Masters Thesis Project. Thesis Extension will be graded as IP (in
progress) until thesis is completed, at which time a grade of pass or Fail will be given.
Prerequisite: CHAD 698.
The Department of Classics and General Humanities offers graduate level courses in Latin literature, in the culture and civilization of the classical world, and in interdisciplinary humanities. These courses may be elected by students who are enrolled in master’s programs at Montclair as well as by post-baccalaureate students seeking to acquire teaching certification in Latin or to broaden their knowledge of classical studies, the classical tradition, and the humanities.

CLASSICS AND GENERAL HUMANITIES

Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNHU 501</td>
<td>IN PURSUIT OF THE HUMANITIES: HISTORY, CRITICAL APPROACHES, METHODS</td>
<td>3</td>
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<tr>
<td></td>
<td>This course is an introduction to how and why the humanities have evolved</td>
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<td></td>
<td>as a discipline within education and within society as a whole from the age</td>
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<td>of the Sophists to the present; to the most influential contemporary</td>
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<td></td>
<td>theoretical approaches to studying texts and ideas within the humanities;</td>
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<td>and to the most important tools and resources for studying the humanities</td>
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<td></td>
<td>in an interdisciplinary sense. The course aims to foster a synoptic view of</td>
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<td>the humanities and a critical sense of how the humanities have evolved in</td>
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<tr>
<td></td>
<td>close association with political, educational, and other societal forces,</td>
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<tr>
<td></td>
<td>and continue to do so today.</td>
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<tr>
<td>GNHU 502</td>
<td>CLASSICAL TRADITIONS</td>
<td>3</td>
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<tr>
<td></td>
<td>This course examines how societies create and use canonical standards of</td>
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<tr>
<td></td>
<td>excellence based on admiration for, and imitation of, &quot;masterpieces&quot; or</td>
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<tr>
<td></td>
<td>&quot;classics&quot; of the past which are invested with a prescriptive status.</td>
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<tr>
<td></td>
<td>Focusing especially on the West with its tradition centered on Ancient</td>
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<td></td>
<td>Greece and Rome, but also incorporating comparative material from non-Western</td>
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<tr>
<td></td>
<td>cultures, the course explores the ways in which classicism manifests itself</td>
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<td></td>
<td>in political thought, in literature, in mythology, and in art and</td>
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<td>architecture. It considers classicism in relation to theories of aesthetics,</td>
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<td></td>
<td>to the cultural hegemony of social groups maintained especially through</td>
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<td>education, to forces that oppose the classical, and to the general need of</td>
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<td></td>
<td>societies to value and to manipulate traditions.</td>
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<tr>
<td>GNHU 531</td>
<td>SELECTED TOPICS IN ANCIENT HISTORY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Each offering of the course explores a selected topic centered around a</td>
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<tr>
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<td>period, a theme, or a question chosen from ancient Mediterranean, Western</td>
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<tr>
<td></td>
<td>Asian, or European socio-economic, political, or cultural history. Topics</td>
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<tr>
<td></td>
<td>may range in time from the Bronze Age to Late Antiquity. May be repeated</td>
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<tr>
<td></td>
<td>twice for a maximum of nine semester hours.</td>
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</tbody>
</table>
GNHU 551 SELECTED TOPICS IN MEDITERRANEAN ARCHAEOLOGY  3
This course consists of an in-depth study of the archaeological evidence for a selected period, region or other thematic topic within the ancient Mediterranean world broadly defined. Special attention will be given to the role which archaeology can play in reconstructing the history of past cultures and to the Mediterranean archaeologist’s frequent need to try to reconcile ancient literary and epigraphical evidenced with archaeologically obtained data. May be repeated twice for a maximum of nine semester hours.

LATN 511 THE COMEDY OF PLAUTUS  3
Intensive reading and study of selected plays of Plautus with attention to language, characterization, style, structure, and metre. The literary and historical milieu of Plautine drama, including the apparatus of play production and the relationship of the comedies to contemporary social and economic history. The place of Plautus in theatre history, with special reference to Greek New Comedy, to other ancient Italic comedy, and to later European drama.

LATN 541 SELECTED TOPICS IN LATIN LITERATURE  3
Intensive reading and critical study of a selected author, genre, period, or theme in Latin literature that is not covered by a regular course. Topics will be chosen to complement other graduate course offerings in Latin and classical studies. May be repeated twice for a maximum of nine semester hours as long as the topic is different.
The mission of the Department of Communication Sciences and Disorders is to prepare speech-language pathologists who meet the certification and licensure requirements of state, national, and professional agencies for work with persons having a variety of communication disorders. Departmental programs stress an interdisciplinary approach to the understanding of communication disorders and to the appropriate assessment of, and interventions for, those disorders. Successful students are those who have a strong understanding of the bases of clinical procedures, are able to develop and use theoretical models, can engage in reflective and analytical thinking in their professional practices, can develop professional collaborations, are able to create meaningful treatment programs, and utilize research appropriately in their work.

ADMISSION REQUIREMENTS

Students wishing to matriculate in this area must have completed a bachelor’s degree. Graduate students must demonstrate communication skills that will not interfere with clinical practice. A student who is judged to have questionable skills will be referred to a faculty panel for further evaluation. If necessary the student will be referred for assistance. Students requiring assistance will be reevaluated before they are allowed to enroll for clinical practica. Enrollment in clinical practica will be postponed until communication skills are judged to be sufficient.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN COMMUNICATION SCIENCES AND DISORDERS, SPEECH-LANGUAGE PATHOLOGY CONCENTRATION

This master’s degree program consist of a minimum of 43 semester hours. Some students may need to take prerequisite courses or corequisite courses as specified by the graduate program coordinator.

Speech-Language Pathology Concentration

Accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language- Hearing Association and approved by the Council for Exceptional Children.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Courses (up to 12 semester hours):</td>
<td></td>
</tr>
<tr>
<td>(Required for students with incomplete or no undergraduate background in speech-language pathology.)</td>
<td></td>
</tr>
<tr>
<td>CSND 408 Phonetic Study of Speech Sounds</td>
<td>3</td>
</tr>
<tr>
<td>CSND 409 Anatomy &amp; Physiology of Speech &amp; Hearing Systems</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>CSND 410</td>
<td>Neurophysiological Bases of Communication</td>
</tr>
<tr>
<td>CSND 534</td>
<td>Speech &amp; Hearing Science</td>
</tr>
</tbody>
</table>

**Required Courses (40 semester hours):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSND 500</td>
<td>Speech &amp; Language Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>CSND 511</td>
<td>Language Disorders of Adults</td>
<td>3</td>
</tr>
<tr>
<td>CSND 512</td>
<td>Diagnosis in Speech-Language Pathology</td>
<td>3</td>
</tr>
<tr>
<td>CSND 515</td>
<td>Voice Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 517</td>
<td>Phonological and Articulation Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 521</td>
<td>Clinical Process &amp; Procedures in Speech-Language Pathology</td>
<td>3</td>
</tr>
<tr>
<td>CSND 524</td>
<td>Evaluation and Treatment of Swallowing Disorders</td>
<td>4</td>
</tr>
<tr>
<td>CSND 525</td>
<td>Motor Speech Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 576</td>
<td>Aural Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>CSND 583</td>
<td>Language Disorders of Children</td>
<td>3</td>
</tr>
<tr>
<td>CSND 584</td>
<td>Cleft Palate and Craniofacial Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 585</td>
<td>Fluency Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 592</td>
<td>Research in Speech-Language Pathology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Practica (3-18 semester hours):**

Depending upon previous supervised clinical practice students will take, by advisement, at least one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSND 535</td>
<td>Advanced Seminar in Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 562</td>
<td>Intermediate Practicum in Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSND 599</td>
<td>Advanced Practicum in Speech Pathology</td>
<td>3</td>
</tr>
<tr>
<td>CSND 600</td>
<td>Externship in Speech-Language Pathology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Field Placements:** A public school student teaching placement will be arranged with an American Speech-Language Hearing Association (ASHA) certified clinician for those intending to obtain teacher certification. Other settings include hospitals, rehabilitation centers, speech and hearing clinics and nursing homes. ASHA certification is required of all supervisors as specified by the American Speech-Language Hearing Association. ASHA requires 375 hours of supervised experience with a variety of cases in order to obtain national certification. A similar requirement is necessary for a state license.

**Teacher Certification:** In addition to a student teaching placement, additional coursework related to teacher certification will be added, if necessary, in consultation with the Dean of the College of Education and Human Services.

A minimum of 43 credits will be required for the Master’s degree, concentration in Speech-Language Pathology. For those students who have deficiencies in certain skills or wish Teacher Certification, additional coursework will be required. Students who already have some of the required coursework from other institutions may transfer credits to this program in accordance with University policy. For these students, specialization electives are available.
Specialization Electives (by advisement)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSND 514</td>
<td>Communication Disorders of the Aged</td>
<td>3</td>
</tr>
<tr>
<td>CSND 523</td>
<td>Educational Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CSND 531</td>
<td>Clinical Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CSND 573</td>
<td>Organization &amp; Administration of Speech &amp; Hearing Programs</td>
<td>3</td>
</tr>
<tr>
<td>CSND 594</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
<tr>
<td>CSND 598</td>
<td>Problems and Issues in Communication Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Department Requirements

1. Students are required to complete successfully a comprehensive examination or project. Comprehensive projects and examinations are designed to give students an opportunity to demonstrate their ability to integrate major concepts while working closely with the faculty. Comprehensive projects and examinations are culminating activities in students’ programs.

Note that there is a limit to the number of times a student may take the comprehensive examination. Comprehensive projects may require revisions before being accepted and there is a limit to the number of revisions allowed. Students are required to consult with their graduate program coordinator for specific information on these additional department requirements.

2. Majors in Speech-Language Pathology must complete 25 hours of supervised clinical observations and a total of 375 semester hours of supervised direct clinical experience. Up to 50 hours completed as an undergraduate will be accepted toward the requirement.

3. Courses are offered in this department that meet prerequisite requirements in Speech-Language Pathology and for admission to the graduate program.

4. Students in the Speech-Language Pathology program have the opportunity to take work, as part of their graduate studies, that meets the requirements for a New Jersey public school certification as a Speech/Language Specialist, and a New Jersey license as a Speech/Language Pathologist.

5. Admission to the program in Speech-Language Pathology is in the fall of each academic year. Completed applications must reach the Graduate School Office by March 1st of each year for admission for the following fall semester; new students may not begin the program in the spring semester. The Graduate Record Examination (GRE) must be taken no later than the December administration for consideration for the following fall semester.

6. Courses in the M.A. in Speech-Language Pathology are scheduled during the day and evening. For this reason students are expected to be available for courses at any time. Additionally, it has been the Department’s position not to support the policy of employing Speech-Language Specialists on a provisional certification basis.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSND 408</td>
<td>PHONETIC STUDY OF SPEECH SOUNDS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The articulation of sounds of American English,</td>
<td></td>
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<tr>
<td></td>
<td>developing an understanding of articulatory</td>
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<tr>
<td></td>
<td>features using the international phonetic</td>
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<tr>
<td></td>
<td>alphabet.</td>
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<tr>
<td></td>
<td>*Prerequisite: Senior standing or major in</td>
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<tr>
<td></td>
<td>Communication Sciences and Disorders, Speech-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Language Pathology concentration.*</td>
<td></td>
</tr>
<tr>
<td>CSND 409</td>
<td>ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The anatomical and physiological bases of</td>
<td></td>
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<tr>
<td></td>
<td>respiration, phonation, articulation and</td>
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<tr>
<td></td>
<td>resonation. The anatomy and physiology of the</td>
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<tr>
<td></td>
<td>auditory mechanism.</td>
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<td></td>
<td>*Prerequisite: Senior standing or major in</td>
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<tr>
<td></td>
<td>Communication Sciences and Disorders, Speech-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Language Pathology concentration.*</td>
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<tr>
<td>CSND 410</td>
<td>NEUROPHYSIOLOGICAL BASES OF COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study of the anatomy and physiology of the</td>
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<tr>
<td></td>
<td>nervous system as it relates to the development</td>
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<tr>
<td></td>
<td>of hearing, vision, thought, memory and</td>
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<tr>
<td></td>
<td>emotions, as well as the perception, processing</td>
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<tr>
<td></td>
<td>and production of speech and language.</td>
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<tr>
<td></td>
<td>*Prerequisite: Senior standing or major in</td>
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<tr>
<td></td>
<td>Communication Sciences and Disorders, Speech-</td>
<td></td>
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<tr>
<td></td>
<td>Language Pathology concentration.*</td>
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<tr>
<td>CSND 500</td>
<td>SPEECH AND LANGUAGE ACQUISITION</td>
<td>3</td>
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<tr>
<td></td>
<td>This course will focus on the development of</td>
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<tr>
<td></td>
<td>speech, language, and communication from</td>
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<td>infancy through preschool. The course will cover</td>
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<td></td>
<td>theories and processes of language development</td>
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<td></td>
<td>and will familiarize students with the typical</td>
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<td></td>
<td>sequence of acquisition for phonology,</td>
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<tr>
<td></td>
<td>semantics, syntax, morphology, and pragmatics.</td>
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</tr>
<tr>
<td></td>
<td>Issues related to dialects and non-mainstream</td>
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<tr>
<td></td>
<td>speech will be discussed. Students will become</td>
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<tr>
<td></td>
<td>familiar with procedures for eliciting and</td>
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<tr>
<td></td>
<td>analyzing children’s language.</td>
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<tr>
<td></td>
<td>*Prerequisite: Graduate major in Communication</td>
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<tr>
<td></td>
<td>Sciences and Disorders, Speech-Language</td>
<td></td>
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<tr>
<td></td>
<td>Pathology concentration.</td>
<td></td>
</tr>
<tr>
<td>CSND 511</td>
<td>LANGUAGE DISORDERS OF ADULTS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course is devoted to an advanced study of</td>
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<tr>
<td></td>
<td>adult aphasia and other communication disorders</td>
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<tr>
<td></td>
<td>associated with neuropathologies of adulthood.</td>
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</tr>
<tr>
<td></td>
<td><em>Prerequisite: CSND 410 or equivalent.</em></td>
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<tr>
<td>CSND 512</td>
<td>DIAGNOSIS IN SPEECH-LANGUAGE PATHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Diagnostic procedures including tests for children</td>
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<tr>
<td></td>
<td>and adults who have multiple disabilities and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>are communication disordered. Opportunities</td>
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<tr>
<td></td>
<td>provided for interviewing parents, testing and</td>
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<tr>
<td></td>
<td>report writing.</td>
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<tr>
<td></td>
<td>*Prerequisite: Graduate major in Communication</td>
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<tr>
<td></td>
<td>Sciences and Disorders, Speech-Language</td>
<td></td>
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<tr>
<td></td>
<td>Pathology concentration.*</td>
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</tr>
</tbody>
</table>
CSND 515  VOICE DISORDERS  3
Selected disorders of voice production. Consideration given to etiology, pathology and
therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords and other
organic voice problems. Speech rehabilitation techniques for the laryngectomized and for
persons with cleft palate conditions.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-
Language Pathology concentration.

CSND 517  PHONOLOGICAL AND ARTICULATION DISORDERS  3
This course provides an in-depth study of phonological and articulation problems of
children and adults with major emphasis on assessment and treatment. Consideration is
given to the speech problems associated with orofacial abnormalities, as well as to the
management of dysarthria and apraxia in children and adults.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-
Language Pathology concentration.

CSND 521  CLINICAL PROCESS AND PROCEDURES  3
IN SPEECH-LANGUAGE PATHOLOGY
The course provides an orientation to clinical practice in speech-language pathology. The
clinical process is presented as a construct which interfaces interpersonal dynamics with
preferred professional practices. A decision-making continuum is applied to the interpre-
tation of client needs as a basis for developing goals, planning treatment procedures,
documenting treatment and planning for referral and/or discharge.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-
Language Pathology concentration.

CSND 523  EDUCATIONAL AUDIOLOGY  3
This course provides a basis for understanding how hearing and hearing losses have an
impact on language, academic, and psychosocial development. Audiometric screening/
testing, tympanometry, and central auditory processing evaluation will be presented in the
context of educational planning.

CSND 524  EVALUATION AND TREATMENT OF  4
SWALLOWING DISORDERS
This course is designed to provide students with the information and skills necessary to
evaluate and treat swallowing disorders in pediatric and adult populations within the
scope of practice for speech-language pathologists. An interdisciplinary approach is
stressed. Students are given the opportunity to learn through classroom and laboratory
experiences. The course meets at St. Joseph’s Hospital and Medical Center in Paterson,
New Jersey.

CSND 525  MOTOR SPEECH DISORDERS  3
Neurological disorders of speech. Consideration given to etiology and differential
diagnosis of the dysarthrias in adults and children, acquired apraxia of speech, and other
motor speech disorders. Principles and techniques for treating motor speech disorders.
Prerequisite: CSND 410 or equivalent.
CSND 531  CLINICAL AUDIOLOGY  3
Increases skills in administering tests for pure-tone and speech reception thresholds; evaluation and interpretation of test results and analysis of client histories. Hearing aid evaluation, measurement of recruitment and tests for psychogenic deafness and malingering; pre- and post-surgical audimetry and special problems of differential diagnosis in testing children.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration.

CSND 533  SUPERVISION OF SPEECH AND HEARING PROGRAMS  3
Develops skill in supervision of beginning clinicians by experienced therapists; criteria for evaluation, writing critiques and understanding interpersonal relationships that enhance teaching through criticism.

CSND 534  SPEECH AND HEARING SCIENCE  3
Study of basic acoustics, memory, and perception. Advanced study of anatomy and physiology of the speech and hearing mechanisms. Commonly used instrumentation will be discussed.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration.

CSND 535  BEGINNING PRACTICUM IN COMMUNICATION DISORDERS  3
This laboratory course provides observation hours and involves students in an initial experience in providing services to individuals with communication disorders at the MSU Communication Center. May be repeated once for a maximum of six semester hours.
Prerequisite: CSND 521 or equivalent. Special fee.

CSND 562  INTERMEDIATE PRACTICUM IN COMMUNICATION DISORDERS  3
In this laboratory course, students provide services under supervision to individuals with communication disorders at the MSU Communication Disorders Center. May be repeated once for a maximum of six semester hours.
Prerequisite: CSND 535 with a grade of “B” or better. Special fee.

CSND 573  ORGANIZATION AND ADMINISTRATION OF SPEECH AND HEARING PROGRAMS  3
Clinical programs in the public schools and other settings. Testing, scheduling, grouping and record-keeping. The role of clinician in relation to administrators, teachers, specialists in related areas, parents and paraprofessionals.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration.

CSND 576  AURAL REHABILITATION  3
Study of theory and techniques for developing speech reading and auditory training programs for individuals with hearing loss. Also considered will be basics of American Sign Language and social and vocational concerns.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration.
CSND 583 LANGUAGE DISORDERS OF CHILDREN 3
Psycholinguistic components of language, factors involved in language development and language disorders associated with developmental lag, childhood aphasia, deafness, retardation, and emotional problems.
Prerequisite: Departmental approval.

CSND 584 CLEFT PALATE AND CRANIOFACIAL DISORDERS 3
Etiology, characteristics, and management of individuals with cleft lip, cleft palate, and other craniofacial disorders. Unit on myofunctional therapy included.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; departmental approval.

CSND 585 FLUENCY DISORDERS 3
Principles and methods of speech therapy with children and adults with fluency disorders. Methods of evaluation, specific techniques of speech therapy, and principles coordinating speech therapy with home and school life. Demonstrations with children and adults with fluency disorders serve as the basis for study and discussion.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration.

CSND 592 RESEARCH IN SPEECH-LANGUAGE PATHOLOGY 3
Significant problems in the field are investigated and published research projects evaluated. Critical analysis and experimental design are emphasized.
Prerequisite: Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration.

CSND 594 INDEPENDENT STUDY 1 - 3
Students select an area of Communication Sciences and Disorders and, with advisement, study the literature in the field, observe related programs at special schools and centers and write reports on findings. Regular conferences with instructor for guidance and evaluation. May be repeated twice for a maximum of three semester hours.
Prerequisite: Departmental approval.

CSND 598 PROBLEMS AND ISSUES IN COMMUNICATION DISORDERS 3
This seminar is designed to introduce newly emerging topics in communication disorders, including cognitive rehabilitation of closed-head injured patients, dysphagia, and augmentative/alternative communication for the non-speaker. Literature review and prescribed observations will provide the foundation for studying the nature, characteristics, epidemiology, and the assessment/treatment protocols of the pertinent pathologies.
Prerequisite: CSND 511.

CSND 599 ADVANCED PRACTICUM IN COMMUNICATION DISORDERS 3
In this laboratory course, students provide services under supervision to individuals with communication disorders in the MSU Communication Disorders Center. May be repeated once for a maximum of six semester hours.
Prerequisite: CSND 562 with a grade of “B” or better. Special fee.
CSND 600  EXTERNSHIP IN SPEECH-LANGUAGE PATHOLOGY  3
This course is designed to provide the experiences and skills necessary for professional
practice as a speech-language pathologist in hospitals, rehabilitation centers, nursing
homes, and other clinical settings that provide services to individuals with communica-
tion disorders. This course may be repeated twice for a total of 9 credits.
Prerequisite: A grade of “B” or better in CSND 599.

CSND 601  CENTRAL AUDIOLOGY PROCESSING DISORDERS  3
IN CHILDREN
The study of central auditory processing deficits in school age children, and their impact
on receptive language, expressive language, reading, academic achievement and attend-
ing behaviors.
Prerequisite: Departmental approval.
The Master of Arts degree in Communication Studies is designed to enhance the development of already existing skills in Speech Communication, Public Relations or Organizational Communication. The program is structured to emphasize both the theoretical and practical approaches in communication and to allow for original research and creative projects. Special attention is paid to the literature and history of each area of concentration, and to the respective academic and professional skills necessary to become a practitioner of the selected discipline. The course sequence and content are designed to strengthen research, performance, and professionalism, and to prepare those who wish to pursue a profession in communication, media and arts related areas. The Master of Arts degree is also ideally suited for those who plan to continue in a program of doctoral studies. Concentrations are available in Speech Communication, Public Relations or Organizational Communication.

ADMISSION REQUIREMENTS

Students wishing to matriculate as Communication Studies majors are recommended to have completed an undergraduate major or the equivalent from one of the following areas: communication, public communication, speech communication, Public relations, broadcasting, organizational communication, media or related areas. It is assumed that most of this work will have been in the area selected for graduate concentration. Some students may need to improve their preparatory backgrounds through undergraduate courses for which graduate credit is not given.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN COMMUNICATION STUDIES

CONCENTRATION IN SPEECH COMMUNICATION

The candidate must complete all four parts of the requirements for the degree as detailed below.

<table>
<thead>
<tr>
<th>Semester Hours</th>
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</thead>
</table>

I. Core Courses (18 semester hours):

SPCM 502 Survey: Quantitative Research Methods ........................................ 3
SPCM 503 Survey: Qualitative Research Methods ........................................... 3
SPCM 505 Introduction to Graduate Communication ......................................... 3
SPCM 520 Introduction to Public Relations .................................................... 3
SPCM 526 Theories of Human Communication ................................................ 3
SPCM 555 Survey: Organizational Communication ........................................... 3

II. Departmental Elective (9 semester hours):

In consultation with the graduate program coordinator, the candidate should select those courses most appropriate to the development of the candidate’s interest. Among those to consider:
### I. Core Courses (15 semester hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCM 502</td>
<td>Survey: Quantitative Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 503</td>
<td>Survey: Qualitative Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 505</td>
<td>Introduction to Graduate Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 526</td>
<td>Theories of Human Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 520</td>
<td>Introduction to Public Relations</td>
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<tr>
<td>SPCM 555</td>
<td>Survey: Organizational Communication</td>
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**OR**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SPCM 555</td>
<td>Survey: Organizational Communication</td>
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### II. Public Relations Concentration (9 semester hours):

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPCM 510</td>
<td>Special Topics in Communication (Public Relations)</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 536</td>
<td>Seminar in Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 545</td>
<td>Issue Management</td>
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**CONCENTRATION IN PUBLIC RELATIONS**

The candidate must complete all five parts of the requirements for the degree as detailed below:

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Core Courses (15 semester hours):</td>
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<tr>
<td>SPCM 502</td>
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<td>SPCM 503</td>
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<td>SPCM 505</td>
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<td>SPCM 526</td>
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<tr>
<td>SPCM 520</td>
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<td>SPCM 555</td>
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**OR**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPCM 555</td>
<td>Survey: Organizational Communication</td>
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</table>

**Public Relations Concentration (9 semester hours):**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPCM 510</td>
<td>Special Topics in Communication (Public Relations)</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 536</td>
<td>Seminar in Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 545</td>
<td>Issue Management</td>
<td>3</td>
</tr>
</tbody>
</table>
III. Electives (3 semester hours)
In consultation with the graduate program coordinator, the candidate should select those courses most appropriate to the development of the candidate’s interest.

- SPCM 509 Problems in Communication .................................................... 3
- SPCM 520 Introduction to Public Relations ................................................ 3
- SPCM 530 Mediated Communication ....................................................... 3
- SPCM 534 Readings in Communication .................................................... 3
- SPCM 540 Interviewing and Conference Planning ...................................... 3
- SPCM 547 Seminar in Organizational Communication ............................... 3
- SPCM 550 Crisis Communication ............................................................. 3
- SPCM 555 Survey: Organizational Communication .................................... 3
- SPCM 556 Survey: Small Group Communication ....................................... 3
- SPCM 566 Decision Theory ..................................................................... 3
- SPCM 570 Interpersonal Communication ............................................... 3
- SPCM 580 Globalization and Organization Communication ..................... 3
- SPCM 581 Media and Mass Culture .......................................................... 3
- SPCM 582 Techniques of Communication ............................................... 3

III. Select option A, B, or C (6 semester hours)

A. Write a Thesis (SPCM 698 Master’s Thesis) ............................................. 6
B. Complete an Internship (SPCM 560 Internship: Communication - 3 s.h.) ... 6
C. Take a combination of courses from below ............................................. 6
   1. Independent Study (SPCM 599 Independent Study) ............................ 3 or 6
   2. Elective course from major .............................................................. 3 or 6
   3. Graduate level courses in another department with graduate program coordinator approval ......................................................... 3 or 6

IV. Pass Comprehensive Examination - required of all students regardless of the option selected in III above. It is recommended that this written examination on department studies (offered in March and October) be taken after 24 or more semester hours have been completed.

Minimum semester hours: 33

CONCENTRATION IN ORGANIZATIONAL COMMUNICATION

The candidate must complete all five parts of the requirements for the degree as detailed below:

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Core Courses (15 semester hours):</td>
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<tr>
<td>SPCM 502</td>
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<tr>
<td>SPCM 503</td>
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<tr>
<td>SPCM 505</td>
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<td>SPCM 526</td>
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<td>SPCM 520</td>
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<tr>
<td>SPCM 555</td>
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<tr>
<td>Organizational Communication Concentration (9 semester hours):</td>
</tr>
<tr>
<td>SPCM 510</td>
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<tr>
<td>SPCM 547</td>
</tr>
</tbody>
</table>

172
III. Departmental Elective (3 semester hours):
In consultation with the graduate program coordinator, the candidate should select those courses most appropriate to the development of the candidate’s interest. Among those to consider:

- SPCM 509 Problems in Communication .............................................. 3
- SPCM 520 Introduction to Public Relations .............................................. 3
- SPCM 530 Mediated Communication .................................................... 3
- SPCM 534 Readings in Communication .................................................... 3
- SPCM 536 Seminar in Persuasion ......................................................... 3
- SPCM 540 Interviewing and Conference Planning .................................... 3
- SPCM 545 Issue Management ................................................................ 3
- SPCM 550 Crisis Communication .......................................................... 3
- SPCM 555 Survey: Organizational Communication .................................. 3
- SPCM 566 Decision Theory ................................................................. 3
- SPCM 570 Interpersonal Communication .................................................. 3
- SPCM 580 Globalization and Organization Communication ..................... 3
- SPCM 581 Media and Mass Culture ...................................................... 3
- SPCM 582 Techniques of Communication .............................................. 3

III. Select option A, B, or C (6 semester hours):

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B. Complete an Internship (SPCM 560 Internship: Communication- 3 s.h.) .... 6
C. Take a combination of courses from below .................................................. 6
   1. Independent Study (SPCM 599 Independent Study) ....................... 3 or 6
   2. Elective course from major .............................................................. 3 or 6
   3. Graduate level courses in another department with graduate program coordinator approval ......................................................... 3 or 6

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Minimum semester hours: 33

COMMUNICATION STUDIES DEPARTMENT

Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCM 502</td>
<td>SURVEY: QUANTITATIVE RESEARCH METHODS</td>
<td>3</td>
</tr>
</tbody>
</table>

This course introduces students to the full range of quantitative research methods and their application in communication contexts such as politics, organizations, the media, marketing, and culture. Emphasis is on the practical applications of quantitative methods for the purposes of evaluation of communication practices and offering of pragmatic recommendations.
SPCM 503 SURVEY: QUALITATIVE RESEARCH METHODS 3
This course introduces students to the full range of qualitative research methods and their application in communication contexts such as politics, organizations, the media, marketing, and culture. Emphasis is on the practical applications of qualitative methods for the purposes of evaluation of communication practices and offering of pragmatic recommendations.

SPCM 505 INTRODUCTION TO GRADUATE COMMUNICATION 3
In Introduction to Graduate Communication, students are prepared for the graduate communication experience through readings, class lecture, guest lectures, presentations, and writing activities. Class content focuses on the major areas of the field such as public relations, organizational communication, mass/mediated communication, group communication, interpersonal communication, and public communication. Emphasis is also given to issues such as writing and presentational skills/requirements (AP, APA, and MLA style, etc.), preparation of vitae/resumes, thesis writing, the research approval process, committee selection, basic research skills, and comprehensive exams.

SPCM 509 PROBLEMS IN COMMUNICATION 3
Individual problems in communication. Reports, papers, panel discussion and experimentation. May be repeated three times for a total of 9 semester hours.

SPCM 510 SPECIAL TOPICS IN COMMUNICATION 3
Special Topics in Communication is intended as a multipurpose course that can be used both to teach rotating special topics courses and to pilot test new courses. Special Topics in Communication is intended to be repeatable and to be used by both the Public Relations and the Organizational Communication concentrations to offer advanced and special topic courses. The course may be repeated without limit provided the topic of the course is different.

SPCM 520 INTRODUCTION TO PUBLIC RELATIONS 3
In Introduction to Public Relations, students learn about the basic theories/history of the discipline, definitional issues, important scholarly/theoretical debates, and the dual nature of the public relations discipline - that is, the rift that exists between theory and application, practitioners and scholars.

SPCM 526 THEORIES OF HUMAN COMMUNICATION 3
In-depth study of human communication behavior as it relates to theories of intrapersonal, interpersonal, small group, public and mass communication. Students develop awareness of communication behavior patterns and cultivate the ability to select appropriate and effective communication behaviors for optimum results.

SPCM 534 READINGS IN COMMUNICATION 3
Study and assessment of the major literature in communication. Competence demonstrated in research assignments and papers. Course must be repeated once for a total of 6 semester hours.

SPCM 536 SEMINAR IN PERSUASION 3
Critical examination of persuasive practices as they relate to communication.
SPCM 545 ISSUE MANAGEMENT 3
Issue Management deals with issues such as problem solving, crisis communication and the process of shaping public opinion. Areas such as lobbying, political public relations, persuasion, dialogue, apologia, and rhetorical approaches to public influence are dealt with, as means of managing organization-public relationships.

SPCM 547 SEMINAR IN ORGANIZATIONAL COMMUNICATION 3
This course focuses on special topics in organizational communication relating to leadership strategies and tools for assessment of organizational culture. Leadership is viewed in behavioral and interactionist terms rather than as a position within an organizational hierarchy. Systems of organizational culture are viewed as patterned behaviors with consequences for organizational effectiveness. Tools are offered for observation and intervention in organizational development efforts focused on team building and leadership.

SPCM 555 SURVEY: ORGANIZATIONAL COMMUNICATION 3
This course introduces the graduate student to the academic study of organizational communication and organizational culture/climate. Attention is given to the history of the field and to the variety of methodologies and research agendas that have been part of that history. Students will offer presentations on selected topics and prepare a final paper on a topic of relevance to their area of interest. The goal will be to provide a broad foundation for future study and research in the field.

SPCM 556 SURVEY: SMALL GROUP COMMUNICATION 3
This course introduces the graduate student to the academic study of group process and small group communication. Attention is given to the history of the field and to the variety and methodologies and research agendas that have been part of that history. Students will offer presentations on selected topics and prepare a final paper on a topic of relevance to their area of interest. The goal will be to provide a broad foundation for future study and research in the field.

SPCM 560 INTERNSHIP: COMMUNICATION 3
Off-campus practicum assignments that range from serving on political campaign staff to coaching students and/or conducting forensic tournaments. Broad, balanced and locally supervised experience, by arrangement.
Prerequisites: Speech Communication concentration students only; departmental approval.

SPCM 580 GLOBALIZATION AND ORGANIZATIONAL COMMUNICATION 3
This course provides an overview of globalization trends and their impact on contemporary organizations. Emphasis is placed on the role of communication processes and new technologies in a globalized context that affect an organization’s identity, culture, approach to leadership and the management of a diverse workforce.

SPCM 581 MEDIA AND MASS CULTURE 3
Influences and effects of the media on society; policy decisions and the influence of the broadcast media as conveyors of information and stimulus for change. Open to all graduate students.
SPCM 582  TECHNIQUES OF COMMUNICATION  3
Techniques and ethics in the production of informative and persuasive messages for public consumption. Open to all graduate students. Course may be repeated once for a total of 6 semester hours.

SPCM 599  INDEPENDENT STUDY  3
Individual projects in communication that result in significant research or creative projects. Student and instructor agree upon an area of study, readings are assigned, research is done and student submits final findings in form of a paper or a series of annotated bibliographies or position papers. The nature of the course permits advanced graduate students to pursue areas of speech not covered by present offerings. May be repeated once for a maximum of six semester hours.

Prerequisites: Speech Communication students only; departmental approval.

SPCM 698  MASTER’S THESIS  6
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take SPCM 699 if they don’t complete SPCM 698 within the semester.

Prerequisite: Departmental approval.

SPCM 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.

Prerequisite: SPCM 698.
COMPUTER SCIENCE

Telephone: (973) 655-4166

MASTER OF SCIENCE DEGREE IN
COMPUTER SCIENCE

The Department of Computer Science offers a Master of Science degree in Computer Science, an MS in Computer Science with a concentration in Applied Statistics, an MS in Computer Science with a concentration in Applied Mathematics, and an MS in Computer Science with a concentration in Informatics. The concentrations consist of taking 3 courses in a computer intensive area, or in a specialized area complementary to computer science. An MS in Mathematics with a concentration in Computer Science is offered by the Department of Mathematical Sciences. This degree option is described under Mathematics.

The graduate program in computer science is designed for students interested in pursuing computer science theoretically as well as practically at an advanced level. While introducing students to newly developing areas of computer science, this program emphasizes the foundations and concepts of the field. Concepts are developed rather than routine programming skills. The option of taking concentrations allows for a minimal amount of specialization if desired. Students are prepared for professional work in the design and implementation of software systems, data base systems, operating systems, artificial intelligence, expert systems, graphics, simulation and algorithms for discrete and continuous structures that will aid in the solution of problems encountered in the scientific and business sector. The curriculum is designed to allow students to develop skills needed to achieve leadership positions in business, industry, and government in computer science or in related fields that are computer science intensive. The program also prepares teachers of computer science at the two year college, high school and middle school levels.

The graduate program in computer science began in 1978. At present, there are 14 full-time faculty in the Department of Computer Science. The special interests of the faculty include algorithms, artificial intelligence, automata theory, automated theorem proving, bioengineering, bioinformatics, compilers, computer science education, complexity theory, computational linguistics, computational logic, cryptography, data bases, data mining and knowledge discovery, design and management of information systems, distributed processing of remote censed data, expert systems, fault-tolerant computing, graphics, machine organization and architecture, neural networks, non-linear phenomena and fuzzy logic, operating systems, parallel and distributed computing, program verification, pixel and image processing, robotics, software engineering, scientific computing, and telecommunications. The department has the advantage of having professional computer scientists as both faculty and visiting specialists. The visiting specialists are drawn from the aerospace, chemical, computer, and pharmaceutical industries. This mix of faculty affords students the opportunity to obtain an education in both the practical and theoretical aspects of computer science.

Computer facilities within the College of Science and Mathematics currently comprise a local area network (SCINet) of Sun servers and workstations, as well as Dell and Macintosh teaching laboratories. CSAM supports Computer Science with a Sun
network powered by Sun Microsystems Workgroup and Enterprise servers. The 11 member collection host application, file, print, Web, and compute services. The primary UNIX computing backbone contains 4 multi-CPU Sun Fire 280R Workgroup servers, 3 multi-CPU Sun Fire V880 Workgroup servers, and 1 multi-CPU Sun Enterprise 450 server. Three other multi-purpose Sun systems host miscellaneous services. In addition, a student laboratory with more than 20 Ultra 10 workstations, and workstations in all faculty offices provide a strong computing environment. The computers on this network run under the UNIX operating system. Available software packages include: Maple, MATLAB, Iris Explorer, LaTeX, Rational Rose, SAS, Splus, MySQL, JavaStudio, and JavaWorkshop. Programming languages include: C, C++, Java, Ada, FORTRAN, Pascal, LISP, MLProlog, Perl and Smalltalk. In addition, the Computer Science Department supports a Parallel-Processing Research Laboratory equipped with a 20-processor Pentium parallel cluster and an NSF-sponsored 64-processor Opteron Linux cluster. These are available, with the permission of the laboratory director, for faculty-student research projects. The University also maintains a number of computer labs throughout the campus. Access to the CSAM Sun network is available from most of these computers via a campus-wide local area network (MSUNet). In addition these computers support a wide variety of software such as JMP, Mac Spin, Data Desk, Solo, Statistix, and Office for student use. Montclair State University supports its own Internet Service Provider (MSU-ISP). All students and faculty establish Internet Accounts. These provide remote access to computers on campus.

Students desiring to enter the MS in Computer Science without an appropriate background in computer science can obtain the necessary foundation in computer science and mathematics by taking courses in our prerequisite program. The details of this program are discussed below. Upon satisfactory completion of part or all of the program, students are admitted to the master of science program.

ADMISSION REQUIREMENTS

1. All students must meet the admissions requirements for graduate study at Montclair State University.
2. Applicants must possess a bachelors degree from an accredited institution with either:
   a. A major in computer science or mathematics
   b. A major in science or engineering
   c. Another major with an overall cumulative grade-point average of 3.0 (B) or other indications of the ability to complete the program.
3. Applicants must have taken at least 15 undergraduate mathematics credits including calculus, linear algebra, probability and discrete mathematics. Deficiencies in mathematics can be rectified by taking MATH: 501, 502, and/or 503, which are accelerated mathematics courses. When required, these will be “prerequisite courses” on the graduate work program. The sequence of prerequisites requires one year to complete, i.e., Fall, Spring and Summer semester.
4. Applicants must:
   a. Be proficient in the following computer programming languages:
      i) C++ or Java
      ii) Assembly Language
   b. Have knowledge of data structures and computer architecture (including RISC)
A two-semester sequence in an object-oriented language or one year’s programming experience in industry will suffice for the first of these requirements. Deficiencies in computer science can be rectified by taking CMPT: 505, 506, and/or 507. These are accelerated computer science courses designed for the student to master the necessary foundations and concepts required for the graduate program rather than just routine programming skills. When required, these will be listed as “prerequisite courses” on the program of study. The sequence requires one year to complete, i.e., Fall, Spring, and Summer semester.

Applicants satisfying admission requirements but needing to make up work in the fundamentals of Computer Science and/or Mathematics (CMPT: 505, 506, 507 and MATH: 501, 502, 503) are granted deferred matriculation. Upon completing the necessary courses with a minimum grade point average of 3.0, students will be granted full matriculation. These courses (up to 22 credits) will not count for degree credit.

A candidate for the Master of Science degree in Computer Science must consult the graduate program coordinator of the department before matriculation since the choice of graduate courses must be adjusted to the level of preparation in undergraduate work. All the degree programs in Computer Science are 33 credit programs. The student’s program of study listing course requirements is prepared in consultation with the graduate coordinator. In order to be awarded a Master of Science degree in Computer Science, a student will be required to have an overall 3.0 grade point average, as well as a 3.0 grade point average for courses taken in the Departments of Computer Science and/or Mathematical Science. In addition a student must have a passing grade on a comprehensive examination based on the core courses. In order to be eligible to take the comprehensive examination students are required to have a 3.0 grade point average and to have completed 15 degree bearing credits including four or more of the core courses (CMPT 580, 581, 583, 586, or 592).

Note: Courses MATH: 501, 502, 503 and CMPT: 505, 506, 507 are not to be counted among the 33 semester hours required for completion of the program.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN COMPUTER SCIENCE

**MS Computer Science**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Computer Science (21 semester hours)</strong></td>
</tr>
<tr>
<td>Required core courses: CMPT 580, 581, 583, 586, 592 ........................................ 15</td>
</tr>
<tr>
<td>Two additional courses selected from:</td>
</tr>
<tr>
<td>CMPT 570-599, 670-699 or MATH 560 .............................................................. 6</td>
</tr>
<tr>
<td><strong>II. Computer Science, Mathematics and/or Statistics Electives (9 or 12 semester hours)</strong></td>
</tr>
<tr>
<td>Courses selected from:</td>
</tr>
<tr>
<td>CMPT 570-599, 670-699</td>
</tr>
<tr>
<td>MATH 420-469*; 520-569, 580-599; 620-669, 680-699</td>
</tr>
<tr>
<td>STAT 440-449; 541-549; 595; 640-649</td>
</tr>
<tr>
<td>Substitutions are allowed with prior written approval of the graduate coordinator.</td>
</tr>
<tr>
<td>At most six semester hours can be taken at the 400 level.</td>
</tr>
<tr>
<td><em>MATH 463 does not count as graduate credit towards a master’s degree.</em></td>
</tr>
</tbody>
</table>
III. Thesis or Comprehensive Examination ...................................................... 0 or 3

**Thesis Option**: Students who select the thesis option must register for CMPT 698 Master’s Thesis. This option is available only to students who have a grade-point average of 3.3 or higher in the required core courses.

OR

**Comprehensive Examination**: A passing grade on a three hour comprehensive written examination in Computer Science.

Minimum semester hours: 33

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**MS Computer Science**

**Informatics Concentration**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Computer Science (15 semester hours)</td>
</tr>
<tr>
<td>Required core courses: CMPT 580, 581, 583, 586, 592 ......................... 15</td>
</tr>
</tbody>
</table>

| II. Informatics (9 semester hours) |
| Required: CMPT 593 and 596 ................................................................. 6 |
| Select one: CMPT 594 or 696 ................................................................. 3 |

| III. Computer Science, Mathematics, Statistics or Business Electives .......... 6 or 9 |
| Students who elect the thesis option must take two courses from this list |
| Students who do not elect the thesis option must take three courses from this list. |
| CMPT 570-599, 670-699 |
| MATH 569, 584 |
| STAT 541, 544, 548, 595, 645 |
| INFO 503 |

Substitutions are allowed with prior written approval of the graduate coordinator. At most six semester hours can be taken at the 400 level.

| IV. Thesis or Comprehensive Examination .................................................. 0 or 3 |
| **Thesis Option**: Students who select the thesis option must register for CMPT 698 Master’s Thesis. This option is available only to students who have a grade-point average of 3.3 or higher in the required core courses. |

OR

**Comprehensive Examination**: A passing grade on a three hour comprehensive written examination in Computer Science.

Minimum semester hours: 33

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**MS Computer Science**

**Applied Statistics Concentration**

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Computer Science (21 semester hours)</td>
</tr>
<tr>
<td>Required core courses: CMPT 580, 581, 583, 586, 592 ......................... 15</td>
</tr>
<tr>
<td>Two additional courses selected from:</td>
</tr>
<tr>
<td>CMPT 570-599, 670-699 or MATH 560 ...................................................... 6</td>
</tr>
</tbody>
</table>

| II. Statistics Concentration (9 semester hours) |
| Required courses: STAT 541, 544, 548 ...................................................... 9 |
III. Computer Science, Mathematics and/or Statistics Elective ....................... 0 or 3
Students who do not elect the thesis option must take one course selected from:
   CMPT 570-599, 670-699
   MATH 420-469*; 520-569, 580-599; 620-669, 680-699
   STAT 440-449; 595; 645
Substitutions are allowed with prior written approval of the graduate program coordinator. At most six semester hours can be taken at the 400 level.
*MATH 463 does not count as graduate credit towards a master’s degree.

IV. Thesis or Comprehensive Examination ...................................................... 0 or 3
Thesis Option: Students who select the thesis option must register for CMPT 698 Master’s Thesis. This option is available only to students who have a grade-point average of 3.3 or higher in the required core courses.

OR

Comprehensive Examination: A passing grade on a three hour comprehensive written examination in Computer Science.

Minimum semester hours: 33

MS Computer Science
Applied Mathematics Concentration

I. Computer Science (21 semester hours)
Required courses: CMPT 580, 581, 583, 586, 592 ........................................... 15
Two additional courses selected from:
   CMPT 570-599, 670-699 or MATH 560 .................................................... 6

II. Applied Mathematics (9 semester hours)
Three courses selected from:
   MATH 560, 564, 566, 580, 581, 584 .......................................................... 9

III. Computer Science, Mathematics, and/or Statistics Elective ....................... 0 or 3
Students who do not elect the thesis option must take one course selected from:
   CMPT 570-599, 670-699
   MATH 420-469*; 520-569, 580-599; 620-669, 680-699
   STAT 440-449; 541-549; 595; 640-649
Substitutions are allowed with prior written approval of the graduate coordinator. At most six semester hours can be taken at the 400 level.
*MATH 463 does not count as graduate credit towards a master’s degree.

IV. Thesis or Comprehensive Examination ...................................................... 0 or 3
Thesis Option: Students who select the thesis option must register for CMPT 698 Master’s Thesis. This option is available only to students who have a grade-point average of 3.3 or higher in the required core courses.

OR

Comprehensive Examination: A passing grade on a three hour comprehensive written examination in Computer Science.

Minimum semester hours: 33
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPT 505</td>
<td>FUNDAMENTALS OF COMPUTER SCIENCE I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>An introduction to programming using a structured high level language, design of algorithms, character strings, recursion, data structures, numerical computing. May not be used for credit by Mathematics or Computer Science majors. <strong>Prerequisite:</strong> Permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>CMPT 506</td>
<td>FUNDAMENTALS OF COMPUTER SCIENCE II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A continuation of CMPT 505. Introduction to assembly language, addressing techniques, subroutine linkage, input/output and macros. Introduction to computer organization including memory, logic design and computer architecture. May not be used for credit by Mathematics and Computer Science majors. <strong>Prerequisites:</strong> CMPT 505 and permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>CMPT 507</td>
<td>FUNDAMENTALS OF COMPUTER SCIENCE III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A continuation of CMPT 505. Design and analysis of data structures, pointers, linked representations, object oriented programming (OOP), classes, inheritance, programming in the large. May not be used for credit by Mathematics and Computer Science majors. <strong>Prerequisites:</strong> MATH 501, and CMPT 505 and permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>CMPT 508</td>
<td>TOPICS IN A COMPUTER LANGUAGE</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>An introduction to a selected computer language, with a view to becoming proficient in programming that language. Each time the course is offered, only one programming language will be taught, but the language could vary from one semester to another. May be repeated once for a maximum of six semester hours as long as the language is different. May not be used for credit by Mathematics or Computer Science majors. <strong>Prerequisites:</strong> CMPT 505 and permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>CMPT 574</td>
<td>PIXEL AND IMAGE PROCESSING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course provides an introductory and comprehensive treatment of pixel and image processing with applications to fine arts, face recognition, etc. Topics include sampling and quantization, convolution, equalization, filtering, image segmentation, image operations, morphological image processing. <strong>Prerequisites:</strong> CMPT 580 and permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>CMPT 575</td>
<td>INTRODUCTION TO COMPUTER GRAPHICS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to computer graphics, including the algorithms to generate two-dimensional and three-dimensional graphical pictures. An overview of ray tracing, shading and color theory. Interactive graphics. Graphics devices. <strong>Prerequisites:</strong> CMPT 580 and permission of graduate coordinator.</td>
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</tr>
<tr>
<td>CMPT 576</td>
<td>OBJECT-ORIENTED SOFTWARE DEVELOPMENT</td>
<td>3</td>
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<tr>
<td></td>
<td>Introduction to the major features of the object-oriented paradigm and their realization in an object-oriented programming language. Introduction to major methods and tools used in object-oriented analysis and design. Implementation and testing issues. <strong>Prerequisites:</strong> CMPT 581, and CMPT 583, and permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<td>------------------------------------------------</td>
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</tr>
<tr>
<td>CMPT 578</td>
<td>INTRODUCTION TO ARTIFICIAL INTELLIGENCE</td>
<td>3</td>
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<tr>
<td></td>
<td>An introduction to artificial intelligence including representations of knowledge, problem solving, games, heuristics and backtracking, expert systems, theorem proving, the languages LISP and PROLOG.</td>
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<tr>
<td></td>
<td>Prerequisites: CMPT 583 and permission of graduate coordinator.</td>
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</tr>
<tr>
<td>CMPT 580</td>
<td>MACHINE ORGANIZATION AND ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Basic computer organization and design, digital functions, data representation, microprogramming, CPU organization, the assembler language, and addressing techniques. Required of majors.</td>
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<tr>
<td></td>
<td>Prerequisite: Permission of graduate coordinator.</td>
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</tr>
<tr>
<td>CMPT 581</td>
<td>SYSTEMS SOFTWARE DESIGN</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Assemblers, macroprocessors, linkers and loaders, introduction to compilers and run facilities. Required of majors.</td>
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<tr>
<td></td>
<td>Prerequisite: CMPT 580, and permission of graduate coordinator.</td>
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</tr>
<tr>
<td>CMPT 583</td>
<td>COMPUTER ALGORITHMS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Algorithms: definition, design and analysis; sorting and searching techniques and introductory dynamic programming studied as algorithms with complexity theory and optimization techniques applied. Required of majors.</td>
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<tr>
<td></td>
<td>Prerequisite: Permission of graduate coordinator.</td>
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<tr>
<td>CMPT 585</td>
<td>TOPICS IN COMPUTER SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Recent developments in the field. Topics such as Monte Carlo methods, graphics, expert systems, security, networks and special areas of applications. May be repeated twice for a maximum of nine semester hours as long as the topic is different.</td>
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<tr>
<td></td>
<td>Prerequisites: CMPT 580, and permission of graduate coordinator.</td>
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<tr>
<td>CMPT 586</td>
<td>FILE STRUCTURES AND DATABASES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Permission of graduate coordinator.</td>
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</tr>
<tr>
<td>CMPT 587</td>
<td>MICROCOMPUTERS AND COMPUTER INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to genealogy, manufacture and hardware design of microprocessors, microcomputer architecture, instruction sets and programming, microcomputer peripherals and interfaces.</td>
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</tr>
<tr>
<td></td>
<td>Prerequisites: CMPT 580 and permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>CMPT 588</td>
<td>FUNDAMENTALS OF PROGRAMMING LANGUAGES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A comparative approach to modern programming languages with emphasis on non-imperative languages, and an introduction to parallel languages.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Permission of graduate coordinator.</td>
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</tr>
<tr>
<td>CMPT 591</td>
<td>COMPILER THEORY AND CONSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to the formal description of programming languages, the theory of parsing, and the concepts and techniques used in the construction of compilers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: CMPT 581, and permission of graduate coordinator.</td>
<td></td>
</tr>
</tbody>
</table>
CMPT 592 DATA BASE DESIGN AND IMPLEMENTATION 3
To develop in-depth understanding of data base concepts and issues. The major emphasis of the course is on the conceptual (logical) organization, retrieval and manipulation of data. Required of majors.
Prerequisites: CMPT 586, and permission of graduate coordinator.

CMPT 593 STRUCTURE SYSTEM DESIGN AND ANALYSIS 3
A study of the design of large scale computer systems relative to the constraints imposed by hardware, software and particular types of applications. Recent work in automated system design will be discussed.
Prerequisites: CMPT 586, and permission of graduate coordinator.

CMPT 594 SOFTWARE ENGINEERING AND RELIABILITY 3
This course will introduce the principles and methods for the design, coding and verification of software systems. Topics include software design techniques, programming methodology, programming testing, proving program correctness, software reliability, and software management.
Prerequisites: CMPT 586, and permission of graduate coordinator.

CMPT 596 PRINCIPLES OF DATA COMMUNICATION 3
Physical and logical aspects of data communications: analog-digital, broadband-baseband, TDM-FDM, protocols, modulation techniques, hardware for communication.
Prerequisites: CMPT 580, and permission of graduate coordinator.

CMPT 680 PARALLEL ARCHITECTURES AND ALGORITHMS 3
This course provides a study of the state-of-art of parallel processing algorithms and architectures. Parallel processing uses multiple processors working together in a synchronized fashion to solve large problems fast.
Prerequisites: CMPT 580, and CMPT 583, and permission of graduate coordinator.

CMPT 683 ADVANCED COMPUTER ALGORITHMS 3
Dynamic programming, game trees and backtracking techniques, branch and bound, polynomial evaluation and fast Fourier transform algorithms; complexity and analysis, and optimization techniques will be applied. NP-hard problems and NP-completeness.
Prerequisites: CMPT 583, and permission of graduate coordinator.

CMPT 690 INDEPENDENT STUDY IN COMPUTER SCIENCE 3
Independent study under the direction of a faculty member, offering the opportunity to pursue topics in computer science which may be outside the scope of regular curricular offerings or may be an extension of an existing course or courses. Approval must be obtained from the graduate coordinator and faculty advisor. May be repeated once for a maximum of six semester hours.
Prerequisite: Permission of graduate coordinator.

CMPT 695 SEMINARS IN COMPUTER SCIENCE 1 - 4
Guided study of selected topics in major field of interest. May be repeated once for a maximum of six semester hours.
Prerequisites: CMPT 581, and 583, and 586; and permission of graduate coordinator.
CMPT 696  LOCAL AREA NETWORKS  3
Fundamental issues and concepts underlying Local Area Network (LAN) development via microcomputers: topology, transmission media and technology, error control, protocols.
Prerequisites: CMPT 596, and permission of graduate coordinator.

CMPT 697  MASTER’S PROJECT IN COMPUTER SCIENCE  3
Analysis of a significant problem related to computing and design of a solution. Where appropriate, implementation and testing as well as documentation of the solution.
Prerequisite: Completion of the computer science required core courses and permission of graduate coordinator.

CMPT 698  MASTER’S THESIS  3
Independent research project done under faculty advisement. Student must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take CMPT 699 if they don’t complete CMPT 698 within the semester.
Prerequisite: Departmental approval.

CMPT 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: CMPT 698.
COUNSELING, HUMAN DEVELOPMENT AND EDUCATIONAL LEADERSHIP

Telephone: (973) 655-7216

Counseling programs in both the public and private sectors, corporate and business training and organizational development activities, and educational administration and supervision roles are integral parts of the American way of life. The mission of the department is to provide qualified and trained personnel for positions of responsibility in these various program areas, enabling organizations to meet the changing needs of society.

In counseling, the department prepares students for work with diverse populations in a variety of settings in the following areas: community counseling, addictions counseling, school counseling, and student affairs/counseling in higher education. In addition, the department offers courses for professional development meeting the requirements for National Board Certification in Counseling and New Jersey State Professional Counselor Licensure. The counseling program is CACREP-equivalent and will apply for CACREP accreditation in the near future.

In the growing area of training and development, the department offers opportunities to current and prospective professionals to gain new knowledge and skills in management education, program planning and organizational analysis.

In educational administration and supervision, the department provides leadership programs for individuals to develop the knowledge and competencies for positions as principals, department supervisors, school business administrators, superintendents, and other school personnel.

An initial core program, consisting of courses applicable to counseling, educational training or administration and supervision is required of all students entering the program. The specific coursework to be followed will be determined under the guidance of the appropriate graduate program coordinator. The appropriate graduate program coordinator will assist in planning individual programs designed to meet each student’s particular interests and needs.

CERTIFICATION PROGRAMS IN COUNSELING

The department offers the MA degree to emphasize the state certification program for school counselors. This state certification requires a masters in counseling. Students should consult their graduate program coordinator for specific certification requirements for this program. Courses are also available for persons seeking certification as Director of School Counselor Services and for individuals interested in completing all academic requirements for certification in alcoholism counseling (CADC), Substance Awareness Coordinator Certification (SAC), National Board Counseling Certification, and New Jersey State Professional Counselor Licensure (LPC).
# REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN COUNSELING

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Professional Core Courses (30 semester hours)</td>
</tr>
<tr>
<td>*COUN 552 Introduction to Professional and Ethical Issues in Counseling 3</td>
</tr>
<tr>
<td>*COUN 577 Counseling Theories ............................................................... 3</td>
</tr>
<tr>
<td>*ELRS 503 Methods of Research ............................................................... 3</td>
</tr>
<tr>
<td>*May be taken by pre-admit and non-degree students. A maximum of 2 courses (6 semester hours) may be taken.</td>
</tr>
<tr>
<td>COUN 579 Appraisal of the Individual .................................................. 3</td>
</tr>
<tr>
<td>COUN 582 Career Counseling ................................................................. 3</td>
</tr>
<tr>
<td>COUN 584 Group Counseling: Theories and Practice ................................ 3</td>
</tr>
<tr>
<td>COUN 588 Counseling Techniques ............................................................. 3</td>
</tr>
<tr>
<td>COUN 595 Multicultural Counseling .......................................................... 3</td>
</tr>
<tr>
<td>COUN 652 Introduction to Marriage, Couples, and Family Counseling .... 3</td>
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<tr>
<td>COUN 531 Counseling Across the Lifespan</td>
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<tr>
<td>OR</td>
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<tr>
<td>COUN 532 Counseling Child and Adolescents</td>
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<td>OR</td>
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<tr>
<td>PSYC 561 Developmental Psychology ..................................................... 3</td>
</tr>
<tr>
<td>II. Practicum</td>
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<tr>
<td>COUN 624 Practicum in Counseling ......................................................... 3</td>
</tr>
<tr>
<td>III. Concentration Requirements and Electives (9 semester hours)</td>
</tr>
<tr>
<td>Choose one concentration from the following:</td>
</tr>
<tr>
<td>A. Community Counseling</td>
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<tr>
<td>COUN 604 Case Management and DSM Diagnosis ..................................... 3</td>
</tr>
<tr>
<td>Choose two from among the following:</td>
</tr>
<tr>
<td>COUN 540 Introduction to Alcohol/Drug Counseling ............................. 3</td>
</tr>
<tr>
<td>COUN 568 Theories of Consultation ......................................................... 3</td>
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<tr>
<td>COUN 570 Counseling Across the Adult Lifespan ..................................... 3</td>
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<tr>
<td>COUN 665 Ecotherapy: Applied Ecopsychology ....................................... 3</td>
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<tr>
<td>COUN 673 Gender Issues in Counseling .................................................. 3</td>
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<tr>
<td>B. School Counseling</td>
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<tr>
<td>COUN 581 Community Resources .............................................................. 3</td>
</tr>
<tr>
<td>COUN 583 Counseling in Schools ............................................................. 3</td>
</tr>
<tr>
<td>ELRS 580 Learning: Process and Measurement</td>
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<tr>
<td>OR</td>
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<tr>
<td>PSYC 560 Advanced Educational Psychology</td>
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<tr>
<td>OR</td>
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<tr>
<td>PSYC 563 Theories of Learning</td>
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<tr>
<td>OR</td>
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<tr>
<td>PSYC 565 Child and Adolescent Psychopathology ................................. 3</td>
</tr>
</tbody>
</table>
C. Student Affairs/Counseling in Higher Education
COUN 592 Theories of College Student Development ...................... 3
COUN 589 Student Services in Higher Education
OR
ELAD 560 Workshop Seminar in Higher Education ....................... 3
Choose one from among the following:
COUN 540 Introduction to Alcohol/Drug Counseling ..................... 3
COUN 673 Gender Issues in Counseling ..................................... 3
ELAD 565 Two-year Junior College ......................................... 3

D. Addictions Counseling
COUN 540 Introduction to Alcohol/Drug Counseling ..................... 3
COUN 640 The Mentally Impaired And Chemically Addicted Client ...... 3
HLTH 511 Biomedical And Psychosocial Perspectives On Drugs ........ 3

III. Internship (6 semester hours)
COUN 654 Internship in Counseling I ....................................... 3
COUN 674 Internship in Counseling II ..................................... 3

Note: Student in School Counseling concentration must do internship in a K-12 setting.)

All students are required to complete a 600 hour internship in their area of concentration at the end of their program, to be approved by the coordinator of internships.

IV. Comprehensive Examination
Nearing completion of the program, (i.e. after completing at least 33 semester hours), the student will register for the comprehensive examination given in the fall or the spring.

Minimum semester hours: 48

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN ADMINISTRATION AND SUPERVISION
(For school personnel)

The Master of Arts degree in Administration and Supervision (A&S) seeks to achieve six basic objectives. Those objectives are:
1. To help develop and/or support a personal philosophy of education and social consciousness consistent with related theories of learning and human development;
2. To develop characteristics required for effective leadership in education;
3. To analyze educational organizations and plan programs and strategies for increasing organizational effectiveness and student achievement;
4. To develop techniques to facilitate interpersonal and group problem-solving and decision-making;
5. To develop skills in managing change and conflict in educational endeavors; and
6. To interpret research findings and design and implement research techniques for their organizational needs.
ADMISSION REQUIREMENTS
Three years of successful teaching experience under certification are required for certification as Supervisor or Administrator. The program for principals is designed to meet the requirements enacted by the New Jersey Department of Education.

PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Core Courses (12 semester hours)</th>
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<tbody>
<tr>
<td></td>
<td>COUN 559 Dynamics of Group Process ..................................................... 3</td>
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<tr>
<td></td>
<td>ELAD 510 Educational Administration I ................................................... 3</td>
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<tr>
<td></td>
<td>ELAD 521 Education Law .............................................................. 3</td>
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<tr>
<td></td>
<td>ELRS 503 Methods of Research .......................................................... 3</td>
</tr>
<tr>
<td></td>
<td>II. Required Courses (18 semester hours)</td>
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<tr>
<td></td>
<td>CURR 530 Principles of Curriculum Development ................................... 3</td>
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<tr>
<td></td>
<td>CURR 534 Strategies for Curriculum Change ........................................... 3</td>
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<td></td>
<td>ELAD 520 Systems Analysis .............................................................. 3</td>
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<td></td>
<td>ELAD 540 Supervision I ........................................................................ 3</td>
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<tr>
<td></td>
<td>ELAD 543 The Clinical Supervisor ....................................................... 3</td>
</tr>
<tr>
<td></td>
<td>ELAD 622 School Finance ....................................................................... 3</td>
</tr>
<tr>
<td></td>
<td>VI. Field Experience (6 semester hours)</td>
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<tr>
<td></td>
<td>ELAD 615 Supervised Field Experience in Administration and Supervision .................. 6</td>
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<tr>
<td></td>
<td>or</td>
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<td></td>
<td>ELAD 616 Internship in Educational Administration .................................... 6</td>
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<td></td>
<td>VII. Comprehensive Examination</td>
</tr>
<tr>
<td></td>
<td>To be taken after a minimum of 27 semester hours.</td>
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<tr>
<td></td>
<td>Minimum semester hours: 36</td>
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</tbody>
</table>

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN ADMINISTRATION AND SUPERVISION-CONCENTRATION FOR EDUCATOR/TRAINER

(Non-school Training Personnel)

This program provides solid foundations with close observation of the applications and implementation of theoretical principles, as well as exploration of organizational development in non-school areas. Graduates will serve as supervisors of trainers in corporate management, basic skill training in industry, civil service training, library/museums, health services, banks, research project management, and human resource management. Graduates of this program will learn to:

1. Develop a personal philosophy of organizational training consistent with the related theories of adult learning and human development.
2. Develop effective leadership skills in educational training programs.
3. Analyze organizations and plan programs and strategies for increased effectiveness.
4. Develop techniques for interpersonal and group problem solving and decision-making.
5. Develop skills in managing change and conflict in business, industry and philanthropic organizations.
6. Interpret research findings and design and implement research techniques to their organizational needs.

**PROGRAM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 559</td>
<td>Dynamics of Group Process</td>
</tr>
<tr>
<td>ELAD 509</td>
<td>Administration of Education and Training Programs</td>
</tr>
<tr>
<td>ELAD 542</td>
<td>Supervisory Skills for Education and Training Personnel</td>
</tr>
<tr>
<td>ELRS 503</td>
<td>Methods of Research</td>
</tr>
<tr>
<td>ELAD 531</td>
<td>Program Planning and Development</td>
</tr>
<tr>
<td>Approved Psychology Course</td>
<td></td>
</tr>
<tr>
<td>Graduate Course in Testing or Approved Elective</td>
<td></td>
</tr>
<tr>
<td>ELAD 628</td>
<td>Field Experience or Internship</td>
</tr>
<tr>
<td>Electives in major field approved by the graduate program coordinator</td>
<td>12 or 9 semester hours</td>
</tr>
</tbody>
</table>

**Minimum semester hours: 36**

Final action on full matriculation is based on requirements of the Office of the Graduate School, the Department and any special individual requirements assigned to the student by the graduate program coordinator.

**Portrait of a Counselor**

Montclair State University’s Counseling Program is committed to the training and development of professional counselors who actively engage in reflective, ethical, and culturally competent counseling practice that promotes the highest levels of personal growth, empowerment, and effectiveness in individuals, families, groups, and communities. The “Portrait of a Counselor” outlined below is a model toward which students in the Program strive.

The Department of Counseling, Human Development, and Educational Leadership community is committed to the initial and continuing development of counselors who exemplify the character, dispositions and habits of mind reflected in this portrait. Competent, professional counselors:

a. conduct ongoing inquiries into the nature of counseling, learn about new developments, and reflect upon their own personal development and professional practice.

b. believe in the worth and potential for change of all persons and strive to ensure equal opportunities for all clients.

c. possess the literacy, critical thinking and technological skills associated with the concept of an educated counseling professional and, are committed to lifelong learning. They speak and write English fluently and to communicate effectively.
and possess the critical thinking skills needed to competently analyze and contribute to the professional literature.

d. have content knowledge of the theories, concepts, purposes and processes associated with counseling.

e. understand the effects of human development on the personal, social and emotional growth of people and are committed to providing a nurturing, caring and accepting therapeutic environment for all clients.

f. possess the skills and attitudes necessary to establish and maintain a counseling environment that fosters trust, critical thinking, inquiry, risk-taking, and self-empowerment.

g. understand and are committed to moral, ethical, legal, and enculturating responsibilities within a democratic society.

h. model respect for individual and cultural differences and an appreciation of the basic worth of each individual. They select counseling interventions with sensitivity to issues of class, gender, race, ethnicity, sexual orientation, age, ability, and work to foster an appreciation of diversity among clients and colleagues.

i. are committed to their role as stewards of change, social justice, and best practices in their profession and possess the interpersonal skills and dispositions to work cooperatively with colleagues.

j. are willing to explore a career in a variety of geographic areas and work settings where counseling services are needed.

k. are committed to on-going supervision of and consultation about their practice throughout their professional careers.

l. are committed to and bound by the codes of ethics and standards of practice as put forth by the American Counseling Association and state regulatory agencies.

*Modified from “Portrait of a Teacher” developed by the Admissions and Retention Subcommittee of the Teacher Education Policy Committee, Montclair State University, Montclair, NJ.

COUNSELING, HUMAN DEVELOPMENT AND EDUCATIONAL LEADERSHIP

Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 552</td>
<td>INTRODUCTION TO PROFESSIONAL COUNSELING</td>
<td>3</td>
</tr>
</tbody>
</table>

This course is designed to introduce students to the profession of counseling. Students will engage in a critical examination of the roles, functions, responsibilities and typical settings of counseling professionals. Students will study issues related to credentialing, licensure, and professional development. In addition, the course will explore approaches to various types of counseling, principles and techniques, and work of the professional counselor. Students will also learn skills in technological competence and computer literacy necessary for effective professional counseling practice.
COUN 557  TECHNIQUES AND EXERCISES IN GROUP DYNAMICS  3
A structured experiential course: participating in and evaluating activities and exercises of individuals who work with small groups. Students will modify old designs and create new ones as they compile their own ideas, forms and exercises.
Prerequisite: COUN 559.

COUN 558  CONSULTATION IN ORGANIZATIONAL DEVELOPMENT  3
A laboratory based course which focuses on the role of the organizational consultant. Emphasis on planning, providing help and evaluating activities. Diagnostic and behavioral skills to aid individuals and groups within organizations will be developed. Designed for those considering consultation work in business, industry, government, penology, education and community organizations.
Prerequisite: COUN 559.

COUN 559  DYNAMICS OF GROUP PROCESS  1 - 3
A laboratory-based course for the development of group skills and understandings. Focus is on experimental learning and personal growth. Readings in human interaction theory will be related to actual group participation.

COUN 561  MARITAL AND FAMILY THERAPY  3
This course focuses on the core concepts fundamental to an understanding of marital and family therapy. Emphasis is on a frame of reference for family therapy strategies and review of current research on family process and treatment. Course is intended for practitioners in the helping professions, including social workers, counselors, ministers, probation and parole officers, addiction counselors.

COUN 562  SOCIAL CASE WORK I  3
This course examines the theory and practice of social casework. Focus is on developing casework techniques in interviewing, diagnostic skills and intervention modalities. Utilizing case studies from school settings and social agencies, critical examination of major casework methods are undertaken in terms of diagnosis and functioning and intervention appropriate for the social treatment of a client - child or adult. Emphasis is on school social work, the child study team, the broad range of learning and behavioral problems, the appropriate use of casework help, the relationship between theory and practice and developing beginning skills in transferring and using knowledge appropriate to problem situations in the school and community. Required for certification in school social work.

COUN 563  SOCIAL CASEWORK II  3
This course entails critical examination of major social work methods in diagnosis, social functioning and relevant intervention techniques appropriate for the social treatment of individuals. Required for certification in school social work.

COUN 568  THEORIES OF CONSULTATION  3
Problems and current practices in small group interaction, social restructuring and cultural encounter. Survey of literature on the influence of interaction on small group behaviors, learning theories, leadership, decision making, social reconstruction, value conflict and perception of self and others.
COUN 570  COUNSELING ADULTS  3
This course is designed to identify the special needs of adults as they seek counseling. Special attention is given to the counseling needs of college students, adults returning to academic environs, women, minority groups, the handicapped, and other adults with special needs. Case studies, field visits, and supervised practice will be basic techniques employed.
Prerequisite: COUN 577.

COUN 571  PEER COUNSELING  3
An advanced course dealing with the concept and experience of peer counseling. The development, organization, implementation, and evaluation of peer counseling programs and activities. This course involves lectures, seminars, and laboratory experiences. In laboratory, students counsel each other. In seminar, they evaluate their peer counseling activities.
Prerequisites: COUN 559 and 577.

COUN 572  SELF-CRITIQUING FOR IMPROVED COUNSELING COMPETENCE  3
Presentation of a theory and system for improving one-to-one counseling through a process of self-critiquing tape recorded interviews of counseling sessions conducted by course participants. Specific counseling behaviors are identified and examined and strategies are developed leading to the attainment of individual behavioral goals.
Prerequisite: COUN 588 and a minimum of 18 graduate credits in counseling.

COUN 574  COUNSELING IN ORGANIZATIONS: EMPLOYEE ASSISTANCE PROGRAM (EAP)  3
This course focuses on nature and characteristics of individuals and groups in organizations in a workplace environment and how an Employee Assistance Program (EAP) helps in maintaining effectiveness. These organizations, both profit and non-profit, place great demands on roles which people play in achieving goals, working in groups and teams, performing effectively, and dealing with problems and issues. Emphasis will be placed on the development and application of effective counseling strategies and interventions which empower individuals and enable them to be effective participants.

COUN 576  ACTION METHODS IN COUNSELING  3
Course is designed to provide an opportunity for students to experience and to develop facility with counseling methods which will enable their clients to explore the roles that they play in their daily lives and to find new and more effective ways of expressing these roles. Through the use of action-oriented techniques, students will increase their spontaneity and will be freer to unfetter creativity in others.

COUN 577  COUNSELING THEORIES  3
A comprehensive study of the major theoretical approaches of counseling. Emphasis is placed on helping prospective counseling professionals understand that the best practices of ethical and culturally responsive counseling are rooted in a sound theoretical foundation.
COUN 581 COMMUNITY RESOURCES 3
This course deals with the various agencies, industries and institutions available in the surrounding communities for use in guiding and referring clients. In addition to becoming familiar with the location and nature of these facilities students learn the techniques for arranging client interviews and visits. Class discussion and personal research are supplemented by field trips.

COUN 582 CAREER COUNSELING 3
An overview of the process of successful career development with clients in school, college, rehabilitation, community, and government agency settings. Areas of study include critical analysis of the world of work, the impact of multiple roles on career choice and decision making, the major theories of career choice and development, occupational and labor market information, and research in career development and counseling. 
Prerequisites: COUN 552 and COUN 577, or departmental approval.

COUN 583 EDUCATIONAL GUIDANCE 3
This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school programs of alternative education, and the academic problems of students while in school. A brief survey of colleges and college admission procedures is made.

COUN 587 ADMINISTRATION AND SUPERVISION OF GUIDANCE PROGRAMS 3
Developing and administering programs of student registration, theory and techniques of scheduling, and supervisory responsibilities of the director of guidance. Coordinating guidance activities in a multi-school district or agency. Examination of current guidance practices; formation of proposals for improvement in programs where the student is working as a counselor and/or director. 
Prerequisite: Certification in School Counselor.

COUN 588 COUNSELING TECHNIQUES 3
Introduction to basic counseling techniques and skills common to multiple theoretical perspectives. Students actively engage in self and cultural awareness and reflection necessary for examining the dynamics of the counseling relationship and maintaining appropriate professional boundaries. 
Prerequisite: COUN 577. 
Corequisite: COUN 552.

COUN 589 STUDENT SERVICES IN HIGHER EDUCATION 3
The course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health programs, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

COUN 590 COUNSELING THE ALCOHOLIC AND THE SUBSTANCE ABUSER 3
Describes methods of assessment, treatment planning and charting. Explains the defense structure of the substance abuser. Discusses ethical issues and counseling with special populations as well as children and adult children of alcoholics. Demonstrates individual and group counseling skills.
COUN 591 SEMINAR IN ALCOHOLISM AND SUBSTANCE ABUSE COUNSELING
Emphasizes family treatment with alcoholism and drug problems and typical effects on spouse and children. Screening, assessment, diagnosis and treatment management are explored. Crisis intervention, relapse prevention, ethical issues and special populations are discussed.

COUN 592 THEORIES OF COLLEGE STUDENT DEVELOPMENT
This course is designed to introduce students to relevant models and theories of student and human development used in Student Affairs counseling and administration in higher education. Students will engage in a critical examination of the processes of student learning, growth and development during the college years and in theories that support and enhance student affairs administration. Special focus will be directed toward understanding the implications of these models for the policies and practices of education in general and student affairs administration in particular.

COUN 595 MULTICULTURAL COUNSELING AND DEVELOPMENT
Exploration and development of the necessary personal awareness, knowledge and skills for culturally competent counseling practice. Emphasis on historical and current issues and trends associated with race/ethnicity, gender, age, socioeconomic status, religion, sexual orientation, and ability and how they affect counseling practice.
Prerequisites: COUN 552 and COUN 577 or departmental approval.

COUN 604 CASE MANAGEMENT AND DSM DIAGNOSIS IN COUNSELING
Procedures in case conceptualization and case management in counseling, in working with children, adolescents, and adults in school, community agency, higher education, and private practice settings. Intermediate study of the DSM and its diagnostic and practical relationship to counseling
Prerequisites: COUN 577, COUN 584, COUN 588, and COUN 624, matriculation in a graduate counseling program or departmental approval.

COUN 624 COUNSELING PRACTICUM
This is the second clinical core course in the graduate counseling program. The course requirements include advanced counseling practice supervised by professor; further development of core counseling skills common to all theoretical approaches; and demonstration of understanding of ACA Code of Ethics and Multicultural Competencies.
Prerequisites: Successful completion (Grade B or better) in COUN 588; COUN 552, COUN 577, and COUN 595; departmental approval.

COUN 640 THE MENTALLY IMPAIRED AND CHEMICALLY ADDICTED CLIENT
Provides concentrated study of a difficult substance abuse treatment population. Emphasized major theoretical issues drawn from recent research and clinical developments; includes consideration of assessment, treatment and after care perspectives, utilizing current approaches and specific techniques.
COUN 641  CLINICAL SUPERVISION AND TRAINING IN ALCOHOL AND DRUG COUNSELING  3

Clinical supervision and training in alcohol and drug abuse counseling closely reviews the fundamentals of supervising the training that counseling interns receive in both individual and small group situations. Analyzing supervision and training issues, content and form of supervisory interactions, eliciting excellence from each candidate, ethics, modeling counseling behavior, successfully working through administrative hierarchies and organizational theory are some of the significant areas that will be explored in-depth.

Prerequisites: COUN 450, and 454, and 590, and 640.

COUN 652  INTRODUCTION TO MARRIAGE, COUPLES AND FAMILY COUNSELING  3

This course includes an introduction to the major current theoretical approaches of family and couples counseling with emphasis on the counseling process from a family system’s perspective in agency, school, or higher education settings within a diverse, multicultural society. Developmental family stages and practice counseling strategies are included.

Prerequisite: COUN 552, COUN 577, COUN 588 or departmental approval.
Corequisite: COUN 595.

COUN 653  SELECTED TOPICS IN COUNSELING  3

This course provides counseling professionals in public, private and nonprofit settings with knowledge about current issues, developments and trends affecting their work and organizations. It will examine strategies to improve professional effectiveness and delivery of services in the face of significant changes impacting the practice of counseling. May be repeated twice for a maximum of nine semester hours as long as the topic is different.

COUN 654  INTERNSHIP IN COUNSELING I  3

This two-part sequential culminating course is the third of the clinical core in the graduate counseling program. This course requires the students to participate in field placement appropriate to their chosen specialized population, community agency, school or higher education setting. Interns will complete a total of 300 semester hours each semester of direct and non-direct work with clients at the site as per national and state standards. Case presentation, clinical observation, and direct counseling one-to-one and in small groups is required. Weekly class supervision seminars on campus are required as well as weekly supervision with an on-site supervisor. Recording of client contact and non-direct contact hours are entered in an on-going log to be presented at the end of the semester.

Prerequisites: Successful completion of 33 semester hours in the graduate counseling program that includes the following courses: COUN 552, COUN 577, COUN 588, COUN 595, and COUN 524.

COUN 663  GROUP LABORATORY DESIGN  3

This course will focus on the translation of client needs into designs for programs of experiential and cognitive learning opportunities. Students will study models of programs which have been used for colleges, schools, businesses, and other organizations. They will then discuss the theoretical aspects involved and participate in the planning, carrying out, and evaluation of current laboratories, workshops, and conferences.

Prerequisite: COUN 559.
COUN 664 INDEPENDENT STUDY 1 - 3
An opportunity to study in depth areas of human services which are not offered in the regular curriculum, under the direction of department faculty member. Semester hours determined by the department chair following consultation with departmental research committee. Advanced individual study on problems beyond what can be accomplished in the classroom. Credit may be obtained for an approved course or seminar related to the student’s special area of interest. May be repeated twice for a maximum of three semester hours.
Prerequisite: Departmental approval.

COUN 665 ECOTHERAPY: APPLIED ECOPSYCHOLOGY 3
This course examines how an emergent approach to therapy and counseling seeks to expand the concepts of self and health to include biosphere. Students will explore and evaluate the effects of human perceptions, attitudes and behavior in relation to the natural world. Students will also learn skills and techniques that heal the human psyche within a paradigm that respects and nurtures the environment.

COUN 666 ETHICAL AND LEGAL ISSUES IN COUNSELING 3
This course will include a study of ethical theory in relation to legal and moral issues in counseling. Conflicts and value problems will be looked at. Ethical principles and specific cases facing counselor will be included. Specific problems in thinking and counseling strategies as well as marketing of services and conduct of individual counselors will be studied.
Prerequisite: COUN 588.

COUN 671 THE USE OF SELF-HELP PROCEDURES IN COUNSELING 3
This course provides students with the opportunity to review, in a laboratory setting, the vast array of self-help materials and procedures available to the general public. Through experiential application, students will become familiar with step-by-step procedures, appropriate application and evaluation of self-help materials in the counseling process.
Prerequisite: COUN 588.

COUN 672 COUNSELING THE AGING 3
This course deals with the long-range preventive counseling and crisis intervention in critical stages of the aging process. Covered are such topics as: job change, economic upheaval, sexuality, changing family structure, chronic illness, death and dying.
Prerequisite: COUN 588.

COUN 673 GENDER ISSUES IN COUNSELING 3
This course is designed to explore gender and sex role issues pertinent to the counseling profession and their effect on the development of children, adults, and family dynamics. Students will utilize the Gender Fair Guidelines and Multicultural Competencies as presented by the American Counseling Association.
Prerequisites: COUN 552, COUN 577, COUN 588 or departmental approval.
COUN 674  INTERNSHIP IN COUNSELING II  3
This is the second of a two-part sequential culminating course in the clinical core in the graduate counseling program. This course requires the students to participate in field placement appropriate to their chosen specialized population, community agency, school, or higher education setting. Interns will complete a total of 300 semester hours each semester of direct and non-direct work with clients at the site as per national and state standards. Case presentation, clinical observation, and direct counseling one-to-one and in small groups is required. Weekly class supervision seminars on campus are required as well as weekly supervision with an on-site supervisor. Recording of client contact and non-direct contact hours are entered in an ongoing log to be presented at the end of the semester.

Prerequisites: Successful completion of COUN 654.

COUN 698  MASTER’S THESIS  3
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take COUN 699 if they don’t complete COUN 698 within the semester.
Prerequisite: Departmental approval.

COUN 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: COUN 698.

ELAD 509  ADMINISTRATION OF EDUCATION AND TRAINING PROGRAMS  3
This course prepares the present or prospective administrator to manage an education or training program in a non-school setting. Administrative theory, organizational functions, personnel and staff requirements as well as program design and development will be examined and studied. The course is designed for the educational administrator in both public and non-public agencies as well as in profit-making or nonprofit organizations.
Prerequisite: One and one-half years of work experience.

ELAD 510  EDUCATIONAL ADMINISTRATION I  3
Nature and dynamics of organizations from the viewpoints of social and behavioral sciences. Leadership, decision-making, conflict resolution and other theories considered in the educational setting. Impact of environmental and personal forces on organizational behavior.
Prerequisite: One and one-half years of successful teaching under certification.

ELAD 512  ADMINISTRATION OF ELEMENTARY SCHOOLS  3
Educational leadership required for effective elementary school organization and administration. Changing role of the principal, relationships with staff and students and current principles, practices and techniques with regard to scheduling, staff utilization, plant operation, student activities and school community relations.
Prerequisite: ELAD 510
ELAD 513  SECONDARY SCHOOL ADMINISTRATION  3
Special administration problems of the junior and senior high school. Recruitment of
staff; scheduling of teachers, organization and school morale, and recent experiments of
organizational structure. Supervision of instruction as a major function of administration.
Current demands of adults in the community. How the secondary school operates in
relation to the elementary school and higher education to help design education as a
continuous process. Students write a paper on special administrative problems.
Prerequisite: ELAD 510.

ELAD 520  SYSTEMS ANALYSIS IN EDUCATION AND TRAINING  3
Latest techniques in operations research for educational purposes. Systems analysis
techniques studied and utilized by student in an instructional, curriculum or administra-
tive mode. Simulation techniques in classroom-oriented activities.

ELAD 521  EDUCATION LAW  3
Legal-theory, practical politics, relationship of school district organization to other units
of government, appellate function of the state Commissioner of Education and the state
Board of Education, New Jersey school laws (Title 18A of the revised statutes) and rules
and regulation of the state Board of Education and their decisions. New Jersey school legal
structure compared with that of other states.

ELAD 522  USE OF COMPUTERS IN EDUCATIONAL ADMINISTRATION  3
This introductory course provides for the school administrator an overview of the
computer, its development and applications in education, and the nature of the computer
operational requirements in an educational organization. Also included will be the
elements of an educational management information system (EMIS), computer staff
supervision, and use of computers in such areas as testing, record keeping, attendance and
report preparation.
Prerequisite: ELAD 510.

ELAD 526  SCHOOL BUSINESS ADMINISTRATION  3
Role of school business administration in the public school. Various functions, structures
and techniques of operation. Simulation techniques utilized to construct both a traditional
and PPBS budget.
Prerequisite: ELAD 510 and 521.

ELAD 528  FINANCIAL MANAGEMENT FOR EDUCATION/TRAINING/PERSONNEL  3
This course provides an introduction to budgets systems, financial management, general
accounting procedures, and the process of reporting for training personnel. Also included
will be discussions of the development of financial reports related to training, as well as
experience in the use of cost-benefit analysis techniques. Financial terminology will be
included in the overall course development.
ELAD 531 PROGRAM PLANNING AND DEVELOPMENT 3
This course provides education and training personnel with experience in the principles and techniques of designing training programs in the organizational setting. Special attention will be placed on organizational needs analysis and program development in skills areas and staff development. Students will design a total program and individual lessons for education and training efforts in a variety of simulated settings.
Prerequisite: One and one-half years of work experience.

ELAD 540 SUPERVISION I 3
School personnel as principals, coordinators and department and subject area supervisors in elementary and secondary schools. Contribution of supervisors in instruction and in supporting the professional work of classroom teachers.

ELAD 542 SUPERVISORY SKILLS FOR EDUCATION AND TRAINING PERSONNEL 3
This course provides the present and prospective education and training supervisor in a public or non-public, profit or nonprofit setting with instruction in course/program assessment, personnel selection procedures, staff evaluation processes, and material/equipment procurement. Also included is training manual development and use.

ELAD 543 THE CLINICAL SUPERVISOR 3
Role of the supervisor in implementing clinical supervisory practices. Simulation techniques utilized to develop observation and conference techniques as well as the development of professional improvement plans.
Prerequisites: ELAD 540.

ELAD 545 LEADERSHIP SKILLS IN COMMUNICATION FOR THE EDUCATOR/TRAINER 3
This course provides experience in basic leadership skills for the educator/trainer: communication skills, report writing skills, listening skills, and presentation skills. Students will prepare actual reports, presentations, and reactions, verbal and/or written, to problem situations. Audio and video taping of individual skills presentation of simulated situations will be an important component of the course. Increasing training and supervisory effectiveness through the improvement of communication skills will be the major focus of this course.

ELAD 550 COMPUTER APPLICATIONS FOR COUNSELORS AND TRAINERS 3
Course provides instruction in computers and software for both personal and program use in such professional fields as counseling, training, and supervision. Emphasis will be placed on individual skills and knowledge of the computer, data processing, and information analysis. Further study will include record keeping, program applications, and software analysis in such areas as therapeutic learning programs, career awareness and development, computer-based training, and staff evaluation reporting.

ELAD 560 WORKSHOP SEMINAR IN HIGHER EDUCATION 3
Overview of structure and functioning. History, philosophy, sociology and politics of the college as a unique and dynamic institution in American society: Educational opportunity and the organization of higher education; open admissions; status, trends and implication; minority group youth in higher education; student initiatives for reform; faculty governance; etc.

200
ELAD 615  SUPERVISED FIELD EXPERIENCE IN  
ADMINISTRATION AND SUPERVISION  
3 - 6

Students are assigned work within an educational agency, operating at the level and in the domain of their professional specialty. They work under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the college supervisor. This experience is not to be construed as an internship, as it will not encompass the total job description of the administrator. A written report on the activity or research paper will be approved by the administrator and presented to the college supervisor, who will evaluate the total experience.

Prerequisite: Departmental approval.

ELAD 616  INTERNSHIP IN EDUCATIONAL ADMINISTRATION  
6

Full semester assignment of guided work within an educational institution’s administrative office. Sixth year students are eligible to choose this internship plan, but it is advised that arrangements be made for released time, at least one half time, if the internship is to be carried on in an institution where student is employed. The experience is planned to include a wide variety of administrative experiences such as locating and interviewing candidates for position, scheduling, in-service professional development, special committee leadership, projects that influence curriculum building arrangements and budgets. The sixth year student may be required to take ELAD 610 or 611 for three additional semester hours during this internship. In all cases, students will complete the research project as a part of the internship assignment.

Prerequisite: Departmental approval.

ELAD 618  INDEPENDENT STUDY IN EDUCATIONAL  
ADMINISTRATION AND SUPERVISION  
1 - 3

Individual pursuit of a research topic in the area of administration or supervision, culminating in a written document of scholarly proportion and integrity. Arrangements for this course should be made with department chairperson or graduate program coordinator. May be repeated twice for a maximum of three semester hours as long as the topic is different.

Prerequisite: Departmental approval.

ELAD 621  SCHOOL PLANT PLANNING  
3

The relationship between educational facilities and educational programs. Site selection, development of educational specifications, the physical environment, selection of equipment, programming of various facilities based on curricula and community needs. Group visits to exemplary educational facilities.

Prerequisite: ELAD 510 and 521.

ELAD 622  SCHOOL FINANCE  
3

Current economic environment; state, local and federal taxation; state school aid theory and practice; school district indebtedness; statutory school budget and fiscal controls; various cost-quality instruments and role of school fiscal structure in relation to local, state and federal governments.

Prerequisite: ELAD 510 and 521.
ELAD 628  FIELD EXPERIENCE IN ADMINISTRATION AND SUPERVISION FOR EDUCATORS/TRAINERS 3 or 6
Students are assigned to a particular office, under guidance of a supervisor, to carry out certain functions of the position. A college staff member acts as coordinator and supervisor by visiting site and consulting with student, observing him in action; plans with site supervisor for improvement and evaluation of student’s work. This course may be taken for 3 or 6 credits.
Prerequisite: Departmental approval.

ELAD 629  ACCOUNTING, AUDITING, AND REPORTING FOR SCHOOL SYSTEMS 3
The course will provide students with the knowledge and skills required to initiate and maintain a school district’s accounting, auditing, and reporting program. Emphasis is placed on the terminology and processes required to insure local school district financial accountability. New Jersey operational requirements will be stressed.
Prerequisite: ELAD 526.

ELAD 643  STAFF PERSONNEL ADMINISTRATION AND SUPERVISION 3
Personnel practices and problems in current school situations. Roles of policy-making bodies, the public, professionals, paraprofessionals and general staff in recruitment, selection, retention and evaluation of staff.
Prerequisites: ELAD 521 and 540.

ELAD 660  FIELD EXPERIENCE IN THE HUMAN RESOURCES, 1 or 3
PART I
The field experience provides significant opportunities in an organization to synthesize and apply the knowledge gained in coursework. In addition, students will have the opportunity to practice and develop skills in the area of human resource development, organizations development, consultations, counseling, communications, human relations, and evaluation. In particular, students will focus on critical thinking, leadership, and ethical issues. May be taken for 3 or 6 credits.

ELAD 661  FIELD EXPERIENCE IN THE HUMAN RESOURCES, 1 or 3
PART II
The field experience provides significant opportunities in an organization to synthesize and apply the knowledge gained in coursework. In addition, students will have the opportunity to practice and develop skills in the area of human resource development, organizations development, consultations, counseling, communications, human relations, and evaluation. In particular, students will focus on critical thinking, leadership, and ethical issues. May be taken for 3 or 6 credits.

ELAD 670  SELECTED TOPICS IN EDUCATIONAL ADMINISTRATION/SUPERVISION 1 - 3
Emphasis on in-service education for practicing administrators and/or supervisors. Topics will vary in accordance with needs, concerns, or requests of school districts or professional organizations desiring service. Current problems are given priority. Credits to be dependent upon number of hours workshops and/or seminars are in session. May be repeated twice for a maximum of six semester hours as long as the topic is different.
Prerequisite: Departmental approval.
CURRICULUM AND TEACHING

Telephone: (973) 655-5187

MASTER OF ARTS IN TEACHING (M.A.T.)

Students with a baccalaureate degree and interest in teaching may earn the Master of Arts in Teaching (MAT) and a teaching certificate simultaneously.

The regular program is open to students who wish to teach one of the following subjects in K-12 schools: fine arts, business education (bookkeeping and accounting, general business education), English, foreign languages (French, Spanish), mathematics, music, health and/or physical education, science, social sciences, or TESL (Teaching of English as a Second Language). Students may pursue elementary/early childhood education in the Department of Early Childhood, Elementary and Literacy Education.

As part of the application process, a candidate’s academic background in the subject he or she wishes to teach will be assessed by faculty. Further undergraduate course work in that subject may be required, in addition to the M.A.T. degree requirements listed below. If required, these courses may be taken concurrently with other program requirements, but must be completed prior to student teaching. As a general rule, M.A.T. candidates who are assessed to have strong academic backgrounds in the subjects they wish to teach may have little or no additional undergraduate course work to complete. (An example would be a candidate who possesses a degree in mathematics who wishes to teach mathematics.) However, course requirements for the M.A.T. in Early Childhood (P-3) and Elementary Education (K-8) are outlined in this catalog under the Department of Early Childhood, Elementary and Literacy Education. Those who wish to pursue certification in special education will need to apply to a dual certification program, as described below. Certification in special education is no longer a stand-alone certification. M.A.T. candidates who wish TESL (Teacher of English as a Second Language) must also satisfy the requirements for a linguistics major, which may add 36 semester hours to their programs.

Upon successful completion of the program, the student will be recommended to the New Jersey Department of Education for a teaching certificate. Students interested in teaching elsewhere should seek information from the appropriate state authorities; requirements are generally similar.

Those who have completed undergraduate or post-baccalaureate teacher certification programs must successfully complete an induction program of teaching under a provisional certificate to be eligible for a permanent or standard New Jersey teaching certificate. Exempted from this requirement are persons who already possess a New Jersey standard certificate and are seeking an additional New Jersey certificate. Persons recommended by the University for certification who have passed the appropriate Praxis examination, will receive a Certificate of Eligibility With Advanced Standing which authorizes the holder to seek and accept offers of employment in New Jersey schools and in other states. The certificate is valid for the lifetime of its holder.

Note: Certification requirements are subject to change (see Teacher Education Programs in this catalog). United States citizenship is required for New Jersey certification.
ADMISSION REQUIREMENTS

Candidates for admission to the M.A.T. program must file an Application for Graduate/Post Baccalaureate Admission to the Graduate School, including all supporting materials by February 15 to be considered for Summer/Fall admission or by September 15 for Spring admission. An undergraduate grade point average (GPA) of at least 2.70 overall, and in the teaching field is required, along with qualifying scores on the general Graduate Record Exam. A higher GPA in the teaching field may be required by some departments.

In addition, candidates for most M.A.T. programs are required to take the appropriate Praxis II Subject Assessment test, prior to being admitted into the Program. Full matriculation requires passing the Praxis. Candidates who do not pass the Praxis but meet all other admissions requirements will be admitted conditionally and limited to 12 graduate credits until they submit passing scores for the appropriate Praxis examination. In addition to transcripts and GRE and Praxis II scores, two recommendations from school or college faculty, or administrators, must be submitted. It is expected that students will be able to demonstrate proficiency in the use of the English language.

After the application deadline, candidates will be notified about the next step in the application process, which may include interviews (with the graduate program coordinator and/or admission committee), writing samples, and portfolio review or audition (the latter applies to art and music candidates).

Students who are accepted to the M.A.T. program will be assigned to faculty advisors whom students should consult each semester. Since students’ backgrounds differ, they should not take courses without advisement. The course of study listed below is generic and may differ in detail for individual students.

General questions about the M.A.T. program should be directed to the Director of Teacher Education Admission, (973) 655-4139.

Program Goals and Admission Criteria
In selecting students for the M.A.T. program, Montclair State University uses criteria which are related to the kinds of knowledge, abilities, dispositions and character we expect graduates of our Program to possess. “The Portrait of a Teacher” outlined below is a model toward which students in the Program strive. In making decisions on acceptance to the Program, faculty consider such criteria as GPA, knowledge of content of major area of study, commitment to teaching and its varied responsibilities, and communication abilities, both written and oral. These criteria enable faculty to assess the likelihood that candidates will achieve the goals inherent in the “Portrait of a Teacher”.

**Portrait of a Teacher:**

The Montclair State University community is committed to the continuing development of teachers who exemplify the dispositions, knowledge, and skills reflected in this portrait. They:

1. Have expert knowledge of the disciplines they will teach and can use various strategies, including media and technology, for creating learning experiences that make the subject matter accessible and meaningful to all students.
2. Understand how children and adolescents learn and develop in a variety of school, family and community contexts, and can provide learning opportunities that support their students' intellectual, social, and personal development.

3. Understand the practice of culturally responsive teaching. They understand that children bring varied talents, strengths, and perspectives to learning; have skills for learning about the diverse students they teach; and use knowledge of students and their lives to design and carry out instruction that builds on students' individual and cultural strengths.

4. Plan instruction based upon knowledge of subject matter, students, families, communities, and curriculum goals and standards; and taking into account issues of class, gender, race, ethnicity, language, sexual orientation, age, and special needs in designing instruction.

5. Understand critical thinking and problem solving, and create learning experiences that promote the development of students' critical thinking and problem solving skills and dispositions.

6. Understand principles of democracy and plan and carry out instruction that promotes democratic values and communication in the classroom.

7. Understand and use multiple forms of assessment to promote the intellectual, social, and physical development of learners and to inform instruction.

8. Create a community in the classroom that is nurturing, caring, safe, and conducive to learning.

9. Are reflective practitioners who continually inquire into the nature of teaching and learning, reflect on their own learning and professional practice, evaluate the effects of their choices and actions on others, and seek out opportunities to grow professionally.

10. Build relationships with school colleagues, families, and agencies in the community to support students' learning and well-being, and work to foster an appreciation of diversity among students and colleagues.

11. Possess the literacy skills associated with an educated person; can speak and write English fluently and communicate clearly.

12. Develop dispositions expected of professional educators. These include belief in the potential of schools to promote social justice; passion for teaching; and commitment to ensuring equal learning opportunities for every student, critical reflection, inquiry, critical thinking, and life-long learning, the ethical and enculturating responsibilities of educators, and serving as agents of change and stewards of best practice.

Criteria for Retention in Program
Students who are accepted to the Program are evaluated periodically. They should review the Teacher Education Handbook to determine criteria used to determine eligibility for student teaching and the University's recommendation for certification. By New Jersey Department of Education regulation and University policy, teacher education students in most certification areas must pass the appropriate PRAXIS II Examination. Consult the Center of Pedagogy website at http://cehs.montclair.edu/academic/cop/teacher to determine which test you must take.
MASTER OF ARTS IN TEACHING (MAT)  
DEGREE REQUIREMENTS

Prerequisites: A course in psychology, fulfillment of all requirements stipulated by the teaching field department, and an academic background of at least 60 semester hours of general education, distributed among the arts, humanities, math, science, technology, and the social sciences. Unfulfilled prerequisites will be listed on the student’s official work program and are considered requirements for the degree. A memorandum from the departmental teacher education program coordinator of the teaching field must be submitted, listing major (teaching-field) course work necessary for certification and/or the M.A.T. degree.

M.A.T. PROGRAM

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<tr>
<th>Semester</th>
<th>Course工作</th>
<th>Hours</th>
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<tbody>
<tr>
<td>I.</td>
<td>Course work in Professional Education required for certification (29-31 semester hours):</td>
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<td>CURR 599 Curricular and Social Dynamics of Schooling ......................... 3</td>
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<td>EDFD 520 Development of Educational Thought ..................................... 3</td>
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<td>A course in teaching reading .................................................... 3</td>
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<td>A course in teaching critical thinking ...................................... 3</td>
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<td>Major department methods course ....................................... 3-4</td>
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<td>CURR 500 Fieldwork in Education ...................................................... 2</td>
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<td></td>
<td>Professional Semester:</td>
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<td>CURR 502 Graduate Seminar in Professional Education ......................... 1</td>
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<td>CURR 511 Supervised Graduate Student Teaching .................................. 8</td>
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<td>OR</td>
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<td></td>
<td>CURR 514 In-Service Supervised Graduate Student Teaching ............. 4-8</td>
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<td>CURR 528 Teaching for Learning ...................................................... 3</td>
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<td>Departmental (major) Seminar (if required) ........................................ 1</td>
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<tr>
<td>II.</td>
<td>Courses in the Teaching Field or Related Fields (12 semester hours):</td>
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<td>Advanced Educational Psychology and a Human/Intercultural Relations course must be included if not fulfilled elsewhere and must be taken prior to the Professional Semester. At least 6 semester hours of graduate courses in the teaching field (major) are required.</td>
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<tr>
<td>III.</td>
<td>Additional Courses in Professional Education (6 semester hours):</td>
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<td>(May be taken after certification)</td>
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<td></td>
<td>CURR 522 Innovations in Teaching ................................................... 3</td>
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<td>ELRS 503 Methods of Research ....................................................... 3</td>
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IV. Comprehensive Examination

Normal minimum semester hours: 47

If the student has essentially achieved the objectives of part of the program, that portion of the requirements may be waived upon (1) recommendation of the graduate program coordinator and (2) review and approval by the Deans of the College of Education and Human Services and the Graduate School. However, the number of graduate credits may not be reduced below 32, and other requirements of the University and Teacher Certification Program still apply.
Teacher of Students with Disabilities is the certification required for teaching special education. Certification in this area will provide teachers with the knowledge, skills, and competencies needed to provide instruction for students with disabilities. Certification as Teacher of Students with Disabilities requires an instructional certificate in P-3, K-5, or a content area. Students must obtain certification in general education in order to obtain certification in Teacher of Student with Disabilities. The following dual certification programs are available: MAT: Early Childhood Education P-3 and Teacher of Students with Disabilities, MAT: Elementary Education K-5 and Teacher of Students with Disabilities. These programs are described in the Department of Early Childhood, Elementary, and Literacy Education.

Those who wish to teach special education in a content area are advised to obtain certification in the content area and then apply for the Teacher of Students with Disabilities; Additional Certification program.

POST-BACCALAUREATE CERTIFICATION FOR TEACHER OF STUDENTS WITH DISABILITIES
(ADDITIONAL CERTIFICATION ONLY)

This program is for teachers who already hold certification in general education in K-5, K-8, or content area certification who wish to expand their knowledge regarding instruction of students with disabilities. The program provides the skills, knowledge and competencies for working with students with disabilities. The emphasis is on inclusive education.

ADMISSION REQUIREMENTS

Admission to the program is limited to teachers who have an instructional certification in general education in K-5, K-8, or content area. Those with P-3 certification are not eligible for the program.

POST-BACCALAUREATE CERTIFICATION FOR TEACHER OF STUDENTS WITH DISABILITIES
REQUIREMENTS
(ADDITIONAL CERTIFICATION ONLY)

Prerequisites: A course in the teaching of reading. If not taken at the undergraduate level, student should take one of the following, selected with the program coordinator.

READ 501 Techniques of Reading Improvement in Secondary Schools .. 3
OR (selected with the program coordinator)
READ 500 The Nature of Reading ...................................................... 3

Specialization Courses (24 semester hours)
SPED 579 Special Education for Student with Disabilities .................. 3
SPED 567 Instructional Planning for Students with Disabilities in Inclusive Settings I ...................................................... 3
OR (selected with program coordinator)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPED 568</td>
<td>Instructional Planning for Students with Disabilities in Inclusive Settings II</td>
<td>3</td>
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<tr>
<td>SPED 584</td>
<td>Assessment and Evaluation in the Inclusive Classroom</td>
<td>3</td>
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<tr>
<td>SPED 566</td>
<td>Language-Based Learning Strategies for Inclusive Settings</td>
<td>3</td>
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<tr>
<td>SPED 586</td>
<td>Transition Services for Students with Disabilities</td>
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<td>OR (selected with program coordinator)</td>
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<tr>
<td>ECSE 508</td>
<td>Partnerships with Families in Early Childhood Special Education</td>
<td>3</td>
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<tr>
<td>SPED 588</td>
<td>Promoting Prosocial Behaviors in Inclusive Settings</td>
<td>3</td>
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<tr>
<td>SPED 585</td>
<td>Technology for the Inclusive Classroom</td>
<td>3</td>
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<tr>
<td>SPED 597</td>
<td>Practicum and Seminar in Teaching Students with Disabilities</td>
<td>3</td>
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**MASTER OF EDUCATION (M. Ed.) IN LEARNING DISABILITIES**

The Learning Disabilities program is designed to prepare students to obtain the Learning Disabilities Teacher-Consultant (LDT-C) certification. Students interested in the Master of Education in Early Childhood Special Education will find that program listed under the Department of Early Childhood, Elementary and Literacy Education.

**ADMISSION REQUIREMENTS***

Students wishing to matriculate in this area must have a bachelor’s degree and a standard New Jersey instructional certificate (e.g., Teacher of Students with Disabilities). Evidence of one year of successful teaching experience must also be provided.

*Note: Admissions and certification requirements are subject to change. Consult with graduate program coordinator.

**REQUIREMENTS FOR THE M.Ed. IN LEARNING DISABILITIES DEGREE**

<table>
<thead>
<tr>
<th>Semester</th>
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<tr>
<td>I. Required Courses (33 semester hours)</td>
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<tr>
<td>ELRS 578*</td>
<td>Testing and Evaluation</td>
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<td>or</td>
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<tr>
<td>PSYC 578</td>
<td>Psychological Tests and Measurements</td>
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<tr>
<td>PSYC 563*</td>
<td>Theories of Learning</td>
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<td>or</td>
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<tr>
<td>PSYC 560</td>
<td>Advanced Educational Psychology</td>
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<tr>
<td>SPED 579*</td>
<td>Special Education for Students with Disabilities</td>
</tr>
<tr>
<td>SPED 580*</td>
<td>Evaluation and Planning for Students with Learning Problems I</td>
</tr>
<tr>
<td>SPED 581*</td>
<td>Evaluation and Planning for Students with Learning Problems II</td>
</tr>
<tr>
<td>SPED 587*</td>
<td>Advanced Instructional Techniques for Students with Learning Problems</td>
</tr>
</tbody>
</table>
Additional Requirements

1. Students pursuing an M.Ed. in Learning Disabilities are required to take a qualifying examination to assess proficiency in the understanding of basic concepts, issues, and practices. This examination will be given prior to admittance into practica. Students apply for this examination in consultation with the graduate program coordinator. If the examination is failed, appropriate plans of action will be developed by graduate program coordinator and student to address the deficiencies.

2. Students are required to complete successfully a comprehensive project. Comprehensive projects are designed to give students an opportunity to demonstrate their ability to integrate major concepts while working closely with the faculty. Comprehensive projects are culminating activities in students’ programs.

Comprehensive projects may require revisions before being accepted and there is a limit to the number of revisions allowed. Students are required to consult with their graduate program coordinators for specific information on these additional department requirements.

Post-Master’s Certification Program in Learning Disabilities

A post-master’s candidate seeking certification as a Learning Disabilities Teacher-Consultant must complete 30 semester hours in the areas of study listed below. Qualified students who have already earned a master’s degree in education, reading, psychology, counseling, special education, or similar fields, may apply credits toward the 30 semester hours required. However, 12 semester hours must be taken at Montclair State University.

REQUIREMENTS FOR CERTIFICATE IN LEARNING DISABILITIES TEACHER-CONSULTANT

The graduate program coordinator will examine the post-master’s applicant’s transcripts of master’s degree and other graduate credits to determine which of the following courses may be applied toward certification for Learning Disabilities Teacher-Consultant:

<table>
<thead>
<tr>
<th>Required Area of Study</th>
<th>MSU Equivalent</th>
<th>sh</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Education of students</td>
<td>SPED 579 Special Education for Student with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>2. Learning theory</td>
<td>PSYC 563 Learning Theory OR PSYC 560 Advanced Educational Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
### Elective Areas of Study (May be contained in master’s degree program.)
The number of elective credits needed will be determined at advisement; see note below.

1. **Methods of teaching students with disabilities**
   - SPED 567: Instructional Planning for Students with Disabilities in Inclusive Settings I (3 credits)
   - SPED 568: Instructional Planning for Students with Disabilities in Inclusive Settings II (3 credits)
   - SPED 582: Basic Instructional Techniques for Students with Disabilities (3 credits)

2. **Technology**
   - SPED 585: Technology for Inclusive Classrooms (3 credits)

3. **Language Development**
   - CSND 583: Language Disorders of Children (3 credits)

4. **Reading**
   - READ 500: The Nature of Reading (3 credits)
   - READ 508: Technique for Reading Improvement in Secondary Schools (3 credits)

5. **Behavior**
   - SPED 588: Promoting Prosocial Behaviors in Inclusive Settings (3 credits)

6. **Transition Services**
   - SPED 586: Transition Services for Students with Disabilities (3 credits)

7. **Psychopathology**
   - PSYC 565: Child and Adolescent Psychopathology (3 credits)

8. **Early childhood special education**
   - ECSE 508: Partnerships with Diverse Families and Communities (3 credits)
   - ECSE 519: Early Language and Literacy Development (3 credits)
   - ECSE 506: Assessment of Preschool Children with Disabilities (3 credits)

### Additional Requirements
1. Students pursuing the LDT-C certification are required to take a Qualifying Examination to assess proficiency in the understanding of basic concepts, issues, and practices. This examination will be given prior to admittance into practica. Students apply for this examination in consultation with their program coordinator. If the examination is
failed, appropriate plans of action will be developed by the graduate program coordinator and student to address the deficiencies.

2. Elective courses provide the background in teaching students with disabilities that a LDT-C must possess in order to be successful in this role. The number of elective credits required will depend on previous educational background, certifications held, and experience, and will be determined at advisement.

Each student’s record will be audited by the Office of the Registrar after completing all of the 30 semester hour requirement. Students must complete the Application for Final Audit and submit it to the Office of the Registrar by the deadlines listed in the Graduate Catalog. If work has been satisfactorily completed, and all other requirements have been met, the student will be recommended for New Jersey state certification as a Learning Disabilities Teacher-Consultant.

The requirements for this endorsement, in addition to the completion of the prescribed academic program are:

1. A standard New Jersey instructional certificate.
2. Three years of successful teaching experience (MSU requires two letters of recommendation from a current or previous supervisor and a notarized statement verifying at least three years of full-time paid employment as a teacher.)
3. A master’s degree in a related field from an accredited college or university.

MASTER OF EDUCATION (M. Ed.)
AN INTERDISCIPLINARY DEGREE
FOR CLASSROOM TEACHERS

Telephone: 973-655-5182

The Master of Education degree for classroom teachers, housed in the department of Curriculum and Teaching, is designed to provide teachers with the knowledge, skills and competencies that will improve their performance in the classroom while broadening their awareness of professional issues and concerns. It is a program that is consciously designed for the classroom teacher, who is a mature student. The program focuses on the study of curriculum, pedagogy, and institutional forces that inhibit and facilitate teachers’ becoming stewards of school change.

ADMISSION REQUIREMENTS

Admission to the program is limited to active, certified teachers. Students must demonstrate required Graduate Record Examination (GRE) or Miller Analogies Test scores and a basic undergraduate grade point average of 3.0, although special consideration will be extended to tenured teachers who otherwise demonstrate they are capable of completing the program. Matriculation is a two-step process. Students must demonstrate a “B” or better average in Phase I coursework for full matriculation.
# REQUIREMENTS FOR THE M.Ed. DEGREE

<table>
<thead>
<tr>
<th>Phase</th>
<th>Semester Hours</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>9</td>
<td>CURR 530</td>
<td>Principles of Curriculum Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDFD 520</td>
<td>Development of Educational Thought</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ELRS 580</td>
<td>Learning: Process and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>II</td>
<td>12</td>
<td>CURR 534</td>
<td>Strategies for Curriculum Change</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CURR 551</td>
<td>Problem Solving and Critical Inquiry in Curriculum Development</td>
<td>3</td>
</tr>
<tr>
<td>A</td>
<td>6</td>
<td>COUN 559</td>
<td>Dynamics of Group Process</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CURR 522</td>
<td>Innovations in Teaching</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CURR 523</td>
<td>Education in the Inner City</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>CURR 532</td>
<td>Middle School Curriculum and Organization</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>CURR 537</td>
<td>The Study of Curriculum and Teaching</td>
<td>3</td>
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<td></td>
<td></td>
<td>CURR 550</td>
<td>Microcomputers in Curriculum and Classroom Teaching</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>CURR 599</td>
<td>Curricular and Social Dynamics of Schooling</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>EDFD 540</td>
<td>Social Forces and Education</td>
<td>3</td>
</tr>
<tr>
<td>Part B</td>
<td>6</td>
<td>COUN 559</td>
<td>Dynamics of Group Process</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CURR 522</td>
<td>Innovations in Teaching</td>
<td>3</td>
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<tr>
<td></td>
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<td>CURR 523</td>
<td>Education in the Inner City</td>
<td>3</td>
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<tr>
<td></td>
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<td>CURR 532</td>
<td>Middle School Curriculum and Organization</td>
<td>3</td>
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<td></td>
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<td>EDFD 540</td>
<td>Social Forces and Education</td>
<td>3</td>
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<tr>
<td>III</td>
<td>6</td>
<td>Graduate Subject/Correlative Electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>9</td>
<td>ELRS 503</td>
<td>Methods of Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CURR 670</td>
<td>Culminating Activity*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CURR 650</td>
<td>Transitional Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

* Satisfies the graduate research/comprehensive examination requirement

Minimum semester hours: 36

# EDUCATIONAL MEDIA AND TECHNOLOGY

## MASTER OF EDUCATION (M.ED.) DEGREE IN EDUCATIONAL TECHNOLOGY

Telephone: 973-655-5187

The Master of Education (M.Ed.) in Educational Technology is housed in the Department of Curriculum and Teaching and emphasizes innovation in the design, production and application of educational communications and instructional technologies across political, organizational and educational settings. The Masters program in Educational Technology is uniquely characterized by Montclair State University’s commitment to educational renewal. The University maintains strong partnerships with more than 20 school districts in the surrounding communities through the Center of Pedagogy and the New Jersey Network for Educational Renewal. Within this framework, the masters program in Educational Technology leads students through the processes of design, development,
utilization, management and evaluation of educational technology within the context of democratic practice. Graduates of the program acknowledge the key role of educators in preparing students to be effective citizen-participants in a democracy. They embrace institutional change and are committed to leadership and to building media literate and technologically proficient communities.

While students achieve an advanced level of technological proficiency through the master’s sequence of EDTC courses, our pedagogical approach to technology is embedded within a larger vision of habits of mind over the technologies themselves. At the core of the program is media literacy—the ability to access, analyze, evaluate, produce and communicate with a variety of media forms. Media literacy requires critical thinking—the habit of mind that uses informed decision-making, reason and ethical standards to think and act with and about media and technology. Our graduates envision infinite pedagogical and professional potential for new media and technologies, while acknowledging issues of equity, diversity and social justice as inextricably connected to educational uses of new media and technologies.

ADMISSION REQUIREMENTS
The Graduate School welcomes applications from individuals who have an overall grade point average of at least 2.8 in undergraduate work and 3.0 in upper division coursework and show evidence of readiness for advanced study in educational technology. The admission process requires applicants to submit Graduate Record Examination scores, two letters of recommendation attesting to the applicant’s readiness for advanced academic study, a statement on teaching, and submission of an educational or research project that utilizes print, video or digital media resources. Applicants must also successfully complete an admission interview with the program coordinator. If applicants do not meet all the requirements for admission, they may be admitted conditionally. Once the student completes a minimum of 9 semester hours of graduate work (with at least a 3.0 average), (s)he may apply for admission to candidacy in a classified standing.

Students are required to complete a total of 33 semester hours within three key areas of study: philosophical foundations, practical design and production, and pedagogical design and application. Coursework provides students with a variety of practical, hands on media production experiences to support authentic design and integration of media and technology within real educational settings. Courses require student participation within the local Montclair State University campus, the surrounding school and business communities, as well as the expansive global community accessed through distance learning technologies, such as video-conferencing and web-based instruction. Performance-based evidence is acquired from students at program entry, during coursework, in connection with field experiences, and upon completion of the program.

Students who are interested in the M.Ed. in Educational Technology and a certification program must complete separate applications for admission to each program. Both School Library Media Specialist (SLMS) and Associate School Library Media Specialist (ALMS) certifications are licensure endorsements that exist separate from the M.Ed. degree program in Educational Technology. However, all three can be pursued within a carefully planned sequence of EDTC coursework. Students should meet with their program coordinator early and often within their program of study.
# REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE IN EDUCATIONAL TECHNOLOGY

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Philosophical Foundations (9 semester hours)</strong></td>
</tr>
<tr>
<td>EDTC 500 Introduction to Educational Technology</td>
</tr>
<tr>
<td>EDTC 501 Curriculum and Technology Development: Global Perspectives</td>
</tr>
<tr>
<td>EDTC 502 Assessment and Evaluation of Learning with Technology</td>
</tr>
</tbody>
</table>

| **II. Practical Design and Production (12 semester hours)** |
| Select four from any of the following: |
| EDTC 561 Production Seminar I: Portfolio Development | 3 |
| EDTC 563 Production Seminar I: Multimedia Authoring | 3 |
| EDTC 565 Production Seminar I: Digital Video Editing | 3 |
| OR |
| CMPT 505 Fundamentals of Computer Science I | 4 |
| EDTC 567 Production Seminar I: Programming Languages | 3 |

| **EDTC 591 Production Seminar II: Developing Databases for Educational Settings | 3 |
| EDTC 593 Production Seminar II: Web-based Instruction | 3 |
| EDTC 595 Production Seminar II: Television Production | 3 |
| EDTC 597 Production Seminar II: Virtual Communities of Learning | 3 |

| **III. Pedagogical Design and Application (6 semester hours)** |
| Select two courses within one of the following areas: |
| **A. Administration, Policy and Leadership** |
| EDTC 510 Technology Planning for Educational Renewal | 3 |
| EDTC 550 Innovations in Educational Technology Design | 3 |
| COUN 559 Dynamics of Group Process | 3 |
| ANTH 550 Culture Change | 3 |
| ANTH 520 Anthropology and International Communication | 3 |
| ELAD 509 Administration of Education and Training Programs | 3 |

| **B. Organizational Planning and Development** |
| EDTC 510 Technology Planning for Educational Renewal | 3 |
| EDTC 550 Innovations in Educational Technology Design | 3 |
| ELAD 509 Administration of Education and Training Programs | 3 |
| COUN 559 Dynamics of Group Process | 3 |
| COUN 558 Consultation in Organizational Development | 3 |

| **C. Curriculum and Technology Integration (P-16)** |
| EDTC 504 The Role of the Media Specialist | 3 |
| EDTC 505 Access and Organization of Educational Media | 3 |
| EDTC 506 Evaluation and Selection of Educational Media | 3 |
| EDTC 520 Integrating Technology Across the Elementary Curriculum | 3 |
| EDTC 530 Integrating Technology Across the Secondary Curriculum | 3 |
| EDTC 550 Innovations in Educational Technology Design | 3 |
| CURR 530 Principles of Curriculum Development | 3 |
IV. Culminating Activities (6 semester hours)

EDTC 600 Supervised Field Experience in Educational Media and Technology* ....................................... 3
EDTC 670 Capstone Project in Educational Technology** ............................................. 3

Minimum semester hours: 33

*The field experience affords students the opportunity to bridge theory and practice through the supervised application of best practices in real settings. Experiences are broad-based and available within all levels of educational settings, cultural organizations, non-profit institutions, government and public agencies, corporate organizations and research institutions. The nature of field experiences varies based on the student’s chosen area of emphasis. Students should plan to meet with the program coordinator early in their studies to discuss interests, coursework and mentoring.

**All students are required to complete a capstone project as partial fulfillment for the M.Ed. degree. A project proposal should be submitted for graduate committee approval at the beginning of the semester preceding the one which registration for the capstone is sought (preferable during the field experience course). Candidates must complete a successful oral defense of the capstone project before a committee of not fewer than three members that has been approved by a departmental committee. All capstone projects will be evaluated according to the Association for Educational Communications and Technology (AECT) program standards.

ASSOCIATE SCHOOL LIBRARY MEDIA SPECIALIST CERTIFICATION (ALMS)

The Associate School Library Media Specialist certification program leads to licensure in the State of New Jersey. The associate (21 semester hours) endorsement is required for any person assigned to perform educational media services in the public schools under the supervision of a qualified supervisor. Potential candidates must hold a bachelor’s degree from an accredited or approved institution and a standard New Jersey instructional license or an instructional Certificate of Eligibility with Advanced Standing. In addition, candidates are required to complete 18-21 semester hour of coursework. Coursework completed in the candidate’s undergraduate program may also be applied toward fulfilling these certification requirements. Potential candidates must submit applications to the Graduate School for initial screening. Approved applications will be forwarded to the Department of Curriculum and Teaching for review and evaluation. Full matriculation may be granted upon personal interview with the graduate program coordinator.
## PROGRAM REQUIREMENTS FOR THE ASSOCIATE SCHOOL LIBRARY MEDIA SPECIALIST CERTIFICATION (ALMS)

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
</table>

### I. Philosophical Foundations (3 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC 504</td>
<td>The Role of the Media Specialist</td>
<td>3</td>
</tr>
</tbody>
</table>

### II. Practical Design and Production (3 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC 503</td>
<td>Critical Basics of Media and Technology Production</td>
<td>3</td>
</tr>
</tbody>
</table>

### III. Pedagogical Design and Application (12 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC 505</td>
<td>Access and Organization of Educational Media</td>
<td>3</td>
</tr>
<tr>
<td>EDTC 506</td>
<td>Evaluation and Selection of Educational Media</td>
<td>3</td>
</tr>
<tr>
<td>READ 503</td>
<td>Literature for Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>EDTC 520</td>
<td>Integrating Technology Across the Elementary Curriculum OR EDTC 530</td>
<td>3</td>
</tr>
</tbody>
</table>

### IV. Culminating Activity (3 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC 600</td>
<td>Supervised Field Experience in Educational Media and Technology*</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students employed as full-time library media specialists for a period of 6 months prior to graduation may waive this course requirement upon graduate program coordinator approval. Students must accumulate a minimum of 18 semester hours to achieve the ALMS endorsement.

Minimum semester hours: 33

## (ADVANCED) SCHOOL LIBRARY MEDIA SPECIALIST CERTIFICATION (SLMS)

The School Library Media Specialist certification program leads to licensure in the State of New Jersey. The advanced (36 semester hours) endorsement is required for any person assigned to develop and coordinate educational media services (including all print and non-print resources and the equipment needed for their use) in the public schools. Potential candidates must hold a master’s degree from an accredited or approved institution (or be concurrently enrolled in the M.Ed. program in Educational Technology); a standard New Jersey instructional license or an instructional Certificate of Eligibility with Advanced Standing or an ALMS endorsement; and at least one year of successful teaching experience as an associate school library media specialist. Candidates are required to complete a minimum of 36 semester-hours of coursework. Coursework completed in the candidate’s undergraduate program, ALMS program, and/or graduate program may also be applied toward fulfilling these requirements. Potential candidates must submit applications to the Graduate School for initial screening. Approved applications will be forwarded to the Department of Curriculum and Teaching for review and evaluation. Full matriculation may be granted upon personal interview with the program coordinator.
I. Philosophical Foundations (6 semester hours)
   EDTC 504 The Role of the Media Specialist ............................................. 3
   EDTC 502 Assessment and Evaluation of Learning with Technology ..... 3

II. Practical Design and Production (9 semester hours)
   EDTC 503 Critical Basics of Media and Technology Production .......... 3
   Select two courses from the following:
   EDTC 561 Production Seminar I: Portfolio Development ......................... 3
   EDTC 563 Production Seminar I: Multimedia Authoring ......................... 3
   EDTC 565 Production Seminar I: Digital Video Editing ......................... 3
   EDTC 591 Production Seminar II: Developing Databases for Educational Settings ................................................................. 3
   EDTC 593 Production Seminar II: Web-based Instruction ......................... 3
   EDTC 595 Production Seminar II: Television Production ......................... 3

III. Pedagogical Design and Application (18 semester hours)
   EDTC 505 Access and Organization of Educational Media ...................... 3
   EDTC 506 Evaluation and Selection of Educational Media ...................... 3
   READ 503 Literature for Adolescents ........................................................ 3
   EDTC 510 Technology Planning for Educational Renewal ......................... 3
   EDTC 520 Integrating Technology Across the Elementary Curriculum ... 3
   OR
   EDTC 530 Integrating Technology Across the Secondary Curriculum ..... 3
   EDTC 550 Innovations in Educational Technology Design ...................... 3

IV. Culminating Activity (3 semester hours)
   EDTC 600 Supervised Field Experience in Educational Media and Technology* ......................................................... 3

*Students employed as full-time library media specialists for a period of 1 year prior to graduation may waive this course requirement upon graduate program coordinator approval. Students must accumulate a minimum of 36 semester hours to achieve the SLMS endorsement.

Minimum semester hours: 36
CURRICULUM AND TEACHING

Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURR 500</td>
<td>FIELDWORK IN EDUCATION</td>
<td>1 - 3</td>
</tr>
<tr>
<td></td>
<td>This field course will expose adult students to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the theoretical underpinnings of social and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning behaviors of students in public schools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and the professional behaviors of teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in the context of classrooms. Coupled with theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>will be actual experiences in appropriate</td>
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</tr>
</tbody>
</table>
|             | settings designed to provide the adult students |}
|             | opportunities to reflect upon, to plan           |
|             | for, to interact with, and to evaluate the full  |
|             | range of teacher activities and students         |
|             | activities in classroom settings.                |
|             | **Prerequisite:** Students must be admitted to   |
|             | either the post-B.A. certification or MAT programs and have filed a timely field experiences application with the Center of Pedagogy. |

| CURR 502    | GRADUATE SEMINAR IN PROFESSIONAL EDUCATION        | 1              |
|             | Open only to graduate student teachers; this     |
|             | course provides an opportunity to discuss        |
|             | problems encountered during their teaching      |
|             | assignment with peers and supervisors. As a     |
|             | collaborative group, practical solutions to      |
|             | problems are explored and steps toward           |
|             | implementation are proposed. Placements in field |
|             | centers are arranged. Part of the professional  |
|             | semester for graduate students.                  |
|             | **Prerequisite:** CURR 500.                     |

| CURR 511    | SUPERVISED GRADUATE STUDENT TEACHING             | 8              |
|             | Student teaching in the New Jersey public       |
|             | schools is required of all students who are      |
|             | completing initial teaching certification        |
|             | programs. Part of the professional semester for |
|             | graduate students.                              |
|             | **Prerequisite:** Special fee.                  |

| CURR 514    | INSERVICE SUPERVISED GRADUATE STUDENT TEACHING   | 4-8            |
|             | Open only to post-baccalaureate and graduate     |
|             | students, this course replaces supervised        |
|             | student teaching for those already employed in   |
|             | teaching situations without standard certification. Joint supervision by the school district and University personnel. Student must obtain permission of department chairperson and the school district. Certain qualifications required. |
|             | **Prerequisite:** Departmental approval. Special fee. |

| CURR 522    | INNOVATIONS IN TEACHING                          | 3              |
|             | New media and strategies, novel teaching rules,  |
|             | individualized instructional programs,           |
|             | classroom group dynamics and experimental       |
|             | school organizations. Team teaching utilized     |
|             | where feasible. The student prepares an         |
|             | innovation proposal.                            |
|             | **Prerequisite:** Departmental approval.         |

| CURR 523    | EDUCATION IN THE INNER CITY                      | 3              |
|             | The urban school through the eyes of city       |
|             | youngsters, teachers and other educational      |
|             | personnel. Influences of social and economic    |
|             | forces: poverty, family patterns, ghetto mores, |
|             | urban unrest, emergent minority leadership,     |
|             | school funding patterns, community agencies and  |
|             | school traditions. Evaluation of federal and     |
|             | other projects, innovative teaching and local    |
|             | action. Student prepares a proposal for          |
|             | improvement of an urban school situation.        |

Prerequisites and Special Fees are subject to change without notice. Please consult the current catalog for the most up-to-date information.
CURR 528  TEACHING FOR LEARNING  3
Taken during the first three weeks before student teaching, this intensive course is specifically designed for graduate students to develop and refine the basic teaching skills indicated to be necessary components for productive learning outcomes. These skills areas include communication, motivation, classroom discipline, learning and cognitive development, media usage, multi-cultural education, curriculum assessment, and practical research. Part of the professional semester.

CURR 530  PRINCIPLES OF CURRICULUM DEVELOPMENT  3
Philosophic, social and economic forces in our society that have determined and will determine the pattern of curriculum in American education in the American public schools from K-12 grades. Accepted manner of designing such curricula and professional bodies and individuals who play leading roles in the process of curriculum design. Connection of community interest and power structures in society which are related to the professional decisions.
Prerequisite: Admitted to M.A.T., or M.Ed., or Post-Baccalaureate Certification program.

CURR 534  STRATEGIES FOR CURRICULUM CHANGE  3
Principles and concepts from sociology, social psychology, educational administration and curriculum applied to education. Opportunity to develop change strategies for particular field settings.
Prerequisite: Admitted to M.A.T., or M.Ed., M.A. in Administration and Supervision, or Post-Baccalaureate Certification program or Supervisor Administrative Certification.

CURR 538  DISCIPLINE AND GROUP MANAGEMENT  3
IN THE CLASSROOM
Course designed to enable teachers to more effectively manage classroom behavioral problems. Classroom management will be examined as distinct from and requisite for effective instruction. Several unified managerial approaches will be studied. Course will culminate with opportunities to practice the selection and application of specific managerial techniques to a range of simulated classroom situations.

CURR 546  EDUCATION OF THE GIFTED AND TALENTED  3
Course will focus on the components necessary for planning and implementing programs for gifted and talented students: definition and identification procedures, alternative organizational patterns, curriculum design, instructional strategies and materials, teacher selection and program evaluation.

CURR 550  MICROCOMPUTERS IN CURRICULUM AND CLASSROOM TEACHING  3
The course is designed to develop, in teachers, skills and knowledge which will help them use computers in their teaching. The skill areas are those involving word processing, data base management, and test construction. The knowledge areas include software evaluation and methods of computer based instruction-tutorials, drill and practice, simulations, games and tests.

CURR 551  PROBLEM SOLVING AND CRITICAL INQUIRY IN CURRICULUM DEVELOPMENT  3
This course provides an opportunity for participants to delve into the nature of problem solving and inquiry within a specific subject and apply this new knowledge to the development of a curricular product.
CURR 558  INTERDISCIPLINARY CURRICULUM  3
This course will examine interdisciplinary curriculum from both a historical perspective and as a current model of curriculum design.
Prerequisite: CURR 530.

CURR 599  CURRICULAR AND SOCIAL DYNAMICS OF SCHOOLING  3
This course introduces students to the curriculum of the American School. The content of the curriculum, the organization of the curriculum and the pedagogical factors that influence it are examined. In addition, students examine the historical, political and philosophic factors that influence curriculum.

CURR 610  INDEPENDENT STUDY IN CURRICULUM AND TEACHING  1 - 3
An opportunity for practicing teachers to develop and implement curricula under the guidance of curriculum development specialists. Student should discuss proposal with a faculty sponsor in the department of Curriculum and Teaching and secure permission prior to registration. Especially appropriate for teachers involved in “T&E” planning. May be repeated for a maximum of six semester hours.
Prerequisite: Departmental approval.

CURR 620  CLINICAL INTERNSHIP IN URBAN EDUCATION I  2-4
The semester-long field experience is designed to provide a student with teaching experience in an urban school. The authentic experience is guided and supervised by school district and university supervisors. University supervisors will represent both the field of education and the academic discipline the student is teaching. A student is required to meet all school district requirements and obligations of a full-time teacher. All students enrolled in this course will have been matriculated in a specialized teacher education program for urban teaching.
Prerequisite: Departmental approval.

CURR 621  CLINICAL INTERNSHIP IN URBAN EDUCATION II  2-4
The semester-long field experience is designed to provide a student with teaching experience in an urban school. The authentic experience is guided and supervised by school district and university supervisors. University supervisors will represent both the field of education and the academic discipline the student is teaching. A student is required to meet all school district requirements and obligations of a full-time teacher. All students enrolled in this course will have been matriculated in a specialized teacher education program for urban teaching.
Prerequisite: Departmental approval.

CURR 650  TRANSITIONAL SEMINAR  2
This course provides participants with an opportunity to integrate major content of Phase I and set goals for remainder of program.
Prerequisites: ELRS 503 and matriculation in M.Ed. program.

CURR 670  CULMINATING ACTIVITY  4
This is the final course of the M.Ed. program. Each teacher is responsible for implementing, at a field site, the activity he/she planned in Transitional Seminar II, and then evaluating and disseminating the results.
SPED 566  LANGUAGE-BASED LEARNING STRATEGIES FOR USE IN INCLUSIVE SETTINGS 3
This course presents an overview of language development and language disorders as the basis for implementing instruction that attends to language-based learning difficulties. A major focus will be the development of instructional strategies that can be employed in inclusive classroom settings to promote learning across the curriculum. The use of metalinguistic and metacognitive strategies will be stressed.
Prerequisite: SPED 579.

SPED 567  INSTRUCTIONAL PLANNING FOR STUDENTS WITH DISABILITIES IN INCLUSIVE SETTINGS - I 3
This course is designed to provide educators with the skills necessary to meet the needs of students with disabilities in K-5 inclusive classrooms. Educators will learn how to use developmentally appropriate practice and universal curriculum design to enhance the learning of students who display competencies across a wide range. The major focus will be on practical techniques and strategies that can be used to provide quality instruction in inclusive settings.
Prerequisite: SPED 579.

SPED 568  INSTRUCTIONAL PLANNING FOR STUDENTS WITH DISABILITIES IN INCLUSIVE SETTINGS - II 3
This course will enhance the ability of future educators to provide effective planning and instruction for students with disabilities in a 6-12 inclusive classroom. Educators will learn how to apply developmentally appropriate practice and curriculum design to improve the learning of students who exhibit competencies across a wide range. The emphasis will be on practical techniques and strategies that can be utilized in an inclusive setting.
Prerequisite: SPED 579.

SPED 579  SPECIAL EDUCATION FOR STUDENTS WITH DISABILITIES 3
An overview of instruction for students with special needs; characteristics of special populations, federal and state legislation, educational implications of disabling conditions, principles for instruction and planning for inclusion are presented; community resources and special issues related to the education of students with disabilities are discussed.

SPED 580  EVALUATION AND PLANNING FOR STUDENTS WITH LEARNING PROBLEMS I 3
This course presents the role of the LDT-C on the Child Study Team, the administration and interpretation of standardized and functional assessment methods for identifying learning difficulties and disabilities, training to facilitate data-based decision making, formulation of an instructional plan based on assessment data, assessment regulations in law code, and legal and ethical issues.
Prerequisite: SPED 579.
SPED 581 EVALUATION AND PLANNING FOR STUDENTS WITH LEARNING PROBLEMS II
Continuation of SPED 580 providing advanced training in the identification of and planning for students with learning problems; models for the formulation of assessment plans, administration and analysis of diagnostic batteries, special issues in evaluation, the use of evaluation data to make decisions regarding eligibility and instructional planning are presented; case study methods are used to simulate Child Study Team practice. 
Prerequisite: SPED 580.

SPED 582 BASIC INSTRUCTIONAL TECHNIQUES FOR STUDENTS WITH LEARNING PROBLEMS
Techniques for planning instruction for students with special needs; specialized methods of instruction in reading, writing, arithmetic, speaking, listening, and social skills that can be utilized in regular and special education settings are presented.
Prerequisites: SPED 580.

SPED 584 ASSESSMENT AND EVALUATION IN THE INCLUSIVE CLASSROOM
This course is designed to be an introduction for pre-service teachers in the field of special education assessment and accountability. The course will introduce students to elements of traditional assessment, including record keeping, grading, objective and essay testing, theories of validity, as well as authentic, performance, and portfolio assessment. The keeping of anecdotal records, inclusion, heterogeneous groupings, and accommodations will also be components of this course.
Prerequisites: SPED 579, SPED 567 and SPED 568.

SPED 585 TECHNOLOGY FOR INCLUSIVE CLASSROOMS
The course is designed provide educators with an understanding of how to use technology as a seamless part of the teaching and learning experience for students with disabilities in inclusive settings. Two main purposes for students with disabilities will be emphasized. Teachers will learn how to provide access to the curriculum for students with disabilities by using the principles of Universal Design for Learning as a framework for curriculum design. They will learn how to utilize technology to meet the unique needs of students with disabilities in order for them to attain maximum independence and participation in all environments.
Prerequisites: SPED 567 and SPED 568.

SPED 586 TRANSITION SERVICES FOR STUDENTS WITH DISABILITIES
This course will focus on a Research Based and Teacher-Tested Support Model for planning and implementing transition services for students with disabilities. Successful transition services will allow students to build the bridges toward becoming independent, self advocates with the insights, skills, knowledge, and learning techniques for successful transition from school to adult life.
Prerequisites: SPED 579 and SPED 567 and SPED 568.
SPED 587 ADVANCED INSTRUCTIONAL TECHNIQUES FOR STUDENTS WITH LEARNING PROBLEMS
The Learning Strategies Model for assisting students with learning problems to become independent will be used as framework; techniques for inclusion in regular educational settings, collaboration, strategies for planning instruction to meet diverse needs of students with mild disabilities, and special needs issues related to instruction will be presented.
Prerequisites: SPED 567 and SPED 568 and SPED 581.

SPED 588 PROMOTING PROSOCIAL BEHAVIORS IN INCLUSIVE SETTINGS
This course is designed to provide future teachers with theory and practice related to the development of appropriate prosocial behaviors within inclusive classroom settings for students with disabilities. This course will focus on behavior and the development and environmental factors that influence its expression. Emphasis will be placed on functional analysis of behavior, how to promote appropriate behavior, and how to develop a classroom setting that fosters prosocial behaviors. Principles of social/emotional learning, social skills development, as well as data collection, schedules of reinforcement, monitoring of progress, social problem solving, and promotion of positive behavior plans will be explored.
Prerequisite: SPED 579.

SPED 589 RESEARCH IN LEARNING DISABILITIES
Significant problems in the field of learning disabilities are investigated, and published research projects evaluated. Critical analysis and experimental design are emphasized.
Prerequisites: SPED 587 and permission of graduate program coordinator.

SPED 590 PRACTICUM: LEARNING DISABILITIES TEACHER-CONSULTANT
Supervised practice of the Child Study Team process in assessment and planning; administration of evaluation procedures and analysis of results; decision-making regarding eligibility and instructional planning, consultation and collaboration as a member of a Child Study Team will be emphasized.
Prerequisite: Departmental approval.

SPED 594 INDEPENDENT STUDY
Students select an area of special education and, with advisement, study the literature in the field, observe related programs at special schools and centers and write reports on findings. Regular conferences with instructor for guidance and evaluation. May be repeated once for a maximum of six semester hours.
Prerequisite: Departmental approval.

SPED 595 MEDICAL AND PHYSICAL BASES OF DISABILITIES
Critical dimensions of the neurological and biological growth in the context of developmental disabilities are discussed. The relevance of the pediatric and neurological examinations for understanding disabilities is provided. The medical treatment of disabilities is presented.
SPED 596 ADVANCED PRACTICUM: 3
LEARNING DISABILITIES TEACHER-CONSULTANT
Continuation of SPED 590; students will enroll in SPED 596 to fulfill the 150 hour time requirement and the meeting of competency standards to practice as a Learning Disabilities Teacher-Consultant begun in SPED 590.
Prerequisite: Departmental approval.

SPED 597 PRACTICUM AND SEMINAR IN 3
TEACHING STUDENTS WITH DISABILITIES
The course provides students with direct experience in teaching children and adolescents with special education needs in a controlled internship program. Students learn to analyze and carry out individualized education programs developed by child study teams that will help children and adolescents with learning difficulties be successful in regular and special education settings. The emphasis is on instruction of children and adolescents with mild to moderate disabilities. In addition to 90 hours of direct instruction of children and adolescents with special needs in an approved placement, each practicum student must participate in class seminars, conferences, and planning sessions.
Prerequisites: SPED 566, SPED 584, SPED 585, SPED 588 and graduate program coordinator.

SPED 668 CONSULTATION METHODS IN PSYCHOEDUCATIONAL 3
SETTINGS
This course is designed to provide students with theory and practice about the consultation process. The course will identify a collaborative, problem-solving model of consultation in psychoeducational settings and define the intrapersonal, interpersonal and systemic factors associated with successful consultation. Students will locate consultation cases and function under direct supervision and monitoring. Cross listed with Psychology, PSYC 668.
Prerequisite: SPED 587.

SPED 690 ACTION RESEARCH IN INCLUSIVE SETTINGS 3
This course represents a capstone course for graduate students in the process of theory, conceptualization, research methods, operationalization, and analysis in the completion of an action research project. This course will link all of the practical aspects of conducting action research with the scholarly tools that support the cycle of reflective practice, thereby showing prospective and practicing teachers how to make action research a natural part of their teaching and to utilize action research to enhance inclusive education for students with disabilities. The course will help define action research and clarify its nature, providing a clear description of the relationship between qualitative and quantitative research. Students will then be offered step-by-step procedures for planning, implementing, and evaluating the kind of research projects that help pre-service teachers use their own understanding and expertise to work systematically through finding a solution to the problem they are investigating. Students will make an oral presentation of their project results, through a departmentally approved review process or an approved graduate symposium.
Prerequisite: SPED 589
EDTC 500 INTRODUCTION TO EDUCATIONAL TECHNOLOGY 3
An introduction to the philosophical, pedagogical and practical dimensions of educational technology. Students explore major tenets and trends in the fields of educational technology, instructional technology, and media literacy. Students develop a cognitive framework for understanding the new literacies associated with digital media and examine learning theories, including behaviorism, cognitivism and constructivism. The emphasis is bridging theory with practice and critically examining the possibilities and challenges associated with accessing and implementing communications technology within educational settings. Introduces students to the vast network of multiple media forms and systems that define educational technology.

EDTC 501 CURRICULUM AND TECHNOLOGY DEVELOPMENT: GLOBAL PERSPECTIVES 3
This course provides a global view of education, technology and pedagogy world wide. Through collaboration with educators worldwide, students compare epistemologies in the United States with those of other countries. Students examine the potential roles, regulations and renewal of the technologies of education within the social and political democracy of the United States.
Prerequisite: EDTC 500.

EDTC 502 ASSESSMENT AND EVALUATION OF LEARNING WITH TECHNOLOGY 3
This course explores quantitative and qualitative approaches to researching the impact of technology within education and instructional settings. Students learn theory and practice of design, development, utilization, management and (formative and summative) evaluation of processes and resources for learning. Students select an area of inquiry, define a research problem, and collect and interpret preliminary data. This course provides a scaffold for the Capstone Project.
Prerequisites: EDTC 500 and 501.

EDTC 503 CRITICAL BASICS OF MEDIA AND TECHNOLOGY PRODUCTION 3
This course introduces critical and practical frameworks for producing educational media. Students engage in hands-on production of multiple media forms to support a variety of curricular goals with emphasis on digital media. Students explore the possibilities of curricular goals with emphasis on digital media. Students explore the possibilities of multimedia and non-linear teaching and learning for educators and learn the fundamentals of interactive and integrative curriculum design across MacIntosh and PC-based computer platforms. Course is a prerequisite open to matriculating and non-matriculating students. Fulfills the SLMS and ALMS certification program requirements. Course does not fulfill masters program requirements.

EDTC 504 THE ROLE OF THE MEDIA SPECIALIST 3
This introductory course explores the collaborative role of the media specialist in educational renewal and the systemic integration of technologies into school, districts and communities. The course explores the coordination and management of media resources, leadership responsibilities, professional development, standards and assessment, organizational communication and ongoing support as interrelated elements in effective educational technology integration. Course fulfills SLMS and ALMS certification requirements.
EDTC 505  ACCESS AND ORGANIZATION OF EDUCATIONAL MEDIA  3
This hands-on seminar explores global and systemic approaches to creating a library or media center collection within school and community structures. The course focuses on access, cataloging, and classification of library resources in multiple media formats using various classification schemes. Course fulfills SLMS and ALMS certification requirements.

EDTC 506  EVALUATION AND SELECTION OF EDUCATIONAL MEDIA  3
Emphasizes the evaluation and selection of research materials in multiple media formats—from print to digital. The course provides opportunities to discover what kinds of resources are available and generate criteria for evaluating the quality and usefulness of new and traditional media in supporting the research process. Course fulfills SLMS and ALMS certification requirements.

EDTC 510  TECHNOLOGY PLANNING FOR EDUCATIONAL RENEWAL  3
Students assist district or organizational leaders in the systemic design and implementation of a technology plan that is customized for a school or organization philosophy, budget, and individual staff needs and abilities. Comprehensive planning considers goals, standards, resources, community structures, school or organization-based support, and staff development. Students conduct a needs assessment, facilitate planning meetings among leaders, educators, staff, parents and community representatives and address practical issues of purchasing and technical support.
Prerequisites: EDTC 500, EDTC 501 and EDTC 502 or graduate advisor approval.

EDTC 520  INTEGRATING TECHNOLOGY ACROSS THE ELEMENTARY CURRICULUM  3
This laboratory course provides students with hands-on experience in creating educational and instructional technology environments that are student-centered, collaborative, inquiry-based, and emphasize critical thinking. The course explores the fundamentals of interactive design using both MacIntosh and PC-based computer platforms. Students orchestrate object, print, video and digital media technologies to support specific curricular goals at the early childhood and elementary levels.
Prerequisites: EDTC 500, EDTC 501, and EDTC 502 or graduate advisor approval.

EDTC 530  INTEGRATING TECHNOLOGY ACROSS THE SECONDARY CURRICULUM  3
This laboratory course provides students with hands-on experience in creating educational and instructional technology environments that are student-centered, collaborative, inquiry-based, and emphasize critical thinking. The course explores the fundamentals of interactive design using both MacIntosh and PC-based computer platforms. Students orchestrate object, print, video and digital media technologies to support specific curricular goals at the middle- and high-school levels.
Prerequisites: EDTC 500, EDTC 501, and EDTC 502 or graduate advisor approval.
EDTC 550 INNOVATIONS IN EDUCATIONAL TECHNOLOGY DESIGN  3
This course offers an integrated approach to the design of educational technology environments, with an emphasis on the uses of adaptive and assistive technologies. Students engage in an inquiry-based approach to educational design within schools, corporations, public agencies, or community-based settings. The course holistically defines technology to include object, print, audio, video, and digital media formats, and emphasizes a needs-based design of educational technology to foster diversity and social justice.
Prerequisites: EDTC 500, EDTC 501, and EDTC 502 or graduate advisor approval.

EDTC 561 PRODUCTION SEMINAR I: PORTFOLIO DEVELOPMENT  3
This course introduces students to various types of portfolios including presentational, teaching and reflective. Students engage in strategic planning, design, development and assessment of a digital portfolio that incorporates multiple media forms and artifacts.

EDTC 563 PRODUCTION SEMINAR I: MULTIMEDIA AUTHORING  3
This course introduces students to the design and production of non-linear multimedia projects using text, images, sound, graphics, and animation. Students experiment with various digital authoring tools, explore elements of instructional design, and develop appropriate assessment strategies for educational media environments.

EDTC 565 PRODUCTION SEMINAR I: DIGITAL VIDEO EDITING  3
This course emphasizes advanced design, production and integration of video programs in the context of non-linear hypermedia. Students gain hands-on experience in special effects, animation and graphic design using Photoshop and FinalCut Pro software.

EDTC 591 PRODUCTION SEMINAR II: DEVELOPING DATABASES FOR EDUCATIONAL SETTINGS  3
This laboratory course introduces students to the tools available to assist in building databases and database applications for educational settings. Students engage in a systematic approach to identifying the necessary steps in creating a database and managing data, with an emphasis on user needs.
Prerequisite: Evidence of advanced computer proficiency.

EDTC 593 PRODUCTION SEMINAR II: WEB-BASED INSTRUCTION  3
This laboratory course leads students through the systematic use of web technology to design and manage learning and training experiences. Students gain hands-on experience in developing synchronous and asynchronous classrooms, with an emphasis on the needs of the non-traditional learner. Technologies include HTML and course management systems such as WebCT and Blackboard.
Prerequisite: Evidence of advanced computer proficiency.

EDTC 595 PRODUCTION SEMINAR II: TELEVISION PRODUCTION  3
This laboratory course involves hands-on exploration of television programming, including elements of conceptual creativity, pre-planning, set design, floor direction, control room operations and basic television directing. Students work in the DuMont Television Center and on location.
EDTC 597 PRODUCTION SEMINAR II: 
VIRTUAL COMMUNITIES OF LEARNING 3
This hybrid lecture/laboratory course provides students with direct experience with videoconferencing technologies to explore the globalization of e-learning as it relates to education, commerce, politics and culture. Students explore the global impact of networked communication technologies and develop educational, technical and business strategies for the design of learning environments. 
Prerequisite: Evidence of advanced computer proficiency.

EDTC 600 SUPERVISED FIELD EXPERIENCE IN 
EDUCATIONAL TECHNOLOGY 3
The supervised field experience is designed to provide the masters candidate with professional field experience in his/her chosen area of emphasis. This semester-long experience bridges theory and practice through the application of best practices under the supervision of professionals in real settings. The student works under an established administrator on some limited function of the position, approved through mutual agreement among the student, the administrator and the university supervisor. 100 hours per semester. 
Prerequisite: Graduate advisor approval.

EDTC 670 CAPSTONE PROJECT IN EDUCATIONAL TECHNOLOGY 3
The capstone project is designed to provide the master’s candidate with both professional and scholarly experience in his/her chosen area of emphasis. Candidates for the master’s degree work with a supervising faculty member to design, develop and implement an educational technology project in the scholarship area of discovery, application or pedagogy—depending upon the student’s professional interests and goals. Offered as pass/fail only. 
Prerequisite: Graduate committee approval of proposal.
EARLY CHILDHOOD, ELEMENTARY, 
AND LITERACY EDUCATION 
DEPARTMENT

Telephone: (973) 655-5407

The Department of Early Childhood, Elementary, and Literacy Education is committed to preparing individuals who can improve the lives of children, youth, and adults by implementing effective care, education, and literacy programs. In order to meet this challenge, our students build a strong knowledge base through inquiry and action research, develop skills and dispositions as reflective and caring practitioners, support and enhance systems that demonstrably include and respect all children youth, adults, and their families; and provide professional leadership on local, state, and national levels. The department’s work reflects its commitment to the “Portrait of a Teacher” (see Curriculum and Teaching), social justice, and diversity.

All of our programs embed the following characteristics:

• a common, clear vision of good teaching that is apparent in all course work;
• clinical experiences aligned to well-defined standards of practice and performance;
• strong relationships, common knowledge, and shared beliefs among school/community-based and university faculty who work together to provide substantial clinical experiences using a cohort model;
• emphasis on social justice and the principles of democracy to ensure the optimal achievement of all students;
• opportunities to explore and participate in various education models; and
• courses developed and scheduled to meet the unique needs of adult learners.

MASTER OF EDUCATION (M.ED.) IN 
EARLY CHILDHOOD SPECIAL EDUCATION

The Master of Education degree in Early Childhood Special Education offered through the Department of Early Childhood, Elementary, and Literacy Education, College of Education and Human Services, has been approved as meeting the Council for Exceptional Children/National Council for the Accreditation of Teacher Education Specialty Guidelines for special education.

ADMISSION REQUIREMENTS*

Students wishing to matriculate in this area must have a bachelor’s degree and a standard New Jersey instructional certificate, such as “Teacher of Students with Disabilities” or “Teacher of Preschool through Grade 3.”

*Note: Admissions and certification requirements are subject to change. Consult with graduate program coordinator.
### MASTER OF EDUCATION DEGREE (M.ED.) IN EARLY CHILDHOOD SPECIAL EDUCATION

**PROGRAM REQUIREMENTS**

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<thead>
<tr>
<th>Semester Hours</th>
<th>I. Basic courses (9 semester hours)</th>
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<tbody>
<tr>
<td></td>
<td>ECSE 504  Typical and Atypical Development: Birth to Three Years ...... 3</td>
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<td>ECSE 505  Risk and Resilience in Early Development ....................... 3</td>
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<td>ECSE 520  Research in Early Childhood Special Education ................. 3</td>
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<tr>
<th>Semester Hours</th>
<th>II. Core Courses (9 semester hours)</th>
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<tr>
<td></td>
<td>ECSE 519  Language and Early Literacy Development .......................... 3</td>
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<td>SPED 579  Special Education for Students with Disabilities ............... 3</td>
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<td>SPED 595  Medical and Physical Bases of Disabilities ...................... 3</td>
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(Other courses may be substituted based on advisement.)

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<tr>
<th>Semester Hours</th>
<th>III. Specialization Courses (21 semester hours)</th>
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<tbody>
<tr>
<td></td>
<td>ECSE 506  Observation and Assessment of Young Children with Special Needs ........................................... 3</td>
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<td>ECSE 507  Assessment of Pre-School Children with Disabilities II .......... 3</td>
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<td>ECSE 508  Partnerships with Families: Early Childhood Special Education ............................................. 3</td>
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<td></td>
<td>ECSE 509  Programs and Practices for Young Children with Special Needs .............................................. 3</td>
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<td>ECSE 510  Field Experience: Early Childhood Special Education ........... 3</td>
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<td>ECSE 518  Neuromotor Development of the Young Child ................................................................. 3</td>
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<td>SPED 668  Consultation Methods .......................................................... 3</td>
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Minimum semester hours: 39

### MASTER OF ARTS IN TEACHING (M.A.T.) – EARLY CHILDHOOD AND ELEMENTARY EDUCATION

Students with a baccalaureate degree and interest in teaching may earn the Master of Arts in Teaching (M.A.T.) and a teaching certificate simultaneously. Upon successful completion of the program, the student will be recommended to the New Jersey Department of Education for a teaching certificate. Students interested in teaching elsewhere should seek information from the appropriate state authorities; requirements are generally similar.

Those who have completed undergraduate or post-baccalaureate teacher certification programs must successfully complete an induction program of teaching under a provisional certificate to be eligible for a permanent or standard New Jersey teaching certificate. Exempted from this requirement are persons who already possess a New Jersey standard certificate and are seeking an additional New Jersey certificate. Persons recommended by the university for certification, who have passed the appropriate Praxis examination, will receive a Certificate of Eligibility With Advanced Standing which authorizes the holder to seek and accept offers of employment in New Jersey schools and in other states.

**Note:** Certification requirements are subject to change (see Teacher Education Programs in this catalog).
ADMISSION REQUIREMENTS

Candidates for admission to the MAT program must file an Application for Admission to the Graduate School, including all supporting materials by February 15 to be considered for Summer/Fall admission or by September 15 for Spring admission. An undergraduate grade point average (GPA) of at least 2.75 overall, is required, along with qualifying scores on the general Graduate Record Exam and completion of the required Praxis II exam. In addition to transcripts and GRE scores, two recommendations from school or college faculty, or administrators, must be submitted. It is expected that students will be able to demonstrate proficiency in the use of the English language. Candidates must also submit evidence of substantial and meaningful experience with groups of children over time or equivalent.

After the deadline, candidates will be notified about the next step in the application process, which may include interviews (with a graduate program coordinator and/or admission committee) and writing samples.

Students who are accepted to the MAT program will be assigned to a faculty advisor whom students should consult each semester. Since students’ backgrounds differ, they should not take courses without advisement.

General questions about the MAT program should be directed to the Director of Teacher Education Admission, (973) 655-4139.

MASTER OF ARTS IN TEACHING (M.A.T.)-
EARLY CHILDHOOD EDUCATION
(TEACHER OF PRE-SCHOOL THROUGH GRADE 3 CERTIFICATION) DEGREE REQUIREMENTS

Prerequisites: Successful completion of a baccalaureate degree from an accredited institution, including a minimum of 60 liberal arts credits. One course in general psychology and two semesters of child development or equivalent at the undergraduate or graduate level; significant and meaningful work with groups of children; admission to the Teacher Education Program. It is expected that students in the program will be able to demonstrate proficiency in the use of the English language. Those students who have not had a course in human biology or health must successfully complete an examination in physiology and hygiene.

Semester Hours

I. Course work in Professional Education required for certification (15 s.h.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECEL 501</td>
<td>Perspectives on Early Childhood and Elementary Education in a Diverse Society (10 hours field experience)</td>
<td>3</td>
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<tr>
<td>ECEL 518</td>
<td>Families, Communities, and Schools: Diversity, Culture, Democracy</td>
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<td>OR</td>
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<tr>
<td>ECSE 508</td>
<td>Partnerships with Families: Early Childhood Special Education</td>
<td>3</td>
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<tr>
<td>READ 500</td>
<td>Nature of Reading</td>
<td>3</td>
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<tr>
<td>ECSE 519</td>
<td>Language and Early Literacy Development</td>
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READ 410  Children’s Literature for a Multicultural Society ..................... 3
ELRS 503  Methods of Research ............................................................. 3

II. Professional Sequence (12-13 semester hours):
Semester Before Student Teaching:
ECEL  502  Seminar I: Inclusive Early Childhood and
  Elementary Classrooms ............................................................ 1
ECEL  528  Early Childhood Curriculum in Inclusive Settings ................. 3
ECEL  510  Clinical Experience I in Inclusive Early Childhood and
  Elementary Settings ................................................................. 2

Student Teaching Semester
ECEL  504  Seminar II: Inclusive Early Childhood and
  Elementary Classrooms ............................................................ 1
ECEL  511  Clinical Experience II in Inclusive Early Childhood and
  Elementary Settings ................................................................. 5
OR
CURR  514  In-Service Supervised Graduate Student Teaching ............... 5
(CURR 514 replaces ECEL 511 for those in full-time teaching positions.)

III. Content/Methods (9 semester hours)
MATH 577  Mathematics Education in the Elementary School .............. 3
ECEL  516  Social Studies and the Arts:
  Understanding Democracy in Elementary Classrooms ................. 3
ECEL  517  Integrating Science and Technology in Early Childhood
  and Elementary Classrooms ..................................................... 3

Minimum semester hours: 36-37

MASTER OF ARTS IN TEACHING -
ELEMENTARY EDUCATION
(ELEMENTARY SCHOOL TEACHER CERTIFICATION)
DEGREE REQUIREMENTS

Prerequisites: Successful completion of a baccalaureate degree from an accredited
institution, including a minimum of 60 liberal arts credits. One course in general
psychology and two semesters of child development or equivalent at the undergraduate
or graduate level; significant and meaningful work with groups of children; admission to
the Teacher Education Program. It is expected that students in the program will be able
to demonstrate proficiency in the use of the English language. Those students who have
not had a course in human biology or health must successfully complete an examination
in physiology and hygiene.

I. Core Courses (15 semester hours):
ECEL  501  Perspectives on Early Childhood and Elementary Education
  in a Diverse Society (10 hours field experience) ...................... 3
ECEL  518  Families, Communities, and Schools:
  Diversity, Culture, Democracy
OR
ECSE  508  Partnerships with Families:
  Early Childhood Special Education ....................................... 3
ELRS 503 Methods of Research ................................................................. 3

Literacy courses: (2 reading/writing courses required)
READ 500 Nature of Reading ................................................................. 3

One of the following: ................................................................................. 3
READ 503 Literature for Adolescents
READ 507 Understanding Reading Comprehension
READ 410 Children’s Literature for a Multicultural Society

II. Professional Sequence (12-13 semester hours):

Semester Before Student Teaching:
ECEL 502 Seminar I: Inclusive Early Childhood and
Elementary Classrooms ........................................................................ 1

ECEL 522 Curriculum Development and Assessment in Diverse
Elementary Classrooms ........................................................................ 3

ECEL 510 Clinical Experience I in Inclusive Early Childhood and
Elementary Settings ............................................................................... 2

Student Teaching Semester
ECEL 504 Seminar II: Inclusive Early Childhood and
Elementary Classrooms ........................................................................ 1

ECEL 511 Clinical Experience II in Inclusive Early Childhood and
Elementary Settings ............................................................................. 5

OR
CURR 514 In-Service Supervised Graduate Teaching I ......................... 5
(CURR 514 replaces ECEL 511 for those in full-time teaching positions.)

III. Content/Methods (9 semester hours)
MATH 577 Mathematics Education in the Elementary School ............. 3

ECEL 516 Social Studies and the Arts:
Understanding Democracy in Elementary Classrooms .................... 3

ECEL 517 Integrating Science and Technology in Early Childhood
and Elementary Classrooms ................................................................. 3

Minimum semester hours: 36-37

M.A.T. IN TEACHER OF STUDENTS WITH
DISABILITIES–DUAL CERTIFICATION PROGRAMS

Students who wish to obtain dual certification in general education and special education can apply for the following programs. Teacher of Students with Disabilities is the certification required to teach in special education. Certification as Teacher of Students with Disabilities requires dual certification. Students must obtain certification in general education in order to obtain certification in Teacher of Students with Disabilities. The following dual certification programs are available: MAT: Early Childhood Education P-3 and Teacher of Students with Disabilities or MAT: Elementary Education K-5 and Teacher of Students with Disabilities.
MASTER OF ARTS IN TEACHING (M.A.T.): EARLY CHILDHOOD EDUCATION P-3 AND TEACHER OF STUDENTS WITH DISABILITIES

ADMISSION REQUIREMENTS

General Education Praxis for Elementary Education required to enter the program. Evidence of substantial and meaningful experiences with groups of children over time or equivalent and experience with persons with disabilities. Prerequisite for entry is one semester of Child Development (with focus on birth-eight years) or equivalent at the undergraduate or graduate level. Course may be added to the program on a graduate level if not completed prior to admission.

I. Required Courses (30 semester hours):
   ECEL 501 Perspectives on Early Childhood and Elementary Education in a Diverse Society (10 hours field experience) ..................... 3
   ECSE 508 Partnerships with Families: Early Childhood Special Education ....................................................... 3
   READ 500 Nature of Reading ................................................................. 3
   ECSE 519 Language and Early Literacy Development ................................................. 3
   ELRS 503 Methods of Research .......................................................................... 3
   ECSE 506 Observation and Assessment of Young Children with Special Needs ......................................................... 3
   ECSE 509 Programs and Practices for Young Children with Special Need ......................................................... 3
   ECSE 523 Communication, Collaboration and Consultation in Early Childhood ......................................................... 3
   ECSE 505 Risk and Resilience in Early Development ......................................................... 3
   SPED 579 Special Education for Students with Disabilities ......................................................... 3

II Content/Methods (6 semester hours)
   ECEL 513 Math, Science and Technology for Young Children in Inclusive Settings ................................................. 3
   ECEL 516 Social Studies and the Arts: Understanding Democracy in Elementary Classrooms ......................................................... 3

III. Professional Sequence (12-13 semester hours)
   Semester Before Student Teaching:
   ECEL 502 Seminar I: Inclusive Early Childhood and Elementary Classrooms ......................................................... 1
   ECEL 528 Early Childhood Curriculum in Inclusive Settings ......................................................... 3
   ECEL 510 Clinical Experience I in Inclusive Early Childhood and Elementary Settings ......................................................... 2

   Student Teaching Semester
   ECEL 504 Seminar II: Inclusive Early Childhood and Elementary Classrooms ......................................................... 1
MASTER OF ARTS IN TEACHING (MAT):  
ELEMENTARY EDUCATION K-5 AND TEACHER OF STUDENTS WITH DISABILITIES  

ADMISSION REQUIREMENTS

General Education Praxis for Elementary Education required to enter the program. Evidence of substantial and meaningful experiences with groups of children over time or equivalent and experience with persons with disabilities. Prerequisite for entry is one semester of Child Development (with focus on birth-eight years) or equivalent at the undergraduate or graduate level. Course may be added to the program on a graduate level if not completed prior to admission.

I. Required Courses (27 semester hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECEL 511</td>
<td>Clinical Experience II in Inclusive Early Childhood and Elementary Settings</td>
</tr>
<tr>
<td>CURR 514</td>
<td>In-Service Supervised Graduate Student Teaching</td>
</tr>
</tbody>
</table>

(CURR 514 replaces ECEL 511 for those in full-time teaching positions.)

Successful completion of a comprehensive exam is required for the Master’s degree.

Minimum semester hours: 48-49
III. Professional Sequence (12-13 semester hours)

Semester Before Student Teaching:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECEL 502</td>
<td>Seminar I: Inclusive Early Childhood and Elementary Classrooms</td>
<td>1</td>
</tr>
<tr>
<td>ECEL 510</td>
<td>Clinical Experience I in Inclusive Early Childhood and Elementary Settings</td>
<td>2</td>
</tr>
<tr>
<td>ECEL 522</td>
<td>Curriculum Development and Assessment in Diverse Elementary Classrooms</td>
<td>3</td>
</tr>
</tbody>
</table>

Student Teaching Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECEL 504</td>
<td>Seminar II: Inclusive Early Childhood and Elementary Classrooms</td>
<td>1</td>
</tr>
<tr>
<td>ECEL 511</td>
<td>Clinical Experience II in Inclusive Early Childhood and Elementary Settings</td>
<td>5</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURR 514</td>
<td>In-Service Supervised Graduate Student Teaching</td>
<td>5</td>
</tr>
</tbody>
</table>

*(CURR 514 replaces ECEL 511 for those in full-time teaching positions.)*

Successful completion of a comprehensive exam is required for the Master’s degree.

Minimum semester hours: 48-49

TEACHER OF STUDENTS WITH DISABILITIES: ADDITIONAL CERTIFICATION

Individuals who already hold certification in general education in K-5, K-8, or content area can apply for Teacher of Students with Disabilities: Additional Certification program in order to receive an additional certification in teaching students with disabilities. This program is described in the Department of Curriculum and Teaching.

POST BACCALAUREATE INITIAL TEACHER OF PRE-SCHOOL THROUGH GRADE 3 CERTIFICATION

Prerequisites: Successful completion of a baccalaureate degree from an accredited institution, including a minimum of 60 liberal arts credits. One course in general psychology and two semesters of child development or equivalent at the undergraduate or graduate level; significant and meaningful work with groups of children; admission to the Teacher Education Program. It is expected that students in the program will be able to demonstrate proficiency in the use of the English language. Those students who have not had a course in human biology or health must successfully complete an examination in physiology and hygiene.

I. Core Courses (9 semester hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECEL 501</td>
<td>Perspectives on Early Childhood and Elementary Education in a Diverse Society (10 hours field experience)</td>
<td>3</td>
</tr>
<tr>
<td>ECEL 518</td>
<td>Families, Communities, and Schools: Diversity, Culture, Democracy</td>
<td>3</td>
</tr>
<tr>
<td>READ 500</td>
<td>Nature of Reading</td>
<td>3</td>
</tr>
</tbody>
</table>
II. Professional Sequence (12-13 semester hours):

Semester Before Student Teaching:

ECEL 502 Seminar I: Inclusive Early Childhood and Elementary Classrooms ............................................................ 1
ECEL 528 Early Childhood Curriculum in Inclusive Settings ................. 3
ECEL 510 Clinical Experience I in Inclusive Early Childhood and Elementary Settings ................................................................. 2

Student Teaching Semester

ECEL 504 Seminar II: Inclusive Early Childhood and Elementary Classrooms ............................................................ 1
ECEL 511 Clinical Experience II in Inclusive Early Childhood and Elementary Settings ................................................................. 5

OR

CURR 514 In-Service Supervised Graduate Student Teaching ............... 5
(CURR 514 replaces ECEL 511 for those in full-time teaching positions.)

III. Content/Methods (Select one course, 3 semester hours)

MATH 577 Mathematics Education in the Elementary School ............ 3
ECEL 516 Social Studies and the Arts:
Understanding Democracy in Elementary Classrooms ............ 3
ECEL 517 Integrating Science and Technology in Early Childhood and Elementary Classrooms ..................................................... 3

Minimum semester hours: 24-25

POST BACCALAUREATE INITIAL ELEMENTARY SCHOOL TEACHER CERTIFICATION

Prerequisites: Successful completion of a baccalaureate degree from an accredited institution, including a minimum of 60 liberal arts credits. One course in general psychology and two semesters of child development or equivalent at the undergraduate or graduate level; significant and meaningful work with groups of children; admission to the Teacher Education Program. It is expected that students in the program will be able to demonstrate proficiency in the use of the English language. Those students who have not had a course in human biology or health must successfully complete an examination in physiology and hygiene.

I. Core Courses (9 semester hours):

ECEL 501 Perspectives on Early Childhood and Elementary Education in a Diverse Society (10 hours field experience) ..................... 3
ECEL 518 Families, Communities, and Schools:
Diversity, Culture, Democracy ................................................ 3
READ 500 Nature of Reading ................................................... 3

II. Professional Sequence (12-13 s.h.):

Semester Before Student Teaching:

ECEL 502 Seminar I: Inclusive Early Childhood and Elementary Classrooms ........................................................................ 1
ECEL 522 Curriculum Development and Assessment in Diverse Elementary Classrooms ......................................................... 3
ECEL 510 Clinical Experience I in Inclusive Early Childhood and Elementary Settings ................................................................. 2

Student Teaching Semester
ECEL 504 Seminar II: Inclusive Early Childhood and Elementary Classrooms ................................................................. 1
ECEL 511 Clinical Experience II in Inclusive Early Childhood and Elementary Settings ................................................................. 5

OR
CURR 514 In-Service Supervised Graduate Student Teaching ................. 5
(CURR 514 replaces ECEL 511 for those in full-time teaching positions.)

III. Content/Method (Select one course, 3 semester hours)
MATH 577 Mathematics Education in the Elementary School ................. 3
ECEL 516 Social Studies and the Arts: Understanding Democracy in Elementary Classrooms .......... 3
ECEL 517 Integrating Science and Technology in Early Childhood and Elementary Classrooms ..................................................... 3

Minimum semester hours: 24-25

MASTER OF ARTS DEGREE IN READING

The Department of Early Childhood, Elementary, and Literacy Education offers advanced degrees and certificates that prepare educators to meet present and future demands as literacy specialists within a range of teaching and policy contexts. Ever-increasing cultural and linguistic diversity, coupled with persistent disparities in student achievement outcomes, require educators to be able to meet the literacy learning needs of all students. Our graduate Reading programs emphasize practice informed by current theory and research, and provide a range of learning experiences that enhance candidates understanding of what it means to be an effective literacy educator within current social and political climates. Reading specialists are prepared to plan literacy curricula, coordinate instruction for individuals and groups of students, assess the nature of a range of reading difficulties and design effective responses, recommend methods and materials to be used in district reading programs, conduct in-service teacher training and professional development, and contribute to the evaluation of student reading achievement.

The advanced programs of study in Reading are designed to fulfill state-level and national standards for professional educators. Additionally, they provide students with deeper understandings of research, theory, and practice.

ADMISSION REQUIREMENTS

The Master of Arts in Reading is designed to provide literacy educators with appropriate experiences and solid grounding in the field of literacy. It is expected that students will graduate with a comprehensive understanding of literacy’s broad definition, sociopolitical underpinnings, and the ways they can effectively serve as change agents in their respective spheres of influence. Program graduates should be equipped with both the skills and dispositions to effectively advocate for the field of literacy and the profession of literacy educators. As a department, it is our hope and anticipation that our graduates will be prepared to serve in a wide array of educational roles in a variety of institutional and multicultural contexts. The curriculum places emphasis upon reflection and critical
thinking about professional practice and helps students analyze the moral and ethical responsibilities of literacy educators.

Students who are applying to the program must meet all of the basic requirements for admission, as established through the MSU Graduate School. Undergraduate transcripts and GRE or MAT scores will be reviewed; but they do not serve as the primary measures in determining a student’s admission to the program. Students will also be evaluated as per their initial essays, letters of recommendation, and personal interviews with the program faculty. Full matriculation will be based on all of these criteria. It is strongly recommended that students enrolling in the Master of Arts in Reading already hold a professional certification and have spent at least one year teaching in schools or working with students in a professional capacity. Students who wish to receive certification as Reading Specialists must possess an initial teaching certificate, a Masters degree in any field, two years teaching experience, and 30 hours of study as outlined in their study programs prepared with the program coordinator, and a passing score on the Praxis (Reading) Exam.

Successful matriculation through the program will be based upon the quality of academic performance as indicated by grades and instructor input.

**PROGRAM REQUIREMENTS**

I. Required Foundation Courses (6 semester hours)
   - ELRS 503 Methods of Research ................................................................. 3
   - READ 500 The Nature of Reading .............................................................. 3
   (Note: READ 500 is a prerequisite course for READ 502, 511, 513, 514, and 505. ELRS 503 is a prerequisite course for READ 505.)

II. Required Courses (24 semester hours)
   - READ 501 Techniques of Reading Improvement in Secondary Schools .. 3
   - READ 502 Administration and Supervision of Reading Programs .......... 3
   - READ 503 Literature for Adolescents ...................................................... 3
   - READ 508 Critical Thinking and Literacy ................................................. 3
   - READ 511 Case Studies of Reading Difficulties ...................................... 3
   - READ 513 Supervised Clinical Practicum, Part I ................................. 3
   - READ 514 Supervised Clinical Practicum, Part II ................................. 3
   - READ 505 Research Seminar in Reading ............................................... 3
   (Note: READ 511 is a prerequisite course for READ 513 and 514.)

III. Elective Course in Reading (3 semester hours)
   Select one of the following:
   - READ 504 Literacy Needs of Adult Learners ....................................... 3
   - READ 506 Reading Resources ................................................................. 3
   - READ 507 Understanding Reading Comprehension .............................. 3
   - READ 510 Field Experience in Reading ............................................... 3
   - READ 512 Seminar in Reading Disabilities .......................................... 3
   - READ 600 Workshop in Contemporary Issues in Reading .................... 1-3

IV. Culminating Activity:
   Supervised clinical experience within the framework of required courses (in particular, within READ 513/514 and READ 505).
   Minimum semester hours: 33
PROGRAM LEADING TO THE READING SPECIALIST CERTIFICATE (SPECIALIST CERTIFICATION PROGRAM)

Minimum requirements: An initial teaching certificate, two years of successful teaching experience, a Master’s degree (no specified field), an approved graduate degree program in Reading approved by the New Jersey State Department of Education or a program of 30 semester-hours of graduate credits as listed below, and a passing score on the Praxis (Reading) Exam.

PROGRAM REQUIREMENTS

I. Required Foundation Course (3 semester hours)
   READ  500  The Nature of Reading ............................................................. 3
   (Note: READ 500 is a prerequisite course for READ 502, 511, 513, and 514.)

II. Required Courses (21 semester hours)
   READ  501  Techniques of Reading Improvement in
              Secondary Schools ..................................................................... 3
   READ  502  Administration and Supervision of Reading Programs .......... 3
   READ  503  Literature for Adolescents ................................................. 3
   READ  508  Critical Thinking and Literacy ........................................... 3
   READ  511  Case Studies of Reading Difficulties ................................. 3
   READ  513  Supervised Clinical Practicum, Part I ............................... 3
   READ  514  Supervised Clinical Practicum, Part II ............................... 3
   (Note: READ 511 is a prerequisite course for READ 513 and 514.)

II. Elective Course in Reading (3 semester hours)
   Select one course from the following:
   READ  504  Literacy Needs of Adult Learners .................................... 3
   READ  506  Reading Resources ............................................................... 3
   READ  507  Understanding Reading Comprehension ............................ 3
   READ  510  Field Experience in Reading ............................................. 3
   READ  512  Seminar in Reading Difficulties ....................................... 3
   READ  600  Workshop in Contemporary Issues in Reading ................ 1-3

III. Related Recommended Areas (3 semester hours)
   Select from one of the following:
   Children’s or Adolescent Literature
   Measurement
   Organization of reading programs
   Psychology
   Supervision
   Linguistics

   Minimum semester hours: 30
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECEL 501</td>
<td>PERSPECTIVES ON EARLY CHILDHOOD AND ELEMENTARY EDUCATION IN A DIVERSE SOCIETY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Examines the historical, social, political, and philosophical trends and ideologies that impact the care and education of children. Emphasis will be placed on how models have changed over time to respond to the evolving need and dispositions of our society with regard to brain research, inclusion practices and culturally responsive teaching and learning. 10 hours field work required.</td>
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</tr>
<tr>
<td>ECEL 502</td>
<td>SEMINAR I: INCLUSIVE EARLY CHILDHOOD AND ELEMENTARY CLASSROOMS</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Accompanies ECEL 510 Clinical Experience I in Inclusive Early Childhood and Elementary Settings and offers students a forum for discussion, reflection, and critical thinking with regard to clinical work in inclusive elementary classrooms. Prerequisite: Admission to M.A.T. in Early Childhood or Elementary Education or Post-Baccalaureate Certificate Program in Early Childhood or Elementary Education. Corequisite: ECEL 510.</td>
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</tr>
<tr>
<td>ECEL 504</td>
<td>SEMINAR II: INCLUSIVE EARLY CHILDHOOD AND ELEMENTARY CLASSROOMS</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Provides students with a forum to discuss the role of the teacher as teacher candidates take on full-time classroom responsibilities. Discussions focus on identifying and involving oneself in the professional field of early childhood/elementary/middle school education, upholding and advocating for ethical standards, engaging in continuous and collaborative learning, and taking a critical stance to inform practice. Teacher candidates demonstrate that they can make and justify decisions based on their knowledge of central issues such as developmentally appropriate practice, culturally responsive learning and teaching, and the context of children’s lives. Corequisite: ECEL 511.</td>
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</tr>
<tr>
<td>ECEL 505</td>
<td>OBSERVATION AND INQUIRY IN EARLY CHILDHOOD AND ELEMENTARY SETTINGS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Provides students with the tools to identify and implement sound and authentic assessment strategies in early childhood and elementary classrooms. Students will be introduced to formal and informal assessment processes, tools, and strategies related to documentation and assessment techniques that are appropriate to the age and experiences of children. Emphasis will be on authentic assessment methods including the use of rubrics, portfolios, conferences, and self- and peer-assessment. Additional forms of assessment including running records, anecdotal records, checklists, rating scales, and children’s work samples as well as standardized tests will be examined. The relationship among ongoing assessment to plan instructional practice and to evaluate the progress and needs of children in early childhood and elementary settings will be a main focus. Fieldwork is required. Prerequisite: Three years of early childhood and/or elementary teaching experience.</td>
<td></td>
</tr>
</tbody>
</table>
ECEL 510  CLINICAL EXPERIENCE I IN INCLUSIVE EARLY CHILDHOOD AND ELEMENTARY SETTINGS
Provides clinical experiences in an early childhood or elementary setting to foster the skills and dispositions necessary to become effective and nurturing teachers. Students provide learning opportunities that support children’s intellectual, social, and emotional development; design environments that support culturally responsive teaching; and plan and assess high quality curriculum. Students develop skills as reflective and questioning practitioners, promote democratic values and communication in the classroom, and build relationships with school colleagues, families, and agencies in the larger community.
Prerequisite: Admission to M.A.T. in Early Childhood or Elementary Education or Post-Baccalaureate Program in Early Childhood or Elementary Education. Special fee.
Corequisite: ECEL 502.

ECEL 511  CLINICAL EXPERIENCE II IN INCLUSIVE EARLY CHILDHOOD AND ELEMENTARY SETTINGS
Students demonstrate their knowledge of child development and the significant role of families and communities with regard to children’s learning by planning and implementing developmentally appropriate and culturally responsive curriculum in an inclusive early childhood/elementary classroom. Focusing on the diverse needs of individual children, students develop, implement, and assess an integrated curriculum unit that incorporates the Core Curriculum Content Standards and emphasizes literacy across the curriculum. As reflective practitioners, students utilize multiple strategies to assess children’s learning, classroom climate, and effective classroom management. Students are responsible for the full range of teacher activities in the classroom and are expected to seek out the resources of parents, administrators, and school colleagues. Students are required to assemble an exhibition portfolio and participate in a mock interview in order to demonstrate their strengths as a teacher.
Prerequisite: ECEL 510. Special fee.
Corequisite: ECEL 504.

ECEL 513  INTEGRATING MATH/SCIENCE/TECHNOLOGY IN INCLUSIVE EARLY CHILDHOOD CLASSROOMS
Provides learning experiences for diverse early childhood classrooms through the development, implementation, and assessment of integrated math/science/technology curriculum. A focus on design and problem-solving activities (e.g., Children’s Engineering) will be introduced to develop interdisciplinary learning experiences for inclusive classrooms. Student will gain experience in analyzing the classroom environment and materials with regard to the needs of individual children. Learning experiences will apply appropriate content requirements as identified by the New Jersey Core Curriculum Content Standards, the New Jersey Early Childhood Expectations, and professional organizations (NCTM, NSTA, ITEA).
Prerequisites: ECEL 501 and SPED 579.
ECEL 516 SOCIAL STUDIES AND THE ARTS: UNDERSTANDING DEMOCRACY IN ELEMENTARY CLASSROOMS
Introduces students to critical pedagogy through the process, skills, and inquiry of social studies and the arts. The content focus of the course will be diverse communities, weaving together history, geography, social studies (anthropology, economics, archeology, etc.) and the visual and performing arts. Special emphasis will be placed on developing a critical perspective on social studies and the arts, exploring arts media and fostering dialogue focused on creativity, literacy strategies, and culturally responsive teaching and learning.

ECEL 517 INTEGRATING SCIENCE AND TECHNOLOGY IN EARLY CHILDHOOD AND ELEMENTARY CLASSROOMS
Explores the nature of science as a discipline and examines how to integrate science, math and technology into the classroom curriculum. Students will learn strategies to engage children in active explorations aligned with the NJ Science, Math and Technology Standards. Students will recognize the integration of science and math content as vehicles for critical thinking, and children’s engagement in the wonder and study of the natural and physical (human-made) world. Students will experience hands-on, minds-on science activities supported by technology and will examine successful management techniques and science safety codes. Students will gain confidence and skills in the scientific concepts and principles that unite the science disciplines: systems, order and organization; evidence, models, and explanation; change, constancy, and measurement; evolution and equilibrium; and form and function.

ECEL 518 FAMILIES, COMMUNITIES, AND SCHOOLS: DIVERSITY, CULTURE AND DEMOCRACY
Provides students with an understanding of how social and cultural influences shape children’s development and learning. The relationships among teacher, parent, child, and community as they affect learning will be explored. Methods for developing school/family partnerships will be discussed. Students will learn to take into account issues of child diversity and culturally responsive teaching as they create learning experiences. Cross listed with Family and Child Studies, FCST 518.

ECEL 522 CURRICULUM DEVELOPMENT AND ASSESSMENT IN DIVERSE ELEMENTARY CLASSROOMS
Provides students with the opportunities to explore and experience research-based learning theories, teaching practices, curriculum, classroom management models, instructional strategies, and assessment used in upper elementary/middle level classrooms. Students will apply a framework of culturally responsive teaching and learning to curriculum development and building classroom community. Critical reviews of research, case study methods, planning and implementation of an integrated curriculum unit, and reflection on one’s teaching beliefs will be investigated through journal writing, classroom observations, curricular development, assessment techniques, and group discussion.

Prerequisite: Admission to M.A.T. in Early Childhood or Elementary Education or Post-Baccalaureate Certificate Program in Early Childhood or Elementary Education.
ECEL 528 EARLY CHILDHOOD CURRICULUM IN INCLUSIVE SETTINGS 3
Provides students with strategies to assess professional goals, develop authentic assessment practices, and respond to the cultural, linguistic, and learning needs of individual children. Develop, implementation, and assessment of an integrated unit that defines essential questions, aligns with state standards, and adapts lessons for children with special needs is required.
Prerequisites: ECEL 501.
Corequisites: ECEL 502 and ECEL 510

ECEL 532 RESEARCH SEMINAR: CURRENT TOPICS IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION 3
Provides reading, discussion, and analysis of current research in the fields of early childhood and elementary education. Topics may include differentiated learning, inclusion, second language learners, curriculum development, policy implications, and/or culturally responsive teaching and learning, etc.
Prerequisite: Completion of 15 semester hours of core courses required for ECEL M.Ed. program.

ECEL 565 INDEPENDENT STUDY IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION 1-3
Offers opportunities to explore areas in Early Childhood and Elementary education that are not covered in the normal course offerings. May be repeated twice for a maximum of six semester hours.
Prerequisite: Departmental approval.

ECEL 575 SELECTED TOPICS IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION 1-3
Presents a topic or issue in the field that is not currently covered in existing courses. Students will gain specific knowledge and skills with regard to a well defined area of expertise. May be repeated once for a maximum of six semester hours.

ECEL 698 MASTER’S THESIS 3
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take ECEL 699 if they don’t complete ECEL 698 within the semester.
Prerequisite: Departmental approval.

ECEL 699 MASTER’S THESIS EXTENSION 1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: ECEL 698.

ECSE 504 TYPICAL AND ATYPICAL DEVELOPMENT: BIRTH TO THREE YEARS 3
Familiarizes students with the developmental stages of infants and toddlers. Particular emphasis will be placed on sensorimotor stage theory, development of the capacity for symbolic representations, and the acquisition of language. Application of developmental theory to children with disabilities will be discussed.
Examines various theories of child development related to infants, toddlers, and preschoolers, from conception to age five. A strong focus is placed on the impact of risk and protective factors on early development. Specifically, the course addresses the etiology, behavioral characteristics, developmental outcomes, and family impact on the development of young children including those with environmental, biological, or established risk of developmental delays or disabilities. Students learn methods for observing and interpreting physical growth, motor, cognitive, language and communication, social/emotional, and play development of typically developing young children and those with special needs.

Focus on observation, screening and assessment of young children with special needs from birth to age five. Students explore commonly used techniques, instruments, examine administration procedures, and learn to interpret findings related to children’s development. An emphasis is placed on family partnerships, using observation as a tool in natural settings, and creating appropriate assessment plans for young children.

Provides in-depth analysis of selected assessment devices introduced in ECSE 506. A variety of instruments designed for use with infants and preschoolers will be evaluated and employed.

Prerequisite: ECSE 506.

Addresses family-professional partnerships in early childhood special education. Students gain knowledge, skills and dispositions to work collaboratively with diverse families to support the development and education of young children with special needs. Various models including family-focused practice and family systems theory are discussed.

Provides an overview of curricular approaches in Early Childhood Education (birth to 8), specific intervention strategies, and curriculum planning issues. Emphasis is placed upon the development of knowledge, skills and dispositions needed to address outcomes identified in individual IFSPs or IEPs within the context of activity-based programs for young children in naturalistic environments.

Prerequisite: ECSE 506.

Offers supervised experience in diverse field settings with both typical and atypical preschool children; seventy-five (75) clock hours of fieldwork are required.

Prerequisite: Departmental approval.
ECSE 518  NEUROMOTOR DEVELOPMENT OF THE YOUNG CHILD  3
Studies typical and atypical patterns of neuromotor organization and development, including general principles of stability, mobility, and the equilibrium as they influence postural stability. Implications for the educator of young children with disabilities will be stressed.

ECSE 519  LANGUAGE AND EARLY LITERACY DEVELOPMENT  3
Explores the development of language, communication and early literacy in children birth to age five, focusing on both typical and atypical development pathways. Considers how children acquire language in social context and the relationships between communicative skills and literacy. Within a theory to practice framework, the course covers topics that include the family’s role in early language development, language socialization across cultures, bilingualism and second language acquisition, speech and language impairments, and the emergence of literacy in both home and preschool settings. The role of early childhood teachers in fostering language and literacy development in children with diverse needs and backgrounds is highlighted.

ECSE 520  RESEARCH IN EARLY CHILDHOOD SPECIAL EDUCATION  3
Examines research designs, statistical analysis and methods for writing a research paper. Significant problems in the field of early childhood special education are investigated and discussed. Published research projects are evaluated.

ECSE 523  COMMUNICATION, COLLABORATION, AND CONSULTATION IN EARLY CHILDHOOD SPECIAL EDUCATION  3
Provides students with a theoretical framework to guide the interactions of early childhood professionals with educational systems, communities, and with each other to insure appropriate educational practices for young children with special needs. Effective strategies to support communication, collaboration, conflict resolution, consultation, mentoring, and collaborative research skills will be addressed. Students will explore various methods for developing professional partnerships that facilitate interagency collaboration in early intervention, transdisciplinary team practices, and team teaching in inclusive early care and education. Students will reflect upon the various ways in which communication, collaboration, and consultation support curriculum, programs and professional development.

Prerequisites: ECEL 501, and SPED 579 and ECSE 509.

READ 500  THE NATURE OF READING  3
Examines the foundations of reading: the nature of the reading process, readiness, beginning instruction, current practices in the teaching of reading in early childhood and elementary education, a reappraisal of the role of reading in a technological society.

READ 501  TECHNIQUES OF READING IMPROVEMENT IN THE SECONDARY SCHOOL  3
Studies the improvement of nonclinical reading difficulties in the content subjects. For the subject area teacher and the beginning reading specialist. Secondary school reading needs and specific suggestions for guiding the slow, average, and gifted student in a classroom situation.
READ 502 ADMINISTRATION AND SUPERVISION OF READING PROGRAMS
3
Explores the more complex aspects of organizing and administering reading programs: theory and techniques of leadership, program development, organization of in-service programs, developing a budget, methods of evaluation, etc. Essential background for reading specialists in order to establish or administer a functional school reading program. Prerequisite: READ 500.

READ 503 LITERATURE FOR ADOLESCENTS
3
Offers background for the development of recreational reading programs in middle schools and high schools. Literature written for students, as well as literature intended to be read widely by adolescents, criteria for book selection, censorship, role of mass media, minority group identification through books, bibliotherapy, bibliographic tools, and the importance of the librarian.

READ 504 LITERACY NEEDS OF ADULT LEARNERS
3
Language learning and related psychological factors; methodology and reading instruction; literature and the reading program and innovations in reading instruction are examined.

READ 505 RESEARCH SEMINAR IN READING
3
Investigates problems in the field of reading suggested by the educational events and trends, the members of the class, and the educational movements in New Jersey, the country, and the world. Each student will execute an individual research effort. Prerequisite: Departmental approval.

READ 506 READING RESOURCES
3
Review software, hardware, multi-media and multi-sensory materials available in schools and in adjunct facilities. Philosophical, psychological and academic considerations of reading resources are considered. Materials are demonstrated and assessed.

READ 507 UNDERSTANDING READING COMPREHENSION
3
Provides an understanding of the processing of visible language, particularly the types found in written texts used in educational settings. The instructor will explore with the participants the affective, cognitive, linguistic, pragmatic, and textual variables pertaining to the formulation of meaning in reading. Students will create a conceptual framework for the comprehensibility of written materials in terms of the interaction among the reader, the text, and other pragmatic variables.

READ 508 CRITICAL THINKING AND LITERACY
3
Offers a critical thinking framework for the communication arts with an emphasis on reading comprehension, writing, and discussion. Relevant psychological, sociological, and philosophical theories will be studied and applied to texts that are representative of diverse genres and cultures and that challenge conventional beliefs.

READ 510 FIELD EXPERIENCE IN READING
3
Provides students opportunities to observe, participate and report community-based activities of agencies. For students in long-range research, students with limited teaching experience, and students who need additional field and clinical experience. Independent study. Prerequisite: Departmental approval.
READ 511  CASE STUDIES OF READING DIFFICULTIES  3
Offers opportunities to learn the techniques for diagnosing reading difficulties; evaluating the most frequently used tests and inventories; and the testing of a child with reading problems. Group and individual tests, survey and diagnostic tests, standardized and informal tests; and reporting to parents, schools and agencies are discussed. The course develops skills in diagnosing and ameliorating reading problems. Additional diagnostic hours arranged.
Prerequisite: READ 500.

READ 512  SEMINAR IN READING DISABILITIES  3
Examines significant problems in the field of reading disability. Historical and emerging models used in reading diagnosis are discussed.

READ 513  SUPERVISED CLINICAL PRACTICUM, PART I  3
For advanced students and specialists involved in some aspect of remedial instruction. Investigates and interprets serious reading problems; causes of reading difficulties, and techniques of remedial and corrective treatment. Clients are drawn from children in surrounding communities. Additional tutoring hours will be arranged.
Prerequisite: READ 511.

READ 514  SUPERVISED CLINICAL PRACTICUM, PART II  3
For advanced students and specialist involved in some aspect of remedial instruction. Examines selection and adaptation of suitable improvement devices, materials and ideas; intensive treatment in a practicum situation. Clients are drawn from children in surrounding communities. Additional tutoring hours will be arranged.
Prerequisite: READ 511.

READ 600  WORKSHOP IN CONTEMPORARY ISSUES IN READING  1 - 3
Explores contemporary issues in reading instruction, basic skills, literature, cultural literacy and critical thinking. Each workshop will be topic-specific. Faculty determine topic selection according to timely public policy issues and philosophical concerns. Collaborative research between workshop faculty and participants will be emphasized. Students may register for no more than six credits.
The Department of Educational Foundations has the dual responsibility of serving established educational programs while developing new approaches toward their improvement through philosophical, psychological, sociological, historical and comparative studies, as well as through educational theory and research. In keeping with these professional responsibilities, the department offers a specialization in Philosophy for Children in the Ed.D. in Pedagogy, M.Ed. concentrations in Critical Thinking and Philosophy for Children, a graduate certificate in Philosophy for Children, as well as the foundation courses in educational philosophy, educational sociology (including issues of gender, race and class), research measurement, and evaluation methodology for the preparation and professional development of teachers and other educators.

**MASTER OF EDUCATION DEGREE, CONCENTRATION IN CRITICAL THINKING**

The Master of Education (M.Ed.), concentration in Critical Thinking is housed in the Department of Educational Foundations, College of Education and Human Services at Montclair State University. The concept of critical thinking is used as a focal point for an analysis of schooling in America, the relationship between the schools and the broader social system, and the theoretical basis for pedagogical decisions. Recognizing the importance of improving classroom practice of teachers enrolled in the program, strong emphasis is placed on understanding the theoretical underpinnings of critical thinking from a philosophical, historical, social, and political perspective, and a consideration of the implications for classroom practice. Improvements in classroom practice of teachers enrolled in the program are developed from these implications.

**GOALS**

a. To develop an understanding of the philosophical, historical, social, and political origins of the concept of teaching for critical thinking and the implications for current school practice.

b. To develop an understanding of the basic concepts and ideals that underlie critical thinking as a school goal.

c. To develop an understanding of research and evaluation especially as they relate to the improvement of teaching.

d. To strengthen teachers’ existing curricular planning and pedagogical strategies so that critical thinking objectives can be achieved.

e. To develop the ability to engage in a critical analysis of educational issues and the professional knowledge base of teachers.
ADMISSION AND MATRICULATION

Admission to the M.Ed. program is limited to certified teachers. Applicants must demonstrate required Miller Analogies Test scores and a basic undergraduate GPA of 3.0, although special consideration will be extended to tenured teachers who otherwise demonstrate that they are capable of completing the program. An applicant who wishes to enroll in courses in the program prior to matriculation may be permitted to register for six credits by applying as a non-degree student and presenting proof of an undergraduate degree or teaching certification.

Graduation requirements are the completion of 39-48 semester hours as outlined, including a culminating activity.

REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE, CONCENTRATION IN CRITICAL THINKING

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>I. Core M.Ed. Courses (18 semester hours)</td>
</tr>
<tr>
<td>COUN 559 Dynamics of Group Processes ................................................. 3</td>
</tr>
<tr>
<td>CURR 530 Principles of Curriculum Development ....................................... 3</td>
</tr>
<tr>
<td>CURR 534 Strategies for Curriculum Change ............................................... 3</td>
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<tr>
<td>EDFD 520 Development of Educational Thought ............................................. 3</td>
</tr>
<tr>
<td>EDFD 540 Social Forces and Education .......................................................... 3</td>
</tr>
<tr>
<td>ELRS 503 Methods of Research ......................................................................... 3</td>
</tr>
<tr>
<td>II. Concentration Required Courses (9 semester hours)</td>
</tr>
<tr>
<td>EDFD 548 Crucial Issues in American Education ........................................... 3</td>
</tr>
<tr>
<td>EDFD 550 Critical Thinking and Learning .................................................... 3</td>
</tr>
<tr>
<td>EDFD 670 Culminating Activity Project in Critical Thinking ......................... 3</td>
</tr>
<tr>
<td>III. Specialization Courses, selected from such courses as: (9 semester hours)</td>
</tr>
<tr>
<td>CURR 635 Research Seminar in Curriculum Construction ................................. 3</td>
</tr>
<tr>
<td>EDFD 551 Critical Thinking and Moral Education .......................................... 3</td>
</tr>
<tr>
<td>EDFD 552 Critical Thinking and Contemporary Educational Issues .................. 3</td>
</tr>
<tr>
<td>READ 507 Understanding Reading Comprehension ........................................... 3</td>
</tr>
<tr>
<td>READ 508 Critical Thinking and Literacy ...................................................... 3</td>
</tr>
<tr>
<td>READ 600 Workshop in Contemporary Issues in Reading ................................. 1-3</td>
</tr>
<tr>
<td>IV. Content Field Courses (3-9 semester hours)</td>
</tr>
<tr>
<td>Students must complete 3-9 semester hours, as determined by an advisor, in content field(s), e.g., science, English, history, foreign language, etc. Courses are to be selected in consultation with the graduate program coordinator.</td>
</tr>
<tr>
<td>Minimum semester hours: 39-48</td>
</tr>
</tbody>
</table>
MASTER OF EDUCATION DEGREE,  
CONCENTRATION IN  
PHILOSOPHY FOR CHILDREN

Philosophy for Children is an internationally recognized program which focuses on cultivating dialogue, inquiry and good judgment in children and adolescents. The degree of Master of Education with a concentration in Philosophy for Children is designed for classroom teachers, college professors, teacher educators, interested graduates and children’s authors interested in helping young people become better thinkers. This program of study invites candidates to construct their own community of inquiry focusing on key issues relating to democratic pedagogy, curriculum, and cognitive, affective, social and ethical development.

Full-time students attend four semesters, the first and last of which are two-week residential sessions held off campus in a community setting. Part-time students wishing to enroll over a longer period of time are also welcome to apply. In addition to a range of theoretical subjects, students have the opportunity to acquire actual classroom experience doing philosophy with children and analyzing their experience under the supervision of the faculty in the Institute for the Advancement of Philosophy for Children.

Montclair State University has been the international home of Philosophy for Children since the inauguration of the Institute for the Advancement of Philosophy for Children (IAPC) thirty years ago. IAPC faculty have international reputations in philosophy for children and the teaching of thinking, and are at the forefront of teaching and research in these areas. Since 1974, students and scholars from all over the world have made their way to Montclair to study together, under the guidance and direction of this outstanding faculty.

Admission Requirements

Students should have an undergraduate degree with an overall average of 3.00, Graduate Record Examination or Miller Analogies Test scores, and an interview. (The examination scores are waived in the case of individuals already holding a master’s degree from a United States college or university.)

Examinations

All candidates for the degree must pass the IAPC comprehensive examination. Application for this examination must be made in writing to the Graduate School by March 1st of the year in which the examination is to be taken.
REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE, CONCENTRATION IN PHILOSOPHY FOR CHILDREN

Semester Hours

I. Required Courses (taken in the summer)
   - PHLC 508 Teaching Philosophical Reasoning I ........................................ 2
   - PHLC 509 Teaching Philosophical Reasoning II ....................................... 2
   - PHLC 614 Scientific Reasoning .............................................................. 2
   - PHLC 615 Foundations of Philosophy for Children ................................ 2

II. Required Philosophy for Children Courses (21 semester hours)
   - EDFD 521 Contemporary Educational Thought ........................................ 3
   - EDFD 522 Pragmatism in Education ......................................................... 3
   - EDFD 581 Critical Thinking, Community and Self ................................ 3
   - PHLC 502 Teaching Children Philosophical Thinking II .......................... 3
   - PHLC 511 Teaching Philosophical Reasoning III ..................................... 3
   - PHLC 512 Value Inquiry ........................................................................... 3
   - PHLC 513 Social Inquiry ........................................................................... 3

III. Required Education Courses (9 semester hours)
   - CURR 530 Principles of Curriculum Development ................................... 3
   - CURR 534 Strategies for Curriculum Change ............................................ 3
   - ELRS 503 Methods of Research ............................................................... 3

IV. Comprehensive examination

Minimum semester hours: 38

EDUCATIONAL FOUNDATIONS

Course Descriptions

Semester Hours

EDFD 520 DEVELOPMENT OF EDUCATIONAL THOUGHT 3
Intensive study of philosophical perspectives of selected classical to modern thinkers as they relate to educational theory and practice. A range of points of view will be considered including such seminal thinkers as Plato, Aristotle, Aquinas, Rousseau, Dewey, Greene, Freire and Bell Hooks. The application of philosophical perspectives to contemporary education issues will be explored.

EDFD 521 CONTEMPORARY EDUCATIONAL THOUGHT 3
Current trends and issues in contemporary education will be explored with an emphasis on central concerns such as building community, education for democracy, critical thinking, reasoning, literacy and content standards. We will examine issues of theory as well as applications to pedagogy and curriculum.
EDFD 522 PRAGMATISM IN EDUCATION
An intensive study of the doctrines and principles developed in the writings of John Dewey and his followers, with special reference to critical issues in education today. Introduction into pragmatic thought through the writings of Dewey, Pierce, and James, and the implications of this philosophy studied through the works of Kilpatrick, Counts, Bode, Childs, Bramald, and others.

EDFD 531 FOUNDATIONS OF EDUCATION FOR LANGUAGE MINORITY STUDENTS
This course examines the social, cultural, political, and linguistic foundations of schooling in the United States for students who speak languages other than English. Issues addressed include the history of education for U.S. immigrants; socio-cultural, legal, and political influences on the education of language minority students; and linguistic factors in the education of language minority students. Students also explore curriculum, instruction, and school organization as they relate to the education of language minority students.

EDFD 540 SOCIAL FORCES AND EDUCATION
Examination of various facets of society that have impact on the educational system: economic, political, social, ethnic and religious forces as they relate to problems of educational systems. Field studies included.

EDFD 548 CRUCIAL ISSUES IN AMERICAN EDUCATION
A study of the origin, development, and status of specific crucial issues in the field of education. Such topics as: race, class and gender and their effects on school life and curriculum, multicultural education, violence in schools, teenage pregnancy, school funding and the education of teachers, etc. will be considered.

EDFD 550 CRITICAL THINKING AND LEARNING
This course provides an introduction to critical thinking as an educational goal. Students will consider the nature of critical thinking and its implications for educational objectives and student learning, and engage in its practice. Students will examine classroom practices through which critical thinking can be developed, including questioning strategies and evaluation procedures.

EDFD 551 CRITICAL THINKING AND MORAL EDUCATION
The course offers a critical thinking framework for moral education. Approaches to moral education through critical thinking will be explored including those of Lipman, Siegel and Paul. These will be seen within the perspective of alternative and complementary approaches including values clarification, moral developmentalism, and cultural transmission models. Students will be helped to identify occasions for moral education throughout the curriculum and to design interventions and curriculum materials to strengthen the moral judgment of their pupils.

EDFD 552 CRITICAL THINKING AND CONTEMPORARY EDUCATIONAL ISSUES
Critical thinking is a reform movement in education that reflects sociological, political, and philosophical issues. Writers, including Freire, Greene, Paul, Siegel and Lipman, have advocated a critical response to educational policy viewed within the context of social and political forces. The course will examine these views and analyze their role in relation to current trends and attitudes as reflected by thinkers such as Hirsch and Bloom and the various reports that have exemplified the current evaluation of recent education.
EDFD 554  CRITICAL THINKING AND DEMOCRACY  3
Critical thinking is a reform movement in education that addresses central concerns in education for democracy as well as other sociological, political and philosophical issues. This course will help teachers deepen their understanding of the meaning of “democracy,” as well as the relationship between democratic practice and schooling. In this course, teachers will explore the history of American education, studying the basic commitment to democracy inherent within it, as well as the on-going tension between democratic ideals and other educational objectives, such as rewarding excellence and furthering capitalistic meritocracy.

EDFD 555  CRITICAL THINKING AND REASONING  3
Critical thinking requires the ability to be reasonable, both in asserting claims and in interacting with others. This course will look at the foundations of critical thinking, informal logic, argumentation analysis, and cognitive psychology, in order to help teachers develop, facilitate, and support student reasoning in relation to their studies and to their lives outside of schools.

EDFD 581  CRITICAL THINKING, COMMUNITY AND SELF  3
Attention will be given to the basic technique of forming classroom communities of inquiry through the study of the broad historical tradition of educational philosophy from Plato to Passmore. Particular attention will be given to philosophers who have dealt with the nature of reflection, thinking skills, ethical inquiry, pedagogical methods, children’s rights, dialogue, community, personhood, and the general aims of education.

EDFD 670  CULMINATING ACTIVITY IN CRITICAL THINKING  3
The final course in the M.Ed. concentration in Critical Thinking, this individualized learning experience involves each graduate student in the planning and execution of a complex critical thinking project, in consultation with the course instructor. Each student must relate critical thinking to his/her own on-going professional responsibilities, as well as prepare a formal evaluation of the results. A descriptive and evaluative report are required, as is the dissemination of the results through a conference presentation or publishable article.

ELRS 503  METHODS OF RESEARCH  3
Theory and methods of historical, descriptive, and experimental research; formulation of a research problem; use of bibliographical sources and reference materials; statistics and measurement in research; types and instruments of research; data collection, and analysis. Writing the research report, and career opportunities in research.

ELRS 553  SELECTED TOPICS IN CRITICAL THINKING  3
This course will focus on particular areas of application, theoretical dispute, and/or procedural issues as they apply to teaching for critical thinking. May be repeated once for a maximum of six semester hours.

Prerequisite: EDFD 550.
ELRS 578 TESTING AND EVALUATION 3
Principles and practices of educational and psychological testing and evaluation relevant to professionals in human services, communication sciences and disorders, education, and related fields. Historical/philosophical orientation; place of testing in instructional and remedial programs; statistical concepts underlying measurement; validity, reliability, response set; construction of tests and measurement instruments; evaluation and interpretation of testing data; use and misuse of testing data; reporting data to students, parents and colleagues; critical analyses of selected standardized intelligence, ability and personality tests; experimental tests and measurement instruments. Course project geared to individual student needs.

ELRS 580 LEARNING: PROCESS AND MEASUREMENT 3
Study of the learning process and its measurement as it applies in the classroom and non-school settings.

ELRS 603 SEMINAR IN RESEARCH 3
Carry out a research project-historical, descriptive, or experimental in nature-culminating in a written report.
Prerequisite: ELRS 503.

ELRS 650 INDEPENDENT STUDY IN EDUCATIONAL RESEARCH AND EVALUATION 1 - 3
Designed for individuals who, in consultation with advisor, wish to undertake an in-depth analysis of a specific research problem. May be repeated once for a maximum of six semester hours.
Prerequisite: Departmental approval.

PHLC 501 TEACHING CHILDREN PHILOSOPHICAL THINKING I 3
This course is designed to equip teachers with the skills and background essential for teaching philosophical thinking in the classroom. Teachers will be introduced to the curriculum materials in philosophy for children, the history of philosophical ideas which form an essential component of the approach, the nature of formal and informal reasoning and an analysis of educational issues which are affected by the introduction of philosophy into the classroom. This course will not count toward the undergraduate major in philosophy. May be repeated for credit three times for a total of twelve credits as long as the content is different with each repetition.

PHLC 502 TEACHING CHILDREN PHILOSOPHICAL THINKING II 3
This course will enable teachers who have already taken the introductory course in teaching children philosophical thinking, to teach children to apply the basic thinking skills to language arts and social studies. The course consists of 3 hours in each of two semesters devoted to seminars and 3 hours each of two semesters devoted to practice in the classroom under individual supervision (for extension only). May be repeated for credit three times for a total of twelve credits as long as the content is different with each repetition.

PHLC 508 TEACHING PHILOSOPHICAL REASONING I 2
This course aims to acquaint teachers with reasoning skills that are employed in everyday conversation, reading, listening and writing, so as to prepare them to think more reasonably and judiciously.
PHLC 509  TEACHING PHILOSOPHICAL REASONING II  
This course aims to assist teachers to operationalize reasoning skills while at the same time utilizing certain aspects of philosophy of language, aesthetics and epistemology for the enhancement of writing skills.

PHLC 511  TEACHING PHILOSOPHICAL REASONING III  
The aim of this course is to assist prospective teachers to operationalize reasoning skills and to utilize certain aspects of philosophy of language, aesthetics, and epistemology for the enhancement of writing skills. 
Prerequisite: PHLC 509

PHLC 512  VALUE INQUIRY  
Prospective teachers are introduced to the techniques by which reasoning can deal with moral issues in the objective and impartial fashion known as ethical inquiry for children.

PHLC 513  SOCIAL INQUIRY  
This course will enable prospective teachers who have already taken the foundational course in philosophy for children to teach children to apply basic reasoning skills to the social studies. The program, therefore, represents an integration of philosophy, logic and the social sciences. It is also a way of presenting the social studies as a discussion course in which the conceptual foundations of the behavioral sciences are reviewed and appraised. 
Prerequisites: PHLC 508, 509 and 511.

PHLC 614  SCIENTIFIC REASONING  
This course aims at familiarizing students with a variety of reasoning skills that are useful in scientific inquiry, while at the same time teaching them how to create a cognitive readiness in children to do science.

PHLC 615  FOUNDATIONS OF PHILOSOPHY FOR CHILDREN  
This course focuses on the educational relationship between children and thinking. It aims to assist students to understand the role of ideas in children’s learning, the ways in which children can be encouraged to deliberate with regard to ill-defined conceptual issues, and to assist students to understand the relationship of Philosophy for Children to critical and creative thinking.

Educational Foundations courses are also offered as part of the specialization in Philosophy for Children in the Ed.D. in Pedagogy. Please refer to the index for the page number for the Ed.D. in Pedagogy where those courses are described.
ENGLISH

Telephone: (973) 655-4274

In the Master’s program, students may choose course work in British Literature, American Literature, International Literature, or Writing Studies to complement the required core courses and electives. Students are expected to demonstrate the ability to participate in sophisticated scholarly discourse, both orally and in writing.

The program serves as continuing training for in-service teachers and as preparation for doctoral-level work, as well as providing intellectual enrichment. A significant number of M.A. graduates have, in recent years, gone on to doctoral programs at major universities or to teaching positions at community colleges. Others have found the program to be both useful and enhancing to careers in business.

ADMISSION REQUIREMENTS

Candidates for matriculation in the Master of Arts program of this department must show a B average or better in their undergraduate work and a score of not less than 500 (Verbal) on their Graduate Record Examinations. Most applicants will have majored in literature (English, comparative, or foreign) at the undergraduate level. However, students with strong academic credentials may apply even if they do not have the recommended background in literature. The graduate program coordinator will interview each candidate for the program regarding his or her scholastic record and intellectual or professional goals. Students admitted to the graduate program coordinator in English must take at least one course in each academic year in order to maintain matriculation. Exceptions may be made upon application to the departmental graduate program coordinator.

Non-matriculated students must obtain the approval of the departmental graduate coordinator in order to enter graduate courses in English.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN ENGLISH

I. Distribution of course work
   A. Core courses (9 semester hours)
      1. ENGL 605 Seminar in Literary Research ................................. 3
         (to be taken near the beginning of the program)
      2. ENLT 514 Theoretical Approaches to Literature ...................... 3
      3. ENGL 698 Master’s Thesis (to be taken at the end of the program) .. 3
   B. Four courses in one of these four areas of study ...................... 12
      1. British Literature
      2. American Literature
      3. International Literature
      4. Writing Studies
   C. Electives .................................................................................. 12
      Any ENGL, ENLT, or ENWR graduate courses not used to fulfill requirements in “B.” Six credits may be taken outside the English Department with prior permission of the English graduate program coordinator.

Minimum semester hours: 33
II. Foreign Language Requirement
Students are not required to demonstrate a reading knowledge of a foreign language; however, the department provides students with the opportunity to demonstrate such competency by examination in case they wish to present this credential when they apply for admission to doctoral programs. Examinations may normally be given in French, German, Italian, Russian, and Spanish. Other languages may be offered with the approval of the department. Testing arrangements should be made with the graduate program coordinator.

ENGLISH

Course Descriptions
BRITISH LITERATURE

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>ENGL 505 CHAUCER</td>
</tr>
<tr>
<td>An intensive study of the Canterbury Tales and other works against their literary and social backgrounds, with special attention to Chaucer’s language and to the procedures of Chaucerian scholarship. No previous study of Middle English is required.</td>
</tr>
<tr>
<td>ENGL 508 SHAKESPEARE STUDIES: TRAGEDIES</td>
</tr>
<tr>
<td>Shakespeare’s tragic drama against a background of classical and Medieval theories of tragedy, and in relation to the practice of his contemporaries. Consideration is given to Shakespeare’s use of plot sources and to Elizabethan theories of rhetoric.</td>
</tr>
<tr>
<td>ENGL 509 SHAKESPEARE STUDIES: COMEDIES</td>
</tr>
<tr>
<td>Shakespeare’s comic art in the light of comic theory and practice from Aristotle to the present. Areas of analysis include Shakespeare’s use of Roman and native English comedy, his language, characters, and sources, and the traditions of Shakespearean criticism.</td>
</tr>
<tr>
<td>ENGL 510 SHAKESPEARE STUDIES: HISTORIES</td>
</tr>
<tr>
<td>A study of the ten English history plays. Shakespeare’s use of historical sources and variations from historical fact are examined carefully. Attention is given to scholarship, criticism, and production of the history plays.</td>
</tr>
<tr>
<td>ENGL 511 ELIZABETHAN AND JACOBEAN DRAMA</td>
</tr>
<tr>
<td>A comprehensive view of the period of the apex of English drama, from 1550 to the closing of the theaters in 1642. Major works by Elizabethan and Jacobean dramatists other than Shakespeare are studied in the light of Medieval English drama and the new Renaissance theories of Shakespeare’s contemporaries. Attention is given to changes in subject matter, tone, dramaturgy, and staging during the latter part of the period.</td>
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<tr>
<td>ENGL 518 MILTON</td>
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<tr>
<td>Paradise Lost, Paradise Regained, Samson Agonistes, and some of the minor works are analysed intensively. Styles, themes, and techniques are considered in the light of Milton’s life and the political and religious controversies of his times. The poetry is also studied in terms of its relation to Milton’s Italian and classical models, his Elizabethan masters, and his contemporaries.</td>
</tr>
</tbody>
</table>
ENGL 521 THE AUGUSTAN AGE 3
The literature of the Restoration and early eighteenth century in its cultural contexts. Topics include criticism and aesthetics, satire, the new nature poetry, and the relationship between literary forms and philosophical and critical ideas. Emphasis on the works of Dryden, Swift, Pope, Gay, Addison and Steele, and Thomson.

ENGL 532 VICTORIAN STUDIES II: NOVEL 3
The Victorian novel in its historical and cultural contexts, with emphasis on the responses of the most vital art form of the age to the unprecedented changes in English life that took place during the era. Works by Thackeray, Trollope, Dickens, the Brontes, Eliot, and others.

ENGL 533 VICTORIAN STUDIES III: POETRY 3
The course concentrates on the major mid-Victorian poets, Tennyson, Browning, and Arnold, and to a lesser extent on their successors among the pre-Raphaelites, the aesthetes, and the rhymers.

ENGL 535 TURN-OF-THE-CENTURY BRITISH WRITERS 3
An examination of British literature in the transitional period between the late nineteenth and early twentieth centuries. Writers might include Hardy, Conrad, Joyce, and Lawrence. Attention is given to the ways in which their works illuminate the movement from Victorian to modernist thinking and demonstrate the relation between literary consciousness and society.

ENGL 540 THE MODERN BRITISH NOVEL 3
Innovations in characterization, narrative technique, and theme under the impact of major twentieth-century political, economic, and cultural developments. Works by Forster, Huxley, Waugh, Orwell, Greene, Amis, Murdoch, Lessing, and others.

ENGL 597 INDEPENDENT STUDY IN BRITISH LITERATURE 3
The student completes a research project under the supervision of a member of the graduate faculty. This course is designed to allow investigations into areas not covered by regular courses and seminars. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisites: Permission of the graduate program coordinator and of the project supervisor is required before registration.

ENGL 600 SEMINAR IN BRITISH LITERATURE 3
Advanced study of an author, genre, movement, theme, or critical theory. See current announcement for specific topic. Students may repeat the British seminar so long as the topic is different each time.

AMERICAN LITERATURE

ENGL 550 STUDIES IN EARLY AMERICAN LITERATURE 3
All major and several minor American writers of the seventeenth and eighteenth centuries are studied within several contexts: literary, religious, philosophical, and political. Topics include the development of American literature 1620-1800; the effects of puritanism and deism; the concept of the American Dream; the originality of the founding fathers; and the extent to which modern American literature and culture reflect the colonial heritage.
ENGL 555  AMERICAN ROMANTICISM  3
An exploration of the Romantic movement in America with attention to transcendentalism and other social movements. Writers might include Brown, Irving, Cooper, Emerson, Thoreau, Fuller, Louisa May Alcott, and Whitman.

ENGL 556  POE, HAWTHORNE, AND MELVILLE  3
An intensive examination of the writings of the three “Dark Romantics” of the American Renaissance, set against their biographical backgrounds and the literary and historical contexts in which they worked.

ENGL 557  AMERICAN REALISM  3
The development of American realistic fiction, with emphasis on the works of Twain, Howells, and James in relation to their literary heritage and to their social milieu. Attention will also be given to local-color writers, such as Jewett and Freeman, and to naturalist writers, such as Crane, Norris, and London.

ENGL 560  MODERN AMERICAN FICTION  3
After a brief examination of late nineteenth-century realism, the major writers of the twentieth century (up to World War II) are studied with special attention to the critical attitudes of the period and to related scholarship. Authors include Dreiser, Stephen Crane, Sherwood Anderson, Hemingway and Faulkner.

ENGL 561  MODERN AMERICAN POETRY  3
Beginning with background material on late nineteenth-century poetry, the course examines selected major modern poets. The changing scene in modern poetry is noted, and the reading of contemporary poets is included. Works by Hart Crane, Hilda Doolittle, T.S. Eliot, Robert Lowell, Ezra Pound, Wallace Stevens, and others.

ENGL 563  RECENT AMERICAN FICTION  3
American fiction of approximately the last forty years in the context of American culture and traditions. The course analyzes the characteristics of theme, technique, and sensibility which form the basis of a writer’s response to the ambiguities of life in the contemporary world. Works studied might include Bellow, Roth, Didion, Walker, Doctorow, and Morrison.

ENGL 564  AMERICAN DRAMA  3
The major American playwrights, such as Eugene O’Neill, Thornton Wilder, Arthur Miller, and Tennessee Williams, are placed in the perspective of their contemporaries and of traditions of the American stage.

ENGL 565  BLACK AMERICAN WOMEN WRITERS  3
This course explores the writings of Black American women. We will examine the conditions out of which Black women write and the ways in which their works are critiqued and theorized. Discussions will center on questions of race, gender, sexuality, and class; narrative approaches and literary devices; and the Black “womanist” creative tradition.

ENGL 598  INDEPENDENT STUDY IN AMERICAN LITERATURE  3
The student completes a research project under the supervision of a member of the graduate faculty. This course is designed to allow investigations into areas not covered by regular courses and seminars. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisite: Departmental Approval.
ENGL 601 SEMINAR IN AMERICAN LITERATURE  3
Advanced study of an author, genre, movement, theme, or critical theory. See current announcement for specific topic. May be repeated without limit as long as the topic is different each time.

INTERNATIONAL LITERATURE

ENLT 565 IBSEN, STRINDBERG, AND SHAW  3
Intensive study of three great modern playwrights with an emphasis on dramatic theory and criticism, social context, and literary/theatrical values.

ENLT 569 MAJOR WRITERS OF AFRICA AND THE AFRICAN DIASPORA  3
The course will concentrate on literature from sub-saharan Africa and the African diaspora and may include writers from the Caribbean, Asia, and the Americas. Discussion topics may address issues of place; power and its effects, including colonialism and slavery; gender relations, family structures, religious beliefs; the arts and other cultural expressions.

ENLT 571 TRENDS IN THE CONTEMPORARY NOVEL  3
Significant fiction of the last fifty years from at least five countries. Students will be introduced to a variety of fictional forms which will include work from diverse geographical regions.

ENLT 572 MODERN MOVEMENTS IN THE ARTS  3
An interdisciplinary course which considers theories and practices in the arts across cultures, beginning with classical modernism and its contemporary legacies. Emphasis on literature, with attention to the visual arts and/or music and performance.

ENLT 577 FILM STUDIES  3
On a rotating basis, different cultural, historical, and aesthetic aspects of American, British, or world film will be examined. See current announcement. Students may repeat Film Studies so long as the topic is different each time.

ENLT 599 INDEPENDENT STUDY IN INTERNATIONAL LITERATURE  3
The student completes a research project under the supervision of a member of the graduate faculty. This course is designed to allow investigations into areas not covered by regular courses and seminars. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisites: ENGL 106; departmental approval.

ENLT 602 SEMINAR IN INTERNATIONAL LITERATURE  3
Advanced study of an author, genre, movement, theme, or critical theory. See current announcement for specific topic. May be repeated without limit as long as the topic is different.

Prerequisite: Departmental approval.
WRITING STUDIES

ENGL 586  TEACHING WRITING AND THE BASIC WRITER  3
This course explores the social, educational and linguistic foundations of writing instruction with special attention to the problems of the basic writer. Practicing and prospective teachers examine the theory, research and practice of writing instruction through a process of inquiry, workshops and work on their own writing.

ENGL 588  RESEARCH IN WRITING STUDIES  3
An introduction to representative empirical research in composition pedagogy and writing studies. In the first half of the semester students will be introduced to a range of methodologies used in research in writing and composition studies. Inquiry models will include survey, ethnography, case study, the interview. In the second half of the semester students will explore a research question using one or more of the methodologies taught.

ENGL 590  RHETORICAL THEORIES AND THE TEACHING OF WRITING  3
A inquiry into the rhetorical and theoretical roots of current questions, methods and practices of writing instruction—to investigate the possibility that both teaching writing and writing itself are deeply constructed endeavors, rooted in structures of language perception, knowing and being that are often discussed in theoretical discourse.

ENWR 590  GRADUATE WRITING SEMINAR  3
Writing in one or more of the following: essay, scholarly research, autobiography, creative non-fiction, poetry, drama, screenwriting. May be repeated three times for a maximum of twelve semester hours as long as the topic is different.
Prerequisites: Departmental approval.

REQUIRED COURSES

ENGL 605  SEMINAR IN LITERARY RESEARCH  3
Instruction and practical experience in such areas as reference sources, textual study, kinds of criticism, and the basics of editing. Recommended for the first or second semester of graduate study.

ENGL 698  MASTER’S THESIS  3
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take ENGL 699 if they don’t complete ENGL 698 within the semester.
Prerequisite: Departmental approval.

ENGL 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: ENGL 698.

ENLT 514  THEORETICAL APPROACHES TO LITERATURE  3
An in-depth study of late 19th and 20th century theoretical approaches to literature and issues of representation. Critical methodologies to be studied will include: Formalism, Structuralism, Post-Structuralism, Historical Materialism, Psychoanalysis, Feminism, Post-Colonialism and New Historicism. Students will study literary and/or filmic texts along with the critical theories. Does not count towards the International Literature specialization, as this is a required core course.
The Master of Arts degree in Environmental Studies offers concentrations in Environmental Education, Environmental Health, Environmental Management, and Environmental Science. Each of these concentrations is designed for professional careers. Environmental Education serves the needs of teachers; Environmental Health serves the need of health professionals; Environmental Management serves government and business leaders; and Environmental Science serves industry. The program is administered by the Department of Earth and Environmental Studies. The facilities of the New Jersey School of Conservation, operated by the University at Stokes State Forest, and the New Jersey Marine Sciences Consortium are available as an additional resource for the study of the natural environment. The Earth and Environmental department also offers the Doctor of Environmental Management (D.Env.M.) degree.

ADMISSION REQUIREMENTS

The requirements established for all graduate studies and for matriculation at Montclair State University will be followed in respect to this program. Students with weak undergraduate preparation for environmental studies will be required to complete prerequisite courses at the undergraduate level and/or appropriate graduate level.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN ENVIRONMENTAL STUDIES

CONCENTRATION IN ENVIRONMENTAL EDUCATION

<table>
<thead>
<tr>
<th>I. Required Courses (9 semester hours)</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNFS 500 Curriculum Development in Environmental Education (a field practicum)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
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<tr>
<td>CURR 534 Strategies for Curriculum Change</td>
<td>3</td>
</tr>
<tr>
<td>CNFS 610 Administration and Supervision of Environmental Field Study</td>
<td>2</td>
</tr>
<tr>
<td>CNFS 620 Field Laboratory Experiences in Administration and Supervision of Environmental Field Study</td>
<td>1</td>
</tr>
<tr>
<td>ENVR 509 Environmental Change and Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Research Courses (6-9 semester hours)

Select one methods course:

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>ELRS 503 Methods of Research</td>
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<tr>
<td>or</td>
</tr>
<tr>
<td>ENVR 503 Methods in Environmental Research</td>
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<tr>
<td>or</td>
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<tr>
<td>ENVR 721 Research Methods</td>
</tr>
</tbody>
</table>
Select one research option:

- CNFS 601 Advanced Environmental Education Seminar ......................... 2
- CNFS 621 Field Laboratory Experience in Environmental Education ...... 1
- ENVR 695 Research Project in Environmental Studies ............................. 3
- ENVR 698 Master’s Thesis ........................................................................ 6

III. Field Courses (6 semester hours)

Select a minimum of 6 semester hours from the following list:

- BIOL 430 Field Ornithology ..................................................................... 3
- BIOL 521 Field Studies of Flowering Plants ............................................ 3
- CNFS 460 Practicum in Environmental Education ................................. 3
- CNFS 470 Introduction to Wilderness Stewardship .................................. 2
- CNFS 471 Fundamentals of Wilderness Leadership ................................. 3
- CNFS 472 Training for Wilderness Leaders .............................................. 5
- CNFS 495 Workshop on Utilizing Natural Environments ....................... 1
- CNFS 496 Field Study in Humanities and Natural Science ...................... 1
- CNFS 497 Field Studies in Social Studies and Outdoor Recreation .......... 1
- CNFS 501 Outdoor Teaching Sites for Environmental Education (must be taken with CNFS 521) .................................................. 2
- CNFS 502 American Heritage Skills ........................................................ 2
- CNFS 504 Field Techniques for Teaching the Humanities ....................... 3
- CNFS 505 Society and the Natural Environment (must be taken with CNFS 525) ................................................................. 2
- CNFS 510 Environmental Impact of Recreation on Natural Areas ......... 2
- CNFS 511 Field Investigation of Environmental Impact on Natural Areas ................................................................. 1
- CNFS 521 Field Laboratory Experience in Outdoor Teaching Sites for Environmental Education (must be taken with CNFS 505) ....... 1
- CNFS 522 Field Laboratory Experience in American Heritage Skills ..... 1
- CNFS 525 Field Laboratory Experience in Society and the Natural Environment (must be taken with CNFS 505) ......................... 1
- CNFS 601 Advanced Environmental Education Seminar (must be taken with CNFS 621) .................................................. 2
- CNFS 621 Field Laboratory Experience in Environmental Education (must be taken with CNFS 601) .................................................. 1
- GEOS 480 Field Study in Geoscience ...................................................... 4
- GEOS 580 Field Geology ........................................................................... 4
- PHMS 490 Field Methods in the Marine Sciences ................................... 2

IV. Natural Science Courses (6-7 semester hours)

- BIOL 570 Ecology .................................................................................... 3
- BIOL 595/CNFS 595 Conservation Biology ............................................... 3
- GEOS 502 Dynamic Earth ........................................................................ 4
- GEOS 525 Environmental Geoscience ....................................................... 3

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V. Electives

Select a minimum of 3 semester hours from the following list:

- ANTH 411 Archaeological and Field Methods .......................................... 3
- ANTH 534 Anthropology and Education ................................................... 3
- CNFS 503 Humanities and the Environment ............................................ 3
- CNFS 530 Workshop in Wildlife Management Education .................... 1
- CNFS 609 Independent Study in Environmental Curriculum
  Development ........................................................................ 1-4
- CURR 503 Principles of Curriculum Development ................................ 3
- CURR 534 Strategies for Curriculum Change ............................................ 3
- EDFD 540 Social Forces and Education .................................................... 3
- ENVR 410 Environmental Law ................................................................. 3
- ENVR 505 Human Environment .............................................................. 3
- ENVR 508 Environmental Problem Solving ............................................ 3
- ENVR 531 Independent Study in Environmental Studies .................... 1 - 4
- ENVR 551 Natural Resource Management ......................................... 3
- GEOS 501 Air Resource Management .................................................... 3
- GEOS 509 Water Resource Management .............................................. 3
- GEOS 530 Paleocoeology ........................................................................ 3
- GEOS 560 Advanced Marine Geology .................................................... 3
- HLTH 502 Determinants of Environmental Health ................................ 3
- HLTH 532 Air Pollution ............................................................................ 3
- HLTH 565 Foundations of Epidemiology .............................................. 3
- SOCI 565 Sociology of Youth .................................................................... 3

VI. Comprehensive Examination (not required if selecting ENVR 698
Master’s Thesis)

No more than 15 semester hours may be taken from any one subject area.

Minimum semester hours: 33

CONCENTRATION IN ENVIRONMENTAL HEALTH

I. Required courses (18 semester hours)

- BIOL 570 Ecology .................................................................................... 3
- ENVR 508 Environmental Problem Solving ............................................ 3
- ENVR 509 Environmental Change and Communication ...................... 3
- HLTH 502 Determinants of Environmental Health ................................ 3
- HLTH 603 Research Project in Health .................................................... 3

II. Required Electives (12 semester hours)

A minimum of 6 semester hours from elective areas A and B each.

A. Health Services Area

- HLTH 500 Health Aspects of Family Living ............................................ 2
- HLTH 516 Selected Developments in Community Health ..................... 3
- HLTH 528 The Evaluation of Health ..................................................... 3
- HLTH 530 Health Issues Seminar ............................................................ 3
- HLTH 531 Independent Study in Health ................................................. 3
- HLTH 535 History and Foundations of Health I ................................... 3
- HLTH 536 History and Foundations of Health II ................................... 3
- HLTH 565 Foundations of Epidemiology ............................................... 3
### B. Life Sciences Area

- **BIOL 531** Medical Parasitology .................................................. 3
- **BIOL 543** Advances in Immunology ............................................ 3
- **BIOL 553** Microbial Ecology ....................................................... 4
- **GEOS 509** Water Resource Management ................................... 3
- **HLTH 531** Independent Study in Health ....................................... 3
- **HLTH 532** Air Pollution ............................................................... 3

### III. Electives (3 semester hours)

### IV. Comprehensive Examination

Minimum semester hours: 33

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### CONCENTRATION IN ENVIRONMENTAL MANAGEMENT

#### I. Required Courses (15 semester hours)

- **BIOL 570** Ecology ........................................................................ 3
- **ENVR 508** Environmental Problem Solving .................................. 3
- **ENVR 509** Environmental Change and Communication .................. 3
- **ENVR 610** Seminar in Environmental Management ...................... 3
- **ENVR 721** Research Methods ..................................................... 3

#### II. Required Electives (12 semester hours)

A minimum of 6 semester hours from elective areas A and B each

**A. Scientific Data and Concepts Area**

- **ANTH 411** Archeological Field Methods ...................................... 3
- **CHEM 411** Water Analysis and Purification .................................. 3
- **ENVR 410** Environmental Law ................................................... 3
- **ENVR 531** Independent Study in Environmental Studies .............. 1 - 4
- **EUGS 405** Computer Mapping

or

- **GEOS 405** Computer Mapping .................................................. 3
- **GEOS 525** Environmental Geoscience ........................................ 3
- **HLTH 502** Determinants of Environmental Health ...................... 3
- **PHMS 581** Coastal Geomorphology .......................................... 4
- **PSYC 556** Environmental Psychology ........................................ 3

**B. Policy-making, Analysis and Management Area**

- **ECON 501** Economic Analysis .................................................... 3
- **ECON 508** Economics of Public Management .................................. 3
- **ECON 510** Urban Economics: Problems and Policy .................. 3
- **ENVR 505** Human Environment .................................................. 3
- **ENVR 531** Independent Study in Environmental Studies .............. 1 - 4
- **ENVR 551** Natural Resource Management ................................... 3
- **EUGS 550** Urban Studies and Policy Analysis ............................. 3
- **GEOS 501** Air Resource Management ........................................ 3
- **GEOS 509** Water Resource Management .................................... 3
- **GEOS 513** Waste Management .................................................. 3
- **PSYC 553** Urban Psychology ...................................................... 3

#### III. Electives (6 semester hours)

#### IV. Comprehensive Examination

Minimum semester hours: 33
# CONCENTRATION IN ENVIRONMENTAL SCIENCE

## I. Required courses (15 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 570</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 525</td>
<td>Environmental Geoscience</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 575</td>
<td>Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 658</td>
<td>Seminar in Environmental Graphics</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 502</td>
<td>Determinants of Environmental Health</td>
<td>3</td>
</tr>
</tbody>
</table>

## II. Required Electives (12 semester hours)

A minimum of 6 semester hours from elective areas A and B each

### A. Bio-ecology Area

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BICL 505</td>
<td>Bacteriological Techniques in Marine Sampling</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 430</td>
<td>Field Ornithology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 467</td>
<td>Biology of the Fishes</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 521</td>
<td>Field Studies of Flowering Plants</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 522</td>
<td>Plant Pathology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 531</td>
<td>Medical Parasitology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 532</td>
<td>Advanced Entomology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 543</td>
<td>Advances in Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 550</td>
<td>Topics in Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 553</td>
<td>Microbial Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 571</td>
<td>Physiological Plant Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 572</td>
<td>Wetland Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 573</td>
<td>Shoreline Ecology</td>
<td>4</td>
</tr>
<tr>
<td>PHMS 565</td>
<td>Tidal Marsh Ecology</td>
<td>4</td>
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</tbody>
</table>

### B. Physical Environment Area

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 411</td>
<td>Water Analysis and Purification</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 570</td>
<td>Advanced Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 509</td>
<td>Water Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 530</td>
<td>Paleocology</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 537</td>
<td>Biostratigraphy of New Jersey</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 560</td>
<td>Advanced Marine Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 571</td>
<td>Geophysics</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 573</td>
<td>Nuclear Geophysics</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 532</td>
<td>Air Pollution</td>
<td>3</td>
</tr>
<tr>
<td>PHMS 581</td>
<td>Coastal Geomorphology</td>
<td>4</td>
</tr>
</tbody>
</table>

## III. Electives (6 semester hours)

## IV. Comprehensive Examination

Minimum semester hours: 33

**Note:**

1. Electives for all these concentrations may be added by the college. The graduate program coordinator should be contacted before any are selected by the student.
2. It is the student’s responsibility to file for the comprehensive examination with the graduate program coordinator. At that time, information will be given concerning the nature and scope of the examination.
## Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR 508</td>
<td>ENVIRONMENTAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The purpose of this course is to train students to</td>
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<tr>
<td></td>
<td>define environmental problems, develop their skills</td>
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<tr>
<td></td>
<td>in solving these problems, as well as commitment to</td>
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<tr>
<td></td>
<td>work toward their solution. Each lesson consists of</td>
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<td></td>
<td>student preparation of reading selected articles,</td>
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<tr>
<td></td>
<td>classroom orientation, field trips, and the</td>
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<tr>
<td></td>
<td>student-instructor follow-up. Field trip topics</td>
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<td></td>
<td>include pedestrian/vehicle conflict, school site</td>
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<td></td>
<td>development, plants as a city resource, urban/rural</td>
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<td></td>
<td>recreation, sign ordinances, transportation and</td>
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<tr>
<td></td>
<td>similar topics.</td>
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<tr>
<td>ENVR 509</td>
<td>ENVIRONMENTAL CHANGE AND COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prepare students as professional environmentalists:</td>
<td></td>
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<tr>
<td></td>
<td>communication and journalism strategies, theory of</td>
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<td></td>
<td>persuasion, and roles as catalyst, solution giver,</td>
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<td></td>
<td>process helpers, and resource person.</td>
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<tr>
<td>ENVR 531</td>
<td>INDEPENDENT STUDY IN ENVIRONMENTAL STUDIES</td>
<td>1 - 4</td>
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<tr>
<td></td>
<td>Student must develop statement of goals and phasing</td>
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<td></td>
<td>for completion, prior to consultation with instructor.</td>
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<tr>
<td></td>
<td>May be repeated three times for a maximum of ten</td>
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<tr>
<td></td>
<td>semester hours as long as the topic is different.</td>
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<tr>
<td>ENVR 551</td>
<td>NATURAL RESOURCE MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Provide background in natural resource management;</td>
<td></td>
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<tr>
<td></td>
<td>wildlife, fisheries, forests, water and related</td>
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<td></td>
<td>components. Includes field trips.</td>
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<tr>
<td>ENVR 610</td>
<td>SEMINAR IN ENVIRONMENTAL MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This is a methods seminar focusing on the techniques</td>
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<tr>
<td></td>
<td>of managing a project with environmental significance.</td>
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<tr>
<td></td>
<td>Students will design and plan in detail a project to</td>
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<tr>
<td></td>
<td>improve an existing environmental problem or to</td>
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<td></td>
<td>implement an economically important project that</td>
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<tr>
<td></td>
<td>would minimize environmental problems.</td>
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<tr>
<td>ENVR 655</td>
<td>ADVANCED ENVIRONMENTAL REMOTE SENSING AND IMAGE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PROCESSING</td>
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<tr>
<td></td>
<td>This course provides a forum to explore cutting</td>
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<td>edge advances in remote sensing of the environment</td>
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<tr>
<td></td>
<td>afforded by new satellite and aircraft based imaging</td>
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<tr>
<td></td>
<td>platforms and to provide facility with image</td>
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<tr>
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<td>processing (IP) and geographic information systems</td>
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<tr>
<td></td>
<td>(GIS) software. Topics covered include multispectral,</td>
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<tr>
<td></td>
<td>hyperspectral and multiangular reflectance data,</td>
<td></td>
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<tr>
<td></td>
<td>very high resolution panchromatic imagery, active</td>
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<tr>
<td></td>
<td>radar and lidar systems, microwave imagery, advanced</td>
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<tr>
<td></td>
<td>spatial and statistical raster analysis, and</td>
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<tr>
<td></td>
<td>interfaces to GIS.</td>
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<tr>
<td></td>
<td>Prerequisite: Matriculation in a graduate program or</td>
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<tr>
<td></td>
<td>permission of the graduate program coordinator.</td>
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<tr>
<td>ENVR 695</td>
<td>RESEARCH PROJECT IN ENVIRONMENTAL STUDIES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To complete the research proposal initiated in the</td>
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<tr>
<td></td>
<td>research methods course.</td>
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<td></td>
<td>Prerequisite: Departmental approval.</td>
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</tbody>
</table>
**ENVR 698**  
**MASTER’S THESIS**  
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take ENVR 699 if they don’t complete ENVR 698 within the semester.  
*Prerequisite: Departmental approval.*

**ENVR 699**  
**MASTER’S THESIS EXTENSION**  
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.  
*Prerequisite: ENVR 698.*

**ENVR 721**  
**RESEARCH METHODS**  
Advanced research techniques, beginning with census reports, government surveys and reports from other agencies. Field research, both cultural and physical; mapping techniques; the design of appropriate scale and data transformation to familiarize the range of possibilities and the need for careful choice of data and maps. Computer applications in geographic problem solving.  

**EUGS 504**  
**PRO-SEMINAR**  
Research on selected problems which will vary according to instructor. May be repeated once for a maximum of eight semester hours as long as the topic is different each time.  

**EUGS 680**  
**SPATIAL ANALYSIS**  
This course will introduce students to techniques for the analysis of spatial data. The course will heavily utilize GIS and Remote Sensing data with particular attention to applications and manipulation techniques. Topics include characterizing spatial data, data sampling, visualization, data modeling, point pattern analysis, and spatial data interaction.  
*Prerequisite: A GIS course (EUGS 470 or higher).*

**GEOS 501**  
**AIR RESOURCE MANAGEMENT**  
Spatial distribution of energy in the atmosphere treated in terms of natural factors and man’s induced changes (atmospheric pollution). Incoming sun energy as modified by man is traced through the atmosphere, vegetation, soil and water.  
*Prerequisite: For majors in College of Science and Mathematics.*

**GEOS 502**  
**THE DYNAMIC EARTH**  
Origin, evolution and history of the earth. Internal and external processes by which minerals and rocks form and are modified. Interpretation of rock features and structures and significance of the fossil record. Plate tectonics, geomorphology, oceanography, and meteorology. The course is conducted at a more rigorous level than introductory, undergraduate courses. Research project and field trips are required. (3 hours lecture, 2 hours lab.)  
*Prerequisites: Not open to graduates of a geology or geoscience program.*

**GEOS 509**  
**WATER RESOURCE MANAGEMENT**  
The spatial patterns of the water resource both as surface water and ground water. Processes affecting availability and techniques of estimation are stressed.  
*Prerequisite: For majors in College of Science and Mathematics.*
GEOS 525  ENVIRONMENTAL GEOSCIENCE  3
In-depth study of the relationships between man and the physical environment of atmosphere, hydrosphere and lithosphere. Particular attention to problems of mineral resource and fossil-fuel depletion; pollution of air, water and soils and waster disposal and recycling, simple computer modeling of environmental situations. (3 hours lecture.)
Prerequisite: For majors in College of Science and Mathematics.

GEOS 530  PALEOECOLOGY  3
Distribution and association of fossils as interpreted from the evidence presented in the geologic record. Detailed paleoecological field study made of selected faunal assemblages. (2 hours lecture; 2 hours lab.)
Prerequisite: Biology major, or Geoscience major, or Environmental Studies major with a concentration in Environmental Science.

GEOS 552  APPLIED GROUNDWATER MODELING  4
Introduction to groundwater flow and contaminant transport modeling, using a variety of current software packages. Saturated and unsaturated media will be considered. Emphasis is on application of models to the solution of common problems encountered in hydrology industry and research. (3 hours lecture; 2 hours lab.)
Prerequisites: Undergraduate hydrogeology course and college-level calculus or departmental approval.

GEOS 575  GEOCHEMISTRY  3
Chemical laws and principles applied to the earth, chemical composition of the earth, distribution and relative abundance of the elements. Radioactive materials, atmospheric precipitation of geochemicals, the geochemistry of polluted water (including solid and liquid wastes) study of meteorites. Required field trips. (3 hours lecture.)
Prerequisites: For majors in the College of Science and Mathematics.

GEOS 590  RESEARCH SEMINAR  3
Student field, laboratory, and library investigation of a problem in the area of his or her interest in geoscience, the results of which will be presented in oral and written form. Class discussion of the individual papers and of other pertinent topics of current interest in geoscience.
Prerequisite: Geoscience major.

GEOS 592  SPECIAL PROBLEMS IN GEOSCIENCE  1-4
Independent research project to be performed by the student under the guidance of the faculty.
Prerequisite: Departmental approval.

GEOS 594  RESEARCH IN GEOSCIENCE LITERATURE  1
Investigation and evaluation of a topic in geoscience under the supervision of a faculty member by: (1) preparing a bibliography from standard sources, including an on-line computer search; and, (2) preparing a report written in standard professional format.
Prerequisite: Geoscience major.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOS 658</td>
<td>SEMINAR IN ENVIRONMENTAL GRAPHICS</td>
<td>3</td>
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<td>The use of graphic materials suitable for analyzing, understanding and presenting aspects of the environment through seminar presentation. The preparation of illustrative materials, especially suitable for inclusion in environmental impact statements as well as for public presentation, will be developed by each student as a culminating research project. <strong>Prerequisites: For majors in the College of Science and Mathematics.</strong></td>
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<tr>
<td>GEOS 698</td>
<td>MASTER’S THESIS</td>
<td>4</td>
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<td></td>
<td>Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take GEOS 699 if they don’t complete ENVR 698 within the semester. <strong>Prerequisite: Departmental approval.</strong></td>
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</tr>
<tr>
<td>GEOS 699</td>
<td>MASTER’S THESIS EXTENSION</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given. <strong>Prerequisite: GEOS 698.</strong></td>
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</tbody>
</table>
EXERCISE SCIENCE AND
PHYSICAL EDUCATION

Telephone: (973) 655-5253

MASTER OF ARTS DEGREE IN PHYSICAL EDUCATION

The graduate program in Physical Education, which is housed in Exercise Science and Physical Education department, provides students the opportunity to pursue advanced study in the general field of physical education, and to develop competency in an area of concentration. Concentrations are offered in Teaching and Supervision of Physical Education, Coaching and Sports Administration, and Exercise Sciences. The program is designed to develop and enhance competencies necessary for teaching in school programs, coaching of athletics, conducting individualized exercise programs, administration of physical education and/or athletics, and administration of specialized exercise programs in a non-school setting.

Both theoretical and practical approaches are emphasized throughout the program. In addition to course work in an area of concentration, all students complete a core of required courses including philosophical and sociological foundations of sport and physical education. Analytical skills are developed through a sequence of courses culminating in a research project. A comprehensive examination is required of all degree candidates.

Facilities for research in motor learning, biomechanics, and exercise physiology are provided in the Speidel Human Performance Laboratory. These facilities are available for classwork and independent research by students and faculty.

The Department of Exercise Science and Physical Education is a member of the Panzer School Council and is administered by the College of Education and Human Services. The Master of Arts degree with a major in Physical Education has been offered at Montclair State since 1964.

ADMISSION REQUIREMENTS

All applicants must meet the basic admission requirements for graduate study at Montclair State. Applicants for the concentration in Teaching and Supervision of Physical Education must have a bachelor’s degree with a major in Physical Education, or a teaching certificate in Physical Education. For the concentration in Coaching and Sports Administration, a bachelor’s degree with evidence of coursework in anatomy and physiology, motor learning, kinesiology, and philosophy/principles of coaching is required. For the concentration in Exercise Sciences, applicants must have a bachelor’s degree with evidence of coursework in anatomy and physiology, chemistry, physiology of exercise, and nutrition. Students lacking adequate preparation may be required to take additional coursework at the undergraduate level as a prerequisite to matriculation in the master’s program.
REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN PHYSICAL EDUCATION

I. Required Courses (14 semester hours)
   PEMJ 575 Philosophical and Sociological Foundations of Sport and Physical Education .................................................. 3
   PEMJ 579* Analytic Methods in Physical Education .......................................................... 3
   PEMJ 503 Research Methods in Physical Education .................................................. 3
   PEMJ 505 Research Seminar in Physical Education .................................................. 1
   PEMJ 603 Research Project ................................................................................................ 4
   (Full year course, register in Fall only)
   *Course 579 must be completed before 503 and both 503 and 505 must be completed before 603.

II. Concentrations (15 semester hours)
   In addition to the required courses above, students must complete 15 semester hours in one of the following concentrations.
   A. Teaching and Supervision of Physical Education*
      PEMJ 556 Advanced Motor Learning .......................................................... 3
      PEMJ 557 Human Motor Development .................................................. 3
      PEMJ 560 Curriculum in Physical Education ............................................ 3
      PEMJ 565 Reflective Teaching in Physical Education .......................... 3
      PEMJ 577 Supervision in Physical Education ....................................... 3
      *The supervisory certificate may be obtained with appropriate selection of elective courses.
   B. Coaching and Sports Administration
      PEMJ 508 Administration and Supervision of Athletics and Coaching .................................................. 3
      PEMJ 554 Orientation to Sports Medicine .................................................. 3
      PEMJ 555 Biomechanical Analysis of Movement and Sports Skills .... 3
      PEMJ 556 Advanced Motor Learning .......................................................... 3
      PEMJ 559 Applied Sport Psychology .......................................................... 3
   C. Exercise Sciences
      PEMJ 539 Advanced Exercise Physiology .................................................. 3
      PEMJ 540 Applied Exercise Physiology .................................................. 3
      PEMJ 541 Aerobic Exercise: Testing and Programming .................................. 3
      PEMJ 542 Applied Cardiac Rehabilitation .................................................. 3
      PEMJ 543 Anaerobic Exercise: Testing and Programming ........................ 3
   III. Free Electives ..................................................................................................... 6
   Any graduate course for which a student meets prerequisites is acceptable. Students with specific goals should confer with the graduate program coordinator for recommended electives.

IV. Comprehensive Examination
   All students are required to complete a comprehensive examination during the last year of their study. The examination is given in October and March. Application forms are available in the Graduate School and must be filed at least six weeks before the examination with the graduate program coordinator in Physical Education. The examination consists of two questions from the concentration area and one question related to philosophy/sociology of physical education, sport, and
fitness. Candidates are limited to three attempts to successfully complete the examination.

Minimum semester hours: 35

Note: The following PEMJ courses are general electives within the program:
- PEMJ 492 Selected Topics in Physical Education
- PEMJ 516 Comparative Physical Education
- PEMJ 531 Practicum in Physical Education for the Handicapped
- PEMJ 535 Advanced Management of Wellness Programs
- PEMJ 548 Practicum in Individualized Exercise Programs
- PEMJ 550 Survey of Literature and Trends in Physical Education
- PEMJ 552 Seminar in Current Problems in Athletics
- PEMJ 553 A Neurological Approach to Motor Learning and Performance

A list of suggested electives from other departments is available from the graduate program coordinator.

PHYSICAL EDUCATION

Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>PEMJ 503</td>
<td>RESEARCH METHODS IN PHYSICAL EDUCATION</td>
<td>3</td>
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<tr>
<td></td>
<td>An introduction to the theory and methods of historical, descriptive and experimental methods of research in physical education. Topics include the nature of research, interpretation of data and design of research.</td>
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<td><em>Prerequisite: PEMJ 579.</em></td>
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<tr>
<td>PEMJ 505</td>
<td>RESEARCH SEMINAR IN PHYSICAL EDUCATION</td>
<td>1</td>
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<tr>
<td></td>
<td>Provides for the examination of current research topics in physical education, sport, and exercise sciences. Each student will conduct an in-depth review and analysis of literature related to a specific research topic, and develop a formal research proposal.</td>
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<td></td>
<td><em>Prerequisite: PEMJ 503 and 579.</em></td>
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<tr>
<td>PEMJ 508</td>
<td>ADMINISTRATION AND SUPERVISION OF ATHLETICS AND COACHING</td>
<td>3</td>
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<td></td>
<td>Underlying principles and desirable practices from the point of view of the administrator and supervisor, and of the person supervised and subjected to administrative policies. Interviewing, observation, conducting conferences and administrative considerations.</td>
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<tr>
<td>PEMJ 531</td>
<td>PRACTICUM IN PHYSICAL EDUCATION FOR THE HANDICAPPED</td>
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<td>Practical experience with mentally retarded, emotionally disturbed, physically handicapped or sensory handicapped persons. Requirement is for 120 hours (including conference time).</td>
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<td><em>Prerequisites: PEMJ 557 and instructor’s permission.</em></td>
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<tr>
<td>PEMJ 535</td>
<td>ADVANCED MANAGEMENT OF WELLNESS PROGRAMS</td>
<td>3</td>
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<td></td>
<td>An in-depth study of the role and responsibilities of management in wellness programs with an emphasis on programs in physical education, sport, and fitness. Current theories and practices will be examined, including specific techniques for carrying out management tasks and responsibilities.</td>
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</tbody>
</table>
PEMJ 539 ADVANCED EXERCISE PHYSIOLOGY 3
An advanced course in exercise physiology. Topics include muscular contraction; bioenergetics; energy expenditure; acid-base balance; gas exchange; and the cardiovascular, pulmonary, endocrine, and nervous system responses to acute exercise.
Prerequisite: PEMJ 220 or permission of instructor.

PEMJ 540 APPLIED EXERCISE PHYSIOLOGY 3
An advanced course in applied exercise physiology. Topics include physiological adaptations to chronic exercise, dietary manipulation, pharmacological intervention, and environmental stressors; the underlying mechanisms affecting those physiological adaptations; and the effect of those adaptations on human physical performance. Body composition assessment and interventions to change body composition are also discussed.
Prerequisites: PEMJ 539 or permission of instructor.

PEMJ 541 AEROBIC EXERCISE: TESTING AND PROGRAMMING 3
This course focuses on developing the skills necessary to conduct aerobic fitness testing and to prepare aerobic exercise prescriptions/programs. Topics include aerobic fitness testing protocols, assessment of various physiological variables during exercise testing, and aerobic exercise prescription/programs for healthy and special populations.
Prerequisite: PEMJ 539 or permission of instructor.

PEMJ 542 APPLIED CARDIAC REHABILITATION 3
This course is designed to provide the student with current information regarding the application of scientific and programming principles of cardiac rehabilitation in a variety of settings. Students are also given the opportunity to work with actual cardiac rehabilitation patients in an appropriate hospital setting.
Prerequisites: PEMJ 539 or permission of instructor.

PEMJ 543 ANAEROBIC EXERCISE: TESTING AND PROGRAMMING 3
The course is an advanced course in neuromuscular resistance training and conditioning and flexibility training. Topics include anaerobic and flexibility fitness testing protocols, and anaerobic and flexibility exercise prescriptions/programs for healthy and special populations.
Prerequisite: PEMJ 539 or permission of instructor.

PEMJ 544 ADMINISTRATION OF SPECIALIZED EXERCISE PROGRAMS 3
This course provides information concerning principles of administration, staffing, facilities, equipment, and finance to prepare the student to administer specialized exercise programs in a variety of settings.

PEMJ 548 PRACTICUM IN INDIVIDUALIZED EXERCISE PROGRAMS 3 - 6
This course provides the student the opportunity for practical experience in the application of individualized exercise prescriptions for asymptomatic and/or symptomatic individuals in a variety of non-school settings.
Prerequisites: Completion of required courses within area of specialization in exercise sciences (12 s.h.) or permission of instructor.
PEMJ 552  SEMINAR IN CURRENT PROBLEMS IN ATHLETICS  3
The organization, planning and administration of intramural and interscholastic sports programs for men and women. Program development, scheduling, promotion and conduct of the program and personnel selection. Other persistent problems identified by the students will be discussed as will trends in such areas as sports media, coaching and officiating.

PEMJ 554  ORIENTATION IN SPORTS MEDICINE  3
New techniques, materials, modalities and problems related to the prevention and care of athletic injuries; current developments in the field; new conditioning concepts and activities for both the athlete and non-athlete.
Prerequisites: Courses in kinesiology, physiology of exercise and prevention and care of athletic injuries, or permission of instructor.

PEMJ 555  BIOMECHANICAL ANALYSIS OF MOVEMENT AND SPORT SKILLS  3
The examination of internal and external forces that act upon a human body and the effects produced by these forces during the performance of movement and sport skills. Application of techniques for measuring and diagrammatically representing these forces.

PEMJ 556  ADVANCED MOTOR LEARNING  3
An analysis of theory and research related to the processes involved in the learning and performance of motor skills, including information processing, neuropsychological mechanisms of motor control, structure of practice, and factors in memory/retention. Emphasis will be placed on application of principles of motor learning and control to the teaching/coaching of motor skills.

PEMJ 557  HUMAN MOTOR DEVELOPMENT  3
An analysis of theory and research related to the process of human motor development, including prenatal concerns, the interaction of cognitive and motor ability, and the development of fundamental movement patterns. Emphasis will be placed on assessment of motor development and implications for physical education programs.

PEMJ 559  APPLIED SPORT PSYCHOLOGY  3
This course provides an in-depth analysis of the theories and techniques of sport psychology. Student will learn how to apply these skills to the teaching and coaching situations in order to optimize the performance of students and athletes.

PEMJ 560  CURRICULUM IN PHYSICAL EDUCATION  3
This course provides an analysis of current curricular models for physical education programs grades K-12. Strategies for curriculum change are also examined, and students have opportunities to apply theories of curriculum development to actual school settings.

PEMJ 565  REFLECTIVE TEACHING IN PHYSICAL EDUCATION  3
The focus of this course is on reflective practice. In particular, specific strategies for reflection will be presented, and different ways of studying teaching behavior and teaching effectiveness will be explored.

PEMJ 575  PHILOSOPHICAL AND SOCIOLOGICAL FOUNDATIONS OF SPORT AND PHYSICAL EDUCATION  3
The historical development of modern physical education programs. The sociological factors affecting behavior in modern society applied to teaching and coaching situations.
PEMJ 577  SUPERVISION IN PHYSICAL EDUCATION  3
An analysis of theory and research related to supervision in facilitating effective teaching
to provide pupils with appropriate learning experiences in Physical Education programs.
Prerequisite: PEMJ 565.

PEMJ 579  ANALYTIC METHODS IN PHYSICAL EDUCATION  3
An introduction to descriptive and inferential statistics, both parametric and nonparamet-
ric. Analytic methods will be applied to specific problems in physical education, and
microcomputer programs will be used to analyze behavioral data.

PEMJ 580  INDEPENDENT STUDY IN PHYSICAL EDUCATION  1 - 3
An experience in the pursuit of study of topics which may be outside the scope of regular
curricular offerings or may be an extension of a course or courses. Completion and
approval of independent study application form required prior to registration. May be
repeated for a maximum of three semester hours.
Prerequisite: Departmental approval.

PEMJ 603  RESEARCH PROJECT  4
Guidance is provided in developing and conducting a research project in physical
education. Each student is required to conduct an investigation of a specific problem and
to submit a written report of the completed project to the faculty of the department of
physical education. Full year course. Register fall only.
Prerequisite: PEMJ 503.

PEMJ 698  MASTER’S THESIS  4
Independent research project done under faculty advisement. Students must follow the
MSU Thesis Guidelines, which may be obtained from the Graduate School. Students
should take PEMJ 699 if they don’t complete PEMJ 698 within the semester.
Prerequisite: Departmental approval.

PEMJ 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In
Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: PEMJ 698.
The Family and Child Studies department provides students with a greater understanding of multiple ways of knowing families and children in various contexts. It enables students to critically analyze the literature and to keep abreast of trends in research. The faculty creates a learning environment that supports and encourages the development of forward thinking practitioners and educators who work with families and children in a variety of settings. Note: The master’s degree program is currently being revised. For additional information contact the department chairperson.

### FAMILY AND CHILD STUDIES

#### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCST 501</td>
<td>SEMINAR IN FAMILY AND CHILD STUDIES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Identification of the issues in family and child studies.</td>
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<td></td>
<td>Trends are analyzed as a basis for managing change.</td>
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<td>Each participant will design a project and plans for</td>
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<td></td>
<td>implementation.</td>
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<tr>
<td>FCST 503</td>
<td>PROGRAM DEVELOPMENT IN FAMILY LIFE EDUCATION</td>
<td>3</td>
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<tr>
<td></td>
<td>Analysis of the development of family living programs.</td>
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<td>Current problems, practices, and trends.</td>
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<td>Designing and planning for the implementation of</td>
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<td></td>
<td>innovative programs.</td>
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<tr>
<td>FCST 507</td>
<td>RESEARCH IN FAMILY AND CHILD STUDIES</td>
<td>3</td>
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<tr>
<td></td>
<td>Designed to provide basic research and statistical literacy</td>
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<td>so that the student can develop a research proposal in its</td>
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<td></td>
<td>entirety in family and child studies.</td>
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<td></td>
<td>Prerequisites: FCST 304; Family and Child Studies majors</td>
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<td></td>
<td>only.</td>
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<tr>
<td>FCST 508</td>
<td>INDEPENDENT STUDY IN FAMILY AND CHILD STUDIES</td>
<td>1 - 3</td>
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<tr>
<td></td>
<td>An opportunity to study in-depth areas of family and child</td>
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<td></td>
<td>studies, which are not offered in the regular curriculum.</td>
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<td>May be repeated for a maximum of six semester hours as long</td>
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<td>as the topic is different.</td>
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<td></td>
<td>Prerequisite: Departmental approval.</td>
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<tr>
<td>FCST 509</td>
<td>RESEARCH SEMINAR</td>
<td>3</td>
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<tr>
<td></td>
<td>Carrying out a research study on specific problems of</td>
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<td></td>
<td>limited scope.</td>
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<td></td>
<td>Prerequisite: FCST 507.</td>
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<tr>
<td>FCST 512</td>
<td>CHILD DEVELOPMENT I:</td>
<td>3</td>
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<tr>
<td></td>
<td>THEORIES OF CHILD DEVELOPMENT</td>
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<tr>
<td></td>
<td>This course both examines and critiques the standard</td>
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<td>theories of so-called “normative” child development, along</td>
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<td>with newer contextual models that consider the role</td>
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<td>of oppressive structures in the lives of children.</td>
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<tr>
<td>FCST 514</td>
<td>CHILD IN THE FAMILY</td>
<td>3</td>
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<tr>
<td></td>
<td>An intensive study of the theories and research related to</td>
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<tr>
<td></td>
<td>child rearing techniques.</td>
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<tr>
<td></td>
<td>Analysis of factors influencing parental practices and</td>
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<td></td>
<td>their effects on the child.</td>
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</tbody>
</table>
FCST 518  FAMILIES, COMMUNITIES, AND SCHOOLS: DIVERSITY, CULTURE, AND DEMOCRACY  
Provides students with an understanding of how social and cultural influences shape children’s development and learning. The relationships among teacher, parent, child, and community as they affect learning will be explored. Methods for developing school/family partnerships will be discussed. Students will learn to take into account issues of child diversity and culturally responsive teaching as they create learning experiences. Cross listed with Early Childhood, Elementary, and Literacy Education, ECEL 518.

FCST 540  INTERDISCIPLINARY STUDY OF FAMILY  
Contributions which various academic disciplines (history, anthropology, biology, economics, as well as psychology and sociology) make toward a more comprehensive understanding of family life.

FCST 542  DYNAMICS OF FAMILY INTERACTION  
Critical review of concepts and theories, both psychological and sociological, currently used in understanding patterns and problems of family relationships.

FCST 544  INTERCULTURAL STUDY OF FAMILY  
Analytical study of cross cultural regularities and differentials in family structures. Functions and impact of social change on family values and patterns. Varied conceptual approaches to the study of family as well as a broad acquaintance with empirical studies and research.

FCST 535  CONSUMER AND FAMILY LAW  
Laws and policies of institutions which affect family function, relationships and welfare.

FCST 570  MANAGEMENT OF FAMILY RESOURCES  
Family as a decision-making unit. Directing its resources for more effective living. Philosophical, psychological, sociological and economic trends which have a direct influence on family’s ability to maximize its resource potential and utilization.

FCST 590  SELECTED TOPICS IN FAMILY AND CHILD STUDIES  
An in-depth study of a current selected topic. Topics may be interdisciplinary in nature. Topics will be announced in the course schedule book. May be repeated twice for a maximum of nine semester hours as long as the topic is different. 
Prerequisite: Departmental approval.

FCST 698  MASTER’S THESIS  
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take FCST 699 if they don’t complete FCST 698 within the semester. 
Prerequisite: Departmental approval.

FCST 699  MASTER’S THESIS EXTENSION  
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given. 
Prerequisite: FCST 698.
The graduate program in French is designed to prepare students for both teaching and research in language and literature. A Master of Arts degree opens opportunities to teach in both community colleges and high schools, and provides a solid foundation for students interested in continuing their studies toward a Doctor of Philosophy degree. Graduate training in French is also increasingly useful for positions in government industries, and media concerned with French-speaking areas of the world.

**ADMISSION REQUIREMENTS**

Admission is open to students who hold a bachelor’s degree and have completed at least 24 semester hours of undergraduate French or its equivalent. Students applying for admission must satisfy the standard University requirements for admission to graduate study.

After acceptance, the candidates will consult the graduate program coordinator to plan their programs. Transfer credit and curriculum substitutions must be authorized by the graduate program coordinator and student schedules must be approved each semester. Courses will be offered on a rotating basis to allow diversity of offerings. Please consult department chairperson for details.

Individuals holding the bachelor’s degree and showing an adequate proficiency in French may enroll in graduate courses, even though they do not wish to enter the Master of Arts program, by completing an application for admission as a non-degree student.

**REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN FRENCH, FRENCH LITERATURE CONCENTRATION**

The concentration in Literature gives students the opportunity to explore the various authors as well as literary trends and developments that have typified France and its former colonies over the centuries. It allows students to build a solid foundation in literary research, analysis and appreciation. Students may build their own fields of inquiry by combining required courses and electives that specifically target their area of interest. The concentration in literature provides valuable background in French/Francophone literatures and cultures for those students planning to teach at the high school and college levels or preparing for doctoral study.

<table>
<thead>
<tr>
<th>Semester Hours</th>
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</thead>
</table>

I. Required Courses (6 semester hours)

- FREN 508  Explication de Texte and Stylistic Analysis ......................... 3
- FREN 603  Research Seminar ................................................................. 3

Two courses from each of the following three categories (18 semester hours)

A. **Medieval, Renaissance, and Classical French Literature**

- FREN 511  Medieval French Literature .................................................. 3
- FREN 513  Medieval French Theatre ....................................................... 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>FREN 514</td>
<td>Medieval French Seminar</td>
<td>3</td>
</tr>
<tr>
<td>FREN 516</td>
<td>French Humanism in the Sixteenth-Century</td>
<td>3</td>
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<tr>
<td>FREN 517</td>
<td>Poetry of the Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>FREN 518</td>
<td>Sixteenth-Century Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 525</td>
<td>Moralists of the Seventeenth-Century</td>
<td>3</td>
</tr>
<tr>
<td>FREN 526</td>
<td>Corneille, Racine and Moliere</td>
<td>3</td>
</tr>
<tr>
<td>FREN 527</td>
<td>Selected Topics in Seventeenth-Century French Literature</td>
<td>3</td>
</tr>
<tr>
<td>B. Enlightenment and Revolution in French Literature</td>
<td></td>
<td></td>
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<tr>
<td>FREN 530</td>
<td>Philosophy and Politics in Eighteenth-Century France</td>
<td>3</td>
</tr>
<tr>
<td>FREN 531</td>
<td>The Development of the Novel in Eighteenth-Century France</td>
<td>3</td>
</tr>
<tr>
<td>FREN 532</td>
<td>Eighteenth-Century Seminar</td>
<td>3</td>
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<tr>
<td>FREN 537</td>
<td>Nineteenth-Century French Theatre</td>
<td>3</td>
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<tr>
<td>FREN 538</td>
<td>French Novel of the Nineteenth-Century I</td>
<td>3</td>
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<tr>
<td>FREN 539</td>
<td>French Novel of the Nineteenth-Century II</td>
<td>3</td>
</tr>
<tr>
<td>FREN 540</td>
<td>Nineteenth-Century French Poetry</td>
<td>3</td>
</tr>
<tr>
<td>FREN 541</td>
<td>Nineteenth-Century Seminar</td>
<td>3</td>
</tr>
<tr>
<td>C. Modern French and Francophone Literatures</td>
<td></td>
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<tr>
<td>FREN 509</td>
<td>Critical Approaches to Literature</td>
<td>3</td>
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<tr>
<td>FREN 542</td>
<td>Twentieth-Century French Theatre</td>
<td>3</td>
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<tr>
<td>FREN 543</td>
<td>Twentieth-Century French Poets</td>
<td>3</td>
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<tr>
<td>FREN 544</td>
<td>Twentieth-Century French Novel I</td>
<td>3</td>
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<tr>
<td>FREN 545</td>
<td>Twentieth-Century French Novel II</td>
<td>3</td>
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<tr>
<td>FREN 546</td>
<td>Twentieth-Century Seminar</td>
<td>3</td>
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<tr>
<td>FREN 547</td>
<td>Francophone Literature</td>
<td>3</td>
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<tr>
<td>FREN 548</td>
<td>Contemporary French Civilization: Selected Topics</td>
<td>3</td>
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<tr>
<td>FREN 549</td>
<td>Contemporary Francophone Civilization Seminar</td>
<td>3</td>
</tr>
<tr>
<td>FREN 551</td>
<td>Women Writers from North Africa</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Culminating Activity and Electives (choose option A or B) (minimum 9 semester hours)

A. Thesis Option (10 semester hours)

- FREN 698 Master’s Thesis ........................................ 4
- Two electives from the list of French Electives ....... 6

(The list of French electives is printed after the French Studies Concentration.)

B. Comprehensive Exam Option (9 semester hours)

- Three electives from the list of French Electives ........ 9

The comprehensive examination tests critical ability and familiarity with major works of French literature. Before registering for the comprehensive examination, students must have completed their course work and have satisfied the requirement of having taken two courses in each of the categories above. The examination is based on a reading list and course content.

Minimum semester hours: 33
REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN FRENCH, FRENCH STUDIES CONCENTRATION

The concentration in French Studies allows students flexibility in examining French and Francophone cultures from a variety of perspectives. By choosing courses about the French language, Francophone civilization and cultural productions, students will study the impact of the French language and culture in the world today. Students may build their own fields of inquiry by combining required courses and electives that specifically target their area of interest. Useful for teachers, translators, professionals holding positions in government, international business, and the media, and students seeking to tackle doctoral study, the concentration provides a solid foundation in interdisciplinary French studies.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>I. Required Courses (24 semester hours)</td>
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<tr>
<td>FREN 603 Research Seminar</td>
<td>3</td>
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<tr>
<td>One of the following:</td>
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<tr>
<td>FREN 548 Contemporary French Civilization: Selected Topics</td>
<td>3</td>
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<tr>
<td>FREN 549 Contemporary Francophone Civilization Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Two courses from each of the three categories below (18 semester hours)</td>
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</tr>
<tr>
<td>A. French Language Today</td>
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</tr>
<tr>
<td>FREN 419 The Teaching of French in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>FREN 501 Graduate Study Abroad</td>
<td>3</td>
</tr>
<tr>
<td>FREN 504 Politics of the French Language</td>
<td>3</td>
</tr>
<tr>
<td>FREN 505 History of the French Language</td>
<td>3</td>
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<tr>
<td>FREN 506 Advanced French Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>FREN 507 Practicum in Translation</td>
<td>3</td>
</tr>
<tr>
<td>FREN 508 Explication de Texte and Stylistic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FREN 510 Topics in French Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>B. Approaches to Francophone Societies</td>
<td></td>
</tr>
<tr>
<td>FREN 514 Medieval French Seminar</td>
<td>3</td>
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<tr>
<td>FREN 518 Sixteenth-Century Seminar</td>
<td>3</td>
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<tr>
<td>FREN 525 Moralists of the Seventeenth-Century</td>
<td>3</td>
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<tr>
<td>FREN 530 Philosophy and Politics in Eighteenth-Century France</td>
<td>3</td>
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<tr>
<td>FREN 532 Eighteenth-Century Seminar</td>
<td>3</td>
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<tr>
<td>FREN 536 The Romantic Movement</td>
<td>3</td>
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<tr>
<td>FREN 541 Nineteenth-Century Seminar</td>
<td>3</td>
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<tr>
<td>FREN 546 Twentieth-Century Seminar</td>
<td>3</td>
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<tr>
<td>FREN 548 Contemporary French Civilization: Selected Topics</td>
<td>3</td>
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<tr>
<td>FREN 549 Contemporary Francophone Civilization Seminar</td>
<td>3</td>
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<tr>
<td>FREN 550 Introduction to French Colonialism</td>
<td>3</td>
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<tr>
<td>C. Expressions of Francophone Culture</td>
<td></td>
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<tr>
<td>FREN 509 Critical Approaches to Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 511 Medieval French Literature</td>
<td>3</td>
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<tr>
<td>FREN 513 Medieval French Theatre</td>
<td>3</td>
</tr>
<tr>
<td>FREN 516 French Humanism in the Sixteenth-Century</td>
<td>3</td>
</tr>
</tbody>
</table>
II. Culminating Activity and Electives (choose option A or B) (minimum 9 semester hours)

A. Thesis Option (10 semester hours)

FREN 698 Master’s Thesis ................................................................. 4
Two electives from the list of French Electives .................................... 6
(The list of French electives is printed below.)

B. Comprehensive Exam Option (9 semester hours)

Three electives from the list of French Electives .............................. 9

The comprehensive examination tests critical ability and familiarity with major works of French literature. Before registering for the comprehensive examination, students must have completed their course work and have satisfied the requirement of having taken two courses in each of the categories above. The examination is based on a reading list and course content.

Minimum semester hours: 33

French Electives:

FREN 501 Graduate Study Abroad ..................................................... 3
FREN 504 Politics of the French Language .......................................... 3
FREN 505 History of the French Language ......................................... 3
FREN 506 Advanced French Phonetics .............................................. 3
FREN 507 Practicum in Translation .................................................... 3
* FREN 508 Explication de Texte and Stylistic Analysis ......................... 3
FREN 509 Critical Approaches to Literature ...................................... 3
FREN 510 Topics in French Linguistics .............................................. 3
FREN 511 Medieval French Literature .............................................. 3
FREN 513 Medieval French Theatre .................................................. 3
FREN 514 Medieval French Seminar .................................................. 3
FREN 516 French Humanism in the Sixteenth-Century ....................... 3
FREN 517 Poetry of the Renaissance .................................................. 3
FREN 518 Sixteenth-Century Seminar .............................................. 3
FREN 525 Moralists of the Seventeenth-Century ................................ 3
FREN 526 Corneille, Racine and Moliere .......................................... 3
FREN 527 Selected Topics in Seventeenth-Century French Literature .... 3
FREN 530 Philosophy and Politics in Eighteenth-Century France ....... 3
### FRENCH

#### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 500</td>
<td>FRENCH AS A RESEARCH TOOL</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Learning to read French as a tool for research (a “service” course for MA candidates in other departments).</td>
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<tr>
<td>FREN 501</td>
<td>GRADUATE STUDY ABROAD</td>
<td>3-6</td>
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<tr>
<td></td>
<td>Study at a university in a French-speaking country to gain first-hand knowledge of the historical, social, economic, and cultural life of the country. Credit by evaluation. May be taken twice for a total of 6 credits.</td>
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<tr>
<td></td>
<td><em>Prerequisite: Permission of graduate program coordinator.</em></td>
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<tr>
<td>FREN 504</td>
<td>POLITICS OF THE FRENCH LANGUAGE</td>
<td>3</td>
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<tr>
<td></td>
<td>Presenting an overview of the social history and politics of France and Francophone societies, this course provides a context in which to analyze the particular relationship that existed between French language and national identity. It will examine issues such as the status and role of the French language outside France, language policy and planning measures, and ideologies connected to issues such as gender, race, identity, and class.</td>
<td></td>
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<tr>
<td>FREN 505</td>
<td>HISTORY OF THE FRENCH LANGUAGE</td>
<td>3</td>
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<tr>
<td></td>
<td>Structures of modern French as outcome of linguistic and cultural processes over 2,000 years.</td>
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<tr>
<td>FREN 506</td>
<td>ADVANCE FRENCH PHONETICS</td>
<td>3</td>
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<tr>
<td></td>
<td>Principles of general and experimental phonetics. Previous knowledge of phonetics desirable.</td>
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<tr>
<td></td>
<td><em>Prerequisite: Special fee.</em></td>
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</tr>
</tbody>
</table>
FREN 507  PRACTICUM IN TRANSLATION  3
Basic principles and theory of translation with emphasis on research techniques.
Prerequisite: Adequate competency in the language for the purpose of translation training. Special fee.

FREN 508  EXPLICATION DE TEXTE AND STYLISTIC ANALYSIS  3
Techniques of “explication de texte and stylistic analysis” as an instrument for development of critical reading ability, and as pedagogical tool for teaching literature as well as language through literature.

FREN 509  CRITICAL APPROACHES TO LITERATURE  3
Fundamental notions of contemporary French literary criticism; theory and practice.

FREN 510  TOPICS IN FRENCH LINGUISTICS  3
Changing topics to include in-depth studies of subjects in French sociolinguistics, syntax, pragmatics, and applied linguistics. May be repeated without limit as long as the topic is different.

FREN 511  MEDIEVAL FRENCH LITERATURE  3
French literature from ninth through fifteenth centuries emphasizing the “Chanson de geste” and the “Roman courtois.”

FREN 513  MEDIEVAL FRENCH THEATRE  3
Origins and development of theatre in France during the Middle Ages.

FREN 514  MEDIEVAL FRENCH SEMINAR  3
Changing topics to include in-depth studies of individual authors, themes, and genres from the Middle Ages as they relate to historical and cultural events. Examples include “Francois Villon and His Time”, “Courtly Culture of the Middle Ages”, and “Knights, Taverns and Romance”. This course may be repeated twice for a total of nine credits as long as the seminar topic is different each time.

FREN 516  FRENCH HUMANISM IN 16TH-CENTURY  3
Humanistic ideals as reflected in the works of Rabelais, Montaigne and other authors.

FREN 517  POETRY OF THE RENAISSANCE  3
Major works of Marot, Ronsard, Du Bellay, and other poets of the Pleiade.

FREN 518  16TH-CENTURY SEMINAR  3
Changing topics to include in-depth studies of individual authors, themes, and genres from the 16th century as they relate to historical and cultural events. Examples include “Women Writers of Renaissance France”, “Religion and Politics in 16th-Century French Literature”, and “Storytelling in its Cultural Context”. This course may be repeated twice for a total of nine credits as long as the seminar topic is different each time.

FREN 525  MORALISTS OF THE 17TH-CENTURY  3
Representative works of Descartes, Pascal, La Rochefoucauld, Saint Simon, La Bruyere, and other authors.

FREN 526  CORNEILLE, RACINE AND MOLIERE  3
Dramatic art as reflected in representative plays of the three authors.
FREN 527  SELECTED TOPICS IN 17TH-CENTURY FRENCH LITERATURE
Changing topics to include in-depth studies of individual authors and themes. May be repeated without limit as long as the topic is different.

FREN 530  PHILOSOPHY AND POLITICS IN 18TH-CENTURY FRANCE
Impact of the “philosophes” on religious, political and sociological thought.

FREN 531  THE DEVELOPMENT OF THE NOVEL IN 18TH-CENTURY FRANCE
Study of the social and historical context of a novel and its particular form (e.g. epistolary, episodic, etc.)

FREN 532  18TH-CENTURY SEMINAR
Changing topics to include in-depth studies of individual authors, themes and genre topics.

FREN 536  THE ROMANTIC MOVEMENT
The origins and development of Romanticism in England and Germany are compared with the later triumph of the movement in France. Representative works of Chateaubriand, Goethe, Novalis, Kleist, Hoffmann, Heine, Musset, and Nerval are studied, and their themes compared with those of the English romantics. (Taught in English. Recommended to French majors as a free elective.) Cross listed with English, ENLT 536.

FREN 537  19TH-CENTURY FRENCH THEATRE
Hugo’s dramatic theories and their application in representative plays.

FREN 538  FRENCH NOVEL OF 19TH-CENTURY I
Insight into major works of Balzac and Stendhal.

FREN 539  FRENCH NOVEL OF 19TH-CENTURY II
Insight into major works of Flaubert and Zola.

FREN 540  19TH-CENTURY FRENCH POETRY
Development of French poetry from Romanticism to Symbolism.

FREN 541  19TH-CENTURY SEMINAR
Changing topics to include in-depth studies of individual authors, themes, and genres from the 19th century as they relate to historical and cultural events. Examples include “Victor Hugo’s Nineteenth Century”, “The Belle Epoque”, and “The Creation of National Identity”. This course may be repeated twice for a total of nine credits as long as the seminar topic is different each time.

FREN 542  20TH-CENTURY FRENCH THEATRE
Major modern currents and trends in drama.

FREN 543  20TH-CENTURY FRENCH POETS
Within a general developmental context, emphasis upon thematics, and structural analysis of work of Apollinaire, Reverdy, Char, Eluard and Bonnefoy.

FREN 544  20TH-CENTURY FRENCH NOVEL I
Evolution of the French novel from Proust to Camus.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FREN 545</td>
<td>20TH-CENTURY FRENCH NOVEL II</td>
<td>3</td>
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<tr>
<td></td>
<td>Evolution of the French novel from the “New Novel” of the 50s</td>
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<td>to contemporary French writing.</td>
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<td>FREN 546</td>
<td>20TH-CENTURY SEMINAR</td>
<td>3</td>
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<tr>
<td></td>
<td>Changing topics on twentieth-century French literature.</td>
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<tr>
<td>FREN 547</td>
<td>FRANCOPHONE LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Major Francophone writings outside continental France.</td>
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<tr>
<td>FREN 548</td>
<td>CONTEMPORARY FRENCH CIVILIZATION - SELECTED TOPICS</td>
<td>3</td>
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<tr>
<td></td>
<td>Study of institutions and culture of contemporary France.</td>
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<td></td>
<td>May be repeated once for a maximum of six semester hours.</td>
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<tr>
<td>FREN 549</td>
<td>CONTEMPORARY FRANCOPHONE CIVILIZATION SEMINAR</td>
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<tr>
<td></td>
<td>Changing topics addressing contemporary issues affecting the</td>
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<td></td>
<td>Francophone world.</td>
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<td></td>
<td>Topics might include “Gender, Women and Society”, “French</td>
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<td></td>
<td>Rap and Black Culture in France,” “The Scourge of AIDS in</td>
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<td></td>
<td>Francophone Africa: Causes and Remedies.”</td>
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<td></td>
<td>May be repeated twice for a total of six credits.</td>
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<tr>
<td>FREN 550</td>
<td>INTRODUCTION TO FRENCH COLONIALISM</td>
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<tr>
<td></td>
<td>This course introduces students to the history of French</td>
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<tr>
<td></td>
<td>colonialism in Africa (North and Sub-Saharan), the Americas,</td>
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<tr>
<td></td>
<td>the Middle East, and the various islands of Oceania and the</td>
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<td></td>
<td>Pacific. It offers an overview of the French imperial process</td>
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<tr>
<td></td>
<td>from the fifteenth century and studies the various cultural,</td>
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<tr>
<td></td>
<td>political, and economic impact of French civilization on its</td>
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<tr>
<td></td>
<td>(former) colonies.</td>
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<tr>
<td>FREN 551</td>
<td>WOMEN WRITERS FROM NORTH AFRICA</td>
<td>3</td>
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<tr>
<td></td>
<td>This course is based on a selection of works by Francophone</td>
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<tr>
<td></td>
<td>women writers from North Africa (Algeria, Morocco, and</td>
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<tr>
<td></td>
<td>Tunisia) including Assia Djebar, Malika Mokaddem, Nouzha</td>
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<td></td>
<td>Fassi, Badia Hadj Nasser, Leila Houari, Hele Beji, and Emna</td>
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<td></td>
<td>Bel Haj Yahia.</td>
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<tr>
<td>FREN 603</td>
<td>RESEARCH SEMINAR</td>
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<tr>
<td></td>
<td>Opportunity to apply research techniques to a specific topic</td>
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<td>of the student’s choice.</td>
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<td>FREN 604</td>
<td>RESEARCH SEMINAR CONTINUATION</td>
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<td></td>
<td>This course allows students who have not completed the</td>
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<td>semester-long FREN 603 (Research Seminar) to finish it</td>
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<td></td>
<td>during additional semesters. May be repeated up to a total</td>
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<td></td>
<td>of 4 credits.</td>
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<tr>
<td>FREN 698</td>
<td>MASTER’S THESIS</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Independent research project done under faculty advisement.</td>
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<td>Students must follow the MSU Thesis Guidelines, which may be</td>
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<td></td>
<td>obtained from the Graduate School. Students should take</td>
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<td></td>
<td>FREN 699 if they don’t complete FREN 698 within the semester.</td>
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<tr>
<td></td>
<td>Prerequisite: Departmental approval.</td>
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<tr>
<td>FREN 699</td>
<td>MASTER’S THESIS EXTENSION</td>
<td>1</td>
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<tr>
<td></td>
<td>Continuation of Master’s Thesis Project. Thesis Extension will</td>
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<td>be graded as IP (In Progress) until thesis is completed, at</td>
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<td>which time a grade of Pass or Fail will be given.</td>
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<tr>
<td></td>
<td>Prerequisite: FREN 698.</td>
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</tbody>
</table>
The graduate programs in Geoscience are designed to enable the student to pursue further study in the various areas of the Department for professional or personal reasons, to further his/her preparation for the teaching profession, or for a career requiring advanced training.

This program is designed to give opportunities for in-depth study in the broad field of Geoscience (geology). The program provides sufficient flexibility through electives so that emphasis in (1) environmental geology, geochemistry, and GIS remote sensing, and earth systems science, (2) metamorphic and igneous petrology, (3) sedimentology, stratigraphy, and paleobiology or (4) oceanography and marine geology are possible. Almost all of the courses are taught at night during the week to accommodate students who are currently employed full-time. Many of the courses for the oceanography and marine geology emphasis will be taken at the various sites of the New Jersey Marine Science Consortium during the summer.

ADMISSION REQUIREMENTS

Prior to matriculation the student should have completed a subject matter background of at least twenty-four (24) semester hours in the geosciences, as well as sufficient background in related sciences (physics, chemistry, mathematics). In cases of a weak undergraduate background, prerequisite courses, not for graduate credit, may be assigned. Candidates must also fulfill additional criteria for graduate matriculation as listed in this bulletin (Admission to Graduate School). The graduate program coordinator for the department must approve each candidate’s background and credentials.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN GEOSCIENCE

Thirty-two (32) semester hours are required, but additional hours may be required to compensate for any deficiencies in the applicant’s undergraduate record (see below).

Degree candidates employed in the field of education may use six semester hours of free electives for graduate courses in the area of professional education.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Core Courses (10 semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEOS 525 Environmental Geoscience ....................................................... 3</td>
</tr>
<tr>
<td></td>
<td>GEOS 560 Advanced Marine Geology ......................................................... 3</td>
</tr>
<tr>
<td></td>
<td>GEOS 578 Igneous and Metamorphic Geology .............................................. 4</td>
</tr>
<tr>
<td>II. Geoscience Electives (9-18 semester hours)</td>
<td>Choose any combination of courses below. All courses in Geoscience (GEOS) at 500 level or above (except GEOS 502 Dynamic Earth).</td>
</tr>
<tr>
<td></td>
<td>PHMS 581 Coastal Geomorphology .......................................................... 4</td>
</tr>
<tr>
<td></td>
<td>PHMS 598 Special Problems in the Marine Sciences .............................. 1-4</td>
</tr>
</tbody>
</table>
Maximum of two of the following 400 level courses:

- **GEOS 450** Principles of Soil Science ........................................................ 3
- **GEOS 452** Geohydrology ........................................................................... 3
- **GEOS 454** Environmental Geochemistry ................................................... 3
- **GEOS 470** Geographic Information Systems ............................................. 3
- **ENVR 410** Environmental Law .................................................................. 3
- **ENVR 455** Fundamentals of Remote Sensing of Environment ................. 3

### III. Approved Electives (0-6 semester hours)

Graduate level classes in the sciences, mathematics, or other approved courses. *(All courses in this category subject to approval by graduate program coordinator.)*

### IV. Research - One of the two options below (4-7 semester hours):

A. **Thesis Option**

- **GEOS 594** Research in Geoscience Literature ........................................... 1
- **GEOS 698** Master’s Thesis ........................................................................ 6

**Thesis Process:** All graduate students who choose the thesis option will be required to do the following: (1) submit a written thesis proposal approved by the thesis committee, (2) pass an oral defense of the final thesis project, and (3) submit a written thesis approved by the thesis committee.

B. **Option B**

- **GEOS 590** Research Seminar in Geoscience ............................................. 3
- **GEOS 594** Research in Geoscience Literature ........................................... 1

**Written Comprehensive Examination:** All graduate students who choose the non-thesis option will be required to take the written Comprehensive Examination in Geoscience.

Minimum semester hours: 32

### Semester Hours

Special Prerequisites for students with Bachelor’s degree outside of Geoscience:

A. **Basic Math and Science Requirements (if necessary):**

- **CHEM 120** General Chemistry I ................................................................. 4
- **CHEM 121** General Chemistry II ................................................................ 4
- **PHYS 193** College Physics I ...................................................................... 4
- **PHYS 194** College Physics II .................................................................... 4
- **MATH 116** Calculus A ................................................................................ 4

B. **Introductory Geology Requirement (if necessary):**

- **GEOS 502** The Dynamic Earth ................................................................. 4

C. **Geoscience Major Undergraduate Courses (required):**

- **GEOS 434** Stratigraphy ............................................................................. 4
- **GEOS 443** Mineralogy ............................................................................... 4
- **GEOS 444** Petrology .................................................................................. 4
- **GEOS 472** Structural Geology ................................................................... 3

For offerings at the New Jersey Marine Sciences Consortium, see the current announcement.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOS 502</td>
<td>THE DYNAMIC EARTH</td>
<td>4</td>
<td></td>
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<tr>
<td></td>
<td>Origin, evolution and history of the earth. Internal and</td>
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<td></td>
<td>external processes by which minerals and rocks form and</td>
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<td></td>
<td>are modified. Interpretation of rock features and</td>
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<td>structures and significance of the fossil record.</td>
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<tr>
<td></td>
<td>Plate tectonics, geomorphology, oceanography, and</td>
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<tr>
<td></td>
<td>meteorology. The course is conducted at a more rigorous</td>
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<tr>
<td></td>
<td>level than introductory, undergraduate courses. Research</td>
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<tr>
<td></td>
<td>project and field trips are required. (3 hours lecture; 2</td>
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<td></td>
<td>hours lab)</td>
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<tr>
<td></td>
<td>Prerequisites: Undergraduate degree in science or</td>
<td></td>
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<tr>
<td></td>
<td>mathematics or permission of the instructor. (Not open</td>
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<tr>
<td></td>
<td>to graduates of a geology or geoscience program.)</td>
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<tr>
<td>GEOS 525</td>
<td>ENVIRONMENTAL GEOSCIENCE</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>In-depth study of the relationships between man and the</td>
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<td></td>
<td>physical environment of atmosphere, hydrosphere and</td>
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<td></td>
<td>lithosphere. Particular attention to problems of mineral</td>
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<tr>
<td></td>
<td>resource and fossil-fuel depletion; pollution of air,</td>
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<td></td>
<td>water and soils and waste disposal and recycling,</td>
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<tr>
<td></td>
<td>simple computer modeling of environmental situations.</td>
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<tr>
<td></td>
<td>Prerequisite: Graduate standing in either the</td>
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<tr>
<td></td>
<td>Environmental Studies-Physical or Geoscience Program,</td>
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<tr>
<td></td>
<td>or instructor’s permission.</td>
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<tr>
<td>GEOS 530</td>
<td>PALEOECOLOGY</td>
<td>3</td>
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<tr>
<td></td>
<td>Distribution and association of fossils as interpreted</td>
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<td></td>
<td>from the evidence presented in the geologic record.</td>
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<td></td>
<td>Detailed paleoecological field study made of selected</td>
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<tr>
<td></td>
<td>faunal assemblages. (2 hours lecture; 2 hours lab)</td>
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<tr>
<td></td>
<td>Prerequisite: Course in invertebrate paleobiology.</td>
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<tr>
<td>GEOS 552</td>
<td>APPLIED GROUNDWATER MODELING</td>
<td>4</td>
<td></td>
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<tr>
<td></td>
<td>Introduction to groundwater flow and contaminant</td>
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<td></td>
<td>transport modeling, using a variety of current</td>
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<td>software packages. Saturated and unsaturated media</td>
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<td></td>
<td>will be considered. Emphasis is on application of</td>
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<td></td>
<td>models to the solution of common problems encountered</td>
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<td></td>
<td>in hydrology industry and research. (3 hours lecture; 2</td>
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<td></td>
<td>hours lab.)</td>
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<tr>
<td></td>
<td>Prerequisites: Undergraduate hydrogeology course and</td>
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<tr>
<td></td>
<td>college-level calculus or departmental approval.</td>
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<tr>
<td>GEOS 560</td>
<td>ADVANCED MARINE GEOLOGY</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>Development and evolution of the ocean basins; marine</td>
<td></td>
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<tr>
<td></td>
<td>sedimentation; shoreline development and classification;</td>
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<td></td>
<td>submarine topography; mineral resources of the sea.</td>
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<tr>
<td></td>
<td>Laboratory analysis of marine sediments and fossil</td>
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<tr>
<td></td>
<td>assemblages. Required field trips. (2 hours lecture; 2</td>
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<td></td>
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<tr>
<td></td>
<td>hours lab.)</td>
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<tr>
<td></td>
<td>Prerequisites: Courses in physical geology and one 400</td>
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<tr>
<td></td>
<td>level course in marine geology or oceanography.</td>
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<tr>
<td>GEOS 571</td>
<td>GEOPHYSICS</td>
<td>3</td>
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<tr>
<td></td>
<td>Theory and application of conventional geophysical</td>
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<tr>
<td></td>
<td>methods: seismology, magnetism, electricity and</td>
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<td></td>
<td>gravity. Laboratory includes the collection and</td>
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<td></td>
<td>interpretation of geophysical data. Field trips. (3</td>
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<td></td>
<td>hours lecture.)</td>
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<tr>
<td></td>
<td>Prerequisites: Courses in physical geology and</td>
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<tr>
<td></td>
<td>College Physics II and Calculus A.</td>
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</tbody>
</table>
GEOS 575 GEOCHEMISTRY 3
Chemical laws and principles applied to the earth, chemical composition of the earth, distribution and relative abundance of the elements. Radioactive materials, atmospheric precipitation of geochemicals, the geochemistry of polluted water (including solid and liquid wastes), study of meteorites. Required field trips. (3 hours lecture)
Prerequisites: General chemistry, petrology.

GEOS 578 IGNEOUS AND METAMORPHIC GEOLOGY 4
The interpretive study of igneous and metamorphic rocks in detail with the aim of properly identifying and naming the rocks and interpreting their history: rock suites from classical areas. Required field trips. (3 hours lecture; 2 hours lab.)
Prerequisite: Geoscience major.

GEOS 590 RESEARCH SEMINAR 3
Student field, laboratory and library investigation of a problem in the area of his or her interest in geoscience, the results of which will be presented in oral and written form. Class discussion of the individual papers and of other pertinent topics of current interest in geoscience.
Prerequisite: Advanced standing as a Geoscience graduate student.

GEOS 592 SPECIAL PROBLEMS IN GEOSCIENCE 1 - 4
Independent research project to be performed by the student under guidance of faculty. May be repeated three times for a maximum of ten semester hours as long as the topic is different.
Prerequisite: Departmental approval.

GEOS 594 RESEARCH IN GEOSCIENCE LITERATURE 1
Investigation and evaluation of a topic in geoscience under the supervision of a faculty member by: (1) preparing a bibliography from standard sources, including an on-line computer search; and, (2) preparing a report written in standard professional format.
Prerequisite: Geoscience major.

GEOS 698 MASTER’S THESIS 6
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take GEOS 699 if they don’t complete GEOS 698 within the semester.
Prerequisite: Departmental approval.

GEOS 699 MASTER’S THESIS EXTENSION 1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: GEOS 698.

PHMS 598 SPECIAL PROBLEMS IN THE MARINE SCIENCES 1 - 4
An opportunity for the qualified graduate student to do research in a field of marine science selected under the guidance of a professor. Open only to graduate students who have indicated a potential for original thinking. Also offered at the site of the New Jersey Marine Sciences Consortium. May be repeated three times for a maximum of ten semester hours as long as the topic is different.
Prerequisites: Departmental approval.
MASTER OF ARTS DEGREE IN HEALTH EDUCATION

The graduate program in Health Education, which is housed in the Health and Nutrition Sciences department, prepares professionals for careers in health education and various selected areas of the health professions. The graduate program leads to a Master of Arts degree in health education. Advanced study is provided to candidates engaged in, or seeking, positions in the broad and expanding spectrum of the health professions in the school, community, business and industrial sectors, the media and various other segments of the health care delivery system.

The curriculum provides a foundation of required coursework which is complemented by a wide array of health professions electives, interdisciplinary coursework and varied educational experiences afforded by diverse instructional approaches. Advancements in the scientific realm combined with practical applications address our contemporary health problems. There is a definite research focus within the program. Students are provided with the option of either conducting a study on a pertinent health topic in the form of a thesis or completing a broader-based research seminar. Special student interests, academic objectives and professional goals can be accommodated on an individualized basis. Students must complete a minimum of 36 semester hours of courses and pass a written comprehensive examination.

ADMISSION REQUIREMENTS

All candidates must meet the basic admission requirements for graduate study at Montclair State. The completion of a major in health education from an accredited college or university is preferred. Candidates with degrees in closely related areas will be considered, although prematriculation coursework may be required.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN HEALTH EDUCATION

<table>
<thead>
<tr>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>I. Required Core Courses (15 semester hours)</td>
</tr>
<tr>
<td>HLTH 503 Research Methods in Health .......................... 3</td>
</tr>
<tr>
<td>HLTH 520 Foundations and Methods of Health Education ........ 3</td>
</tr>
<tr>
<td>HLTH 526 Curriculum Development and Program Planning in Health Education ........................................ 3</td>
</tr>
<tr>
<td>HLTH 528 Evaluation in Health ........................................... 3</td>
</tr>
<tr>
<td>HLTH 601 Research Seminar in Health ............................. 3</td>
</tr>
<tr>
<td>II. Departmental Electives (18 semester hours)</td>
</tr>
<tr>
<td>Choose 6 courses, 18 semester hours, from the list of 500-level and 400-level health courses, HLTH designation. The maximum number of credits that can be taken from 400-level courses is six semester hours.</td>
</tr>
</tbody>
</table>
III. Free Elective (a 500-level or higher course in Health Education or any other discipline) ........................................................................................................... 3

IV. Successful completion of the Health Education Comprehensive Examination

The examination is scheduled for March and October of each year. Prior registration is necessary through completion of application available in the department office. Candidates are limited to three attempts to pass the examination.

Minimum semester hours: 32

Note: The 500-level course descriptions follow the programs. For a list of the 400-level courses, please refer to the undergraduate catalog.

MASTER OF SCIENCE DEGREE IN NUTRITION AND FOOD SCIENCE

The graduate program in Nutrition and Food Science provides student with in-depth study of nutrition science, nutrition education, food and nutrition issues, food regulations and compliance and nutrition counseling. It prepares professionals for careers in nutrition and wellness, allied health services, education and research, food and nutrition administration, government agencies, hospitals, food industries, food production, food safety and regulations, and food and nutrition management.

ADMISSION REQUIREMENTS

All applicants must meet the admission requirements for graduate study at Montclair State University. Some students may need to take undergraduate courses for which graduate credit is not given to improve the preparatory background

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN NUTRITION AND FOOD SCIENCE

The graduate program in Nutrition and Food Science provides students with in-depth study of nutrition science, nutrition education, food and nutrition issues, food regulations and compliance and nutrition and wellness, allied health services, education and research, food and nutrition administration, government agencies, hospitals, food industries, food production, food safety and regulations and food and nutrition management.

I. Required Courses (6-7 semester hours)
   - NUFD 507 Research in Nutrition and Food Science ................................. 3
   - NUFD 509 Research Seminar .................................................................. 3
   OR
   - NUFD 698 Master’s Thesis ...................................................................... 4

II. Nutrition and Food Science Core Requirements (13 semester hours)
   - NUFD 501 Principles of Nutrition ............................................................. 4
   - NUFD 577 Social Marketing in Nutrition .................................................. 3
   - NUFD 580 New Findings in Nutrition ....................................................... 3
   - NUFD 585 Food and Nutrition Issues ...................................................... 3
Select one of the following emphasis:
1. Nutrition Education (9 semester hours)
   - NUFD 560 Advanced Nutrition Counseling for Diverse Population Groups ....................................................... 3
   - NUFD 581 Nutrition Education ....................................................... 3
   - NUFD 587 Nutrition Education Practicum .................................................. 3
2. Nutrition and Food Science Management (9 semester hours)
   - NUFD 557 Food Safety and Sanitation Management .................................................. 3
   - NUFD 573 Food and Nutrition Regulations and Compliances .................................................. 3
   - NUFD 583 Nutritional Aspects of Food Processing and Handling ................................................................. 3

III. Electives (3 or 4 semester hours) A student selects 3 semester hours of electives if enrolling in Master’s Thesis or 4 semester hours if enrolling in Research Seminar.
   - HLTH 565 Foundation of Epidemiology ....................................................... 3
   - HLTH 580 Health Policy and Politics ....................................................... 3
   - HLTH 585 Organization and Administration of Health Care Facilities .................................................. 3
   - PEMJ 539 Advanced Exercise Physiology ....................................................... 3
   - PEMJ 541 Aerobic Exercises: Testing and Programming .................................................. 3
   - PEMJ 543 Anaerobic Exercises: Testing and Programming .................................................. 3
   - NUFD 412 Nutrition Education Techniques ....................................................... 3
   - NUFD 482 Nutrition Counseling ....................................................... 3
   - NUFD 488 Medical Nutrition Therapy ....................................................... 4
   - NUFD 490 Nutrition and Food Science Professional Seminar .................................................. 1
   - NUFD 668 Nutrition Assessment ....................................................... 3

IV. Comprehensive Examination: both oral and written to be taken after completing 24 semester hours of graduate study. Students must apply to take the exam and consult with the graduate program coordinator at the beginning of the semester in which the exams will be taken. The comprehensive examination is given each fall and spring semesters.

V. Master’s Thesis: Candidates who choose to write a thesis will register for NUFD 698 Master’s Thesis for four semester hours credit in lieu of NUFD 509 Research Seminar. The comprehensive is waived. A thesis defense is required upon the completion of the thesis before the candidate’s graduate thesis committee.

Minimum semester hours: 32

Please abide by all the policies and procedures outlined in the current Graduate Catalog.

HEALTH AND NUTRITION SCIENCES

Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 502</td>
<td>DETERMINANTS OF ENVIRONMENTAL HEALTH</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced study of health and safety aspects of the environment: air, water, industrial pollution and the impact of expanding population on health problems.</td>
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<tr>
<td>HLTH 503</td>
<td>RESEARCH METHODS IN HEALTH</td>
<td>3</td>
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<tr>
<td></td>
<td>Theoretical and practical experiences in methods of inquiry, designing of research studies, utilization of various tools for gathering data, statistical analysis of data, and writing of research proposals.</td>
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<tr>
<td></td>
<td>Prerequisite: HLTH 528.</td>
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</tbody>
</table>
HLTH 505 SCHOOL HEALTH PROGRAM MANAGEMENT 3
Examines management theory and practices applicable to school health programs. Historical developments and philosophical issues are also reviewed. Includes management techniques, staffing patterns, accounting procedures and evaluation methods essential for the successful school health program.

HLTH 510 HEALTH EDUCATION WORKSHOP I 1 - 3
For teachers of health education; deeper understandings of subject matter, current methods and techniques for the classroom, and considerations for curriculum development.

HLTH 511 BIOMEDICAL AND PSYCHOSOCIAL PERSPECTIVES ON DRUGS 3
Examines the complex biomedical and psychosocial dimensions of contemporary drug use, emphasizing consideration of a broad spectrum of physiological responses to and health consequences of involvement. Provides a comprehensive view of the historical and social aspects of drug use, and an analysis of selected major issues presented by our current problems with drugs.
Prerequisite: Undergraduate course in the study of alcohol and other drugs or permission of instructor.

HLTH 520 FOUNDATIONS AND METHODS IN HEALTH EDUCATION 3
Study of the scientific historical foundations and the instructional methodologies in health education and health promotion with opportunity for practical application of various methodologies for the achievement of specific objectives.

HLTH 526 CURRICULUM DEVELOPMENT AND PROGRAM PLANNING IN HEALTH EDUCATION 3
Principles and processes of curriculum development, design, implementation and evaluation of health programs for various populations and environmental settings.
Prerequisite: HLTH 520.

HLTH 528 EVALUATION IN HEALTH 3
Provides for an in-depth study of the theories and principles of measurement and evaluation and their application to the field of health education. The theoretical foundations and the practical considerations for proper selection, development and administration of various measuring instruments, and the analysis of their results constitute the focal points of the course.
Prerequisite: A basic course in statistics or in tests and measurement.

HLTH 530 HEALTH ISSUES SEMINAR 3
Provides seminar setting for concentrated study of selected major contemporary health issues. A minimum of five topical areas are presented for analysis and interpretation through extensive readings, pertinent written projects, and directed oral communication.

HLTH 531 INDEPENDENT STUDY IN HEALTH 1 - 4
Under the direction of departmental faculty member. Semester hours determined by the department chairperson following consultation with departmental research committee.
Prerequisite: Departmental approval.
HLTH 540 SELECTED TOPICS IN MENTAL HEALTH  
Entails use of seminar approach for in-depth analysis of selected topics in mental health. Topics will vary according to class interest, but will include, among others, stress, labeling, racism, sexism, and ageism.

Prerequisite: A basic course in mental health.

HLTH 551 SELECTED TOPICS IN GERONTOLOGY  
Entails use of seminar approach for in-depth analysis of selected topics in gerontology. Topics will vary according to class interest, but will include, among others, ageism, health problems, loss and diminishment, homelessness and terminal old age.

HLTH 560 HUMAN DISEASES  
Presents a contemporary view of the major infectious and chronic/degenerative diseases with an emphasis on the principles of causation, process, diagnosis, prevention, and management. Important past and present medical developments are discussed in the context of continuing change, methods and inferences of epidemiologic investigation are studied and the implications of ongoing research are considered. Concludes with an instructional component which addresses methodology and disease specific information resources.

Prerequisite: A basic course in biology.

HLTH 565 FOUNDATIONS OF EPIDEMIOLOGY  
Provides an understanding of the epidemiologic method of identifying disease-causing agents. Emphasizes the generation of hypotheses based on descriptive epidemiologic data, the testing of hypotheses by analytical epidemiologic research design, the determination of causality and value of epidemiologic research in developing disease prevention programs.

HLTH 575 THE TEACHING OF HUMAN SEXUALITY  
Provides for the study of instructional methodologies and resource materials pertaining to human sexuality education. Emphasizes curriculum development, teaching plans, resource selection and the role of the teacher in school and community setting.

Prerequisite: HLTH 290.

HLTH 577 SELECTED TOPICS IN HEALTH  
Course provides students with the opportunity to expand their professional preparation and expertise about selected topics in health not covered in other graduate health courses. The selected topics will be based on significant, emerging health problems and issues and new scientific developments and discoveries. May be repeated once for a maximum of six semester hours.

HLTH 580 HEALTH POLICY AND POLITICS  
Provides for the study of politics of health care, health policy issues and the health care delivery system. Special emphasis is placed on health policy as it has evolved in response to sociopolitical and economic factors and expected future trends.

HLTH 585 ORGANIZATION AND ADMINISTRATION OF HEALTH CARE FACILITIES  
Analyzes organization and administration of health care facilities. Topics include nature of health care facilities, managerial processes, institutional staffing and productivity, social responsibilities, techniques of managerial innovation, funding sources and health facility legislation. Provides practical applications of relevant theory.
HLTH 601 RESEARCH SEMINAR IN HEALTH 3
Provides intensive study of the entire spectrum of research literature in the health professions field. Includes opportunities for analysis and critique of selected research studies and synthesis of research findings for theoretical and practical application.
Prerequisites: HLTH 503 and HLTH 528.

HLTH 603 RESEARCH PROJECT IN HEALTH 3
Provides an intensive research experience for master's degree candidates in health education. It reflects the culmination of coursework and involves the completion of a research document. All candidates must satisfactorily complete an oral examination based on the research experience.
Prerequisites: HLTH 503 and 528.

NUFD 501 PRINCIPLES OF NUTRITION 4
Topics include advanced study of the biochemical and physiological aspects of human nutrition with emphasis on vitamins, minerals, lipids, protein, carbohydrate, water and energy.

NUFD 507 RESEARCH IN NUTRITION AND FOOD SCIENCE 3
Designed to provide basic research and statistical literacy so that students can develop a research proposal in its entirety in nutrition and food science.
Prerequisites: NUFD 304, Nutrition and Food Science majors only.

NUFD 508 INDEPENDENT STUDY IN NUTRITION AND FOOD SCIENCE 1-3
An opportunity to study in-depth areas of nutrition and food science which are not offered in the regular curriculum. May be repeated for a maximum of six semester hours as long as the topic is different.
Prerequisites: Departmental approval.

NUFD 509 RESEARCH SEMINAR 3
Carrying out a research study on specific problems of limited scope. Work maybe taken in nutrition and food science.
Prerequisites: NUFD 507

NUFD 557 FOOD SAFETY AND SANITATION MANAGEMENT 3
This course is offered for those who must understand food sanitation and safety for effective food management and production. The course emphasizes the understanding of food safety and food sanitation risk management and microbial food contaminants as it encompasses changing federal and state compliance regulations including hazard Analysis Critical Control Point (HACCP), good manufacturing practices and Safe, Sanitary Operational Procedures (SSOP).

NUFD 560 ADVANCED NUTRITION COUNSELING FOR DIVERSE POPULATION GROUPS 3
Topics include ethnic variations in health care beliefs; culturally sensitive nutrition counseling skills, developmental skills and dietary behaviors of children, adolescents and aging adults and nutrition counseling approaches for these age groups. Six hours of nutrition counseling clinical experience required.
Prerequisite: NUFD 482.
NUFD 573 FOOD AND NUTRITION REGULATIONS AND COMPLIANCES 3
This course will provide an in-depth understanding of the legal and regulatory compliances of food and dietary supplement products in the United States. Topics will cover issues such as food and food safety regulation, regulatory compliance, Hazard Analysis Critical Control Points (HACCP), International Standards Organization (ISO), the regulation of Genetically Modified Organisms (GMO’s), food additives, food labeling, dietary supplements and more recently, the protection of the food supply from bio or chemo terrorism or “food security.”

NUFD 577 SOCIAL MARKETING IN NUTRITION 3
Social Marketing in Nutrition course entails a comprehensive view of the applications of social marketing in the design, implementation, and evaluation of nutrition education programs. Social marketing is an audience-centered approach that focuses on multiple, reinforcing channels of communication along with environmental changes to influence behavior. Highlights of social marketing will be presented in light of its usefulness and applicability to nutrition education.
Prerequisite: Basic nutrition course or departmental approval.

NUFD 580 NEW FINDINGS IN NUTRITION 3
This course enables students to develop detailed and in-depth knowledge of human nutrition, nutrients and their interrelationships. Emphasis is placed on the critical review and analysis of recent development in nutrition research.
Prerequisites: NUFD 182 or NUFD 192; CHEM 109, CHEM 111, and BIOL 243; or equivalents.

NUFD 581 NUTRITION EDUCATION 3
This course is designed to provide students with skills for developing, implementing, evaluating and funding nutrition education programs for populations with various demographic characteristics.
Prerequisites: NUFD 182 or NUFD 192; CHEM 109, CHEM 111, and BIOL 243; or equivalents.

NUFD 583 NUTRITIONAL ASPECTS OF FOOD PROCESSING AND HANDLING 3
A course designed to study the theory and practice of evaluating food processing from a nutritional standpoint and to compare food availability with the effects that various kinds of processing have on nutrient content. This course is appropriate for graduate students and selected seniors in food and nutrition, food service management, biology, chemistry, and health sciences.
Prerequisites: CHEM 130, and NUFD 150 and NUFD 182 or NUFD 192.

NUFD 585 FOOD AND NUTRITION ISSUES 3
An investigation of current issues in food and nutrition with an emphasis on consumer, food industry, government and professional perspectives.
Prerequisites: NUFD 382.
NUFD 587  NUTRITION EDUCATION PRACTICUM  3
The practicum is designed to provide students with planned, supervised experiences in a
variety of selected business agencies or organizations where nutrition education skills and
competencies can be utilized.
Prerequisites: NUFD 580 and 581.

NUFD 668  NUTRITION ASSESSMENT  3
This course covers the systematic principles and comprehensive steps of human nutrition
assessment. This includes screening of nutritional status, planning nutrition intervention
as well as implementation and evaluation of nutrition intervention processes. The tools and
techniques used in nutrition assessment will be utilized by the students in this course.
Prerequisites: Anatomy and Physiology, Chemistry, Biochemistry, Nutrition, or NUFD
501, or departmental approval.

NUFD 698  MASTER’S THESIS  4
Independent research project done under faculty advisement. Students must follow the
MSU Thesis Guidelines, which maybe obtained from the Graduate School. Students
should take NUFD 699 if they don’t complete NUFD 698 within the semester.
Prerequisite: Departmental approval.

NUFD 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In
Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisites: NUFD 698.

NUFD 412  NUTRITION EDUCATION TECHNIQUES  3
Procedures and techniques for developing programs and teaching nutrition to a variety of
target populations. Individual and group methods emphasize innovation. Field studies.
Prerequisites: NUFD 182 and NUFD 282.

NUFD 482  NUTRITION COUNSELING  3
This course offers practical experience dealing with the principles of marketing, adult
learning, helping skills, assessment, documentation, and evaluation as related to weight
control and the role of food in promotion of a healthy lifestyle. Six hours of clinical
experience is required.
Prerequisite: NUFD 412 or departmental approval. Special fee.

NUFD 488  MEDICAL NUTRITION THERAPY  4
This course enables students to apply nutrition science to the prevention and treatment of
human diseases and medical conditions. Nutrition assessment, diet modification, and
specialized nutrition support, such as enteral and parenteral feeding, are covered.
Prerequisites: NUFD 182 or NUFD 192 and NUFD 382 and BIOL 243 and CHEM 270.
Special fee.

NUFD 490  NUTRITION AND FOOD SCIENCE
PROFESSIONAL SEMINAR  1
A capstone course, which provides skills necessary for beginning professionals in
nutrition and food science fields.
Prerequisites: Junior or senior standing; Nutrition and Food Science majors only with
concentration in General, Dietetics, or Food Management.
The Master of Arts in Legal Studies offers a program of study for students seeking advanced preparation in legal studies. It provides academic opportunities leading to career enhancement for legal professionals. The degree offerings are on the cutting edge of specialty areas such as dispute resolution, human resource management, private sector compliance, law office management, legal technology, legal information management, trademark law, ethics, and professional responsibility.

Legal Studies provides graduate instruction through a broad range of topics which develop the student’s critical understanding of law. Graduate offerings in Legal Studies are designed:

- To enhance professional development in law-related fields.
- To advance the study of law within the context of an interdisciplinary liberal arts education.
- To provide a more advanced level of legal knowledge in areas such as compliance and human resources.
- To prepare for the technologically sophisticated legal environment of the twenty-first century.
- To develop theoretical and practical knowledge of advocacy and dispute resolution.
- To develop advanced research and writing abilities.
- To enhance analytical and critical thinking skills essential to the legal field.

Students may choose the general program without a concentration or they may choose a concentration in Dispute Resolution, Governance, Compliance, and Regulation, or Legal Management, Information, and Technology. In the general program, students have the opportunity to enroll in courses from all concentrations. At the end of their course of study, students may choose either to write a thesis or to be tested by comprehensive examination.

The programs of the department of Legal Studies incorporate education in the liberal arts with sound preparation for law-related professions. Many career alternatives are possible for graduates in government, the corporate sector and private arenas. Graduate course work in legal studies serves the needs of a broad range of professionals including:

- Managers; supervisors; human resource directors; claims managers; compliance officers; affirmative action officers; contract managers; law office managers and administrators; government administrators and officials at the federal, state, county and local levels; public and nonprofit administrators; international specialists; and information specialists.
- Paralegal managers; legal assistant/paralegals; human resource officers; investigators; criminal justice professionals; legal advocates for victims of domestic violence, the disadvantaged and the physically and mentally challenged.
- Primary and secondary school teachers desiring education in law or conflict resolution/peer mediation; consultants; newspaper reporters; practitioners in the
field of dispute resolution; professionals who utilize dispute resolution in various forums, such as labor, insurance and financial markets.

In contrast to the Master of Arts in Legal Studies, the Post-Baccalaureate Paralegal Studies Certificate Program is an appropriate course of study for entry level preparation. Students may elect to pursue the Post-Baccalaureate Certificate and also the Master of Arts degree. Contact the Department of Legal Studies for further information.

ADMISSION REQUIREMENTS

Candidates for admission must have a baccalaureate degree from an accredited college or university and meet the university’s minimum requirements for the Graduate Records Examination. In addition, candidates for admission to the M.A. in Legal Studies must have a minimum cumulative grade point average of 2.75 for their undergraduate work.

Candidates for the M.A. in Legal Studies having limited familiarity with the legal environment, an introductory law course is a recommended prerequisite. Candidates with marginal credentials may be accorded deferred or conditional matriculation status and permitted to enroll in a maximum of two graduate courses in the program. If they attain a combined minimum grade point average of 3.0 in two Legal Studies graduate courses and meet the other matriculation requirements, they may apply for full matriculation status in the program.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN LEGAL STUDIES

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PSYC 558  Personnel Psychology ................................................. 3
PSYC 570  The Psychology of Human Factors ............................... 3
PSYC 571  Organizational Psychology ........................................... 3
SOCI 562  Social Change ................................................................ 3
SOCI 581  Sociological Perspectives on Health and Medicine ............ 3
SPCM 526  Theories of Human Communication .............................. 3
SPCM 536  Seminar in Persuasion .................................................. 3

IV. Thesis or Comprehensive Examination
Students must have completed 27 graduate credits and receive thesis or comprehensive examination approval.

For students selecting Thesis option:
LSLW 698  Master’s Thesis .......................................................... 3
LSLW 699  Master’s Thesis Extension ............................................. 1

For students selecting Comprehensive Examination option, choose one additional departmental elective.

Note: Students may not select more than 2 courses from courses at the 400 level.

Minimum semester hours: 36

REQUIREMENTS FOR THE MASTER OF ARTS
DEGREE IN LEGAL STUDIES, CONCENTRATION IN
DISPUTE RESOLUTION

Semester Hours

I. Required Courses (6 or 9 semester hours)
LSLW 500*  United States Legal System ....................................... 3
LSLW 501  Ethical and Professional Issues in the Legal Environment ...... 3
LSLW 511  Research Methods and Analysis .................................... 3

*LSLW 500 may be waived by the graduate program coordinator for a student with a law-related background and a course from Group III may be substituted in its place.

II. Concentration courses (15 semester hours)
Required:
LSLW 551  Negotiation Theory and Practice .................................... 3
LSLW 552  Mediation Theory and Practice ...................................... 3
LSLW 553  Arbitration and Other Alternative Adjudicative Processes ...... 3
Students must select an additional two elective courses from below:

- LSLW 554 Conflict Management and Peer Mediation in Schools .......... 3
- LSLW 555 Family Mediation ................................................................. 3
- LSLW 556 Dispute Resolution in the Workplace .................................. 3
- LSLW 558 Cross-Cultural Conflict Resolution ................................. 3
- LSLW 559 Advanced Conflict Management in Education ............... 3
- LSLW 560 Bullying Prevention in Schools ........................................... 3

III. Select three courses from departmental electives (9 semester hours)

- LSLW 512 Statutory and Regulatory Analysis ...................................... 3
- LSLW 516 Comparative Legal Systems ................................................. 3
- LSLW 517 Evidence ............................................................................. 3
- LSLW 518 Terrorism: Legal and Regulatory Perspectives .................. 3
- LSLW 519 International Criminal Law ................................................. 3
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- LSLW 578 Legal Aspects of Human Resource Management .............. 3
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- LSLW 580 Field Experience in Legal Studies

OR

- LSLW 581 Cooperative Education in Legal Studies ............................. 4
- LSLW 588 Independent Study in Legal Studies ..................................... 3
- LSLW 590 Environmental Law and Policy ......................................... 3
- LSLW 599 Selected Topics in Legal Studies ......................................... 3
- LSPR 411 Advanced Patent, Trademark and Copyright Law ............ 3
- LSPR 420 Advanced Civil Litigation .................................................. 3

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### IV. Elective

(One elective from Department Electives or approved electives outside of the department) (0 or 3 semester hours)

*Note: A student takes one course from this category only if LSLW 500 is waived.*

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<tr>
<td>SPCM 526</td>
<td>Theories of Human Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 536</td>
<td>Seminar in Persuasion</td>
<td>3</td>
</tr>
</tbody>
</table>

### V. Thesis or Comprehensive Examination

Students must have completed 27 graduate credits and receive thesis or comprehensive examination approval.

For students selecting Thesis option:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSLW 698</td>
<td>Master’s Thesis</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 699</td>
<td>Master’s Thesis Extension</td>
<td>1</td>
</tr>
</tbody>
</table>

For students selecting Comprehensive Examination option, choose one additional departmental elective.

*Note: Students may not select more than 2 courses from courses at the 400 level.*

Minimum semester hours: 36
I. Required Courses (6 or 9 semester hours)
   LSLW 500* United States Legal System ..................................................... 3
   LSLW 501 Ethical and Professional Issues in the Legal Environment ...... 3
   LSLW 511 Research Methods and Analysis .............................................. 3
   *LSLW 500 may be waived by the graduate program coordinator for a student
   with a law-related background and a course from Group III may be substituted
   in its place.

II. Concentration courses - Select five courses from below (15 semester hours)
   LSLW 512 Statutory and Regulatory Analysis .......................................... 3
   LSLW 531 Administrative Law ................................................................. 3
   LSLW 545 Cyberlaw .................................................................................. 3
   LSLW 553 Arbitration and Other Alternative Adjudicative Processes ..... 3
   LSLW 556 Dispute Resolution in the Workplace ...................................... 3
   LSLW 572 Legal Information Management ............................................... 3
   LSLW 574 Human Rights Law .................................................................. 3
   LSLW 577 International Law and Transnational Legal Issues ................. 3
   LSLW 579 Private Sector Compliance with Public Regulations ............... 3

III. Electives - Select 3 courses from below (9 semester hours)
   LSLW 512 Statutory and Regulatory Analysis .......................................... 3
   LSLW 516 Comparative Legal Systems ..................................................... 3
   LSLW 517 Evidence ................................................................................... 3
   LSLW 518 Terrorism: Legal and Regulatory Perspectives ...................... 3
   LSLW 519 International Criminal Law ...................................................... 3
   LSLW 520 Private Civil Responsibility: Contracts and Torts ................. 3
   LSLW 524 Juvenile Law ............................................................................ 3
   LSLW 525 Jurisprudence ........................................................................... 3
   LSLW 527 Computer Crimes ..................................................................... 3
   LSLW 531 Administrative Law ................................................................. 3
   LSLW 537 Entertainment Law ................................................................... 3
   LSLW 538 Trademark Law ........................................................................ 3
   LSLW 540 Criminal Trial Preparation ....................................................... 3
   LSLW 541 Advanced Computer Systems in the Legal Environment ...... 3
   LSLW 545 Cyberlaw .................................................................................. 3
   LSLW 547 Intellectual Property: Copyright, Licensing and Advertising .. 3
   LSLW 550 Law Office Management and Technology ............................... 3
   LSLW 551 Negotiation Theory and Practice .............................................. 3
   LSLW 552 Mediation Theory and Practice ................................................. 3
   LSLW 553 Arbitration and Other Alternative Adjudicative Processes ..... 3
   LSLW 554 Conflict Management and Peer Mediation in Schools .......... 3
   LSLW 555 Family Mediation ................................................................. 3
   LSLW 556 Dispute Resolution in the Workplace ...................................... 3
   LSLW 557 Law Office Financial Management ......................................... 3
   LSLW 558 Cross-Cultural Conflict Resolution ........................................ 3
IV. Elective (One elective from Department Electives or approved electives outside of the department) (0 or 3 semester hours)

Note: A student takes one course from this category only if LSLW 500 is waived.

ANTH 520 Anthropology and International Communication .......... 3
ANTH 550 Culture Change ......................................................... 3
APLN 500 Language and Linguistics ............................................ 3
APLN 502 Sociolinguistics .......................................................... 3
APLN 510 Discourse Analysis ..................................................... 3
APLN 518 Forensic Linguistics .................................................... 3
APLN 536 Languages of the USA ................................................ 3
COUN 481 The Legal Rights of Women ........................................ 3
COUN 559 Dynamics of Group Process ....................................... 3
COUN 574 Counseling in Organizations: Employee Assistance Program 3
ECON 545 Economics of Labor .................................................. 3
ECON 550 Technical Change and International Competition .......... 3
ELAD 521 Education Law ........................................................... 3
ELAD 542 Supervisory Skills for Education and Training Personnel ... 3
ELAD 545 Leadership Skills in Communication for the Educator/Trainer 3
ENWR 590 Graduate Writing Seminar ........................................ 3
HIST 525 The History of American Labor, 1870-1970 ................... 3
HIST 540 Europe as a World Civilization ..................................... 3
HLTH 585 Organization and Administration of Health Care Facilities .. 3
INBS 511 Issues in International Management ........................... 3
LATN 584 Law in Roman Society ............................................... 3
MGMT 510 Human Resources Management .................................. 3
MGMT 511 Issues in International Management ............................ 3
MGMT 520 Managing Global Diversity ....................................... 3
PHIL 424 Seminar in Philosophy (Contemporary Social Thought) .... 3
PSYC 554 Psychology of Business and Industry .......................... 3
PSYC 558 Personnel Psychology ............................................... 3
PSYC 570 The Psychology of Human Factors ............................... 3
IV. Thesis or Comprehensive Examination

Students must have completed 27 graduate credits and receive thesis or comprehensive examination approval.

For students selecting Thesis option:

- LSLW 698 Master’s Thesis ................................................................. 3
- LSLW 699 Master’s Thesis Extension ...................................................... 1

For students selecting Comprehensive Examination option, choose one additional departmental elective.

Note: Students may not select more than 2 courses from courses at the 400 level.

Minimum semester hours: 36

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN LEGAL STUDIES, CONCENTRATION IN LEGAL MANAGEMENT, INFORMATION, AND TECHNOLOGY

Prerequisite: Computer Applications in the Legal Environment (LSPR 339).

Equivalent undergraduate course from other institutions may be substituted.

Semester Hours

I. Required Courses (6 or 9 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSLW 500*</td>
<td>United States Legal System</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 501</td>
<td>Ethical and Professional Issues in the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 511</td>
<td>Research Methods and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

*LSLW 500 may be waived by the graduate program coordinator for a student with a law-related background and a course from Group III may be substituted in its place.

II. Select five courses from concentration courses (15 semester hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSLW 512</td>
<td>Statutory and Regulatory Analysis</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 541</td>
<td>Advanced Computer Systems in the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 545</td>
<td>Cyberlaw</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 550</td>
<td>Law Office Management and Technology</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 553</td>
<td>Arbitration and Other Alternative Adjudicative Processes</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 556</td>
<td>Dispute Resolution in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 557</td>
<td>Law Office Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 572</td>
<td>Legal Information Management</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 578</td>
<td>Legal Aspects of Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>LSLW 579</td>
<td>Private Sector Compliance with Public Regulations</td>
<td>3</td>
</tr>
</tbody>
</table>
III. Select three courses from departmental electives (9 semester hours)

- LSLW 512 Statutory and Regulatory Analysis .......................................... 3
- LSLW 516 Comparative Legal Systems ..................................................... 3
- LSLW 517 Evidence ................................................................................... 3
- LSLW 518 Terrorism: Legal and Regulatory Perspectives ........................ 3
- LSLW 519 International Criminal Law ...................................................... 3
- LSLW 520 Private Civil Responsibility: Contracts and Torts .................... 3
- LSLW 524 Juvenile Law ................................................................. 3
- LSLW 525 Jurisprudence ........................................................................... 3
- LSLW 527 Computer Crimes ................................................................. 3
- LSLW 531 Administrative Law ................................................................. 3
- LSLW 537 Entertainment Law ................................................................. 3
- LSLW 538 Trademark Law ................................................................. 3
- LSLW 540 Criminal Trial Preparation ....................................................... 3
- LSLW 541 Advanced Computer Systems in the Legal Environment ...... 3
- LSLW 545 Cyberlaw ................................................................. 3
- LSLW 547 Intellectual Property: Copyright, Licensing and Advertising .. 3
- LSLW 550 Law Office Management and Technology ............................... 3
- LSLW 551 Negotiation Theory and Practice .............................................. 3
- LSLW 552 Mediation Theory and Practice .............................................. 3
- LSLW 553 Arbitration and Other Alternative Adjudicative Processes ..... 3
- LSLW 554 Conflict Management and Peer Mediation in Schools .......... 3
- LSLW 555 Family Mediation ................................................................. 3
- LSLW 556 Dispute Resolution in the Workplace ....................................... 3
- LSLW 557 Law Office Financial Management ......................................... 3
- LSLW 558 Cross-Cultural Conflict Resolution ......................................... 3
- LSLW 559 Advanced Conflict Resolution in Education .......................... 3
- LSLW 560 Bullying Prevention in Schools .............................................. 3
- LSLW 572 Legal Information Management ............................................ 3
- LSLW 573 Seminar in Law and Literature ................................................ 3
- LSLW 574 Human Rights Law ................................................................. 3
- LSLW 577 International Law and Transnational Legal Issues ................. 3
- LSLW 578 Legal Aspects of Human Resource Management .................. 3
- LSLW 579 Private Sector Compliance with Public Regulations ............... 3
- LSLW 580 Field Experience in Legal Studies
  OR
- LSLW 581 Cooperative Education in Legal Studies .................................. 4
- LSLW 588 Independent Study in Legal Studies ......................................... 3
- LSLW 590 Environmental Law and Policy ................................................ 3
- LSLW 599 Selected Topics in Legal Studies ............................................. 3
- LSPR 411 Advanced Patent, Trademark and Copyright Law .................. 3
- LSPR 420 Advanced Civil Litigation ...................................................... 3

IV. Elective (One elective from Department Electives or approved electives outside of the department) (0 or 3 semester hours)

Note: A student takes one course from this category only if LSLW 500 is waived.

- ANTH 520 Anthropology and International Communication .................. 3
- ANTH 550 Culture Change ........................................................................ 3
- APLN 500 Language and Linguistics ..................................................... 3
V. Thesis or Comprehensive Examination

Students must have completed 27 graduate credits and receive thesis or comprehensive examination approval.

For students selecting Thesis option:

- LSLW 698 Master’s Thesis ................................................................. 3
- LSLW 699 Master’s Thesis Extension ............................................. 1

For students selecting Comprehensive Examination option, choose one additional departmental elective.

Note: Students may not select more than 2 courses from courses at the 400 level.

Minimum semester hours: 36
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSLW 500</td>
<td>UNITED STATES LEGAL SYSTEM</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course provides the theoretical basis and</td>
<td></td>
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<tr>
<td></td>
<td>appropriate applications of law within the</td>
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<tr>
<td></td>
<td>United States legal system in the context of its</td>
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<tr>
<td></td>
<td>foundations, processes and norms. Integrating</td>
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<tr>
<td></td>
<td>readings from legal theorists, scholars and</td>
<td></td>
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<tr>
<td></td>
<td>jurists, the course presents the full range of</td>
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<tr>
<td></td>
<td>legal perspectives and processes in order to</td>
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<tr>
<td></td>
<td>understand methodologies for resolving legal</td>
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<tr>
<td></td>
<td>problems within the evolving United States</td>
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<td></td>
<td>system of law.</td>
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<tr>
<td>LSLW 501</td>
<td>ETHICAL AND PROFESSIONAL ISSUES IN THE LEGAL</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENVIRONMENT</td>
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<tr>
<td></td>
<td>Examination of ethical and professional issues</td>
<td></td>
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<td></td>
<td>as they relate to the legal environment.</td>
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<td></td>
<td>Exploration of different viewpoints and</td>
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<td></td>
<td>conflicting views. Interrelationships with rules</td>
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<td></td>
<td>of professional responsibility analyzed and</td>
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<td></td>
<td>discussed through hypothetical and real ethical</td>
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<tr>
<td></td>
<td>dilemmas.</td>
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<tr>
<td>LSLW 511</td>
<td>RESEARCH METHODS AND ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Presentation of theory and methods of</td>
<td></td>
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<tr>
<td></td>
<td>intellectual inquiry and research. Advanced</td>
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<tr>
<td></td>
<td>study of legal research methodology and legal</td>
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<tr>
<td></td>
<td>analysis which includes preparation of scholarly</td>
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<tr>
<td></td>
<td>legal research papers.</td>
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<tr>
<td>LSLW 512</td>
<td>STATUTORY AND REGULATORY ANALYSIS</td>
<td>3</td>
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<tr>
<td></td>
<td>Study of legislative and administrative processes</td>
<td></td>
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<tr>
<td></td>
<td>including the creation, application and</td>
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<tr>
<td></td>
<td>interpretation of statutory and administrative</td>
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<tr>
<td></td>
<td>law. Required research includes use of primary</td>
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<tr>
<td></td>
<td>and secondary legislative and administrative</td>
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<tr>
<td></td>
<td>law materials as well as legislative history.</td>
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<tr>
<td>LSLW 516</td>
<td>COMPARATIVE LEGAL SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To provide students with a broad understanding</td>
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<tr>
<td></td>
<td>of the different legal systems through the</td>
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<td></td>
<td>examination of their historical backgrounds;</td>
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<tr>
<td></td>
<td>sources of law and legal institutions. Study of</td>
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<tr>
<td></td>
<td>substantive and procedural laws in representative</td>
<td></td>
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<tr>
<td></td>
<td>countries of the common law and civil traditions.</td>
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<tr>
<td>LSLW 517</td>
<td>EVIDENCE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course provides an in-depth exposure to the</td>
<td></td>
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<tr>
<td></td>
<td>rules of evidence and their application in civil</td>
<td></td>
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<tr>
<td></td>
<td>and criminal litigation situations.</td>
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<tr>
<td>LSLW 518</td>
<td>TERRORISM: LEGAL AND REGULATORY PERSPECTIVES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study of the laws and the framework regulations</td>
<td></td>
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<tr>
<td></td>
<td>regulating domestic and international response</td>
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<tr>
<td></td>
<td>to the global phenomenon of terrorism.</td>
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<tr>
<td>LSLW 519</td>
<td>INTERNATIONAL CRIMINAL LAW</td>
<td>3</td>
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<tr>
<td></td>
<td>This course provides students with the</td>
<td></td>
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<tr>
<td></td>
<td>theoretical foundations and practical applications</td>
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<tr>
<td></td>
<td>of international criminal law. As the problems</td>
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<tr>
<td></td>
<td>of international and transnational crimes</td>
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<tr>
<td></td>
<td>impact on world order and stability, efforts</td>
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<tr>
<td></td>
<td>will be intensified in the global community to</td>
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<tr>
<td></td>
<td>codify crimes, establish protocols of international</td>
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</tr>
<tr>
<td></td>
<td>cooperation and defend fundamental rights against</td>
<td></td>
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<tr>
<td></td>
<td>public or private violence.</td>
<td></td>
</tr>
</tbody>
</table>
PRIVATE CIVIL RESPONSIBILITY: CONTRACTS AND TORTS 3
Study of aspects of contract and tort law and their interaction in contemporary business practices, examined in the context of an ever-changing society. Application of common law principles and contract and tort as well as the Uniform Commercial Code. Judicial and legislative roles and reactions to change in the context of the public good and business interests.

JUVENILE LAW 3
The goal of this course is to provide students with the theoretical foundations and practical applications of juvenile law. The course will utilize a model and method approach, which will present theory and procedure in a case problem context. The course will explore the history and philosophy of juvenile law, landmark court cases, police handling of juveniles and the pretrial and hearing process. It will acquaint students with various traditional legal theories and compare and contrast them with juvenile law as it has evolved to meet changes in society.

JURISPRUDENCE 3
To acquaint students with procedural and substantive principles of Jurisprudence as it is developed in American Law. The course will chart the development of basic legal and philosophical principles governing the theory of law through its cultural and constitutional roots through the early 21st century. Special attention will be given to analysis of legal realism and feminist jurisprudence.

COMPUTER CRIMES 3
This course will provide students with the theoretical foundations and practical applications of the law applied to technology-based crimes. The course will utilize a model and method approach, which will present theory and procedure in a case problem context. The course will acquaint students with the procedures utilized in the detection and prosecution of computer crimes.

ADMINISTRATIVE LAW 3
A critical analysis of the body of law which regulates government agencies and their relations with the public. Examination of federal and state administrative law, regulations, rules and procedures.

ENTERTAINMENT LAW 3
This course provides students with the theoretical foundations and practical applications of entertainment law. The course utilizes a model and method approach, which presents theory and procedure in a case problem context. The course acquaints students with various traditional legal theories and compares and contrasts them with law as it has evolved to meet new changes in society. Areas to be covered include representing minors, contract preparation, copyright infringement, publishing, the record industry, film, and television.

TRADEMARK LAW 3
Comprehensive study of procedural and substantive aspects of trademark selection, registration, use and protection within the context of intellectual property.
LSLW 540 CRIMINAL TRIAL PREPARATION 3
Preparation and trial of a criminal case as studied through case law, procedures, techniques and strategies. Contrast of New Jersey and Federal criminal procedure. Study of investigation, pleadings, motions, discovery, jury selection, evidentiary problems, direct and cross-examination and summations. Extensive use of simulation exercises.

LSLW 541 ADVANCED COMPUTER SYSTEMS 3
IN THE LEGAL ENVIRONMENT
Application of operation of computer systems, including hardware and software, designed specifically to assist in the practice of law or the management of law office and to provide students with a conceptual basis for evaluation, application and operation of other legal application and systems programs which may become available.

LSLW 545 CYBERLAW 3
To acquaint students with procedural and substantive principles of Internet technology and legal principles which are at the nexus of modern legal practice. To become versed in the theory and practice of intellectual property, criminal law, jurisdictional issues and choice of law relating to commerce, law enforcement, and legal procedure. To teach students to analyze and synthesize legal principles which are at the core of changing World Wide Web technology.

LSLW 547 INTELLECTUAL PROPERTY: COPYRIGHT, LICENSING AND ADVERTISING 3
To acquaint students with procedural and substantive principles of Intellectual Property Law as it is developed and is practiced in the entertainment field. The course will chart the development of intellectual property in American law from its constitutional roots through the early 21st century. Special attention will be given to analysis of issues in entertainment law involving copyright, licensing, and advertising.

LSLW 550 LAW OFFICE MANAGEMENT AND TECHNOLOGY 3
Theoretical foundations and practical applications of law office management and technology. Hands-on and theoretical problems dealing with work product, human resources, and workflow in assembly, case management, database management, human resource management, and technological interfaces with traditional processes.

LSLW 551 NEGOTIATION THEORY AND PRACTICE 3
In-depth study of negotiation theories and practical applications. Includes an examination and comparison of various negotiation theories and critical skills needed to be an effective negotiator. Extensive role plays. Study of ethical and policy issues. LSPR 308 is recommended as a prerequisite.

LSLW 552 MEDIATION THEORY AND PRACTICE 3
In-depth examination of the theory and practical applications of mediation. Integration of ethical and policy issues and applications through role plays. Study of how the various applications affect the mediation process and the court’s role in the development of mediation. LSPR 308 is recommended as a prerequisite.
LSLW 553 ARBITRATION AND OTHER ALTERNATIVE ADJUDICATIVE PROCESSES

In-depth examination of the theory and applications of arbitration and other adjudicative processes. Utilization of role plays to expand student knowledge and ability to understand increasingly complex issues. Examination of policy and ethical issues and exploration of case law research. LSPR 308 is recommended as a prerequisite.

LSLW 554 CONFLICT MANAGEMENT AND PEER MEDIATION IN SCHOOLS

Comprehensive study of the theory and application of interpersonal conflict resolution processes between and among individual students and groups of similar status in primary, secondary and higher education.

LSLW 555 FAMILY MEDIATION

Theoretical and practical aspects of mediation in the family law context. Overview of the laws which govern and affect the formation, maintenance and dissolution of the family unit. Study of the increasingly important role of family mediation both privately and within the judicial structure. Integration of ethical and practical considerations and enhancement of student understanding through role plays and independent research. LSLW 552 is recommended as a prerequisite.

LSLW 556 DISPUTE RESOLUTION IN THE WORKPLACE

Critical study of procedural and substantive legal principles of dispute resolution in the workplace. Exploration of procedures such as negotiation, mediation, arbitration, fact finding, and grievance resolution through collective bargaining which is the core of dispute resolution in both private and public sector employment. LSLW 551 is recommended as a prerequisite.

LSLW 557 LAW OFFICE FINANCIAL MANAGEMENT

To acquaint students with the various types, applications, and procedures of financial management in the legal environment. To explore the various financial, timekeeping, and accounting controls which are at the core of the law office efficiency. To become knowledgeable about various state Rules of Professional Conduct as they affect legal practice. To teach students to manage accounts receivable, financial ledgers, disbursements, and various required journals manually and using computer software.

LSLW 558 CROSS-CULTURAL CONFLICT RESOLUTION

Intensive study and application of theories and techniques of cross-cultural conflict resolution. Examination of issues of race, ethnicity, gender, religion, and sexual preference within the context of dominant Western culture. LSLW 552 is recommended as a prerequisite.

LSLW 559 ADVANCED CONFLICT RESOLUTION IN EDUCATION

This course will provide students with the theoretical foundations and applications of four emerging areas from the conflict resolution field: celebration of diversity, prevention of sexual harassment, support of gender equity, and teaching character education. These interconnected areas are being implemented in school settings in order to create a safe learning environment and avoid legal liability.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSLW 560</td>
<td>BULLYING PREVENTION IN SCHOOLS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course will provide students with the theory of</td>
<td></td>
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<tr>
<td></td>
<td>bullying prevention in educational settings. Students</td>
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<tr>
<td></td>
<td>will critically analyze curriculum targeted to support</td>
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<tr>
<td></td>
<td>bullying prevention, study state laws regarding</td>
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<tr>
<td></td>
<td>bullying prevention and harassment, and enhance the</td>
<td></td>
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<tr>
<td></td>
<td>connections with conflict resolution and related</td>
<td></td>
</tr>
<tr>
<td></td>
<td>fields.</td>
<td></td>
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<tr>
<td>LSLW 572</td>
<td>LEGAL INFORMATION MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study of theoretical aspects of information theory in</td>
<td></td>
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<tr>
<td></td>
<td>the legal environment with application to the problem</td>
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<tr>
<td></td>
<td>method of analysis. This course will examine the</td>
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<tr>
<td></td>
<td>compilation and analysis of legal information from</td>
<td></td>
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<tr>
<td></td>
<td>automated litigation support through computer-assisted</td>
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<tr>
<td></td>
<td>legal research.</td>
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<tr>
<td>LSLW 573</td>
<td>SEMINAR IN LAW AND LITERATURE</td>
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<td>This course examines the “Law and Literature”</td>
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<td>movement, an area of study developed within the legal</td>
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<td>field over the past several decades. The course is</td>
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<td>devoted to a thematic exploration and examination of</td>
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<td>the application of the concepts of law and literature</td>
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<td>and underscores areas of mutual illumination of the</td>
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<td>two vast bodies of text: legal opinions and works of</td>
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<td>LSLW 574</td>
<td>HUMAN RIGHTS LAW</td>
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<td>To acquaint students with procedural and substantive</td>
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<td>principles of Human Rights Law in the international</td>
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<td>arena. The course will chart the development of</td>
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<td>Human Rights Law in various cultures from the Judaic</td>
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<td>and Greek eras through the enlightenment to the 20th</td>
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<td>century. Special attention will be given to analysis</td>
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<td>of disputes involving native populations and minority</td>
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<td>rights as they are affected by the United Nations</td>
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<td>Charter, Treaties, and Conventions. Issues of criminal,</td>
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<td>commercial and individual rights will be considered.</td>
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<td>LSLW 577</td>
<td>INTERNATIONAL LAW AND TRANSNATIONAL LEGAL ISSUES</td>
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<td>To acquaint students with procedural and substantive</td>
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<td>principles of International Law as it has developed</td>
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<td>and is practiced under the United Nations Charter,</td>
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<td>Conventions, Accords, Protocols, and Agreements. The</td>
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<td>course will chart the development of International</td>
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<td>Law from its roots in early legal and cultural</td>
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<td>traditions through the early 21st century. Special</td>
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<td>attention will be given to analysis of issues of</td>
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<td>international compliance and regulatory issues.</td>
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<td>LSLW 578</td>
<td>LEGAL ASPECTS OF HUMAN RESOURCE MANAGEMENT</td>
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<tr>
<td></td>
<td>In-depth study of procedural and substantive legal</td>
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<td>principles of human resource management. Exploration</td>
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<td>of the various procedures which can and should shape</td>
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<td>the work environment in both private and public</td>
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<td>employment.</td>
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<td>LSLW 579</td>
<td>PRIVATE SECTOR COMPLIANCE WITH PUBLIC REGULATIONS</td>
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<td>In-depth study of federal and state requirements of</td>
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<td>compliance with public regulations in the areas of</td>
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<td>labor, employment, employee benefits, affirmative</td>
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<td>action, equal pay, and other federal and state</td>
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<td>mandated policies. Exploration of the interplay of</td>
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<td>various statutory and common law requirements governing</td>
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<td>private organizations which function in the United</td>
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LSLW 580  FIELD EXPERIENCE IN LEGAL STUDIES 3
Application of academic theories to compensated field experience of 120 hours over a semester in a legal environment reflective of the student’s course of study. Research of issues related to placement and/or ethical issues.
Prerequisites: Completion of a minimum of LSLW 501, LSLW 511 and 18 additional credits towards the M.A..

LSLW 581  COOPERATIVE EDUCATION IN LEGAL STUDIES 3
Application of academic theories to compensated field experience of 20 hours per week in a legal environment reflective of the student’s course of study. Research of issues related to placement and/or ethical issues.
Prerequisites: Completion of a minimum of LSLW 501, LSLW 511 and 18 additional credits toward the M.A. degree and departmental approval.

LSLW 588  INDEPENDENT STUDY IN LEGAL STUDIES 1-4
To allow students and faculty to create courses of study within the discipline of Legal Studies which more precisely reflect students needs and to supplement concentration courses with other courses which more fully educate students according to their specific educational needs.

LSLW 590  ENVIRONMENTAL LAW AND POLICY 3
The goal of this course is to provide students with the theoretical foundations and practical applications of Environmental Law. The course will utilize a model and method approach, which will present theory and procedure in a case problem context. The course will acquaint students with various traditional legal theories and compare and contrast them with law as it has evolved to meet new changes in society.

LSLW 599  SELECTED TOPICS IN LEGAL STUDIES 3
Examination of a current topic in the legal environment that is of significance. Analysis of theoretical foundations and practical applications in the area studied. Development of the ability to critically analyze, observe, and research the topic under examination, as well as prepare a research paper. May be repeated once for a maximum of six semester hours.

LSLW 698  MASTER’S THESIS 4
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take LSLW 699 if they don’t complete LSLW 698 within the semester.
Prerequisite: Departmental approval.

LSLW 699  MASTER’S THESIS EXTENSION 1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: LSLW 698.
Linguistics

Telephone: (973) 655-4286

The M.A. in Applied Linguistics prepares students for careers in a variety of professions where an understanding of language is essential. Students may choose to concentrate their studies in one of several areas; among these are second language learning and teaching, TESL, discourse analysis, computational linguistics, language policy and language planning. As an example, students who are interested in the interaction between language and society might choose to take APLN 530 Language Policy and Language Planning, APLN 532 Language and Culture, and APLN 534 Languages in Contact as three of their electives. Certification in Teaching English as a Second Language (TESL) as a second teaching field is available for students who already hold certification in another field. A certificate in Teaching English to Speakers of Other Languages is also available. See index for a description of the TESOL certificate.

Students in other programs may elect Linguistics courses with their graduate program coordinator’s prior approval.

Certification in Teaching English as a Second Language as a second teaching field

To be eligible for certification in Teaching English as a Second Language (TESL) as a second teaching field, students must complete a course of study of 18 semester hours. Interested students should contact the Linguistics Department for the list of required courses.

Admission Requirement

Candidates must fulfill the criteria for graduate matriculation at Montclair State University listed in this catalogue (Admission to Graduate Study). After they have been accepted, candidates will consult with the graduate program coordinator in the Linguistics Department to plan their individual programs of study.

Requirements for the Master of Arts Degree in Applied Linguistics

The M.A. in Applied Linguistics requires the successful completion of 36 semester hours, a comprehensive exam, and a 1 semester hour research requirement (described below in IV). The 36 semester hours of course work include a core of 18 semester hours required of all students. The remaining 18 semester hours will be chosen from among the approved electives in consultation with the graduate program coordinator.

<table>
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<tr>
<th>Semester Hours</th>
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<tr>
<td>I. Required Courses (18 semester hours)</td>
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<tr>
<td>* APLN 500 Language and Linguistics .................................................. 3</td>
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<tr>
<td>APLN 502 Sociolinguistics ................................................................. 3</td>
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<tr>
<td>APLN 504 Syntax ................................................................................... 3</td>
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<tr>
<td>APLN 505 Semantics and Pragmatics .................................................... 3</td>
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</table>
II. Electives-Group I (6 semester hours)
Students select at least 2 of the following 7 courses:
(Additional courses taken from Group I will also count towards a student’s electives.)

APLN 510 Discourse Analysis ................................................................. 3
+APLN 520 Current Theories of Second Language Acquisition ................. 3
APLN 530 Language Policy and Language Planning ................................ 3
APLN 540 Literacy .................................................................................... 3
APLN 550 Computational Linguistics ....................................................... 3
APLN 560 Translation Theory ................................................................. 3
APLN 570 The Structure of American Sign Language .............................. 3

III. Electives-Group II (12 semester hours)
Students elect 4 courses from the list below and/or from the above list:†

APLN 512 Cross-Cultural Discourse Analysis .......................................... 3
APLN 518 Forensic Linguistics ................................................................. 3
APLN 522 Sociocultural Theory and Second Language Acquisition/Learning ............................................................... 3
+APLN 524 Advanced Structure of American English ......................... 3
+APLN 525 Methodology of Teaching ESL ............................................ 3
APLN 526 Computer-Assisted Language Instruction ............................... 3
APLN 528 Language Testing and Assessment ........................................... 3
+APLN 532 Language and Culture ............................................................ 3
APLN 534 Languages in Contact ............................................................... 3
APLN 535 Language Policy in Nations in Transition ............................... 3
APLN 536 Languages of the U.S.A. ........................................................... 3
APLN 538 Cross-Cultural Perspectives on Language Socialization .......... 3
APLN 542 Cross-Cultural Perspectives on Literacy .................................... 3
APLN 544 Linguistics and Reading ........................................................... 3
APLN 552 Current Issues in Natural Language Processing ....................... 3
APLN 565 Lexicography ........................................................................... 3
APLN 590 Selected Topics in Applied Linguistics .................................... 3
APLN 594 Independent Study .................................................................... 3
APLN 596 Independent Study .................................................................... 3

+Students interested in completing certification in TESL as a second teaching field must take these electives from Group I and from Group II. APLN 529 TESL Practicum does not count as an elective for the M.A. in Applied Linguistics but is a New Jersey State Requirement for TESL certification as a second teaching field.

† In consultation with the Linguistics Department’s graduate program coordinator, students may elect to take up to 3 courses from a list of appropriate courses offered by other departments.
IV. Research Requirement

APLN 605 Independent Research .............................................................. 1

(A grade of no credit (NC) will be used until the research is completed; may be repeated 3 times.)

All students are required to do an original piece of linguistics research in order to complete their M.A. in Applied Linguistics. This research is to be presented in the form of a paper of at least 30 pages. The paper may be a revision of one written for a graduate course in Linguistics. The paper will be read and approved by the faculty member supervising the independent research as well as by two other faculty members; one of the other two faculty can be from outside of the Linguistics department. A twenty-minute oral presentation of the research will be given by the student at an annual Linguistics Department Colloquium.

V. Comprehensive Examination

Minimum semester hours: 37

LINGUISTICS

Course Descriptions

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<tr>
<th>Semester Hours</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>3</td>
<td>APLN 500</td>
<td>LANGUAGE AND LINGUISTICS</td>
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<td>An overview of the study of language and linguistics intended to provide students with a clear understanding of human language and with the conceptual foundations of linguistics. The course will expose students to several major areas within linguistics: language acquisition, phonetics, phonology, morphology, syntax, semantics and pragmatics. It will introduce the major tenets and principles of linguistics without surveying the areas treated in the other graduate courses in the department. It is a prerequisite for all other courses in the M.A. program.</td>
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<tr>
<td>3</td>
<td>APLN 502</td>
<td>SOCIOLINGUISTICS</td>
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|                |             | The study of language in its social context with a focus on language variation. Topics include language and social class, language and ethnicity, language and gender, and the study of standard versus nonstandard varieties of language. 
*Prerequisite: APLN 500.* |
| 3              | APLN 504    | SYNTAX |
|                |             | An investigation of the findings of theoretical syntax and the valuable insights which these provide for syntactic analysis in language teaching, for language-learning texts, for translation, for work in artificial intelligence, etc. 
*Prerequisite: APLN 500.* |
APLN 505 SEMANTICS AND PRAGMATICS  
An exploration of the main tenets of contemporary semantics and pragmatics, the areas of linguistics that examine various aspects of meaning. The course investigates the boundaries between semantics and pragmatics by studying utterance meaning as well as lexical and sentence meaning. Students will learn about the applications of semantics and pragmatics to a variety of areas of applied linguistics.  
Prerequisite: APLN 500.

APLN 506 PHONETICS AND PHONOLOGY  
The study of the basic principles of phonetics and phonology, and the relevance of these principles to a variety of applications, including foreign-language teaching, speech pathology, and the analysis and synthesis of speech by computer.  
Prerequisite: APLN 500. Special fee.

APLN 508 RESEARCH DESIGN IN APPLIED LINGUISTICS  
A course to train students in research design, methodology and data collection procedures. Students learn skills which prepare them for administrative and research positions in fields such as language planning, ESL curriculum evaluation and language learning measurement.  
Prerequisite: APLN 500.

APLN 510 DISCOURSE ANALYSIS  
An investigation of the techniques used in discourse analysis, the branch of linguistics which studies how to analyze naturally occurring connected speech. Discourse analysis is the study of the organization of language above the sentence level including the structure of conversations. It considers language in a social context, in particular the language used in verbal interactions.  
Prerequisite: APLN 500.

APLN 512 CROSS-CULTURAL DISCOURSE ANALYSIS  
A discourse analytic examination and comparison of the verbal practices and communicative strategies of different linguistic, social and cultural groups. Students will broaden their understanding of discourse analysis by investigating verbal interactions that take place in different languages and within a variety of cultural contexts.  
Prerequisites: APLN 510.

APLN 518 FORENSIC LINGUISTICS  
The study of the role of the linguist in the field of law. The course analyzes the difference between “truth” as defined by science and by the law. It describes how linguists can serve as “expert witnesses” in civil cases and in a wide range of criminal investigations. It also explores how dialect study, discourse analysis, lexical analysis, phonetics, pragmatics, etc. can provide linguistic evidence crucial to litigation.  
Prerequisite: APLN 500.

APLN 520 CURRENT THEORIES OF SECOND LANGUAGE ACQUISITION  
An in-depth analysis of the processes of child and adult second language acquisition (SLA) and how it differs from first language acquisition and the implications of these theories for the teaching and learning of second languages. The application of sociolinguistics and psycholinguistics to language teaching.  
Prerequisite: APLN 500.
APLN 522  SOCIOCULTURAL THEORY AND SECOND LANGUAGE ACQUISITION/LEARNING

An examination of the basic tenets of sociocultural theory of mind and their application to various aspects of second language acquisition/learning. The results of recent studies present evidence that collaborative mental activity carried out through linguistic means promotes second language learning. At the core of this theory is the principle of linguistically mediated cognition; that is, growth in mental abilities is mediated through language working in collaboration with others.

Prerequisite: APLN 500.

APLN 524  ADVANCED STRUCTURE OF AMERICAN ENGLISH

A detailed analysis of the phonological and grammatical structures of American English; advanced study of the social and stylistic varieties of American English; various theories of English grammar are studied.

Prerequisite: APLN 500.

APLN 525  METHODOLOGY OF TEACHING ESL

The study of current issues in the teaching of English as a Second Language. Issues may include innovative teaching methodologies, the application of language learning theories to classroom teaching and the adaptation and development of instructional materials.

Prerequisite: APLN 500.

APLN 526  COMPUTER-ASSISTED LANGUAGE INSTRUCTION

Designed for prospective and experienced foreign language and ESL teachers who are interested in exploring the following areas: the use of network-based computer instruction; authentic interactive language instruction via the World Wide Web; and the use and evaluation of currently available software and CD Roms for teaching second and foreign languages. This course is intended to introduce students to the use of computer-mediated language instruction and to the evaluation and selection of software for language learning.

Prerequisite: APLN 500. Special fee.

APLN 528  LANGUAGE TESTING AND ASSESSMENT

Basic concepts of testing: reliability, validity, correlation, etc. Statistical concepts: correlation coefficient, standard deviation, etc. Testing individual language skills: listening, reading, writing and oral proficiency. Testing communicative competence. Measuring language dominance in bilingualism.

Prerequisites: APLN 520, and 525.

APLN 529  TESL PRACTICUM

To provide students who are seeking certification in Teaching English as a Second Language (TESL) as a second teaching field, with an opportunity to teach ESL in a formal classroom setting. Arrangements will be made on an individual basis for each student.

Prerequisites: Completion of other required courses for TESL certification. APLN 525 may be taken as a corequisite.
APLN 530 LANGUAGE POLICY AND LANGUAGE PLANNING 3
The study of the problems facing multilingual societies. The course explores the function of standard languages and the competition which often exists among different populations and languages. Topics include the role of language in ethnic loyalty, the dynamics of language loss and maintenance and the linguistic, economic, sociological, political and educational aspects of language planning.
Prerequisite: APLN 500.

APLN 532 LANGUAGE AND CULTURE IN MINORITY EDUCATION 3
An investigation of the intimate connection between language, culture, and ethnic pride and identity. Study of the communication problems faced by bilingual children due to differences in verbal and nonverbal patterns of communication; survey of various instructional methods and models employed in teaching children from different linguistic and cultural backgrounds; study of the correlation between language and various socio-cultural factors.
Prerequisite: APLN 500.

APLN 534 LANGUAGES IN CONTACT 3
A study of the effects of bilingualism and multilingualism on society and on the languages involved. By examining a variety of examples, students become familiar with the possible outcomes of language contact and with the factors that play a role in language-policy decisions in multilingual societies. Pidgins and creoles are also studied.
Prerequisite: APLN 500.

APLN 536 LANGUAGES OF THE USA 3
A survey of the indigenous, colonial, and immigrant languages of the U.S., and how they are used in education and general communication. Also studied are factors affecting the maintenance or loss of languages and the shift from native languages to English with discussion of the mutual effects of language contact.
Prerequisite: APLN 500.

APLN 538 CROSS-CULTURAL PERSPECTIVES ON LANGUAGE SOCIALIZATION 3
A cross-cultural analysis of how children are socialized to use language and how children are socialized through the use of language. Investigates how children learn about their culture through learning their language. Connects the phenomenon of language acquisition to the belief-system and family structure within a society.
Prerequisite: APLN 500.

APLN 540 LITERACY 3
An exploration of the nature of written language and its role in cognition and in social and intellectual life. The linguistic, psychological, and functional differences between speaking, writing, and reading are studied. Literate and non-literate societies are examined.
Prerequisite: APLN 500.

APLN 542 CROSS-CULTURAL PERSPECTIVES ON LITERACY 3
An overview of how reading and writing are acquired among various societies throughout the world and what educational implications this knowledge has in applied contexts, such as in the teaching of English as a Second Language.
Prerequisite: APLN 500.
APLN 544 LINGUISTICS AND READING 3
A study of the insights into the reading process provided by the linguist’s description of what the speaker knows about language; an analysis of what the process of language acquisition tells us about the process by which children learn to read; an investigation of the connection between dialect differences and reading difficulties and an exploration of the contribution that linguistics makes for teaching second language learners to read English.

Prerequisite: APLN 500.

APLN 550 COMPUTATIONAL LINGUISTICS 3
A survey of the field of existing computer systems for analyzing natural language. The following areas are covered: parsing, semantic analysis and discourse analysis. Students will be required to analyze human language using a specific programming language such as PROLOG, LISP or Pascal.

Prerequisite: APLN 500. Special fee.

APLN 553 TEXT ANALYSIS TOOLS 3
An introduction to the computer analysis of text for use in research and teaching. Students learn to develop software to search and manipulate written text and transcribed speech. Applications in computer assisted language learning, corpus linguistics, lexicography, and translation are considered.

Prerequisite: Special fee.

APLN 560 TRANSLATION THEORY 3
An exploration of the principles involved in providing semantic “equivalents” between two languages, emphasizing the problems of translating a variety of different types of texts which reflect major cross-cultural differences.

Prerequisite: APLN 500.

APLN 565 LEXICOGRAPHY 3
The study of the principles of compiling dictionaries. Topics include: the collection and evaluation of citations, semantic fields, defining, recording pronunciations, and determining usage. Attention will be paid to the differences among different types of dictionaries. Sample dictionaries are examined and students carry out their own lexicographic project.

Prerequisite: APLN 500.

APLN 570 THE STRUCTURE OF AMERICAN SIGN LANGUAGE 3
The study of American sign language, or ASL, the manual language of many deaf Americans. This course approaches ASL from a linguistic perspective, examining its semantics, grammar, and “phonology”, and comparing ASL with English and other spoken languages. ASL is also compared with other manual languages used in America, including signed English and “total communication”. The educational implications of ASL and other manual languages are discussed.

Prerequisite: APLN 500.

APLN 590 SELECTED TOPICS IN APPLIED LINGUISTICS 3
An intensive study in a particular area of applied linguistics to address topics not covered in other courses. Topics reflect current issues in applied linguistics. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisite: APLN 500.
APLN 594 INDEPENDENT STUDY 1-3
This course allows MA students to explore areas in Applied Linguistics that are not covered in the normal course offerings. May be repeated for a maximum of six semester hours.
Prerequisites: Departmental approval.

APLN 596 INDEPENDENT STUDY 1-3
This course allows MA students to explore areas in Applied Linguistics that are not covered in the normal course offerings. May be repeated for a maximum of six semester hours.
Prerequisites: Departmental approval.

APLN 605 INDEPENDENT RESEARCH 1
Independent research on an approved topic in Applied Linguistics. For this requirement, students study an original topic, prepare a formal written paper of at least thirty pages, and make an oral presentation at a Linguistics Department colloquium. The paper must be read and approved by three faculty members. A grade of In Progress (IP) will be used until the research is completed; may be repeated three times.
Prerequisites: All other required courses for the M.A. degree in Applied Linguistics; departmental approval.
The Department of Mathematical Sciences offers an MS in Mathematics with four concentrations, an MS in Statistics, an MA and a graduate certificate in Teaching Middle Grades Mathematics and the specialization in Mathematics Education for the Ed.D. in Pedagogy. The MS in Mathematics is discussed next, followed by a discussion of the MA in Teaching Middle Grades Mathematics. The Statistics degree is discussed under Statistics. The Mathematics Education specialization in the Ed.D. and course descriptions are described under Pedagogy (Ed.D.). Information about the graduate certificate may be found under Graduate Certificate Programs.

At present, 26 full-time faculty members are teaching graduate courses in pure and applied mathematics, mathematics education or statistics. Our curriculum in mathematics has extensively integrated modern methods of computing. The special interests of the faculty include algebra, analysis, applied statistics, chaos theory, combinatorics, dynamical systems, financial mathematics, game theory, graph theory, logic, mathematical modeling, mathematics/computer science education, mathematical economics, methods and techniques of teaching mathematics, modeling in the biological, chemical and physical sciences, numerical analysis, operations research, problem solving, representation theory, statistical computing and graphics, voting theory, and the use of technology in education. Our faculty in mathematics education are known throughout the world.

Computer facilities comprise access to a Sun Microsystems network consisting of Sun Fire and Enterprise servers. Sun Ultra and Sun Blade workstations are available to students and faculty. Some of the UNIX software packages and programming languages available include: Java, C, C++, Fortran 90 and 77, interpreters in Prolog and ML, PHP, Perl, Tcl, Rational Suite Development Studio, SAS, Maple, Netscape, Star Office, LaTeX, S-Plus, and Oracle Database. Students have access to a 20 workstation Sun Microsystems computer lab conveniently located in the same building as the Mathematics department. Remote connectivity to CSAM’s UNIX network is universally available from campus computer laboratories as well as from off campus. Campus computer labs commonly have both PC and Macintosh computers and offer a standard set of applications, some of which include: JMP, Microsoft Office, SAS, Netscape and Internet Explorer. MSU hosts its own ISP dial-up access, which is available to all faculty and students within its calling area. The College of Science and Mathematics maintains an independent computer support operation including full-time professional staff and student technicians. This support is specialized towards resolving CSAM related computing issues, and is provided in addition to the campus computer Helpdesk. The campus computer Helpdesk is available for regular and extended hour telephone and in-person support.
The Master of Science degree in Mathematics is offered with concentrations in computer science, mathematics education, pure and applied mathematics, or statistics. Concentrations consist primarily of taking four to six courses in the area of the concentration. The MS degrees provide students with the advanced knowledge needed for positions of leadership in business, industry and government as well as for teaching at the high school and community college level. The concentration in mathematics education will upgrade the skills of teachers and offers a special combination of courses in mathematics, mathematics education and the use of technology in mathematics education. This degree does not lead to certification. All the concentrations prepare students to pursue doctorate degrees. The master’s degree in mathematics with a computer science concentration differs from the MS degrees in Computer Science, as does the master’s degree with a statistics concentration differ from the MS in Statistics. The MS in Computer Science is discussed under Computer Science and the MS in Statistics is discussed under Statistics.

ADMISSION REQUIREMENTS

1. All students must meet the admission requirements for graduate study at Montclair State University.
2. An applicant for the Master of Science degree in Mathematics must present an undergraduate mathematics major or at least 30 semester hours in mathematics from an accredited institution. Courses in a related area that have substantial mathematics content may be submitted toward this requirement. Applicants whose undergraduate preparation is deficient in either depth or breadth will be required to complete certain courses which will not carry graduate degree credit.

A candidate for the Master of Science degree in Mathematics must consult the graduate program coordinator of the department before matriculation in order to develop an individual work program based on level of preparation. All the degree programs in Mathematics are 33 credit programs. Up to six semester hours can be taken at the senior (400) level. In order to be awarded a Master of Science degree in Mathematics, a student will be required to have an overall 3.0 grade point average, as well as a 3.0 grade point average for courses taken in the Department of Mathematical Sciences. In addition a student must have a passing grade on a comprehensive examination based on the core courses. Students are required to have a 3.0 grade point average and to have completed a minimum of 12 degree bearing credits in order to be eligible to take the comprehensive examination. A Masters Thesis in place of the Masters Comprehensive exam may be an option for masters programs offered by the Department of Mathematical Sciences.
REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN MATHEMATICS

MS Mathematics
Computer Science Concentration

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<th>Semester Hours</th>
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<tr>
<td></td>
<td>I. Computer Science Courses ............................................... 12</td>
</tr>
<tr>
<td></td>
<td>Three courses selected from:</td>
</tr>
<tr>
<td></td>
<td>CMPT 580, 581, 583, 586</td>
</tr>
<tr>
<td></td>
<td>One additional course selected from:</td>
</tr>
<tr>
<td></td>
<td>CMPT 580-599, 680-699 or MATH 560</td>
</tr>
<tr>
<td></td>
<td>II. Mathematics and/or Statistics Electives ..................................... 15</td>
</tr>
<tr>
<td></td>
<td>Courses selected from:</td>
</tr>
<tr>
<td></td>
<td>MATH 420-469; 520-569, 580-599; 620-669, 680-699</td>
</tr>
<tr>
<td></td>
<td>STAT 440-449; 541-549; 640-649</td>
</tr>
<tr>
<td></td>
<td>At least 12 semester hours must be at the 500 level. MATH 425 and 426, and either 431 or 436 and either STAT 440 or 443 must be elected if not taken previously. At most, 6 s.h. can be taken at the 400 level.</td>
</tr>
<tr>
<td></td>
<td>III. Free Electives ................................................................. 6</td>
</tr>
<tr>
<td></td>
<td>IV. Comprehensive Examination: Two hour examination in Computer Science and one hour examination chosen from Algebra, Analysis, Applied Mathematics, or Statistics.</td>
</tr>
<tr>
<td></td>
<td>Minimum semester hours: 33</td>
</tr>
</tbody>
</table>

MS Mathematics
Mathematics Education Concentration

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I. Mathematics Education ........................................................ 12</td>
</tr>
<tr>
<td></td>
<td>Four courses selected from:</td>
</tr>
<tr>
<td></td>
<td>MATH 510-517*, 570-579</td>
</tr>
<tr>
<td></td>
<td>with at least one course selected from each of the following three groups:</td>
</tr>
<tr>
<td></td>
<td>Group A    MATH 570, 571, 572, 573</td>
</tr>
<tr>
<td></td>
<td>Group B    MATH 515, 574, 575, 579</td>
</tr>
<tr>
<td></td>
<td>Group C    MATH 512, 513, 514*, 516*, 517*</td>
</tr>
<tr>
<td></td>
<td>II. Mathematics and/or Statistics Electives ..................................... 15</td>
</tr>
<tr>
<td></td>
<td>Five courses selected from MATH 420-469, STAT 440-449, MATH 520-569, 580-599, STAT 541-549, or CMPT 570-599 with at least 9 s.h. at the 500 level. At most, 6 s.h. can be taken at the 400 level. Students must take courses from at least 3 of the following 7 areas:</td>
</tr>
<tr>
<td></td>
<td>Algebra:    MATH 431, 531, 532, 535, 536</td>
</tr>
<tr>
<td></td>
<td>Analysis:   MATH 425, 426, 521, 522, 525, 526</td>
</tr>
<tr>
<td></td>
<td>Applied Mathematics Continuous:</td>
</tr>
<tr>
<td></td>
<td>MATH 420, 560, 564, 566, 568</td>
</tr>
<tr>
<td></td>
<td>Applied Mathematics Discrete: MATH 464, 465, 569, 580, 581, 584</td>
</tr>
<tr>
<td></td>
<td>Statistics: MATH 540</td>
</tr>
<tr>
<td></td>
<td>STAT 440, 443, 541-549, 640-649</td>
</tr>
</tbody>
</table>
Geometry: MATH 450, 451, 551, 554, 555
Computer Science: CMPT 570-599, 670-699,
MATH 514*, 516*, 517*

MATH 425 and 431 must be elected if equivalent courses have not been taken previously.

III. Free Electives (6 semester hours)

IV. Comprehensive Examination: Mathematics Education (courses from Groups A and B) and a specialty selected from Algebra, Analysis, Computer Science or Statistics.

*MATH 514, 516, or 517 may count for credit as a Mathematics elective or as a Mathematics Education elective, but not for both.

Note: The Ed.D. in Pedagogy, Mathematics Education specialization is described under Pedagogy (Ed.D.).

Minimum semester hours: 33

MS Mathematics
Pure and Applied Mathematics Concentration

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Pure Mathematics</td>
<td>12</td>
</tr>
<tr>
<td>Algebra MATH 531 and MATH 535</td>
<td></td>
</tr>
<tr>
<td>Analysis MATH 521 and MATH 525</td>
<td></td>
</tr>
<tr>
<td>II. Applied Mathematics</td>
<td>12</td>
</tr>
<tr>
<td>MATH 530, 560, 584, 591</td>
<td></td>
</tr>
<tr>
<td>III. Computer Science, Mathematics and/or Statistics Electives</td>
<td>9</td>
</tr>
<tr>
<td>Any courses numbered MATH 520-569, 580-599, 620-669, 680-699; STAT 541-549, 590-599, 640-649, with particular attention to MATH 540, STAT 541, 548, MATH 566, 568, 569. Alternative electives (e.g. MATH 420-469, STAT 440-449, CMPT 570-599, 670-699) are encouraged and may be substituted with prior written approval of the graduate program coordinator. MATH 425 and 426 must be elected if not taken previously. At most, 6 s.h. may be taken at the 400 level.</td>
<td></td>
</tr>
<tr>
<td>IV. A comprehensive examination in Algebra, Analysis, and Applied Mathematics. A student may write a thesis in lieu of taking the Comprehensive Examination. Students selecting the thesis option will take MATH 698 as a mathematics elective for 3 semester hours of credit.</td>
<td></td>
</tr>
</tbody>
</table>

Minimum semester hours: 33

MS Mathematics
Statistics Concentration

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Statistics Courses</td>
<td>12</td>
</tr>
<tr>
<td>STAT 541, 542, 544, 548</td>
<td></td>
</tr>
<tr>
<td>II. Mathematics and/or Statistics Electives</td>
<td>15</td>
</tr>
<tr>
<td>Courses selected from:</td>
<td></td>
</tr>
<tr>
<td>MATH 420-469; 520-569, 580-595; 620 -669, 680-699</td>
<td></td>
</tr>
<tr>
<td>STAT 440-449; 541-549, 640-649</td>
<td></td>
</tr>
</tbody>
</table>
At least 12 semester hours must be at the 500 level. MATH 425 and 426 and either STAT 440 or 443 must be taken if equivalent courses have not been taken previously. At most, 6 s.h. may be taken at the 400 level.

III. Free Electives ...................................................................................................... 6

IV. Comprehensive Examination: Two hour examination in Statistics and a one hour examination chosen from Algebra, Analysis or Computer Science.

Minimum semester hours: 33

MASTER OF ARTS DEGREE IN TEACHING MIDDLE GRADES MATHEMATICS

This master’s program is designed for teachers with New Jersey certification in disciplines other than mathematics who are preparing to teach mathematics in the middle grades. The program of study is built upon Montclair’s five-course Certificate in Teaching Middle Grades Mathematics that provides content preparation in the areas of algebra, geometry, number and operations, data and probability, and measurement. The remaining courses in the masters program provide both breadth and depth in subject matter and mathematical pedagogy to further prepare teachers to effectively teach today’s recommended curriculum. Teachers who successfully complete the master’s in Teaching Middle Grades Mathematics will have the mathematical knowledge and related pedagogical skills to be teacher leaders in their buildings districts and, for some, at the state and regional level. The program of study combines the fundamental concepts and principles that underlie middle school mathematics and includes connections to topics in the mathematics curricula that both precede and follow the middle school curriculum. Thus teachers who successfully complete this master’s degree will be able to make connections across the mathematics curriculum and to other disciplines. Their increased content knowledge and pedagogical skill will result in an observable and enhanced level of confidence, enthusiasm and comfort with mathematics, which in turn will foster a deeper understanding and appreciation of mathematics in their students. Middle grade students who experience a broad and rich exposure to mathematics are academically prepared to succeed in a first course in Algebra, either in the middle school or high school. Students thus prepared will have more options in terms of high school course selection, post high school education and career paths.

ADMISSION REQUIREMENTS

To be admitted to the Masters in Teaching Middle Grades Mathematics the applicant must hold a bachelors degree from an accredited institution with the equivalent of at least a 2.5 GPA on a four-point scale and a teaching certificate. The degree and teaching certificate should not be in mathematics or a closely related field. A recommendation from the applicant’s supervisor is required. Students who successfully complete the Certificate in Teaching Middle Grades Mathematics, and who are accepted in this master’s degree program may transfer the certificate courses to this program of study. Students who complete the certificate with a GPA of 3.2 or better, or students who complete four certificate courses with a GPA of 3.4 or better, will be eligible for admission to this master’s degree program and will have the requirement of taking the Graduate Record Exam (GRE) waived. A complete application of admission will be required.
REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN TEACHING MIDDLE GRADES MATHEMATICS

I. Required Courses ................................................................. 18
   MATH 505, 506, 507, 508, 509, and 611

II. Mathematics Education Electives .............................................. 12
    Two courses selected from Group A and one from Group B:
    Group A: MATH 512, 573, 579
    Group B: MATH 571, 572, 577
    One additional course which was not previously selected to meet the
    Group A or Group B distribution requirements selected from:
    MATH 510, 511, 512, 571, 572, 573, 576, 577, 578, or 579

III. Elective subject to the approval of the graduate program coordinator .......... 3

IV. Successful completion of a comprehensive experience.

V. Eligibility for receiving the Masters in Teaching Middle Grades Mathematics:
   In order to be awarded this master’s the candidate must have a 3.0 grade point
   average, as well as a 3.0 in all courses taken in the Department of Mathematical
   Sciences and receive a passing grade on the comprehensive experience. To be
   eligible to participate in the comprehensive experience the candidate must have
   completed a minimum of 24 semester hours, including MATH 611, with a 3.0
   grade point average as described above. The comprehensive experience will be one
   of the following: a comprehensive examination; the development, presentation
   and defense of a professional portfolio; or the development and successful defense
   of a master’s thesis.

Minimum semester hours: 33

MATHEMATICAL SCIENCES

Course Descriptions

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 501</td>
<td>MATHEMATICS FOR COMPUTER SCIENCE I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Sets, relations, functions, graphs, trees, propositional calculus, induction and recursion, applications to computer science. May not be used for credit by Mathematics or Computer Science majors.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>MATH 502</td>
<td>MATHEMATICS FOR COMPUTER SCIENCE II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to linear algebra, vectors, matrices, counting rules, probability theory, random variables, Poisson and binomial distribution, with applications to computer science. May not be used for credit by Mathematics and Computer Science majors.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Permission of graduate coordinator.</td>
<td></td>
</tr>
<tr>
<td>MATH 503</td>
<td>MATHEMATICS FOR COMPUTER SCIENCE III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Differential and integral calculus, infinite series, applications to computer science. May not be used for credit by Mathematics and Computer Science majors.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisites: Permission of graduate coordinator.</td>
<td></td>
</tr>
</tbody>
</table>
MATH 505  NUMBER AND OPERATIONS IN THE MIDDLE GRADES  3
Topics are organized around the fundamental concepts of number and operations with them. This course prepares middle-grade teachers to help their students understand numbers, ways of representing numbers, relationships among numbers, number systems, operations on numbers, how to compute fluently and how to make reasonable estimates.  
Prerequisites: Acceptance in the certificate or master’s program in Teaching Middle Grades Mathematics and permission of the graduate coordinator. Special fee.

MATH 506  ALGEBRA AND ALGEBRAIC THINKING  3
IN THE MIDDLE GRADES
Topics from pre-algebra and algebra are studied to prepare middle-grades mathematics teachers to enable all students to understand patterns, relationships and functions; represent and analyze mathematical situations and structures using algebraic symbols; use mathematical models to represent and understand quantitative relationships; and analyze change in various contexts. Topics initially approach algebra from a numerical perspective. Strategies for gradually increasing the use of variables and abstract thinking with middle-grade students are discussed.  
Prerequisites: Acceptance in the certificate program or master’s program in Teaching Middle Grades Mathematics and permission of the graduate coordinator. Special fee.

MATH 507  GEOMETRY FOR MIDDLE GRADE TEACHERS  3
Topics are organized around the fundamental concepts of geometry, the use of geometric thinking as a problem-solving tool, and the methods and techniques needed to help students understand and apply these concepts and skills in the middle grades. Teachers gain the knowledge needed to enable their students to develop spatial sense and an ability to use geometric properties and relationships to solve problems in mathematics and in everyday life. Specific emphasis is placed on recognizing, visualizing, representing, and transforming geometric shapes in two and three dimensions.  
Prerequisites: Acceptance in the certificate or master’s program in Teaching Middle Grade Mathematics and permission of the graduate coordinator. Special fee.

MATH 508  DATA ANALYSIS AND PROBABILITY  3
IN THE MIDDLE GRADES
Topics include the basics of collection, summarization, and interpretation of data, and the fundamental ideas of probability. Sampling techniques, experimental design, graphical and numerical summarization of data and the basic ideas of drawing conclusions from data are discussed. Methods for teaching these concepts in the middle grades are discussed in tandem as the material is presented.  
Prerequisites: Acceptance in the certificate or master’s program in Teaching Middle Grades Mathematics and permission of the graduate coordinator. Special fee.
MATH 509 MEASUREMENT IN THE MIDDLE GRADES
Topics are organized around the fundamental and unifying topic of measurement. What attributes of an object are measurable? How are those attributes measured? What system of measurement should be used? What are the units and how are the results converted to other systems? Measurement is a topic that is found across the school curriculum, not just in the mathematics curriculum, and thus it is a topic that can be used to develop cross-subject discussions and investigations. Methods for teaching measurement in the middle grades are discussed in tandem with the content being studied.

Prerequisites: Acceptance in the certificate or master’s program in Teaching Middle Grades Mathematics and permission of the graduate coordinator. Special fee.

MATH 510 WORKSHOP IN MATHEMATICS EDUCATION I
Specific contemporary topics and current issues in school mathematics. May be repeated for a maximum of eight semester hours as long as the topic is different.

Prerequisite: Permission of graduate coordinator. Special fee.

MATH 511 WORKSHOP IN MATHEMATICS EDUCATION II
Specific contemporary topics and current issues in school mathematics. May be repeated four times for a maximum of eight semester hours as long as the topic is different.

Prerequisite: Permission of graduate coordinator. Special fee.

MATH 512 TECHNOLOGY IN THE MIDDLE GRADES MATHEMATICS CURRICULUM
This course is designed to provide experiences in the integration of technology into middle grades mathematics classes. The primary emphases are on the analysis and evaluation of software addressing the middle grades mathematics courses. Other topics include the use of spreadsheets, fraction and graphing calculators, data probes, and handheld digital assistants as problem-solving tools to enhance the teaching/learning process. The course also includes current literature describing exemplary models and practices in the use of technology in the mathematics classroom.

Prerequisite: Permission of graduate coordinator. Special fee.

MATH 513 COMPUTER SCIENCE CONCEPTS FOR HIGH SCHOOL TEACHERS
This course is specifically designed to help high school mathematics teachers prepare to use the microcomputer as a tool in their classrooms. Topics include an introduction to computer literacy, elements of BASIC programming, the evaluation of commercial software, the appropriate use of the software and a survey of relevant professional literature. Minimal prior knowledge of BASIC is assumed. May not be taken for credit by Computer Science majors.

Prerequisite: Permission of graduate coordinator. Special fee.

MATH 514 ADVANCED PLACEMENT COMPUTER SCIENCE CONCEPTS
This course is specifically designed to help senior high school teachers prepare to instruct the AP course in computer science. Topics include the problem solving process, good programming style, the syntax of the current AP language, and their applications to computer science. Additional topics include algorithms, data structures, procedures, program design, sorting and searching. Minimal prior knowledge of a high level language is assumed. May not be used for credit for Computer Science majors.

Prerequisite: Permission of graduate coordinator.
MATH 521, 522  REAL VARIABLES I, II  3 each
Real number system, Lebesgue measure and integration, differentiation, Fourier series, LP, metric, normed vector, Banach and Hilbert spaces.
Prerequisites: MATH 426 Advanced Calculus II and permission of graduate coordinator for 521; MATH 521 for 522.

MATH 525, 526  COMPLEX VARIABLES I, II  3 each
Integration and differentiation in the complex domain, Cauchy’s Theorem and Cauchy’s integral formula, Laurent expansion, residues, elements of conformal mapping, series and product representations.
Prerequisites: MATH 426 Advanced Calculus II and permission of graduate coordinator for 525; MATH 525 for 526.

MATH 530  MATHEMATICAL COMPUTING  3
Introduction to mathematical computing techniques using a computer algebra system and algorithmic approach to solving mathematical problems. Mathematical applications taken from various areas of mathematics, the sciences, engineering, and business.
Prerequisites: Permission of the graduate coordinator or consent of the instructor.

MATH 531, 532  ABSTRACT ALGEBRA I, II  3 each
Basic algebraic structures including groups, rings, fields, modules and lattices.
Prerequisites: MATH 431 Foundations of Modern Algebra and permission of graduate coordinator for 531; MATH 531 for 532.

MATH 535, 536  LINEAR ALGEBRA I, II  3 each
Vector spaces and linear transformations, including inner products, matrix representations, binary and quadratic forms, eigenvectors, canonical forms, and functions of matrices.
Prerequisites: MATH 335 Linear Algebra and permission of graduate coordinator for 535; MATH 535 for 536.

MATH 537  MATHEMATICAL LOGIC  3
Propositional and predicate calculus, model theory, Gödel’s completeness theorems and decidability.
Prerequisites: MATH 425 Advanced Calculus I and permission of graduate coordinator.

MATH 540  PROBABILITY  3
Sample spaces and events, combinatorial analysis, conditional probability and stochastic independence, random variables and probability distributions, expected value and variance, probability generating functions, continuous random variables.
Prerequisites: MATH 340 Probability and permission of graduate coordinator.

MATH 551  TOPOLOGY  3
Basic point-set topology, topological spaces, homeomorphisms, compactness, connectedness, separation properties, uniformities, metrizability, introductory algebraic topology, homology groups and homotopy.
Prerequisites: MATH 425 Advanced Calculus I and permission of graduate coordinator.

MATH 554  PROJECTIVE GEOMETRY  3
Projective planes and spaces are studied by synthetic and analytic approaches. Topics covered include the theorems of Desargues and Pappus, harmonic sequences, projectivities, coordinatization, finite planes, and conics.
Prerequisites: MATH 335 Linear Algebra and permission of graduate coordinator.
MATH 560  NUMERICAL ANALYSIS  3
Error analysis, interpolation and approximation theory, numerical solution of linear and nonlinear equations, numerical differentiation and integration, numerical solution of differential equations.
Prerequisites: MATH 335 Linear Algebra, and permission of graduate coordinator.

MATH 564  ORDINARY DIFFERENTIAL EQUATIONS  3
Linear and nonlinear equations, Green’s functions, power series solutions, autonomous systems, existence and uniqueness, singularities, Sturm-Liouville systems.
Prerequisites: MATH 335 Linear Algebra and 420 Differential Equations and permission of graduate coordinator.

MATH 566  PARTIAL DIFFERENTIAL EQUATIONS  3
First order equations, separation of variables, series solutions, hyperbolic, parabolic and elliptic equations, characteristics, transform methods.
Prerequisites: MATH 335 Linear Algebra and 420 Differential Equations and permission of graduate coordinator.

MATH 568  APPLIED MATHEMATICS: CONTINUOUS  3
Formulation, manipulation and evaluation of mathematical models of continuous systems. Topics selected from: conservation principles and the classical equations of mathematical physics, applications of the qualitative and quantitative theory of ordinary and partial differential equations, optimization, calculus of variations, stability theory, stochastic models.
Prerequisites: MATH 335 Linear Algebra and 340 Probability and 420 Differential Equations and 425 Advanced Calculus I and permission of graduate coordinator.

MATH 569  APPLIED MATHEMATICS: DISCRETE  3
Introduction to the basic ideas of discrete mathematics and its applications. Counting principles, permutations, combinations, algorithms, complexity, graphs, trees, searching and sorting, recurrence relations, generating functions, inclusion-exclusion, the pigeonhole principle, chromatic number, eulerian chains and paths, hamiltonian chains and paths, flows in network, finite Markov chains.
Prerequisites: MATH 335 Linear Algebra and 340 Probability and 425 Advanced Calculus I and permission of graduate coordinator.

MATH 570  ADMINISTRATION AND SUPERVISION OF MATHEMATICS  3
Problems of organization, administration and supervision in the mathematics program of the school. Functions, duties and qualifications of the supervisor investigated. Current problems and research findings.
Prerequisite: Permission of graduate coordinator.

MATH 571  CURRICULUM CONSTRUCTION IN MATHEMATICS  3
Contemporary proposals for the mathematics of grades K through 12. Consideration is given to the problem of implementation of current recommendations. Examination is made of mathematical concepts underlying various programs.
Prerequisite: Permission of graduate coordinator.
MATH 572 CONTEMPORARY TEACHING OF MATHEMATICS 3
Pedagogy, resources, and research related to the teaching of standards-based mathematics in grades 6-12. Emphasis is on creating student-centered learning environments, resources and materials for contemporary mathematics classrooms, models of effective teaching and learning, alternative assessment, appropriate uses of technology and multicultural aspects of mathematics.
Prerequisite: Permission of graduate coordinator.

MATH 573 MATH MATERIALS FOR TEACHERS OF MATHEMATICS 3
The construction, adaptation and effective use of classroom materials and activities designed to enhance and expand the teaching of mathematics and mathematical thinking in the middle and high school grades with special attention given to basic commercial and simple teacher and student-made manipulatives and models with broad use from the development of concepts and skills to their maintenance, review, and extension plus applications to problem solving.
Prerequisites: Permission of graduate coordinator. Special fee.

MATH 574 PROBLEM ANALYSIS IN SECONDARY MATHEMATICS 3
Prerequisites: MATH 222 Calculus III and permission of graduate coordinator.

MATH 575 SELECTED TOPICS IN MATHEMATICS EDUCATION 3
Selection of topics associated with secondary and early college years of mathematics investigated from an advanced point of view. Topics selected to give the teacher a professionalized subject matter viewpoint of such areas as algebra, geometry, number theory, real and complex analysis, probability and history of mathematics.
Prerequisites: MATH 222 Calculus III and permission of graduate coordinator.

MATH 576 RESEARCH SEMINAR IN MATHEMATICS EDUCATION 3
Designed for matriculated graduate students in the mathematics education program. Students survey and analyze recent research projects.
Prerequisite: Permission of graduate coordinator.

MATH 577 MATHEMATICS EDUCATION IN THE ELEMENTARY SCHOOL 3
The contemporary mathematics curriculum of the elementary and middle school. The role of behavioral objectives and learning theory in curriculum development/teacher training. Related research findings.
Prerequisite: Permission of graduate coordinator.

MATH 578 SPECIAL TOPICS IN MATHEMATICS EDUCATION 3
Topics may be selected from areas such as assessment, cooperative learning, elementary education, fractals, graphing calculators, NCTM Standards, and other special areas of interest to mathematics educators. May be repeated once for a maximum of six semester hours as long as the topic is different.
Prerequisite: Permission of graduate coordinator.
MATH 579  APPROACHING SCHOOL MATHEMATICS THROUGH APPLICATIONS  
Topics in middle grade and secondary mathematics are explored with an emphasis on their application to both traditional and more recently developed areas. Applied problems are used to motivate mathematical topics, and mathematical knowledge is used to explore solutions to applied problems.  
Prerequisites: Permission of graduate coordinator.

MATH 580  COMBINATORIAL MATHEMATICS  
Arrangements and selections, binomial coefficients, Stirling numbers, generating functions, recurrence relations, inclusion-exclusion, Polya enumeration formula, combinatorial graph theory, combinatorial geometries.  
Prerequisites: MATH 222 Calculus III and permission of graduate coordinator.

MATH 581  GRAPH THEORY  
Graphs, digraphs, and trees. Connectivity, separability, planarity, and colorability. Cliques, independent sets, matchings, flows and tours. Graphs as mathematical models; graph algorithms.  
Prerequisites: MATH 222 Calculus III and 335 Linear Algebra and permission of graduate coordinator.

MATH 584  SELECTED TOPICS IN OPERATIONS RESEARCH  
An in-depth study of one or at most two topics in operations research, selected from linear programming and game theory, linear and nonlinear programming, queuing theory, inventory theory, simulation models.  
Prerequisites: MATH 425 Advanced Calculus I and STAT 440 Fundamentals of Modern Statistics I and permission of graduate coordinator.

MATH 590  SELECTED TOPICS IN ADVANCED MATHEMATICS  
An in-depth study of a topic or topics selected from areas such as algebra, analysis, geometry, probability and statistics, and applied mathematics, with special emphasis upon recent developments in the field. May be repeated once for a maximum of six semester hours as long as the topic is different.  
Prerequisite: Permission of graduate coordinator.

MATH 591  APPLIED INDUSTRIAL MATHEMATICS  
Formulation, modeling, and solution of mathematical problems from engineering, science and business. Topics include statistical distributions, Monte Carlo method, function fitting, transforms optimization, regression analysis, cost-benefit analysis, ordinary differential equations, partial differential equations, numerical methods, divided differences, splines, Galerkins’s method, and finite elements.  
Prerequisites: MATH 335 Linear Algebra, MATH 425 Advanced Calculus I, MATH 530, STAT 440 Fundamentals of Modern Statistics I, or permission of graduate coordinator.

MATH 595  SEMINARS IN MATHEMATICS  
Guided study of selected topics in major field of interest. May be repeated once for a maximum of six semester hours as long as the topic is different.  
Prerequisite: Permission of graduate coordinator.
MATH 611 LEADERSHIP DEVELOPMENT IN MATHEMATICS EDUCATION

Students gain experience in recognizing, acquiring, and applying key leadership characteristics in the field of mathematics education at the middle and high school grades. Specific attention is given to how teachers become stewards of best practices and active educational change agents in their schools and community and through professional development and involvement.

Prerequisites: Acceptance in the master’s program in Teaching Middle Grades Mathematics and permission of the graduate coordinator.

MATH 690 INDEPENDENT STUDY IN MATHEMATICS

Independent study under the direction of a faculty member, offering the opportunity to pursue topics in mathematics which may be outside the scope of regular curricular offerings or may be an extension of an existing course or courses. Approval must be obtained from the graduate coordinator and faculty advisor. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisite: Permission of graduate coordinator. Departmental approval.

MATH 698 MASTER’S THESIS

Independent research project done under faculty advisement. Student must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take MATH 699 if they don’t complete MATH 698 within the semester.

Prerequisite: Departmental approval.

MATH 699 MASTER’S THESIS EXTENSION

Continuation of Master’s Thesis Project. Thesis extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.

Prerequisite: MATH 698.

PHYS 501 TEACHING PHYSICS IN SECONDARY SCHOOLS

Study of the objectives, methods, and techniques of presentation, courses of study, instructional aids and subject matter of secondary school physics. Recent trends in equipment, technology and strategies. Extensive use of current literature and research.

Prerequisite: 16 semester hours in physics or approval of instructor.

PHYS 519 SPECIAL TOPICS IN PHYSICS

Designed to acquaint the student with recent developments in physics and applications of physics. Examples of topic areas are astrophysics, laser applications, applications of quantum theory, solid state applications, radiation safety, nuclear waste disposal, and medical physics. May be repeated once for a maximum of six semester hours as long as the topic is different.

Prerequisites: At least 12 semester hours in physics and permission of Physics certification program coordinator.

Mathematics courses are also offered as part of the specialization in Mathematics Education in the Ed.D. in Pedagogy. Please refer to the index for the page number for the Ed.D. in Pedagogy where those mathematics courses are described.
Graduate study in Music offers four concentrations leading to the degree of Master of Arts in Performance, Theory/Composition, Music Therapy or Music Education. Performance stresses applied music skills; Theory/Composition stresses creativity and the understanding of the structure of music; Music Therapy stresses the use of music as a therapeutic tool to help children and adults with disabilities; Music Education stresses philosophical and practical approaches to the work of the music specialist in the American public school.

Although certain core courses are required of all graduate students regardless of the concentration, each concentration provides individualized course election in accordance with the background, needs and interests of the student.

Registration in applied music and music theory is dependent on the placement examination administered by the Department; a student may not register for work in these areas until the examination has been taken and the student is fully matriculated (see below under Admission Requirements).

A Music Therapy program is designed for those students with or without an undergraduate degree in music who wish to pursue post-baccalaureate study in music therapy, leading to the national exam for Board Certified Music Therapist. This course of study generally takes a minimum of 4.5 semesters to complete and is individually formatted, depending upon the educational background and musical proficiency of the student. Once this course of study is successfully completed, students are qualified to take the national examination. All prospective certification students must apply through the Graduate School and audition on their primary instrument for the Music Department. Please contact the Music Therapy program coordinator for further information.

ADMISSION REQUIREMENTS

In addition to the general admission requirements stated in this bulletin (see Admission to Graduate Study), all students must present an undergraduate major in music (or the equivalent) with at least 40 semester hours of work in theory, music history and private study in a performance medium. Courses in music education may be included as part of this background.

All applicants must demonstrate familiarity with musical vocabulary and literature as well as proficiency in the following: instrumental/vocal performance, sight singing, aural and written theory, score analysis, listening analysis, and basic piano skills (keyboard harmony, sight-reading of chorale literature and simple improvisation). Audition literature in the primary medium must represent significant solo material from a variety of eras, one of which must be contemporary. Applicants majoring in orchestral instruments must also present significant passages from orchestral literature.

Applicants to the Theory/Composition concentration must submit a portfolio of at least three compositions and/or analytical studies for consideration by the theory faculty. Applicants to the Performance concentration must present an undergraduate major in the primary medium (including at least six semesters of study plus a graduation recital) or professional experience satisfactory to the Music Department. Applicants to the Music Education curriculum must present a certificate in the teaching of music. Applicants in
must possess a bachelor’s degree or the equivalent (to be determined via audition) of a bachelor’s in music. The music audition will place special emphasis on those skills particularly relevant to music therapy (improvisation, sight-reading, dictation, transposition). An interview with the music therapy faculty will be required in order to evaluate student initiative, the development of a philosophy concerning music as a therapeutic art, and emotional and intellectual stability.

**Applied Music**

Special regulations and procedures for the study of applied music are available from the graduate program coordinator. Tuition charges for the study of applied music are based on a special fee structure; information is available from the Registrar or the Department of Music.

Applied music may be taken for academic credit only after the student has passed the Department Audition and Placement Examination and is fully matriculated, and may be taken only with MSU faculty. Private lessons require authorization from the department. This authorization should be obtained by July 1 (for those desiring study in the fall) or by December 1 (for those studying in the spring); the availability of applied music study to students who have not received approval by these dates cannot be assured. Lessons are normally not given in the summer.

No more than 2 semester hours of credit may be awarded for work in a secondary medium. “Music electives” or “electives” in the student’s work program will not normally be used for private study, although they may be so assigned in certain instances.

All students studying applied music are expected to take jury examinations in each semester of applied music study. The grade for the last semester of the sequence will not be given until all recital requirements are completed. Performance majors taking private lessons are required to participate in appropriate major ensembles. Keyboard majors will be given appropriate accompaniment assignments.

Graduate students who are taking applied music may be required to perform in ensembles and are encouraged to do so even when not required. Details about such performance may be obtained from the department chairperson, graduate program coordinator, and/or ensemble conductor. In most cases, credits earned can count toward the degree.

**Examinations**

All candidates for the degree of Master of Arts in Music in all concentrations except education and music therapy must pass the Department’s Comprehensive Examination, given each year in October and March. Applications for this examination must be made in writing to the graduate program coordinator by October 1 for the October examination and by February 1 for the March examination.
REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN MUSIC

Note: The 32 semester hours noted for each concentration (39.5 semester hours for Music Therapy) are a minimum. Undergraduate transcripts and audition and placement results may require additional undergraduate work before graduate courses are begun. Graduate work in excess of the minimum 32 (39.5) semester hours, or both may also be required. Another audition following prerequisite coursework may be required for entrance into graduate study.

Concentration in Performance

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Required Courses (21 semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. Applied music lessons in a performing medium* ..................................... 12</td>
</tr>
<tr>
<td></td>
<td>B. Theory sequence MUCP 511, 512 .............................................................. 6</td>
</tr>
<tr>
<td></td>
<td>C. Seminar in Historical Research, MUHS 604 .............................................. 3</td>
</tr>
</tbody>
</table>

II. Electives in music history or music literature ..................................................... 8

III. Electives in Music ............................................................................................... 3

IV. Two recitals ........................................................................................................ 0

A. Each to include at least 60 minutes of music exclusive of intermissions or pauses.
B. One must be public; the other may be public or before a faculty jury. Procedures are available from the graduate program coordinator.

V. Comprehensive examination ............................................................................... 0

(Voice majors and accompanying majors will be given language tests as well. Details are available from the graduate program coordinator.)

Minimum semester hours: 32

* Performance majors taking applied music will be assigned to a major ensemble. Keyboard majors taking applied lessons will be given appropriate accompaniment assignments.

Note: Piano performance majors wishing to emphasize accompanying must make appropriate arrangements with the graduate program coordinator.

Concentration in Theory/Composition

I. Required Courses (23 semester hours)

A. Applied Music, selected with approvals of instructor, program coordinator , and department chairperson from MUAP 511, 512, 613, or 614 ........... 4
B. Theory sequence MUCP 511, 512 ................................................................. 6
C. Private study in composition (may be either creative or analytical work) MUCP 518, 519 ................................................................. 6
D. Seminar in Historical Research MUHS 604 .................................................. 3
E. Theory and composition ................................................................................ 4

II. Elective in music history or music literature ...................................................... 3
III. Electives in music ............................................................................................... 6
IV. Composition and public performance of one of the larger forms for orchestra, vocal ensemble or chamber ensemble ........................................................... 0
V. Comprehensive examination ............................................................................... 0

Minimum semester hours: 32

Concentration in Music Therapy

The concentration in Music Therapy is intended for students who have completed training as music therapists and wish to develop advanced clinical skills.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Required Courses (30.5 or 34.5 semester hours)</strong></td>
</tr>
<tr>
<td>A. Required Music Therapy/Music Courses</td>
</tr>
<tr>
<td>MUTH 501 Psychology of Music ................................................................. 3</td>
</tr>
<tr>
<td>MUTH 510 Group Music Therapy Experience ................................................. 1.5</td>
</tr>
<tr>
<td>MUCP 511 Theoretical and Aural Skills in Music I ...................................... 3</td>
</tr>
<tr>
<td>MUPR 590 Piano Improvisation ................................................................. 2</td>
</tr>
<tr>
<td>One of the following options: (12 or 8 semester hours)</td>
</tr>
<tr>
<td>MUTH 521 Music Therapy Assessment in Clinical Practice ......................... 3</td>
</tr>
<tr>
<td>MUTH 522 Clinical Improvisation .............................................................. 3</td>
</tr>
<tr>
<td>MUTH 523 Supervision and Teaching in Music Therapy ............................. 3</td>
</tr>
<tr>
<td>MUTH 524 Group Music Therapy ............................................................... 3</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MUTH 620 Music Therapy Seminar I: Severely/Profoundly Impaired Youth 4</td>
</tr>
<tr>
<td>MUTH 621 Music Therapy Seminar II: Severely/Profoundly Impaired Youth 4</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MUTH 622 Music Therapy Seminar I: Mild/Moderately Impaired Youth ...... 4</td>
</tr>
<tr>
<td>MUTH 623 Music Therapy Seminar II: Mild/Moderately Impaired Youth ..... 4</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MUTH 624 Music Therapy Seminar I: Adult Psychiatric ......................... 4</td>
</tr>
<tr>
<td>MUTH 625 Music Therapy Seminar II: Adult Psychiatric ......................... 4</td>
</tr>
<tr>
<td>B. Required Psychology Courses (9 semester hours)</td>
</tr>
<tr>
<td>PSYC 510 Research Methods in Psychology .............................................. 3</td>
</tr>
<tr>
<td>PSYC 561 Developmental Psychology ...................................................... 3</td>
</tr>
<tr>
<td>PSYC 667 Abnormal Psychology ............................................................ 3</td>
</tr>
<tr>
<td>C. Thesis (4 semester hours)</td>
</tr>
<tr>
<td>MUTH 598 Thesis Seminar ................................................................. 1</td>
</tr>
<tr>
<td>MUTH 698 Master’s Thesis ................................................................. 3</td>
</tr>
<tr>
<td><strong>II. Electives (6 or 9 semester hours depending on option selection in I. A.)</strong></td>
</tr>
<tr>
<td>Select 6 or 9 semester hours for specialization in consultation with the graduate music therapy program coordinator, and according to individual career objectives.</td>
</tr>
<tr>
<td>CHAD 502 Child Abuse and Neglect ...................................................... 3</td>
</tr>
<tr>
<td>CHAD 520 Adolescents and the System .................................................... 3</td>
</tr>
<tr>
<td>CHAD 521 Substance Abuse and Family Crisis ....................................... 3</td>
</tr>
<tr>
<td>CSND 583 Language Disorders of Children .......................................... 3</td>
</tr>
<tr>
<td>(Non-Speech Pathology section)</td>
</tr>
<tr>
<td>ECSE 506 Observation and Assessment of Young Children with Special Needs ......................................................... 3</td>
</tr>
<tr>
<td>Course Code</td>
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<tr>
<td>-------------</td>
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<tr>
<td>ECSE 509</td>
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<tr>
<td>ECSE 518</td>
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<tr>
<td>PSYC 564</td>
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<td>PSYC 565</td>
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<td>PSYC 573</td>
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<td>PSYC 578</td>
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<td>PSYC 582</td>
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<tr>
<td>PSYC 593</td>
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<tr>
<td>PSYC 670</td>
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<td>SPED 579</td>
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<tr>
<td>SPED 580</td>
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<tr>
<td>SPED 582</td>
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<tr>
<td>SPED 595</td>
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</tr>
</tbody>
</table>

**Concentration in Music Education, Practitioner Track**

The track is recommended for students who wish to advance their teaching skills and pedagogical understanding. It places special emphasis on music teaching practice through coursework based on current trends in the field. A thesis track emphasizing research skills is also available.

**Semester**

<table>
<thead>
<tr>
<th>I. Music Core Courses (12 semester hours)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Required Courses</td>
<td></td>
</tr>
<tr>
<td>MUCP 511 Theoretical and Aural Skills in Music I</td>
<td>3</td>
</tr>
<tr>
<td>MUHS 549 Modern Music</td>
<td>3</td>
</tr>
<tr>
<td>B. Elective Courses</td>
<td></td>
</tr>
<tr>
<td>Any applied (MUAP), theory (MUCP), history (MUHS), or interdisciplinary course in music. No more than 3 semester hours in an ensemble.</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Music Education Courses (15 semester hours)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Required Course</td>
<td></td>
</tr>
<tr>
<td>MUED 603 Seminar in Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Core Courses (6 semester hours)</td>
<td></td>
</tr>
<tr>
<td>Choose among:</td>
<td></td>
</tr>
<tr>
<td>MUED 518 Technology for Music Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MUED 570 Critical and Creative Thinking in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUED 560 Teaching World Music</td>
<td>3</td>
</tr>
<tr>
<td>B. Elective (MUED)</td>
<td></td>
</tr>
<tr>
<td>No more than 3 semester hours of workshop credit.</td>
<td>6</td>
</tr>
</tbody>
</table>

| III. Related Course (3 semester hours)         | Hours |
| Any course:                                    |       |
| COUN 559 Dynamics of Group Process             | 1-3   |
| ELAD 510 Educational Administration I          | 3     |
| ELAD 540 Supervision I                         | 3     |
| CURR 522 Innovations in Teaching               | 3     |
| CURR 523 Education in the Inner City           | 3     |
| CURR 530 Principles of Curriculum Development  | 3     |
IV. Field Project ........................................................................................................ 3

Comprehensive examination may be taken in lieu of the field project. When choosing this option, the student will need to complete an additional 3 semester hours of course work in areas I, II, or III.

Minimum semester hours: 33

Certification

While some of the graduate courses listed in this catalog may be applied to certification as a teacher in the New Jersey public schools or as a Board Certified Music Therapist, the bulk of courses required by these certifications are available only at the undergraduate level. Certification is quite separate from a Master of Arts degree. Those interested should contact the Department of Music for an interview with the appropriate graduate program coordinator prior to beginning the admission process.

MUSIC

Course Descriptions

Note: Students interested in taking Applied Music courses (MUAP), please see the department chairperson.

MUCP 511  THEORETICAL AND AURAL SKILLS IN MUSIC I  3

Principles and practice of music construction, aural skills in manipulating pitch and rhythm, and related structural analysis. The total spectrum of music as a base, with specific techniques of pitch and rhythm approached from harmonic and contrapuntal standpoints. Primitive and simple folk idioms, modal counterpoint in two and three parts, diatonic tonal harmony in vocal and instrumental idioms, tonal counterpoint in two parts and free composition.

Prerequisite: Music majors only.
MUCP 512  THEORETICAL AND AURAL SKILLS IN MUSIC II  3
Continuation of MUCP 511. Complex non-Western systems, modal and tonal imitative
counterpoint in three and four parts, chromatic tonal harmony and expanded resources
and techniques of the twentieth century.
Prerequisite: MUCP 511; Music majors only.

MUCP 518  PRIVATE STUDY IN COMPOSITION I  3
Advanced work in musical composition in forms and genres determined jointly by teacher
and student. Fifteen private lessons per semester.
Prerequisites: Music majors only. Special fee.

MUCP 519  PRIVATE STUDY IN COMPOSITION II  3
Continuation of MUCP 518.
Prerequisites: MUCP 518; Music majors only. Special fee.

MUCP 520  PRIVATE STUDY IN COMPOSITION III  3
Advanced work in various genres and forms of instrumental and/or vocal music.
Prerequisites: MUCP 519; Music majors only. Special fee.

MUCP 521  PRIVATE STUDY IN COMPOSITION IV  3
Advanced work in various genres and forms of instrumental and/or vocal music.
Prerequisites: MUCP 520; Music majors only. Special fee.

MUCP 561  ADVANCED STUDIES IN MICROTONAL MUSIC  3
Advanced studies in microtonal music, Harry Partch’s theories and compositions,
contemporary compositional applications.
Prerequisite: MUHS 561.

MUCP 562  MICROTONAL COMPOSITION PROJECTS  2
Composition projects for the MSU Harry Partch Ensemble. May be repeated three times
for a total of 8 credits.
Prerequisite: MUHS 561. Corequisite: MUPR 561.

MUCP 599  INDEPENDENT STUDY IN THEORY/COMPOSITION  1 - 4
Individual work performed in connection with a regularly scheduled course but in greater
depth than normally required by that course. May be repeated twice for a maximum of nine
semester hours.
Prerequisite: Department approval.

MUCP 600  INDEPENDENT STUDY IN THEORY/COMPOSITION  1 - 4
Individual pursuit of a research topic culminating in a written document of length and
scholarly integrity. May cover two semesters. Student registers for the semester in which
the work will be completed. May be repeated twice for a maximum of nine semester hours.
Prerequisite: Departmental approval.

MUED 500  WORKSHOP IN MUSIC EDUCATION  1 - 3
Changing conditions in the schools and new methods and materials for in-service and pre-
service teachers. Lectures, demonstrations. Literature and materials selected according to
workshop focus.
Prerequisite: Departmental approval.
MUED 501 PSYCHOLOGY OF MUSIC 3
Psychological foundations of music, including cognition, perception, emotional meaning; musical development and learning; testing for musical ability; research methodology. Cross listed with Music, MUTH 501.
Prerequisite: Departmental approval.

MUED 510 SELECTED TOPICS IN MUSIC EDUCATION 1-3
This course provides a forum for in-depth examination of a selected topic in classroom music teaching.
Prerequisite: Departmental approval.

MUED 518 TECHNOLOGY FOR MUSIC EDUCATORS 3
A history and overview of computer platforms and applications for music. A review of pre-college, collegiate, and professional music software; the basics of music programming; a review of MIDI applications and interfaces; the use of interactive media in music pedagogy, and the future of computer applications in this field.

MUED 520 GENERAL MUSIC IN SECONDARY SCHOOL 3
Examination and practicum of methods, materials and philosophies of non-performance courses in the junior and senior high school.

MUED 521 CREATIVE MOVEMENT AND DANCE EXPERIENCES FOR CHILDREN 3
Investigating the principles of movement in relationship to the principles of music as a format for designing dance and movement experiences which enhance the music learning process. A focus on strategies appropriate for the elementary music classroom. Active participation. Field component. Midterm/final project.

MUED 550 MUSIC EDUCATION TECHNIQUES FOR CHILDREN WITH DISABILITIES 3
Special education techniques as applied to music education; teaching music through movement and simple rhythm instruments. Covers all areas of a broad-based education program as it applies to K-12 populations with mild to moderate handicaps.

MUED 560 TEACHING WORLD MUSIC 3
World musics from cultural and pedagogical perspectives. Following a geographic approach, i.e., Asia, Africa, selected musics will serve as a basis for exploring the musical stylistic dimensions, regional influences, cultural influences, and interrelationships with other art forms. Hands-on application to classroom music teaching K-12.

MUED 570 CRITICAL AND CREATIVE THINKING IN MUSIC 3
Theories of critical and creative thinking with application to the music classroom; developing music strategies that facilitate problem solving and thinking development. Field component.

MUED 579 BAND LITERATURE FOR THE MUSIC EDUCATOR 3
This course presents a broad-based examination of band literature for the elementary through high school level. The two primary components include: (1) a survey of literature appropriate to the ensemble skill level, and (2) rehearsal techniques that facilitate expressive performance. Instruction will also include technological tools for research and programming effectiveness.
MUED 580  THE COMPREHENSIVE CHORAL EDUCATOR  3
Appropriate for the middle and high school choral director, this course will provide a philosophical/theoretical foundation for effective classroom practice. Using choral literature as a basis, this course will focus on pedagogy, conducting, and rehearsal techniques. Repertoire will include literature from the western music canon, non-western cultures, and a variety of choral genres.

MUED 599  INDEPENDENT STUDY IN MUSIC EDUCATION  1 - 4
Regularly listed courses pursued in greater depth, by arrangement with graduate program coordinator for music prior to registration. May be repeated twice for a maximum of nine semester hours during the program, but may be taken only once each semester.
Prerequisite: Departmental approval.

MUED 600  INDEPENDENT STUDY IN MUSIC EDUCATION  1 - 4
Individual pursuit of a research topic culminating in a written document of length and scholarly integrity. May cover two semesters. Student registers for the semester in which the work will be completed.
Prerequisite: Departmental approval.

MUED 603  SEMINAR IN MUSIC EDUCATION  3
Philosophies of music education and their application to the classroom. Investigation and application of techniques of research as they apply to music education.
Prerequisite: Majors only.

MUED 605  FIELD PROJECT IN MUSIC EDUCATION  3
This seminar is designed to help students focus on their area of study and design an appropriate field project. This seminar also entails directed independent study in field projects.
Prerequisites: MUED 603; Music majors only.

MUHS 505  PERFORMANCE PRACTICE IN THE BAROQUE ERA  3
Problems of esthetics, notation, instrumentation, ornamentation and interpretation in vocal and instrumental music from the time of Caccini and Monteverdi through that of J. S. Bach and Handel.

MUHS 506  PERFORMANCE PRACTICE IN THE CLASSICAL ERA  3
Problems of esthetics, notation, instrumentation, ornamentation, and interpretation in vocal and instrumental music from the second decade of the eighteenth century through the works of Beethoven.

MUHS 549  MODERN MUSIC  3
Musical styles of the twentieth century: historical sources, major composers, and recent trends.

MUHS 561  HARRY PARTCH - LIFE AND WORKS  3
Survey of basic theories, instrument inventions, compositions. Features hands-on introduction to instruments, just intonation, acoustics and ear training.
MUHS 599 INDEPENDENT STUDY IN MUSIC HISTORY AND LITERATURE
Course work in one of the regularly listed catalog courses of the department of Music (but not Applied Music) in depth greater than that normally pursued in the course. Students will arrange the nature of the work with the instructor prior to the second meeting of the course. May be repeated once for a maximum of eight semester hours.
Prerequisite: Departmental approval.

MUHS 600 INDEPENDENT STUDY IN MUSIC HISTORY AND LITERATURE
Individual pursuit of a research topic culminating in a written document of length and scholarly integrity independent of any course structure. May cover two semesters; student registers for the semester in which the work will be completed. May be repeated twice for a maximum of nine semester hours.
Prerequisite: Departmental approval.

MUHS 604 SEMINAR IN HISTORICAL RESEARCH
Study of music bibliography, research method and critical analysis.
Prerequisite: Music majors only

MUHS 605 SEMINAR IN HISTORICAL AND THEORETICAL STUDIES
Research and discussion of selected topics in the literature of music focusing on stylistic and analytical problems.
Prerequisite: Music majors only

MUPR 530 ADVANCED CONDUCTING
Baton techniques, clef reading, playing from score at the piano, transposition, score analysis, rehearsal techniques and problems of interpretation and accompaniment by orchestra and band, as well as choral conducting techniques.
Prerequisite: Departmental approval.

MUPR 531 ENSEMBLE: CHORUS
Rehearsal and performance in conventional choral media. Admission by audition only. May repeat.

MUPR 533 ENSEMBLE: OPERA WORKSHOP
Rehearsal and performance of operatic repertoire in English or English translation. Admission by audition only. Auditions held in the semester prior to the one in which the workshop is offered. Open to pianists and singers. May repeat for credit.

MUPR 535 ENSEMBLE: BAND
Rehearsal and performance of band and wind ensemble literature. Admission by audition only. May repeat.

MUPR 537 ENSEMBLE: ORCHESTRA
Rehearsal and performance of orchestral repertoire. Admission by audition only. May be repeated for credit.

MUPR 543 MASTER CLASS IN MUSICAL PERFORMANCE: WOODWIND LITERATURE
Coaching small groups in solo and small ensemble literature for woodwind instruments. Stress on stylistic interpretation, tone, balance and other refinements of performance. Open through audition. Pianists may register as accompanists, but must audition.
Prerequisite: Music majors only.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUPR 544</td>
<td>MASTER CLASS IN MUSICAL PERFORMANCE: BRASS LITERATURE</td>
<td>2</td>
<td>Similar to MUPR 543, but focusing on brass repertoire. Open to pianists and brass players through audition.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Music majors only.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MUPR 590 PIANO IMPROVISATION 2
Development of keyboard skills and ear-training for clinical improvisation.
Prerequisite: Departmental approval.

MUPR 599 INDEPENDENT STUDY IN MUSIC PERFORMANCE 1 - 4
Regularly listed course work pursued in great depth, by permission of graduate program coordinator for music prior to registration. May be repeated five times for a total of 24 semester hours, but may be taken only once per semester.
Prerequisite: Departmental approval.

MUPR 600 INDEPENDENT STUDY IN MUSIC PERFORMANCE 1 - 4
Individual pursuit of a problem of performance or an aspect of musical repertoire, culminating in a performance and appropriate written work. Arranged with the graduate program coordinator for music and a course advisor appointed by him prior to the independent study semester. May cover two semesters; student registers for the semester in which the work will be completed. May be repeated twice for a maximum of nine semester hours.
Prerequisite: Departmental approval.

MUTC 561 MUSIC INSTRUMENT INVENTION 2
Studies in acoustics and instrument construction through creative projects and ongoing maintenance of Harry Partch instrumentarium. May be repeated once for a total of 4 credits.

MUTH 501 PSYCHOLOGY OF MUSIC 3
Psychological foundations of music including cognition, perception, emotional meaning, musical development and learning; testing for musical ability; research methodology. Cross listed with Music, MUED 501.

MUTH 502 THE USE OF MUSIC IN SPECIAL EDUCATION 3
Musical development relative to child development. Music activity will be adopted for varying handicapped child populations.
Prerequisite: Departmental approval.

MUTH 510 GROUP MUSIC THERAPY EXPERIENCE 1.5
Use of creative media to express and explore feelings and issues in a supportive and productive environment. Specific content to be determined by members and therapist. Group members may apply what they have experienced to their own client groups. May be repeated for credit.
Prerequisite: Music majors only.

MUTH 520 EXPERIMENTAL RESEARCH IN MUSIC 3
Methods of experimental research in music and music therapy. Knowledge of experimental research techniques assumed. Emphasis is on using these skills to design and execute research projects.
Prerequisite: Music majors only.

MUTH 521 MUSIC THERAPY ASSESSMENT IN CLINICAL PRACTICE 3
This course introduces intermediate level music therapists to a critical review of assessment literature and supervises their field testing of a published assessment tool appropriate to one’s area of clinical interest.
This course introduces the intermediate level music therapist to a critical review of clinical improvisation literature, invites experiential learning, and supervises the application of improvisation methods appropriate to one’s area of clinical interest.

MUTH 523  SUPERVISION AND TEACHING IN MUSIC THERAPY  3
This course introduces the students to theories, concepts and styles of supervision and teaching, and surveys issues related to teaching as well as clinical and academic supervision.

MUTH 524  GROUP MUSIC THERAPY  3
This course focuses on theories and concepts of music therapy interventions with small groups in various therapy settings and within various therapeutic orientations. The course will help the student effectively design and lead music therapy groups.

MUTH 598  THESIS SEMINAR  1
This seminar is designed to help students prepare a thesis proposal in music therapy and to provide the opportunity to exchange thesis ideas, methods, and designs.

MUTH 599  INDEPENDENT STUDY IN MUSIC THERAPY  1 - 3
Regularly listed courses pursued in greater depth, by arrangement with the instructor prior to registration. May be repeated twice for a maximum of nine semester hours during the program, but may be taken only once per semester.
Prerequisites: Departmental approval.

MUTH 600  INDEPENDENT STUDY IN MUSIC THERAPY  1 - 4
Individual pursuit of a research topic culminating in a written document of length and scholarly integrity. May cover two semesters; student registers for the semester in which the work will be completed. May be repeated twice for a maximum of nine semester hours.
Prerequisite: Departmental approval.

MUTH 620  MUSIC THERAPY SEMINAR I: SEVERELY/PROFOUNDLY IMPAIRED YOUTH  4
Introduction to theoretical and applied skills in use of music therapy with severely/profoundly impaired youth. Developmental framework, applied to review of relevant literature, normal musical development related to social, cognitive, and motor development, developmental assessment, music therapy goal planning, music therapy activity with this population, incorporation of special education techniques, music therapy evaluation. Practicum included.
Prerequisite: Music majors only.

MUTH 621  MUSIC THERAPY SEMINAR II: SEVERELY/PROFOUNDLY IMPAIRED YOUTH  4
Advanced theoretical and applied skills in use of music therapy with severely/profoundly impaired youth. Developmental framework, applied to review of relevant literature, normal musical development related to social, cognitive, and motor development, developmental assessment, music therapy goal planning, music therapy activity with this population, incorporation of special education techniques, music therapy evaluation. Practicum included.
Prerequisite: Music majors only.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTH 622</td>
<td>MUSIC THERAPY SEMINAR I: MILD/MODERATELY IMPAIRED YOUTH</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Introduction to combination of theoretical and applied skills in the use of music therapy with mild/moderately impaired youth. Developmental framework, applied to review of relevant literature, on musical development related to social, cognitive, and motor development, developmental assessment, and music therapy goal planning, music therapy activity with mild/moderately impaired populations, incorporation of special education techniques of music therapy evaluation. Practicum included.</td>
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<tr>
<td></td>
<td>Prerequisite: Music majors only.</td>
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</tr>
<tr>
<td>MUTH 623</td>
<td>MUSIC THERAPY SEMINAR II: MILD/MODERATELY IMPAIRED YOUTH</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Advanced theoretical and applied skills in the use of music therapy with mild/moderately impaired youth. Developmental framework, applied to review of relevant literature on musical development related to social, cognitive, and motor development, developmental assessment, music therapy goal planning, music therapy activity with mild/moderately impaired populations, incorporation of special education techniques, music therapy evaluation. Practicum included.</td>
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<td></td>
<td>Prerequisite: Music majors only.</td>
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<tr>
<td>MUTH 624</td>
<td>MUSIC THERAPY SEMINAR I: ADULT PSYCHIATRIC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Introductory theoretical and applied skills in use of music therapy with adult psychiatric clients. Review of relevant literature on adult psychiatric clients with emphasis on rationale for approaches and treatment. Study of group literature. Music therapy sessions with emphasis on observation of behavior. Practicum included.</td>
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<tr>
<td></td>
<td>Prerequisite: Music majors only.</td>
<td></td>
</tr>
<tr>
<td>MUTH 625</td>
<td>MUSIC THERAPY SEMINAR II: ADULT PSYCHIATRIC</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Advanced theoretical and applied skills in the use of music therapy with adult psychiatric clients. Review of relevant literature on adult psychiatric clients with emphasis on rationale for approaches and treatment. Study of group process literature. Music therapy sessions with emphasis on observation. Practicum included.</td>
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</tr>
<tr>
<td></td>
<td>Prerequisite: Music majors only.</td>
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<tr>
<td>MUTH 698</td>
<td>MASTER’S THESIS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take MUTH 699 if they don’t complete MUTH 698 within the semester.</td>
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<tr>
<td></td>
<td>Prerequisite: Departmental approval.</td>
<td></td>
</tr>
<tr>
<td>MUTH 699</td>
<td>MASTER’S THESIS EXTENSION</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.</td>
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<tr>
<td></td>
<td>Prerequisite: MUTH 698.</td>
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</tbody>
</table>
The New Jersey School of Conservation is the Environmental Education Field Campus of Montclair State University. It is the largest university-operated environmental education center in the world. The School of Conservation is located 57 miles from the main campus on a 240-acre tract located in the Stokes State Forest in Sussex County. Administratively, it is part of the College of Science and Mathematics.

The programs at the School of Conservation are designed to provide students with a greater understanding and appreciation of the role natural areas play as part of a life support system. The resident programs provide field experiences in the environmental sciences, humanities, social studies and outdoor pursuits. Each academic year the school provides resident environmental education programs for about 8,000 elementary/secondary school students, and 2,000 teachers from 100 schools. There are also several field courses provided for graduate students. NJSOC offers three weekend workshops held each academic year designed to train classroom teachers and youth leaders in environmental education curriculum development and field techniques for programs in environmental education. The workshops are usually held in October, February, and May. Each workshop carries one semester hour of undergraduate or graduate credit. During the summer, the School offers ten-day courses at the graduate level for teachers pursuing advanced degrees in environmental education and related fields.

### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNFS 460</td>
<td>PRACTICUM IN ENVIRONMENTAL EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course is designed to provide future teachers and supervisors with a background of experience and knowledge which will enable them to organize and conduct environmental education programs. Using an extensive library of environmental education materials, students formulate teaching units, lists of teaching aids, and projects suitable for use in environmental education programs. Participating in programs with school children in residence at the School of Conservation furnishes a practical background for environmental education development.</td>
<td></td>
</tr>
<tr>
<td>CNFS 470</td>
<td>INTRODUCTION TO WILDERNESS STEWARDSHIP</td>
<td>2</td>
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<tr>
<td></td>
<td>Intensive two-week back country camping course to be held entirely in the field. Provides a basic understanding of how to utilize our natural areas with minimum environmental impact while pursuing outdoor recreational activities. An additional laboratory fee to cover food, lodging, and equipment is required.</td>
<td></td>
</tr>
</tbody>
</table>
CNFS 471  FUNDAMENTALS OF WILDERNESS LEADERSHIP  3
Intensive three-week back country camping course to be held entirely in the field. Throughout the program, leadership, judgment, conservation, and sound expedition skills and abilities are emphasized and practiced. A lab fee to cover the cost of food, lodging, and equipment is required.
Prerequisite: CNFS 470.

CNFS 495  WORKSHOP ON UTILIZING NATURAL ENVIRONMENTS  1
To provide classroom teachers in all disciplines with experiences in using the environment to supplement classroom experiences. Opportunity for teachers to increase their knowledge of, as well as skills in, the techniques of incorporating the physical, biological, and socio-cultural components of the environment in their curricula will be emphasized through the use of small group lecture sessions held in the natural environment being described. Students are provided with the opportunity of administering and experimenting in each of four such environments out of a choice ranging from 15 to 20 specific subject areas.

CNFS 496  FIELD STUDY IN HUMANITIES AND NATURAL SCIENCE  1
Provides teachers in varied and diversified subject areas with an understanding of how the humanities and sciences may be taught in various environments for the purpose of developing an environmental sensitivity.

CNFS 497  FIELD STUDIES IN SOCIAL STUDIES AND OUTDOOR RECREATION  1
Provides an understanding of how outdoor pursuits and social studies may be taught using the environment to develop environmental sensitivity. Does not meet resident requirement.

CNFS 500  CURRICULUM DEVELOPMENT IN ENVIRONMENTAL EDUCATION  3
The historical, philosophical, and conceptual aspects of developing a K-12 environmental education curriculum. The focus is on the four major curriculum areas: humanities, social studies, environmental science and outdoor pursuits with proposed activities for the classroom, school grounds, community, and natural areas, intended to enhance the students’ awareness of environmental problems and their possible solutions.

CNFS 501  OUTDOOR TEACHING SITES FOR ENVIRONMENTAL EDUCATION  2
This course will include a working definition of outdoor environmental teaching sites as they relate to current developments in environmental education. Also incorporated, through lecture and discussion, will be pertinent information on the philosophy, design, construction, and use of outdoor environmental teaching sites, with special emphasis on sites which can be developed on land areas adjacent to schools.
Corequisite: CNFS 521.
CNFS 502 AMERICAN HERITAGE SKILLS
This course will focus on the home life-style for the American colonies from the 1600s to the 1800s. Various skills such as spinning, working with wool, natural dyeing, candle making, rug making, soap making, quilting, and food processing will be demonstrated. Students will have the opportunity to develop their proficiency in these areas. The colonial living skills will be integrated into a general overview of the two hundred year period under consideration, rather than considered as isolated elements. Must be taken concurrently with CNFS 522.
Corequisite: CNFS 522.

CNFS 503 HUMANITIES AND THE ENVIRONMENT
This course will focus on the cycle of humanity’s relationship to nature based on three sequential stages: 1) humans in nature, in which archaic religions, myths and legends will be investigated; 2) humans versus nature, which will be a consideration of the alienation due to the influence of science and technology; and 3) humans and nature, which will consider the new mysticism of today. The course work will include lecture, discussion, seminar, and independent study.

CNFS 505 SOCIETY AND THE NATURAL ENVIRONMENT
This course will focus upon interrelationships of a forest ecosystem. Soil, water, plants, and animals found in a northeastern hardwood forest will be examined in detail. Their relationship to humankind will be discussed and reviewed.
Corequisite: CNFS 525.

CNFS 521 FIELD LABORATORY EXPERIENCE IN OUTDOOR TEACHING SITES FOR ENVIRONMENTAL EDUCATION
The field experiences in this one-credit course are designed to support and supplement the theoretical foundations communicated in the course, “Outdoor Teaching Sites for Environmental Education” (CNFS 501), and to provide practical field exercises in developing environmental education teaching site strategies.
Corequisite: CNFS 501

CNFS 522 FIELD LABORATORY EXPERIENCE IN AMERICAN HERITAGE SKILLS
The field experiences in this one-credit course are designed to support, supplement, and amplify the theoretical foundations communicated in the course, “American Heritage Skills” (CNFS 502), and to provide practical applications of both the content of “American Heritage Skills” and its methodology.
Corequisite: CNFS 502.

CNFS 525 FIELD LABORATORY EXPERIENCE IN SOCIETY AND THE NATURAL ENVIRONMENT
The field experiences in this one-credit course are designed to support and supplement the theoretical foundations communicated in the course “Society and the Natural Environment” (CNFS 505).
Corequisite: CNFS 505.
CNFS 530  WORKSHOP IN WILDLIFE MANAGEMENT EDUCATION
This is a field course designed to provide information about wildlife and environmental topics to be included in a school curriculum. Curriculum supplements include Project WILD and Aquatic WILD.

CNFS 595  CONSERVATION BIOLOGY: THE PRESERVATION OF BIOLOGICAL DIVERSITY
This course addresses concerns about the loss of biological diversity and genetic resources through species extinctions. Students will learn about the importance of maintaining biological diversity, the problems involved in monitoring and protecting sensitive and crucial habitat, the impact of human societies on biodiversity, the alternatives to the destruction of habitat/species, the prospects of restoration, and the policies needed to prevent the loss of biological diversity. Students will also learn about population processes that are directly related to species survival. This course is cross listed with BIOL 595.
Prerequisite: One semester of college biology with laboratory.

CNFS 601  ADVANCED ENVIRONMENTAL EDUCATION SEMINAR
The seminar is for advanced students who want to examine, in depth, a selected topic related to current developments in environmental education. The seminar will choose a particular issue facing environmental education, develop a method for studying that issue, and produce a publishable work (e.g. curriculum materials or academic paper) related to the topic.
Prerequisites: CNFS 500.
Corequisite: CNFS 621.

CNFS 609  INDEPENDENT STUDY IN ENVIRONMENTAL CURRICULUM DEVELOPMENT
Teachers, who have participated in academic programs at the School of Conservation and wish to deepen their understanding of environmental education activities, may enroll in this independent study. In doing so, they may develop an environmental education program for a specific grade level, subject discipline, or school district. Credit is dependent on the scope and depth of the program to be developed. May be repeated for a maximum of four semester hours.
Prerequisite: Departmental approval.

CNFS 610  ADMINISTRATION AND SUPERVISION OF ENVIRONMENTAL FIELD STUDY
This course is intended to provide an overview of administrative procedures in organizing and implementing a day or resident program in environmental education. Among the areas to be reviewed are: historical and philosophical perspectives, development of a field curriculum, staff selection and training, financial management, facility design and selection of equipment.
Corequisite: CNFS 620.
CNFS 620 FIELD LABORATORY EXPERIENCES IN ADMINISTRATION AND SUPERVISION OF ENVIRONMENTAL FIELD STUDY

The field experiences in this one-credit graduate course are designed to support and supplement the theoretical foundations communicated in the course, “Administration and Supervision of Environmental Field Study” (CNFS 610) and to provide opportunities to conduct on-site facility evaluation, test teaching equipment, discuss training programs with faculty at other facilities, and review financial management and business procedures used in the variety of centers.

Corequisite: CNFS 610.

CNFS 621 FIELD LABORATORY EXPERIENCE IN ENVIRONMENTAL EDUCATION

The field experiences in this one-credit course are designed to support and supplement the theoretical foundations communicated in the course “Advanced Environmental Education Seminar” (CNFS 601).

Corequisite: CNFS 601.
The MA in Psychology with a concentration available in Industrial and Organizational Psychology is described immediately below. For the MA in Educational Psychology and the concentrations in Child/Adolescent Clinical Psychology and Clinical Psychology for Spanish-English Bilinguals, see following pages. The application deadlines for all programs are October 1 for spring admittance and February 1 for fall admittance. Please note that admittance into the School Psychologist program is only in the fall.

MASTER OF ARTS DEGREE IN PSYCHOLOGY

The Master of Arts in Psychology is designed primarily as an intermediate degree. This program prepares the student for advanced studies in many psychological fields such as developmental, experimental, learning, personality and counseling, school, and social psychology.

ADMISSION REQUIREMENTS

All applicants must meet the admission requirements for graduate study at MSU. In addition, applicants must meet the following departmental requirements.

1. 12 undergraduate credits in psychology including a course in statistics and a laboratory course in experimental psychology.
2. Completion of the Graduate Record Examination.
3. Approval by the departmental committee.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN PSYCHOLOGY

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Required Courses (13 semester hours)</td>
<td></td>
</tr>
<tr>
<td>PSYC 510 Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 520 Human Experimental Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 550 Quantitative and Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 578 Psychological Tests and Measurements</td>
<td>3</td>
</tr>
<tr>
<td>II. Specialization courses (12 semester hours)</td>
<td></td>
</tr>
<tr>
<td>To be selected with the advice and approval of the graduate program coordinator.</td>
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</tr>
<tr>
<td>III. Free electives (6 semester hours)</td>
<td></td>
</tr>
<tr>
<td>To be selected with the advice and approval of the graduate program coordinator.</td>
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<tr>
<td>IV. Thesis</td>
<td></td>
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<tr>
<td>PSYC 698 Master’s Thesis</td>
<td>4</td>
</tr>
<tr>
<td>V. Comprehensive Examination:</td>
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<tr>
<td>Successful completion of a written comprehensive examination precedes the oral defense of the thesis.</td>
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</tbody>
</table>

Minimum semester hours: 35
CONCENTRATION IN INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY

The Industrial and Organizational Psychology Concentration is designed to prepare persons for work in business and industry as professional specialists in the application of psychological knowledge and techniques in organizations or to prepare persons for continued education in the field of Industrial Organizational Psychology or related fields (Organizational Behavior or Human Resources). The program draws from many areas of psychology especially testing, statistics, experimental design, learning, motivation, and interpersonal relations.

REQUIREMENTS FOR THE INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY CONCENTRATION

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Courses (16 semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PSYC 510 Research Methods in Psychology ............................................ 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 520 Human Experimental Psychology ............................................ 4</td>
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<tr>
<td></td>
<td>PSYC 550 Quantitative and Statistical Methods ....................................... 3</td>
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<tr>
<td></td>
<td>PSYC 578 Psychological Tests and Measurements ................................... 3</td>
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<tr>
<td></td>
<td>PSYC 658 Seminar in Industrial and Organizational Psychology ............. 3</td>
</tr>
<tr>
<td></td>
<td>II. Specialization (Select 3 courses) ........................................................................ 9</td>
</tr>
<tr>
<td></td>
<td>PSYC 554 Psychology of Business and Industry ...................................... 3</td>
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<tr>
<td></td>
<td>PSYC 557 Theory and Application in Consumer Psychology .................. 3</td>
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<td></td>
<td>PSYC 558 Personnel Psychology .................................................................. 3</td>
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<td></td>
<td>PSYC 570 Psychology of Human Factors ................................................. 3</td>
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<tr>
<td></td>
<td>PSYC 571 Organizational Psychology ...................................................... 3</td>
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<td></td>
<td>III. Thesis (4 semester hours)</td>
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<tr>
<td></td>
<td>PSYC 698 Master’s Thesis ........................................................................ 4</td>
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<td>or</td>
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<td></td>
<td>PSYC 611 Internship in Applied Psychology ............................................ 4</td>
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<tr>
<td></td>
<td>IV. Electives: Psychology (maximum of 6 semester hours)</td>
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<tr>
<td></td>
<td>PSYC 552 General Social Psychology ...................................................... 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 563 Theories of Learning ................................................................. 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 568 Psychology of Group Dynamics .................................................. 3</td>
</tr>
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<td></td>
<td>PSYC 582 Behavior Modification ................................................................ 3</td>
</tr>
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<td></td>
<td>V. Electives: Other Departments (maximum of 6 semester hours)</td>
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<tr>
<td></td>
<td>To be selected with the approval of the graduate program coordinator.</td>
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<td></td>
<td>VI. Comprehensive Examination</td>
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<td></td>
<td>Minimum semester hours: 38</td>
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</tbody>
</table>
MASTER OF ARTS DEGREE IN EDUCATIONAL PSYCHOLOGY

The Master of Arts in Educational Psychology aims to increase the student’s knowledge of the application of psychological theory to educational practice.

ADMISSION REQUIREMENTS

All applicants must meet the admission requirements for graduate study at Montclair State University. In addition, the applicant must have 12 undergraduate credits in psychology including a course in statistics and a laboratory course in experimental psychology, and be approved by the departmental committee.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN EDUCATIONAL PSYCHOLOGY

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Courses (15 semester hours)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PSYC 510 Research Methods in Psychology ............................................ 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 561 Developmental Psychology ...................................................... 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 563 Theories of Learning ............................................................. 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 578 Psychological Tests and Measurement ....................................... 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 660 Current Topics in Educational Psychology .................................. 3</td>
</tr>
</tbody>
</table>

II. Electives: Psychology (15 semester hours)
To be selected with the advice and approval of the graduate program coordinator.

III. Electives: Other Departments (6 semester hours)
To be selected with the advice and approval of the graduate program coordinator.

IV. Thesis (Elective)

V. Comprehensive Examination
Minimum: 34 semester hours with Thesis option or 36 semester hours without Thesis option. Students who elect the Thesis option will take one less course in each Elective category (II and III).

Minimum semester hours: 34 or 36

REQUIREMENTS FOR THE CONCENTRATION IN CHILD/ADOLESCENT CLINICAL PSYCHOLOGY

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Courses (9 semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PSYC 510 Research Methods in Psychology ............................................ 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 561 Developmental Psychology ...................................................... 3</td>
</tr>
<tr>
<td></td>
<td>PSYC 578 Psychological Tests and Measurements ....................................... 3</td>
</tr>
</tbody>
</table>

II. Required clinical sequence (18 semester hours)
PSYC 565 Child and Adolescent Psychopathology ........................................ 3
PSYC 574 Individual Intelligence Testing ................................................ 3
PSYC 575 Projective Techniques I .............................................................. 3
III. Electives (9 semester hours)
To be selected with the advice and approval of the graduate program director.

IV. Thesis (optional)
V. Comprehensive Examination

Minimum semester hours: 36

CONCENTRATION IN CLINICAL PSYCHOLOGY FOR SPANISH-ENGLISH BILINGUALS

The Clinical Psychology Concentration for Spanish-English Bilingual Psychologists prepares graduates to function in applied mental health settings that have a significant Spanish-speaking clientele.

REQUIREMENTS FOR THE CONCENTRATION IN CLINICAL PSYCHOLOGY FOR SPANISH-ENGLISH BILINGUALS

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Courses (12 semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PSYC 510 Research Methods in Psychology</td>
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<tr>
<td></td>
<td>PSYC 561 Developmental Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 578 Psychological Tests and Measurements</td>
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<tr>
<td></td>
<td>PSYC 660 Current Topics in Educational Psychology</td>
</tr>
<tr>
<td></td>
<td>II. Specialization (21 semester hours)</td>
</tr>
<tr>
<td></td>
<td>PSYC 551 Mental Health Issues of Hispanics</td>
</tr>
<tr>
<td></td>
<td>PSYC 574 Individual Intelligence Testing</td>
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<tr>
<td></td>
<td>PSYC 575 Projective Techniques I</td>
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<tr>
<td></td>
<td>PSYC 593 Clinical Interviewing</td>
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<td></td>
<td>PSYC 667 Abnormal Psychology</td>
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<td></td>
<td>PSYC 670 Introduction to Psychotherapy</td>
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<td></td>
<td>PSYC 680 Externship in Clinical Psychology</td>
</tr>
<tr>
<td></td>
<td>III. Elective (3 semester hours)</td>
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<tr>
<td></td>
<td>ANTH 538 Ethnopsychology</td>
</tr>
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<td></td>
<td>COUN 559 Dynamics of Group Process</td>
</tr>
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<td></td>
<td>COUN 581 Community Resources</td>
</tr>
<tr>
<td></td>
<td>COUN 590 Counseling the Alcoholic and the Substance Abuser</td>
</tr>
<tr>
<td></td>
<td>FCST 542 Dynamics of Family Interaction</td>
</tr>
<tr>
<td></td>
<td>FCST 544 Intercultural Study of Family</td>
</tr>
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<td></td>
<td>PSYC 552 General Social Psychology</td>
</tr>
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<td></td>
<td>PSYC 582 Behavior Modification</td>
</tr>
<tr>
<td></td>
<td>PSYC 685 Psychoanalytic Theory</td>
</tr>
<tr>
<td></td>
<td>SOCI 574 Sociology of Ethnic Relationships</td>
</tr>
<tr>
<td></td>
<td>SOCI 577 Sociology of Poverty in the United States</td>
</tr>
</tbody>
</table>

IV. Comprehensive Examination

Minimum semester hours: 36
The School Psychologist Certification Program is designed to meet the need for school psychologists by offering an integrated sequence of courses and supervised school, clinical, and community experiences.

ADMISSION REQUIREMENTS

All applicants must meet the admission requirements for graduate study at Montclair State. The deadline for this program is February 1 for fall admittance only.

In addition, applicants must meet the following departmental requirements.

1. 12 undergraduate credits in psychology including a course in statistics and a laboratory course in experimental psychology.
2. The Advanced Graduate Record Examination in Psychology.
3. Four letters of recommendation.
4. Approval by the departmental committee. All materials must be received by the Graduate School by February 1 for the following September.
5. Applicants without an advanced degree should also apply for either the MA in Psychology or MA in Educational Psychology.

REQUIREMENTS FOR THE SCHOOL PSYCHOLOGIST CERTIFICATION PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>I.</td>
<td></td>
</tr>
<tr>
<td>Educational Foundations (12 semester hours)</td>
<td></td>
</tr>
<tr>
<td>One multicultural course from the following (3 semester hours):</td>
<td></td>
</tr>
<tr>
<td>COUN 595</td>
<td>Multicultural Counseling ......................................................... 3</td>
</tr>
<tr>
<td>PSYC 551</td>
<td>Mental Health Issues of Hispanics ........................................... 3</td>
</tr>
<tr>
<td>SOCI 574</td>
<td>Sociology of Ethnic Relationships ............................................ 3</td>
</tr>
<tr>
<td>One curriculum/reading course from the following (3 semester hours):</td>
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</tr>
<tr>
<td>CURR 523</td>
<td>Education in the Inner City ...................................................... 3</td>
</tr>
<tr>
<td>CURR 538</td>
<td>Discipline and Group Management in the Classroom ..................... 3</td>
</tr>
<tr>
<td>CURR 546</td>
<td>Education of Gifted and Talented ............................................. 3</td>
</tr>
<tr>
<td>CURR 599</td>
<td>Curricular and Social Dynamics of Schooling ................................ 3</td>
</tr>
<tr>
<td>CURR 551</td>
<td>Problem Solving and Critical Inquiry in Curriculum Development .................. 3</td>
</tr>
<tr>
<td>READ 500</td>
<td>The Nature of Reading ............................................................ 3</td>
</tr>
<tr>
<td>READ 507</td>
<td>Understanding Reading Comprehension ..................................... 3</td>
</tr>
<tr>
<td>READ 508</td>
<td>Critical Thinking and Literacy .................................................. 3</td>
</tr>
<tr>
<td>And PSYC 668</td>
<td>Consultation Methods in Psychoeducational Settings .......... 3</td>
</tr>
<tr>
<td>And SPED 582</td>
<td>Basic Instructional Techniques for Students with Learning Problems</td>
</tr>
</tbody>
</table>
II. Education of the Handicapped (Select two courses, 6 semester hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
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<tbody>
<tr>
<td>SPED 579</td>
<td>Special Education for Students with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 564</td>
<td>Psychological Aspects of Disabling Conditions</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 565</td>
<td>Child and Adolescent Psychopathology</td>
<td>3</td>
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III. Testing and Clinical Techniques (36 semester hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>PSYC 510</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 550</td>
<td>Quantitative and Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 574</td>
<td>Individual Intelligence Testing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 575</td>
<td>Projective Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 577</td>
<td>Practicum I - Projective Techniques I</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 576</td>
<td>Projective Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 578</td>
<td>Psychological Tests and Measurements</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 579</td>
<td>Practicum II - Projective Techniques I</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 594</td>
<td>Therapeutic Interventions in the Schools</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 609</td>
<td>Practicum III - Diagnostic Case Studies</td>
<td>1</td>
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<tr>
<td>PSYC 610</td>
<td>Diagnostic Case Studies</td>
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<tr>
<td>PSYC 661</td>
<td>Practicum in School Psychology</td>
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<td>PSYC 662</td>
<td>School Psychology Externship</td>
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<tr>
<td>PSYC 667</td>
<td>Abnormal Psychology</td>
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<tr>
<td>PSYC 668</td>
<td>School Psychology Externship</td>
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IV. Personality and Behavioral Development (12 semester hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
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<tbody>
<tr>
<td>PSYC 561</td>
<td>Developmental Psychology</td>
<td>3</td>
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<tr>
<td>PSYC 563</td>
<td>Theories of Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 582</td>
<td>Behavior Modification</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 667</td>
<td>Abnormal Psychology</td>
<td>3</td>
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</table>

V. Biological Bases of Behavior (Select one course, 3 semester hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>PSYC 573</td>
<td>Behavioral Neuroscience</td>
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</tr>
<tr>
<td>SPED 595</td>
<td>Medical and Physical Bases of Disabilities</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 63

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**PSYCHOLOGY**

**Course Descriptions**

**PSYC 506 PROFESSIONAL ISSUES IN MULTICULTURAL SCHOOL PSYCHOLOGY**

This course is designed to expose students in school psychology to multicultural issues which are central to theory, practice, and research. The course has an awareness, knowledge, and skills focus. Awareness is centered on understanding multiple value systems and world views and gaining insight into one’s own cultural socialization and inherent biases. Knowledge focuses on acquiring accurate understanding of the various cultural groups with whom one will work. Skills relate to specific culturally appropriate and tailored interventions. The course incorporates multicultural modes of learning and performance evaluation.
PSYC 510 RESEARCH METHODS IN PSYCHOLOGY 3
This course provides the essentials needed to read, understand and critically evaluate research reports. Students will also learn how to carry out the entire research process, starting with identifying the research problem and ending with a thesis or research report. Factorial analysis of variance and the major multiple correlational designs are explained. 
Prerequisite: Undergraduate laboratory course in experimental psychology.

PSYC 520 HUMAN EXPERIMENTAL PSYCHOLOGY 4
Students survey methods and topics in human experimental psychology by conducting, analyzing, and reporting on experiments on topics to be drawn from cognition, memory, language, perception, learning, sensation, and neuropsychology. 
Prerequisite: PSYC 510.

PSYC 550 QUANTITATIVE AND STATISTICAL METHODS 3
This course presents the theory and use of simple and factorial anova, regression, and covariance to analyze representative psychological data. The use of computer packages for analysis is included. 
Prerequisite: An undergraduate psychology statistics course or equivalent.

PSYC 551 MENTAL HEALTH ISSUES OF HISPANICS 3
This course will familiarize the student with the personal, social, cultural and institutional forces that affect the mental health of Hispanics and Hispanic Americans and how these impact on treatment issues. The course will explore the heterogeneity of the Hispanic groups in the United States and how these groups respond in unique ways to the various services offered in community mental health settings.

PSYC 552 GENERAL SOCIAL PSYCHOLOGY 3
This course surveys and analyzes the theoretical and empirical literature of modern social psychology. Among topics dealt with are the social psychology of the psychology experiment, attitude development and change, group processes and conflict, role theory, ecological psychology, socialization, organizations and work places, and a number of other themes and issues focused on the individual’s relationship to the larger social structure. 
Prerequisite: Undergraduate work in psychology or sociology.

PSYC 554 PSYCHOLOGY OF BUSINESS AND INDUSTRY 3
This course combines applied methodologies with content areas in Industrial Organizational Psychology. Emphasis on needs assessment and program evaluation of personnel and organizational behavior functions. Sampling techniques and quasi-experimental designs are applied to training, performance appraisal, employee attitudes, and organizational research activities. 
Prerequisite: PSYC 550 or a comparable graduate level course in statistics.

PSYC 558 PERSONNEL PSYCHOLOGY 3
Psychological methods and knowledge are applied to the personnel functions of industry. Provides an understanding of the importance of psychometric properties in personnel selection. Emphasis is on relevant social, economic, and legislative changes which affect employment, including the impact of civil right judicial decisions on personnel functions.
PSYC 560  ADVANCED EDUCATIONAL PSYCHOLOGY  3
A comprehensive treatment of the cognitive and affective characteristics of the learner and the processes of learning and teaching provide the framework for this course. Behavioral, cognitive and information-processing theory are presented and their applicability to instructional strategies and classroom dynamics is discussed. Other areas included are the origins of individual differences including heredity and environment, early childhood education, cultural differences, student motivation, classroom management, measurement and evaluation, exceptional children and other topics.

PSYC 561  DEVELOPMENTAL PSYCHOLOGY  3
Philosophical, conceptual, theoretical and research issues pertinent to human development from prenatal life to adulthood are presented. The core conceptual issues of development, such as the nature-nurture controversy, the continuity-discontinuity issue, and the issue of stability-instability, are discussed, and their relationships to the major theories in developmental psychology are examined.

PSYC 563  THEORIES OF LEARNING  3
The aim of this course is to provide the student with an understanding of modern learning theory, its historical context, theoretical ideas, research, and applications. To this end, the theoretical ideas of the major schools of learning - behaviorism, gestalt, cognitivism, and information-processing - are reviewed.

PSYC 564  PSYCHOLOGICAL ASPECTS OF DISABLING CONDITIONS  3
The purpose of this course is to enhance the students’ understanding of the psychological, social and educational implications of disabling conditions in infancy, childhood and adolescence. Topics to be discussed include, but are not limited to, learning disabilities, developmental disabilities, pervasive developmental disorder, emotional/behavioral disorders, chronic illness and ADHD. Issues associated with classification, attitude towards special education, placement and program design and inclusion will be discussed from the psychological perspective. Students will be expected to form and articulate a conceptual framework for understanding and working with children and adolescents with disabilities. Frameworks for working with parents and families will also be included.

PSYC 565  CHILD AND ADOLESCENT PSYCHOPATHOLOGY  3
This course emphasizes the diagnosis of psychological disorders usually first evident in infancy, childhood or adolescence. Topics to be covered include but are not limited to affective disorders, anxiety disorders, conduct disorders, substance abuse, sexuality/gender identity disorders, pervasive developmental disorder and behavioral aspects of developmental disabilities. Students will be expected to understand DSM-IV categories. Each student is expected to be familiar with developmental psychology and personality development. Issues associated with evaluation, classification and diagnosis will be discussed extensively. Guidelines for appropriate interventions will be provided.

Prerequisite: Matriculation in the Child/Adolescent Clinical program or departmental approval.
PSYC 568  PSYCHOLOGY OF GROUP DYNAMICS  3
This course presents theories of group dynamics and illustrative application to understand
personal, marital, political, industrial and professional life. Personal participation by the
student in a group interactive process is required. The course is designed especially to help
group leaders understand the complex underlying dynamic forces that influence our
behavior in groups.
Prerequisite: Open to all graduate Psychology majors only.

PSYC 571  ORGANIZATIONAL PSYCHOLOGY  3
This course examines the psychological aspects of organizational behavior. Emphasis on
the organization effected by individual psychological processes and behavior. Areas
covered include social norms, group and team processes, leadership and power, motiva-
tion, job attitudes and satisfaction, and organizational change.

PSYC 573  BEHAVIORAL NEUROSCIENCE  3
The physiological bases of normal and abnormal behavior with emphasis on the anatomy,
physiology, and pathology of the human nervous system are discussed. Starting with the
nerve cell, the course progresses through the receptors, spinal cord, cortical and subcor-
tical structures, psychosurgery, biofeedback, and other topics.

PSYC 574  INDIVIDUAL INTELLIGENCE TESTING  3
Students learn how to administer, score and interpret individual intelligence tests.
Theories of intelligence and the appropriateness of the tests to specific populations are
discussed. Students administer and report on the three Wechsler Intelligence Scales and
Scales, and other cognitive assessment techniques.
Prerequisites: Departmental approval, and approved certification candidacy in the
School Psychology program, the Bilingual Clinical Concentration, or Child/Adolescent
Clinical program. Special fee.

PSYC 575  PROJECTIVE TECHNIQUES I  3
The basic instruments of projective testing, particularly the Bender Visual Motor Gestalt
Test, DAP, HTP, TAT, TEMAS, and Sentence Completion Tests are studied. Students
will also understand how cultural diversity impacts on assessment. Instruments are
reviewed from the standpoints of basic research and the mechanics of administration and
scoring.
Prerequisites: Departmental approval, and approved certification candidacy in the
School Psychology program, the Bilingual Clinical Concentration, or Child/Adolescent
Clinical program.

PSYC 576  PROJECTIVE TECHNIQUES II  3
This course involves advanced theoretical aspects and practical application of projective
tests. Students are required to administer and score tests, and to analyze individual cases,
including supervised cases at the University Psychoeducational Center. An introduction
to report writing is provided. The major emphasis is on the Rorschach, the Thematic
Apperception Test, and projective drawings. Other assessment instruments are also
included.
Prerequisites: PSYC 574 and 575, and departmental approval, and approved certifica-
tion candidacy in the School Psychology program, the Bilingual Clinical Concentration,
or Child/Adolescent Clinical program.
**PSYC 577  PRACTICUM I - PROJECTIVE TECHNIQUES I**  
This course represents the first in a series of three 1-credit semester practicum experiences at MSU’s Psychoeducational Center for School Psychology students. This initial practicum for School Psychology students is taken in conjunction with PSYC 575 (Projective Techniques I). It is a supervised observation of the practicum work of advanced students from the School Psychology program and Learning Disabilities Teacher Consultant program. Students in Practicum I will be observing advanced students who are involved in planning administration of evaluation procedures and assessing clients; analyzing results; making decisions regarding eligibility for special education; and collaborating as members of the Child Study Team for clients referred to MSU’s Psychoeducational Center. Students will observe assessments via a one-way mirror and meet with the professor to discuss and process their observations. In this way students will directly observe the role and function of the School Psychologist, will come to appreciate the importance of collaboration by interdisciplinary and transdisciplinary teams, and will develop a sense of ethical practice in the profession.  
**Corequisite:** PSYC 575.

**PSYC 578  PSYCHOLOGICAL TESTS AND MEASUREMENTS**  
This course surveys the theory, construction and application of psychological tests. Topics include the statistical concepts underlying measurement; reliability and validity; critical analyses of selected intelligence, ability and personality tests; evaluation and interpretation of test data in practical situations; and the role of testing in clinical, educational and remedial settings.  
**Prerequisites:** Departmental approval, and an undergraduate psychology statistics course or equivalent.

**PSYC 579  PRACTICUM II-PROJECTIVE TECHNIQUES II**  
This course is the second in a series of three 1-credit semester practicum experiences at MSU’s Psychoeducational Center for School Psychology students. During this course, which is offered in conjunction with PSYC 576 (Projective Techniques II), students function as intern members of Child Study Teams conducting assessments of children, adolescents, and their families. Close supervision is provided by university faculty while these practicum students conduct intakes, assessments, observations, interviews, consultations with teachers and parents as well as writing reports. These assessments will yield a decision regarding the client’s eligibility for special education. Students meet with their supervisors after each stage of the process and meet on a regular basis with their teammates from MSU’s Learning Disabilities Teacher Consultant program. Students will be required to interpret and communicate the results of their assessments in a culturally sensitive manner to families and school personnel who are clients at MSU’s Psychoeducational Center.  
**Corequisite:** PSYC 576.
PSYC 582 BEHAVIOR MODIFICATION 3
This course reviews applications of conditioning principles to changing human behavior in clinical, educational, occupational and community settings. Selected topics include operant and classical conditioning, social learning theory, token economies, experimental design, cognitive behavior modification, aversive control, cognitive restructuring, biofeedback, and ethical issues in behavior modification. The course is designed to enable students to construct and implement behavior modification programs.
Prerequisites: Departmental approval, and an undergraduate course in learning or the equivalent.

PSYC 592 GRADUATE SEMINAR IN HEALTH PSYCHOLOGY 3
The theoretical, empirical, and clinical aspects of Health Psychology will be explored and discussed. The relation of Health Psychology with other areas of Psychology and various scientific disciplines will be discussed. The historical development of the field, its research methodologies, theoretical models and exemplary interventions will be described. A specific emphasis will be placed on applications in regards to education, industry and other organizations as they relate to the various master’s programs offered by the Department of Psychology.
Prerequisite: A graduate research methods course, and at least one other graduate psychology course, or departmental approval.

PSYC 593 CLINICAL INTERVIEWING 3
This course integrates the theory and practice of clinical interviewing. The goals of this course are to facilitate the development of the student’s listening, diagnostic, and therapeutic interviewing skills.
Prerequisites: Departmental approval, and 12 graduate credits in psychology or related fields.

PSYC 594 THERAPEUTIC INTERVENTIONS IN THE SCHOOLS 3
This course is designed to assist students in developing skills in planning and implementing school based psychotherapeutic interventions for children, adolescents and their families. The course will present theory and techniques to intervene effectively with children, adolescents and their families in the context of the overall school and classroom settings. The course will focus on interview techniques, treatment strategies for depression, anxiety, trauma (including abuse, exposure to violence, and bereavement), and anger/aggression. Various theoretical models and their treatments strategies will be discussed, including psychodynamic, cognitive and cognitive-behavioral therapy, family systems therapy, play therapy, and interpersonal therapy. Cultural factors involved in diagnosis and treatment will be addressed throughout the semester.
Prerequisite: Departmental approval.

PSYC 609 PRACTICUM III-DIAGNOSTIC CASE STUDIES 1
This course is the final of the three practicum experiences offered at MSU’s Psychoeducational Center and is offered in conjunction with PSYC 610 (Diagnostic Case Studies). In this experience students are assigned more complex cases and given expanded responsibilities such as case management and parent-teacher consultation. Students are expected to perform more independently with less intensive faculty supervision. Students may also conduct play therapy and serve as consultants to teachers at MSU’s Psychoeducational Center Demonstration School.
Prerequisite: PSYC 610.
PSYC 610  DIAGNOSTIC CASE STUDIES  3
This course provides integration of assessment and diagnostic skills within the context of school psychological services. Theoretical and practical issues of differential diagnosis are reviewed in depth. Communication of findings through written reports and oral feedback to significant parties is stressed. The development of intervention plans, including the individual educational program, are reviewed. Instructional design, consultation techniques, counseling, intervention linked assessment, and functional assessment will be integrated into the course content. In addition to other assignments, students work as supervised members of child study teams at the University Psychoeducational Center. 
Prerequisites: PSYC 574, and PSYC 575, and PSYC 576, and departmental approval, and approved certification candidacy in the School Psychology Program.

PSYC 611  INTERNSHIP IN APPLIED PSYCHOLOGY  4
Students attend a one-semester seminar to review the research process, develop individual project proposals for investigation of a problem in an applied setting under the supervision of faculty, present their proposals to the seminar, implement their proposals after approval by a faculty committee, report their completed work in a written report for the M.A. degree, and take an oral examination upon completion of the project. Students normally attend the seminar in a semester preceding registration for this course.
Prerequisites: Departmental approval, and permission of internship advisor.

PSYC 658  SEMINAR IN INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY  3
This course covers the most recent advances, issues and problems in Industrial and Organizational Psychology through relevant professional journals, technical literature, legislation and judicial decisions, advanced research techniques, and consulting practice in order to prepare students for continued education or applied practice of their field. Students critique professional journals and review the development of topics in their field.
Prerequisites: Departmental approval, and matriculation in the Industrial and Organizational Psychology concentration, and completion of specialization courses.

PSYC 659  SPECIAL TOPICS SEMINAR IN PSYCHOLOGY  3
This course provides an in-depth view of important theoretical and methodological issues in various areas of psychology. It is designed to permit faculty with particular interests and expertise to provide students with a comprehensive analysis of a selected contemporary issue (or issues) in psychology.
Prerequisites: Departmental approval, and completion of 15 or more credits in one’s program.

PSYC 660  CURRENT TOPICS IN EDUCATIONAL PSYCHOLOGY  3
Several important contemporary theoretical, applied and methodological issues in various areas of educational psychology are selected by the class for inclusion in the course. Seminar discussions focus on the critical evaluation of the recent literature in the areas selected.
Prerequisites: PSYC 510 and 561, and graduate Psychology majors only.
PSYC 661 PRACTICUM IN SCHOOL PSYCHOLOGY 3
The student receives supervised experience in assessment, counseling and consultation procedures. The course is designed to increase the student’s competence in psychological skills required in school settings.
Prerequisites: Departmental approval, and approved certification candidacy in the School Psychology Program, and permission of graduate advisor.

PSYC 662 SCHOOL PSYCHOLOGY EXTERNSHIP 3
Students serve as apprentice psychologists in cooperating school districts. A certified school psychologist, employed in the cooperating district, serves as the student’s on-site supervisor. Students meet weekly with the University supervisor who teaches the course. Full year course.
Prerequisites: Students must have completed all course work prior to entering externship. Students need permission of the graduate advisor to register for this course. Departmental approval, and approved certification candidacy in the School Psychology Program is required.

PSYC 663 INDEPENDENT STUDY 1 - 3
The student conducts an individual project under the supervision of a professor in the department. May be taken only once for a maximum of three semester hours.
Prerequisite: Departmental approval.

PSYC 667 ABNORMAL PSYCHOLOGY 3
This course focuses on theoretical models and selected research in psychopathology. Topics include contemporary nosology, diagnostic problems, schizophrenia, anxiety and affective disorders, social deviance, somatoform and psychophysiological syndromes, and therapeutic intervention.
Prerequisite: PSYC 561.

PSYC 668 CONSULTATION METHODS IN PSYCHOEDUCATIONAL SETTINGS 3
This course is designed to provide students with theory and practice about the consultation process. The course will identify a collaborative, problem-solving model of consultation in psychoeducational settings and define the intrapersonal, interpersonal and systemic factors associated with successful consultation. Students will locate consultation cases and function under direct supervision and monitoring. Cross listed with Curriculum and Teaching, SPED 668.
Prerequisite: Departmental approval.

PSYC 670 INTRODUCTION TO PSYCHOTHERAPY 3
This course surveys theories, research and practices in individual and group psychotherapy, and introduces the student to various treatments for emotional maladjustment and behavioral pathology.
Prerequisite: Departmental approval.
This course will use a multicultural lens to examine the various family therapy approaches such as structural, Bowenian, behavioral, strategic and paradoxical approaches and their corresponding techniques. Special emphasis will be placed on applying these approaches to the prevailing childhood DSM diagnoses (e.g., Childhood Depression and Anxiety, substance abuse, eating disorders, ADHD, developmental disorders, Oppositional Defiant Disorder and Conduct Disorder). A segment of the course will focus on special topics and their relevance to family functioning (e.g., trauma, incest/sexual abuse, domestic violence, illness/death, poverty and parental psychopathology).

Prerequisite: PSYC 565 or PSYC 667.

This course is a supervised, two semester, clinical experience designed to provide the skills necessary for professional practice in Mental Health Clinics or other settings where there is a significant Hispanic clientele. On-site supervision will take place under the direction of a fully licensed clinical psychologist (the field-based supervisor) in close cooperation with the Bilingual Clinical Program Director at Montclair State. The student will also meet with a Montclair State faculty supervisor on a weekly basis. At least one of the supervisors will be a bilingual/bicultural individual. A contract will be signed between the student intern, field-based supervisor and the Montclair faculty supervisor before the start of the internship.

Prerequisites: Departmental approval, and matriculated status in the Clinical Psychology for Spanish/English Bilinguals Concentration and permission of the program director.

Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take PSYC 699 if they don’t complete PSYC 698 within the semester.

Prerequisite: Departmental approval.

Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.

Prerequisite: PSYC 698.
The Master of Arts program in Social Sciences is designed to accomplish four main objectives:

1. To provide the opportunity for students to acquire advanced knowledge in one of the major areas of the social sciences and history.
2. To acquaint the student with the interrelatedness of these various fields as well as their relationship to other disciplines.
3. To familiarize students with the particular methodologies and specialized problems of his or her field.
4. To provide students with the background to do creative and independent work both during and after their graduate careers.

Specifically, the program offers advanced study in economics and history. Degree candidates do a major portion of their work and prepare for a final comprehensive examination in one of the concentrations. The program also provides flexibility for interdisciplinary study in certain areas and is designed mainly for students who wish to work toward the degree on a part-time basis.

While teachers seeking to keep up-to-date in their fields or preparing for specialized secondary school subjects will constitute an important segment of the graduate student body, degrees in the social sciences and history are increasingly being pursued by (a) individuals seeking to change fields or professions, (b) individuals planning career advancement, and (c) individuals returning to the academic world after a hiatus of some time. A significant number of graduates of the program have pursued doctoral work successfully at major universities. The program’s flexibility has also been utilized to enhance careers in business, government, politics, community service agencies, museum work, urban planning, etc. Student constituencies are able to achieve their respective purposes by following one of the tracks or specializations within the program.

ADMISSION REQUIREMENTS

In addition to the general requirements for admission to the graduate program at Montclair State, candidates must present an undergraduate record showing a total of at least 30 semester hours in the social sciences and/or history. For candidates with weak undergraduate preparation in the field of concentration, prerequisite courses, not for graduate credit, may be required.
The Master of Arts in Social Science: Economics Concentration provides a study of economic theory within a programmatic framework that emphasizes the importance and interdisciplinary nature of the social sciences. Where appropriate, business oriented applications are developed; however, the primary purpose of the program is to develop a knowledge of economics which enhances the student’s understanding of the formulation, evaluation and implementation of public decision making. Although an undergraduate major in Economics is not a prerequisite, candidates must present an undergraduate record with at least 30 semester hours in the social sciences and/or history. Candidates who do not meet minimum requirements may be required to enroll in certain prerequisite courses which do not provide graduate credit. Candidates interested in Economics as an area of concentration should contact the graduate program coordinator or the chairperson of the department for information.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required for all but undergraduate Economics majors:</th>
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<tbody>
<tr>
<td></td>
<td>ECON 501 Economic Analysis ........................................3</td>
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<table>
<thead>
<tr>
<th>I. Required for all but undergraduate Economics majors:</th>
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<tbody>
<tr>
<td>ECON 501 Economic Analysis ........................................3</td>
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<tr>
<th>II. Economics Electives (12-15 semester hours)</th>
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<tr>
<td>ECON 502 Financial Institutions and Monetary Policy ................3</td>
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<tr>
<td>ECON 503 Economic Problems of the Third World ...................3</td>
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<tr>
<td>ECON 505 Aggregate Economics .........................................3</td>
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<tr>
<td>ECON 508 Economics of Public Management ..........................3</td>
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<tr>
<td>ECON 510 Urban Economics: Problems and Policies .................3</td>
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<tr>
<td>ECON 533 Corporations and International Financial Markets ....3</td>
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<tr>
<td>ECON 541 Foundations of Contemporary Economic Thought ..........3</td>
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<tr>
<td>ECON 542 Economic Fluctuations and Forecasting ..................3</td>
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<tr>
<td>ECON 543 United States and the International Economy ..........3</td>
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<tr>
<td>ECON 544 Government and Business .....................................3</td>
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<tr>
<td>ECON 545 Economics of Labor ...........................................3</td>
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<tr>
<td>ECON 550 Technical Change and International Competition ....3</td>
</tr>
<tr>
<td>ECON 575 Independent Study in Economics .........................1 - 3</td>
</tr>
<tr>
<td>ECON 577 Selected Topics in Economics .............................3</td>
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| III. Related Social/Behavioral Science and/or History ..........6 - 9 |

| IV. Electives (subject to approval of graduate program coordinator) | 6 |

<table>
<thead>
<tr>
<th>V. Reading Seminar and Comprehensive Examinations (2 semester hours)</th>
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<tbody>
<tr>
<td>ECON 603 Reading Seminar in Economics ................................2</td>
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</table>

Independent study in preparation for written comprehensive.

Minimum semester hours: 32
# HISTORY CONCENTRATION

Telephone: (973) 655-5261

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Courses (3 semester hours)</th>
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<tbody>
<tr>
<td></td>
<td>HIST 501 New Interpretations in History ................................................. 3</td>
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<tr>
<td></td>
<td>HIST 502 History and the New Social Studies ........................................ 3</td>
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<tr>
<td></td>
<td>II. History Electives (12-15 semester hours)</td>
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<tr>
<td></td>
<td>HIST 501 New Interpretations in History ................................................. 3</td>
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<td>HIST 511 Seminar in American Colonial History ........................................ 3</td>
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<td>HIST 512 The American Revolution, 1763-1787 ......................................... 3</td>
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<td>HIST 513 Problems of the New Nation, 1789-1828 ........................................ 3</td>
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<td>HIST 514 The Crisis of American Nationalism, 1828-1876 ............................ 3</td>
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<td>HIST 515 Culture and Consciousness: Women in Nineteenth Century America ........ 3</td>
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<td>HIST 517 Age of Franklin D. Roosevelt ...................................................... 3</td>
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<td>HIST 518 Urban History: National Trends in N.J. Cities ................................ 3</td>
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<td>HIST 519 America Since 1945 ................................................................. 3</td>
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<td>HIST 520 United States Far Eastern Relations ............................................. 3</td>
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<td>HIST 521 Civil War and Revolution in Chinese History ..................................... 3</td>
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<td>HIST 522 Revolutionary Russia, 1905-1921 ................................................... 3</td>
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<td>HIST 524 History of American Business Leaders ........................................... 3</td>
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<td>HIST 525 History of American Labor, 1870-1970 ......................................... 3</td>
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<td>HIST 526 The Industrialization of America, 1865-1900 .................................. 3</td>
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<td>HIST 527 Industrialization of Europe ......................................................... 3</td>
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<td>HIST 529 Europe of the Dictators, 1919-1939 ............................................. 3</td>
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<td>HIST 532 Modernization in Japanese Cultural History ..................................... 3</td>
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<td>HIST 533 French Revolution and Napoleon ................................ ................. 3</td>
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<td>HIST 534 France of the Republics ............................................................ 3</td>
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<td>HIST 535 Castle, Cathedral and Crusade: Europe in the High Middle Ages, 1000-1300 3</td>
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<td>HIST 536 Popular Culture in Early Modern Europe, 1500-1800 .......................... 3</td>
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<td>HIST 537 Nineteenth Century European Intellectual History .......................... 3</td>
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<td>HIST 540 Europe as a World Civilization ................................................... 3</td>
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<td>HIST 541 Asian Civilization-Comparative Cultural History .............................. 3</td>
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<td>HIST 570 Seminar in Non-Western History .................................................. 3</td>
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<td>III. Related Social/Behavioral Science Electives .......................................... 6 - 9</td>
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<td>IV. Free Electives ......................................................................................... 6</td>
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<td>V. Reading Seminar and Comprehensive Examination (2 semester hours)</td>
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<td>HIST 603 Reading Seminar in History .......................................................... 2</td>
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</table>

Independent study in preparation for written examination given in March and October. In special cases, candidates may register for Departmental 600 Thesis (4 semester hours) in lieu of the comprehensive examination.

Minimum semester hours: 32
ECONOMICS COURSE DESCRIPTIONS

**ECON 501  ECONOMIC ANALYSIS**
The resource allocation and distribution of income implications of a market-oriented economy operating under various degrees of competition. Also analyzed are the determinants of consumer and market demand and the theoretical cost structure of firms.

**ECON 502  FINANCIAL INSTITUTIONS AND MONETARY POLICY**
This course analyzes the structure and functioning of the monetary and financial system. The component parts and the system as a unit will be examined as they interrelate to affect the economy. Topics include commercial banking system, Federal Reserve System, financial markets, financial intermediaries, determination of the level and structure of interest rates, and contemporary problems, both theoretical and applied, in the area of monetary policy. Cross listed with Economics and Finance, FINC 502.
*Prerequisites: ECON 501 and 505.*

**ECON 503  ECONOMIC PROBLEMS OF THE THIRD WORLD**
A survey of major economic problems of the Third World, examination of the economic structure of developing countries and of general theories of economic development; critical evaluation of various policy alternatives for their development; analysis of possible economic relationships between First and Second Worlds with the Third World.
*Prerequisite: ECON 501.*

**ECON 505  AGGREGATE ECONOMICS**
This course develops contemporary macroeconomic theories to explain aggregate employment, national income and the levels of interest rates and prices. Along with developing various models, the course examines current research and reviews the economy's recent macroeconomic performance.

**ECON 508  ECONOMICS OF PUBLIC MANAGEMENT**
Computer-based applications of capital theory in the decision making process of government. Analysis of alternative approaches to public sector project evaluation. Spreadsheet applications of project analysis in physical and human resource management areas covering water resources, public health, and education.
*Prerequisite: ECON 501.*

**ECON 533  CORPORATIONS AND INTERNATIONAL FINANCIAL MARKETS**
Discusses the economic theories and problems which confront business institutions when dealing in international financial markets. Analyzes the various market instruments and how a corporation may use them. Cross listed with Marketing, INBS 533.
*Prerequisite: ECON 501.*

**ECON 542  ECONOMIC FLUCTUATIONS AND FORECASTING**
Theories to account for variations in business activity; macroeconomic models and other forecasting approaches; economic fluctuations in the United States; proposals for reducing fluctuations; Harrod-Domar model and other modern theories of growth.
*Prerequisites: ECON 501 and 505.*
ECON 543  UNITED STATES AND THE INTERNATIONAL ECONOMY  3
Principles of international finance, monetary relations and trade. Discussion of contemporary international monetary and trade problems and policies. Discussion of the economic aspects of current American foreign policy.
Prerequisites: ECON 501 and 505.

ECON 545  ECONOMICS OF LABOR  3
Principal trends in the industrial and occupational distribution of labor; current developments in labor-management relations in both private and public sectors; market trends and institutional factors that determine employment, wage rates, fringe benefits, and industrial peace.
Prerequisite: ECON 501.

ECON 550  TECHNICAL CHANGE AND INTERNATIONAL COMPETITION  3
This course will discuss the theory of productivity and technical change in the context of the declining performance of U.S. manufacturing. It will focus attention on the nature of international competition and its effects on manufacturing productivity growth in the U.S. Based on the analysis, a tentative set of policy suggestions will be offered for restructuring the U.S. manufacturing sector and strengthening its competitive base.
Prerequisites: ECON 501.

ECON 575  INDEPENDENT STUDY IN ECONOMICS  1 - 3
Under faculty guidance and supervision, this tutorial course is open to students who wish to pursue individual study and research in a particular discipline.
Prerequisite: Departmental approval.

ECON 577  SELECTED TOPICS IN ECONOMICS  3
An in-depth study of a selected topic, issue, problem or trend in business economics. The specific subject matter is not offered as an existing regular course or deserves more time-emphasis than is possible in a regular course. When offered, topics and prerequisites are announced in the course schedule book.
Prerequisite: ECON 501 and 505.

ECON 603  READING SEMINAR IN ECONOMICS  2
Required of all Master of Arts degree in Social Science candidates concentrating in Economics, this seminar entails directed independent study in preparation for a 3-hour written comprehensive examination.

ECON 698  MASTERS THESIS  3
Independent research project done under faculty advisement. Students must follow the MSU Thesis guidelines which may be obtained from the Graduate School. Students should take ECON 699 if they don’t complete ECON 698 within the semester.
Prerequisite: Departmental approval.

ECON 699  MASTERS THESIS EXTENSION  1
Continuation of Masters Thesis Project. Thesis Extension will be graded IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
### History Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>HIST 501</td>
<td>NEW INTERPRETATIONS IN HISTORY</td>
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<td>Designed to help students keep up to date in the fields of American, European and Non-Western history. Major trends and developments in the study of history in the light of recent representative examples of historical research and interpretation.</td>
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<tr>
<td>HIST 511</td>
<td>SEMINAR IN AMERICAN COLONIAL HISTORY</td>
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<td>This course will examine the forces and conditions of the colonial period which contributed to the shaping of the characteristics of American political and economic institutions, social practices and ideas, intellectual outlooks, and attitudes.</td>
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<td>HIST 512</td>
<td>AMERICAN REVOLUTION, 1763-1787</td>
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<td>The causes and course of the American revolution from both British and American viewpoints, including analysis of economic, political, social and intellectual factors.</td>
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<td>HIST 513</td>
<td>PROBLEMS-NEW NATION, 1789-1828</td>
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<td>The growth of political institutions under the Constitution, the gaining of respect as a new country in the family of nations, the establishment of economic credit, and the rise of American nationalism.</td>
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<td>HIST 514</td>
<td>THE CRISIS OF AMERICAN NATIONALISM, 1838-1876</td>
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<td>The crisis in American nationalism from Jackson through Reconstruction as the country’s constitution, party system, and social structure contended with the disruptive effects of territorial expansion, the factory system, slavery and the new immigration.</td>
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<tr>
<td>HIST 515</td>
<td>CULTURE AND CONSCIOUSNESS: WOMEN IN NINETEENTH CENTURY AMERICA</td>
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<td>This course in the history of American women will focus on major themes in nineteenth century women’s culture. It will explore the implications of industrialization and modernization for women, the construction of domestic ideology, the development of feminism, and the centrality of gender in nineteenth century life and culture. The emphasis of the course is antebellum, but will consider the implications of this legacy for post Civil War history. Readings will include contemporary scholarship as well as a selection of representative primary texts by and about nineteenth century American women.</td>
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<tr>
<td>HIST 517</td>
<td>AGE OF FRANKLIN D. ROOSEVELT</td>
<td>3</td>
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<td>An opportunity to study that part of recent American history centering about Franklin Delano Roosevelt. While concentrating on domestic aspects of American life, attention is given also to foreign affairs and their impact on the daily lives of Americans.</td>
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<td>HIST 518</td>
<td>URBAN HISTORY: NATIONAL TRENDS IN NEW JERSEY CITIES</td>
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<td>An advanced survey of the urban dimension in American history and of urban history as a discipline. Late 19th and 20th century national trends are pinpointed within the development of Paterson, Passaic, Jersey City, Newark and their suburbs.</td>
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<td>HIST 519</td>
<td>AMERICA SINCE 1945</td>
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<td>This course studies the transformation of the Roosevelt coalition and its liberal policies since 1945 as they faced the challenge of the cold war abroad, and growing class and racial upheaval at home.</td>
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</tbody>
</table>
HIST 521 CIVIL WAR AND REVOLUTION IN CHINESE HISTORY, 1911-1949
The transformation of China from empire to Peoples Republic. Chinese concepts of revolution and the intellectual, political and social changes which preceded the formation of the Peoples Republic in 1949.

HIST 522 REVOLUTIONARY RUSSIA, 1905-1921
The historical forces of the 19th and 20th century Russia which led to the Bolshevik revolution of November, 1917 and to the consolidation of Soviet power by 1921.

HIST 523 HISTORY OF SOVIET DIPLOMACY
Changes in the ideological determinants of Soviet diplomacy contrasted with fluctuations in internal and external political and economic policies. Contributions of leading Soviet statesmen to diplomatic history.

HIST 525 HISTORY OF AMERICAN LABOR, 1870-1970
Study of the American worker from the period after the Civil War to the present, with concentration on social, political and economic behavior as well as the union movement.

HIST 526 THE INDUSTRIALIZATION OF AMERICA, 1865-1900
The causes and nature of the industrialization of the American economy after the Civil War; factors responsible for rapid economic growth; the impact of changing productive techniques on American institutions and human welfare.

HIST 529 EUROPE OF THE DICTATORS, 1919-1939
The political, social, economic and intellectual developments in the major states of Western Europe during the interwar period, with emphasis on varieties of Fascism.

HIST 532 MODERNIZATION IN JAPANESE CULTURAL HISTORY
Modernization in East Asia with focus on Japan. Japanese experience in adjusting new world forces of the 19th and 20th centuries considered against the background of her traditional values and institutions. Comparisons with China and Korea.

HIST 533 FRENCH REVOLUTION AND NAPOLEON
The background of the French Revolution, its changing course and cast of characters during 1789-99, and the advent to power and imperial regime of Napoleon, 1799-1814.

HIST 535 CASTLE, CATHEDRAL AND CRUSADE:
EUROPE IN THE HIGH MIDDLE AGES, 1000-1300
Guided by the organizing principle that some medieval people themselves used, this course will approach the High Middle Ages through the eyes of those who fought (nobility), worked (peasants), and prayed (clergy). Social, political, economic, religious and cultural aspects of the medieval European experience will be explored through the investigation of topics such as the rise of the nation-state, the expansion of trade, the rise of the university, the launching of the Crusades, the development of Gothic architecture and the intensification of religious belief. A field trip is required as part of the course.
HIST 536 POPULAR CULTURE IN EARLY MODERN EUROPE, 1500-1800
This course explores the everyday lives and belief systems of early modern Europeans through a survey of developments in French, Italian, English and German popular culture over a period of three centuries from 1500-1800. Topics to be covered include Carnival, community policing, ritual behavior, religious beliefs, magic, family life, violence, deviant behavior, and the transmission of culture between groups and across generations.

HIST 541 ASIAN CIVILIZATION - COMPARATIVE CULTURAL HISTORY
Course compares and contrasts central value systems, kinship institutions, social stratification and the exercise of political power in traditional India, China and Japan. These topics are related to differing patterns of nationalism in the 19th and 20th centuries.

HIST 570 SEMINAR IN NON-WESTERN HISTORY
Graduate level study in a period problem or theme in non-Western history. Individual seminars will be offered in African history, South Asian history, Latin American history, etc. May be repeated for a maximum of nine semester hours as long as the topic is different. Please see course schedule for specific offering each semester.

HIST 603 READING SEMINAR IN HISTORY
Required for all master’s degree candidates concentrating in History, this seminar entails directed independent study in preparation for a three-hour written comprehensive examination. Candidates should register to take the seminar in the semester preceding the examination date. Take the seminar in the fall if the examination is the following March; take the seminar in the spring if the examination is the following October.
## MASTER OF ARTS DEGREE IN APPLIED SOCIOLOGY

The Master of Arts in Applied Sociology is designed to prepare master’s candidates for nonacademic careers in the areas of policy development and analysis as well as program research and assessment. Graduates may work in the public or private sectors in such fields as family planning, community outreach, education, medical sociology, program evaluation, and the like. The program will also prepare students for doctoral training in Applied Sociology or related fields such as public health, criminal justice, gerontology, and demography.

### ADMISSION REQUIREMENTS

In addition to the general requirements for admission to the graduate program at Montclair State, candidates must present an undergraduate record showing a total of at least 30 semester hours in the social sciences and/or history. Because the required course in Computer Applications in Applied Sociology carries a prerequisite of at least one undergraduate course in statistics, students without this background may be required to complete a statistics course, not for graduate credit. For candidates with weak undergraduate preparation in the field of concentration, other prerequisite courses, not for graduate credit, may be required.

### REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN APPLIED SOCIOLOGY

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<th>Semester Hours</th>
<th>I. Required Courses (21 semester hours)</th>
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<tr>
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<td>SOCI 500 Evaluation Research.................. 3</td>
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<td>SOCI 556 Computer Applications in Sociology .. 3</td>
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<td>SOCI 560 Sociological Theory .................... 3</td>
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<td>SOCI 564 Social Planning and Social Policy .......... 3</td>
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<td>SOCI 568 Social Research Methods I .......... 3</td>
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<td>SOCI 595- An Internship in Applied Sociology .......... 3</td>
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<td>SOCI 598 .................................................. 3</td>
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<td>SOCI 571 Seminar in Applied Sociological Inquiry .......... 3</td>
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<td>II. Sociology Electives (9-12 semester hours)</td>
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<td>SOCI 559 Sociology of Deviance .................. 3</td>
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<td>SOCI 562 Social Change ............................ 3</td>
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<td>SOCI 563 Self and Society .......................... 3</td>
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<td>SOCI 565 Sociology of Youth ..................... 3</td>
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<td>SOCI 566 The Metropolitan Community ............. 3</td>
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<td>SOCI 567 Power and Social Stratification .......... 3</td>
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<td>SOCI 569 Social Research Methods II ............. 3</td>
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<td>SOCI 500</td>
<td>EVALUATION RESEARCH</td>
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<td>SOCI 556</td>
<td>COMPUTER APPLICATIONS IN SOCIOLOGY</td>
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**Comprehensive Project**

A Master’s Project, centered on an internship placement, is also required. Each student will choose a field placement in which to work as an applied-sociologist-in-training. During the internship, the student will begin the required Master’s Project, an analysis of some aspect or aspects of the field setting. Students will continue work on their Master’s Projects in the Seminar in Applied Sociology, where they will receive input and advice from other students and from faculty members.

**SOCIOLGY**

**Course Descriptions**

**SOCI 500 EVALUATION RESEARCH**
This course will examine the ways in which sociological training and insight (especially research skills) are applied in various non-academic settings. Special attention will be given to assessing and evaluating social policy and programs. The political, ethical and moral dilemmas which are entailed in evaluation research will also be explored.

**SOCI 556 COMPUTER APPLICATIONS IN SOCIOLOGY**
One of the primary uses of computers in sociology is to summarize, describe, and analyze data sets using statistical packages. This course provides hands-on experience in computer data analysis of a variety of sociological data sets. Major techniques to be illustrated include cleaning data, constructing scales, and conducting univariate and multivariate analyses.

*Prerequisite: An undergraduate course in statistics.*
The course will address the practical and political issues of defining, measuring, and responding to social deviance (e.g., mental illness, drug use, etc.). The course will concentrate on the role of formal agencies and institutions that deal with deviance and will examine problems in assessing various policy alternatives (e.g., decriminalization, deinstitutionalization, treatment, etc.).

**SOCI 560  SOCIOMETRIC THEORY**  
The practical and philosophical methods of the major sociological theorists are investigated and evaluated.

**SOCI 563  SELF AND SOCIETY**  
The relationships between the human individual and his/her social environment; the formation, maintenance and transformation of self or identity; the structure and processes of small groups; symbolic communication; role theory, cognitive dissonance and inter-group conflict.

**SOCI 564  SOCIAL PLANNING AND SOCIAL POLICY**  
The many elements and considerations in planning for a community, a state or a nation. The social context of planning; projective techniques; budgets, master plans, development programs, and area proposals. The human, the economic, the ecological. Students will be expected to undertake a social planning project. A basic knowledge of statistics and the use of statistical data is desirable.

**SOCI 566  THE METROPOLITAN COMMUNITY**  
The many dimensions of the metropolitan community: human factors, problems an area faces, political difficulties, interaction between the center city and the other parts of the community. Emphasis on New York-New Jersey.

**SOCI 567  POWER AND SOCIAL STRATIFICATION**  
This course will analyze the role of class, status, and power in industrial society, and consider the relationship between issues of social stratification and social environment.

**SOCI 568  SOCIAL RESEARCH METHODS I**  
This course will engage students in the research process from conceptualization to study design, data collection, and analysis. Specific methods covered are surveys, observation, focus groups, and secondary data analysis. Program evaluation and policy relevance will be stressed.

**SOCI 569  SOCIAL RESEARCH METHODS II**  
Continuation of Social Research Methods I. The elements of method included are coding techniques, analysis and scientific report writing.

**SOCI 570  INDEPENDENT PROJECTS**  
Student investigates a topic of sociological relevance under the guidance of a faculty member. May be repeated twice for a maximum of nine semester hours.  
*Prerequisite: Departmental approval.*
SOCI 571  SEMINAR IN APPLIED SOCIOLOGICAL INQUIRY  3
Further develops competencies for the critical assessment of sociological literature, as it
pertains to the formulation of research strategies for policy analysis and evaluation.
Intensive study of a number of readings on applied areas of sociological concern. The
Comprehensive Project based on the Internship experience is written up during this
course.

SOCI 572  SELECTED PROBLEMS IN SOCIOLOGY  3
The intensive exploration of a general problem in sociology. Participants contribute
research into an aspect of the problem, formed at the initiative of a department member
or in response to student’s interest with consent of the instructor. May be repeated three
times for a maximum of twelve semester hours.

SOCI 574  SOCIOLOGY OF ETHNIC RELATIONSHIPS  3
This course will analyze relationships among ethnic groups and evaluate the causes,
consequences, and resolution of ethnic conflict. It will also consider the various policy
implications of discrimination in institutional contexts.

SOCI 576  THE FAMILY AS AN INSTITUTION  3
This course will examine the family system in the West from both historical and
contemporary perspectives. It will consider the implications of recent research on
changing role structure and cultural values regarding marriage, and problems of adapta-
tion in current family systems (e.g., dual-earner marriages, single-parent families,
adolescent sexuality, family abuse, divorce, and remarriage).

SOCI 577  SOCIOLOGY OF POVERTY IN THE UNITED STATES  3
This course examines major contemporary definitions and ideologies of poverty and
public welfare, and considers the extent and patterns of distribution of poverty. Alterna-
tive socio-economic explanations of poverty and their implications for policy will be
assessed, and problem-solving aspects of program and policy research analyzed.

SOCI 578  COMMUNITY RESOURCES AND AGING  3
This course examines resources for the aging within their communities. Additionally, it
will acquaint students with services provided by public and private agencies and relevant
federal and state legislation.

SOCI 581  SOCIOLOGICAL PERSPECTIVES ON
HEALTH AND MEDICINE  3
This course will introduce the student to the interesting and complex relationships that
exist between society, health, and health care. Class lecture discussions will focus on the
connections between social structure, the quality of the physical and social environment,
and health. Special attention will be given to work environments. This course will also
deal with the effects of social factors on the experience of one’s body, the perception of
disease, and the construction of medical knowledge.
SOCI 582  THE SOCIOLOGY OF HEALTH CARE SYSTEMS  3
This course will focus on the relationship between the social structure of medical institutions, professional values, the socialization of health professionals and health care. The social context for the emergence of the modern medical profession, technology and knowledge will be considered along with contemporary social trends in Western industrialized societies such as the increasing medicalization of life. The implications of these trends for social policy and a cross-cultural analysis of healers and health care will be considered.

SOCI 584  THE SOCIOLOGY OF THE CRIMINAL JUSTICE SYSTEM  3
This course examines the criminal justice system (the police, the courts, correctional institutions, probation and parole) and considers its manifest and latent functions. It explores sociologically the ways in which offenders are selected, processed, and treated, and offers a view of the system from both occupational and experiential perspectives.

SOCI 585  THE SOCIOLOGY OF POLICE  3
The course will examine the urban police organization from diverse sociological perspectives. Subjects include the origin and function of the police, social organization of policing, police and the community, police discretion, police use of force, police corruption, and police stress. Police professionalization and social change in status, gender, and race relations within the organization will be examined in terms of their impact on policing the public. Various policy recommendations to improve the relations between the police and the community, and to reduce police corruption and violence will be discussed.

SOCI 587  THE SOCIOLOGY OF JUVENILE DELINQUENCY  3
This course will introduce students to the major sociological theories of juvenile delinquency from both etiological and treatment perspectives. Of particular concern is the relationship between juvenile crime and the larger culture. Topics to be explored include juvenile crime in industrial society; delinquency and the school experience; juvenile crime and adolescent development; the family and delinquency; class, ethnicity, gender, and the juvenile justice system, with an emphasis on treatment programs and facilities.

SOCI 588  AGING INDIVIDUAL IN AN AGING SOCIETY  3
This course examines the social causes of the “elder boom” as well as its consequences for family, education, the economy, politics and religion.

SOCI 590  SOCIOLOGY OF THE LIFE COURSE  3
This course addresses societal responses to individuals passing through stages of the life cycle: childhood, adolescence, middle age, and later life. It will explore the experience of aging and the social policies and institutions which shape that experience.

SOCI 591  THE SOCIOLOGY OF UNEQUAL DEVELOPMENT  3
This course will provide an analysis of the major sociological approaches to understanding the relations between societies at different levels of economic development, and the consequences of these relationships. Relationships between social institutions in the first and third worlds will be examined. Alternative strategies for dealing with poverty in the third world will be discussed.
SOCI 595  INTERNSHIP IN APPLIED SOCIOLOGY: CRIME AND JUSTICE
3
Students will select an institution dealing with an aspect of crime and justice in the metropolitan area in which to become a participant-observer. Application of sociological perspective to the problems and structure of institutions is developed, under the supervision of a faculty member. Students should get faculty supervisor’s approval of placement before the course begins.
Prerequisite: Departmental approval.

SOCI 596  INTERNSHIP IN APPLIED SOCIOLOGY: AGING
3
Students will select an institution dealing with an aspect of aging in the metropolitan area in which to become a participant-observer. Application of sociological perspective to the problems and structure of institutions is developed, under the supervision of a faculty member. Students should get faculty supervisor’s approval of placement before the course begins.
Prerequisite: Departmental approval.

SOCI 597  INTERNSHIP IN APPLIED SOCIOLOGY: HEALTH AND ILLNESS
3
Students will select an institution dealing with an aspect of health and illness in the metropolitan area in which to become a participant-observer. Application of sociological perspective to the problems and structure of institutions is developed, under the supervision of a faculty member. Students should get faculty supervisor’s approval of placement before the course begins.
Prerequisite: Departmental approval.

SOCI 598  INTERNSHIP IN APPLIED SOCIOLOGY: SOCIAL RESEARCH AND POLICY
3
Students will select an institution dealing with an aspect of social research and policy in the metropolitan area in which to become a participant-observer. Application of sociological perspective to the problems and structure of institutions is developed, under the supervision of a faculty member. Students should get faculty supervisor’s approval of placement before the course begins.
Prerequisite: Departmental approval.
The MA program in Spanish offers students a wide array of courses in Spanish and Spanish American literature as well as in advanced studies of the Spanish language and literary theory. The program prepares students for careers in research and teaching and provides a cultural and linguistic base from which students can explore career options in interpreting, translating, diplomatic service, editorial work, social services, commerce and business. The Master of Arts degree also opens opportunities for students to pursue doctoral programs at major institutions.

ADMISSION REQUIREMENTS

The Master of Arts program in Spanish is open to students who hold a bachelor’s degree with an undergraduate major in Spanish or who have completed 24 semester hours of Spanish on the undergraduate level or the equivalent. Students must take the Graduate Record Examination aptitude test prior to acceptance into the program.

Students who hold a bachelor’s degree or its equivalent may enroll in graduate courses without obligation to follow a master’s degree program, if they have 24 semester hours or the equivalent in Spanish.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN SPANISH

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Required Course (3 semester hours)</td>
</tr>
<tr>
<td>Either</td>
</tr>
<tr>
<td>SPAN 504 Introduction to Literary Theory</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>SPAN 505 History of the Spanish Language ............................................. 3</td>
</tr>
<tr>
<td>II. Peninsular Area ................................................................. 12</td>
</tr>
<tr>
<td>One course from each of 4 designated areas</td>
</tr>
<tr>
<td>III. Spanish American Area .......................................................... 12</td>
</tr>
<tr>
<td>One course from each of 4 designated areas</td>
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<tr>
<td>IV. Electives .................................................................................. 9</td>
</tr>
<tr>
<td>A minimum of three additional courses from the departmental offerings.</td>
</tr>
<tr>
<td>V. Comprehensive Examination or Thesis</td>
</tr>
<tr>
<td>The candidate for the MA degree will apply to the graduate program coordinator for the comprehensive examination one semester prior to the desired examination date. If option is to write a thesis, student will take SPAN 698 Master’s Thesis as one of the elective courses and follow the steps outlined in Procedures and Guidelines for the Preparation of Theses at Montclair State University.</td>
</tr>
<tr>
<td>Minimum semester hours: 36</td>
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<tr>
<td>For further details see the graduate program coordinator.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>SPAN 501</td>
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<td>SPAN 526</td>
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</table>
An examination of major works of the generation of writers whose intellectual development coincides with the defeat of Spain in the Spanish-American War of 1898. Attitudes toward Spanish reality, culture, philosophy and art will be explored in the writings of Unamuno, Valle Inclán, Baroja, Azorín, Machado and others.

A critical analysis of works of Spanish literature of the 19th and 20th centuries and of films that are either based on the texts or reflect their major themes. Selected authors and film directors include Galdos, Lorca, Rodoreda, Tusquets, Buñuel, Saura and Almodóvar.

A study of the formation and the nature of Spanish civilization through an investigation of the political, social and cultural trends and influences on the Iberian Peninsula from prehistoric times to the present.

Analysis of representative plays from Benavente to Sastre are read. Critical study of the evolution of theater in light of style, technique and thought of these playwrights.

An analysis of the novels of contemporary Spanish writers whose novels appeared following the Spanish Civil War 1939. The development of the contemporary novel from social realism and objectivism to experimental techniques and subjectivism will be examined through the works of such authors as Cela, Delibes, Marsé, Martín Santos, Goytisolo, Martín Gaite, Matute, Moix and others.


Study of pre-Columbian literature, followed by analysis of the chronicles of discovery and exploration and major works of colonial poetry, prose and theater.

Critical evaluation of prose and poetry from neoclassicism to naturalism and realism. Special emphasis will be given to the development of specific genres such as “literatura gauchesca” and the essay.

Study of the aesthetic novels of Modernismo; novels of the Mexican Revolution; the psychological novel; and the novel of the land and of social reform.

New trends in the Spanish American theater: the theater of the absurd, the theater of cruelty and the theater of fantasy. Critical analysis of representative works of these genres.

Critical evaluation of the Modernista movement in Spanish American poetry and prose. Genesis, techniques, characteristics and principal writers of the movement.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 548</td>
<td>CONTEMPORARY SPANISH AMERICAN NOVEL</td>
<td>3</td>
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<tr>
<td>SPAN 549</td>
<td>CONTEMPORARY SPANISH AMERICAN SHORT STORY</td>
<td>3</td>
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<tr>
<td>SPAN 551</td>
<td>CONTEMPORARY SPANISH AMERICAN POETRY</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 560</td>
<td>TOPICS IN SPANISH AND SPANISH AMERICAN LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 698</td>
<td>MASTER’S THESIS</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 699</td>
<td>MASTER’S THESIS EXTENSION</td>
<td>1</td>
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</tbody>
</table>

A critical examination of representative examples of the Spanish American novel from the “boom” to the “post-boom.”

The contemporary short story from the end of the Modernista period to the present time. Critical evaluation and analysis of representative works.

Individual works of poetry as autonomous linguistic and artistic creations and as part of a general renaissance in culture. Post-modernism, vanguardism and post-vanguardism.

Selected specialized topics, either of a period, genre, or particular author, in Spanish or Spanish American literature. Topic will change with each offering. Majors only. May be repeated once for a maximum of six semester hours.

Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take SPAN 699 if they don’t complete SPAN 698 within the semester.

Prerequisite: Departmental approval.

Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.

Prerequisite: SPAN 698.
The Department of Mathematical Sciences offers a Master of Science degree in Statistics and a Master of Science degree in Mathematics with a Statistics concentration. The Department of Computer Science offers the Master of Science in Computer Science with a concentration in Applied Statistics. The degrees with concentrations in statistics are discussed under degrees in Mathematics and Computer Science respectively.

The MS in Statistics has been developed for students interested in becoming practitioners of statistics, who are trained in statistical methodology. The programs emphasize the foundations and concepts of statistics as well as the new and developing areas of statistics. Though the applications of statistical sciences are emphasized, the theoretical foundations are presented as well. Specifically, students are prepared for professional work in the design and analysis of statistical models, data analytic techniques and the associated computational methods, and statistical computing. The curriculum is designed to allow students to develop the skills needed to achieve positions in the many pharmaceutical, chemical, health services, public service and consumer product corporations and other industries that require significant research and development efforts as well as data analysis. Through the accessibility of computers and the availability of powerful statistical software to analyze huge data sets, the use of statistical methods has now become widespread in many industries.

The MS in Statistics is of interest to undergraduate mathematics majors looking for challenging career paths that apply their problem solving skills to important social, health, medical and business issues; undergraduate statistics majors who feel the need to expand their knowledge; people currently working as statistical assistants; people trained in biology, chemistry, physics or medicine who are involved in the analysis of experiments; and computer scientists who are involved in data analysis.

Our statistics faculty is active at the national and local level of professional societies and consult for Fortune 500 companies. Occasionally we bring in statistical scientists from local telecommunications or pharmaceutical firms to present courses on special topics in new and developing areas of statistics.

The Statistical Consulting Program, housed in the Department of Mathematical Sciences, offers the campus community and off-campus clients statistical advice in the design of experiments and studies as well as the analysis and interpretation of the results. This program also offers MS students the opportunity to obtain applied experience by becoming involved in the data collection, analysis and interpretation of ongoing projects. In addition, our proximity to the pharmaceutical industry permits students the exciting option of an applied industrial experience, working under the supervision of a practicing statistician and a departmental faculty advisor.

Students and faculty in the Department have access to state-of-the-art interactive computing environments for data analysis and data graphics. The SAS Application System and S-Plus are available on a Sun Microsystems network consisting of Sun Fire and Enterprise servers. Sun Ultra and Sun Blade workstations are available to students and faculty. Some of the UNIX software packages and programming languages available include: Java, C, C++, Fortran 90 and 77, interpreters in Prolog and ML, PHP, Perl, Tcl, Rational Suite Development Studio, SAS, Maple, Netscape, Star Office, LaTeX, S-Plus,
and Oracle Database. Students have access to a 20 workstation Sun Microsystems computerlab conveniently located in the same building as the Mathematics department. Remote connectivity to CSAM’s UNIX network is universally available from campus computer laboratories as well as from off campus. Campus computer labs commonly have both PC and Macintosh computers and offer a standard set of applications, some of which include: JMP, Microsoft Office, SAS, Netscape and Internet Explorer. MSU hosts its own ISP dial-up access, which is available to all faculty and students within its calling area. The College of Science and Mathematics maintains an independent computer support operation including full-time professional staff and student technicians. This support is specialized towards resolving CSAM related computing issues, and is provided in addition to the campus computer Helpdesk. The campus computer Helpdesk is available for regular and extended hour telephone and in-person support.

ADMISSION REQUIREMENTS

1. All students must meet the admissions requirements for graduate study at Montclair State University.
2. Applicants must possess a bachelors degree from an accredited institution with either:
   a. A major in computer science or mathematics.
   b. A major in science or engineering
   c. Another major with an overall cumulative grade-point average of 3.0 (B) or other indications of the ability to complete the program.
3. Applicants must have taken at least 18 undergraduate mathematics credits which should include:
   a. Three semester sequence of calculus
   b. Linear algebra
   c. Probability.
4. Applicants must be proficient in a computer programming language such as C, C++, or Java.

A candidate for the Master of Science degree in Statistics must consult the graduate program coordinator of the department before matriculation since the choice of graduate courses must be adjusted to the level of preparation in undergraduate work. All the degree programs in Statistics are 33 credit programs. The student’s program of study listing course requirements is prepared in consultation with the graduate program coordinator. In order to be awarded a Master of Science degree in Statistics, a student will be required to have an overall 3.0 grade point average, as well as a 3.0 grade point average for courses taken in the Department of Mathematical Sciences. In addition a student must pass a three hour written comprehensive examination based on the core courses. Students are required to have a 3.0 grade point average and to have completed a minimum of 12 degree bearing credits in order to be eligible to take the comprehensive examination.
Requirements for the Master of Science Degree in Statistics

Semester Hours

I. Required Core Courses (15-18 semester hours)
   STAT: 541 or equivalent* ................................................................. 3
   STAT: 542, 543, 544, 547, 548 ..................................................... 15
* This course must be taken if an equivalent course has not been taken previously

II. Statistical Science Electives (12 semester hours)
   One of the following courses:
      STAT: 640, 646 or 648 ................................................................. 3
   Three or more courses selected from:
      STAT: 545, 546, 549, 640-649 ..................................................... 9

III. Computer Science, Mathematics and/or Statistics Electives .............. 3-6 s.h.
    Courses selected from:
    CMPT: 578, 583, 586, 589, 590, 592, 593, 594, 683
    MATH: 540, 560, 568, 569, 580, 584,
    STAT: 541-549; 640-649
    Substitutions are allowed with prior written approval of the graduate program coordinator. At most 6 semester hours can be taken at the 400 level. At most six semester hours of an applied industrial experience can be taken with approval of the graduate program coordinator.

IV. A passing grade on a comprehensive examination. The comprehensive examination is taken in Statistics.

Minimum semester hours: 33

Mathematical Sciences

Course Descriptions

Semester Hours

STAT 541 APPLIED STATISTICS 3
Review of estimation and hypothesis testing for one sample and two sample problems; introduction to non-parametric statistics, and linear regression; fundamental principles of design, completely randomized design, randomized block design, Latin square, and 2 factor designs.
Prerequisite: STAT 440 Fundamentals of Modern Statistics I or 443 Introduction to Mathematical Statistics and permission of graduate coordinator.
STAT 542, 543  STATISTICAL THEORY I, II  3 each
Discrete and continuous probability distributions, multivariate distributions, sampling
theory, transformations, Chi-squared, ‘F’ and ‘t’ distributions. Point estimation properties
of estimators, sufficiency, exponential families, interval estimation, hypothesis
testing, power, Neyman-Pearson Lemma, likelihood ratio tests. The impact of the above
theory on areas such as regression analysis, analysis of variance and analysis of discrete
data.

Prerequisites: STAT 541 and permission of graduate coordinator for STAT 542; STAT 542  for STAT 543.

STAT 544  STATISTICAL COMPUTING  3
Computer systems for data analysis and data graphics, and intermediate level statistical
methodology are investigated. Several statistical computing packages are utilized and
evaluated.

Prerequisites: STAT 541 or 548, and CMPT 183 Foundations of Computer Science I and
permission of graduate coordinator.

STAT 545  PRACTICUM IN STATISTICS I  3
An applied experience in which students work with practitioners in industry, government
or research organizations utilizing statistical techniques in a research setting. Students
will work with statisticians on projects involving experimental design and data collection
as well as the analysis and interpretation of the data.

Prerequisites: STAT 541, and 544 and STAT 547 or 548 and permission of Statistics
graduate program coordinator.

STAT 546  NON-PARAMETRIC STATISTICS  3
Selected distribution-free tests and estimation techniques including sign, Kolmogorov-
Smirnov, Wilcoxon signed rank, Mann-Whitney, Chi-square, rank correlation, Kendall’s
Tau, Kruskal-Wallace, Friedman, McNemar, and others.

Prerequisites: STAT 440  Fundamentals of Modern Statistics I and permission of
graduate coordinator.

STAT 547  DESIGN AND ANALYSIS OF EXPERIMENTS  3
Fundamental principles of design; fixed, random and mixed models; factorial designs;
designs with restricted randomization; split plot design; confounding; fractional replica-
tion; experimental and sampling errors.

Prerequisite: STAT 541 or 548.

STAT 548  APPLIED REGRESSION ANALYSIS  3
Fitting equations to data; matrices, linear regression; correlation; analysis of residuals;
multiple regression, polynomial regression; partial correlation; stepwise regression;
regression and model building; regression applied to analysis of variance problems;
introduction to nonlinear regression.

Prerequisites: STAT 440 Fundamentals of Modern Statistics I or STAT 443 Introduction
to Mathematical Statistics and permission of graduate coordinator.

STAT 549  SAMPLING TECHNIQUES  3
Sampling and survey methodology; basic sampling theory; simple, stratified, random,
cluster, systematic and area sampling. Sampling errors and estimation procedures.

Prerequisites: STAT 440 Fundamentals of Modern Statistics I or STAT 443 Introduction
to Mathematical Statistics and permission of graduate coordinator.
STAT 595  TOPICS IN STATISTICS  3
Topics such as exploratory data analysis statistical graphics, statistical quality control and statistical quality assurance, Bayesian methods and Markov chain, Monte Carlo studies. May be repeated twice for a maximum of nine semester hours.
*Prerequisite: Permission of graduate coordinator.*

STAT 640  BIOSTATISTICS I  3
Fundamental statistical concepts and methods used by statistical scientists in the health, biological, medical and pharmaceutical industries. Categorical data analysis, logistic regression, generalized linear models, nonparametric regression techniques.
*Prerequisites: STAT 544, and 547, and 548 and permission of graduate coordinator.*

STAT 641  BIOSTATISTICS II  3
Fundamental statistical concepts and methods used by statistical scientists in the health, biological, medical and pharmaceutical industries. Survival analysis and designs for clinical trials.
*Prerequisites: STAT 544, and 547, and 548, and permission of graduate coordinator.*

STAT 645  ADVANCED TOPICS IN STATISTICS  3
Recent developments in statistical science. Topics such as data mining, statistical genomics, computationally intensive data-analytic methods, statistical consulting, dynamic statistical graphics and visualization, applied time series analysis. May be repeated with no limit as long as the topic is different.
*Prerequisite: Permission of graduate coordinator.*

STAT 646  MULTIVARIATE ANALYSIS  3
Analysis of multiple response variables simultaneously; covariance and the multivariate normal distribution; manova, discriminant functions; principle components and canonical correlations.
*Prerequisites: STAT 541 and 548 and permission of graduate coordinator.*

STAT 648  ADVANCED STATISTICAL METHODS  3
Advanced statistical concepts and methods used by statistical scientists in the analysis of designed experiments and observational studies. Response surface methodology, analysis of covariance, the general linear model, the cell means model and the analysis of variance of unbalanced or messy data.
*Prerequisites: STAT 544, and 547, and 548 and permission of graduate coordinator.*

STAT 649  INDEPENDENT STUDY IN STATISTICS  3
Independent study under the direction of a faculty member, offering the opportunity to pursue topics in statistics which may be outside the scope of regular curricular offerings or may be an extension of an existing course or courses. Approval must be obtained from the graduate coordinator and faculty advisor. May be repeated once for a maximum of six semester hours as long as the topic is different.
*Prerequisite: Permission of graduate coordinator. Departmental approval.*
The Master of Arts degree in Theatre is designed to enhance already existing skills in the theatre or to develop those skills that can be applied from related and ancillary backgrounds. The program is structured to emphasize both theoretical and practical approaches in theatre and to allow for original research and creative projects. Concentrations are available in Theatre Studies, Production/Stage Management, and Arts Management. Special attention is paid to the literature and history of each area of concentration and to the respective academic and professional skills necessary to become a practitioner of the selected concentration. The course sequence and content are designed to strengthen research, performance, and production. The Master of Arts, Theatre Studies concentration is ideal for those seeking to pursue a generalized knowledge in theatre or for those who plan to continue in a program of doctoral studies. The Master of Arts, Production/Stage Management concentration is ideal for those who wish to pursue a management position in educational or professional theatre. The Master of Arts, Arts Management concentration is ideal for those who want to improve their business management skills, gain additional expertise in the arts and cultural sectors, and extend their career opportunities.

ADMISSION REQUIREMENTS

It is recommended that students wishing to matriculate as graduate students in Theatre would have completed an undergraduate major or the professional equivalent from one of the following areas: acting, directing, production, design, English or cultural studies. Students with other degrees will be considered on an individual basis. Some students may need to improve their preparatory backgrounds through undergraduate courses for which graduate credit is not given.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE IN THEATRE

CONCENTRATION IN THEATRE STUDIES

The candidate must complete all three parts of the requirements and a comprehensive examination for the degree as detailed below.

<table>
<thead>
<tr>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>I. Required Core (6 semester hours)</td>
</tr>
<tr>
<td>THTR 501 Research Methods in Theatre</td>
</tr>
<tr>
<td>THTR 534 Graduate Theatre Readings</td>
</tr>
<tr>
<td>II. Required Courses (18 semester hours)</td>
</tr>
<tr>
<td>THTR 505 Dramaturgy</td>
</tr>
<tr>
<td>OR</td>
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<tr>
<td>THTR 511 Tragic Elements in Drama</td>
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<tr>
<td>THTR 512 Comic Elements in Drama</td>
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</tbody>
</table>
THTR 513 Modern and Contemporary Theatre History ......................... 3
THTR 517 Theatre Criticism .................................................................. 3
THTR 525 Advanced Acting Workshop
OR
THTR 535 Advanced Directing Workshop ............................................. 3
THTR 599 Independent Study .............................................................. 3
(must be an academic writing project)

III. Electives (9 semester hours)
Chosen in consultation with the graduate program coordinator.
(6 semester hours may be taken outside of the Theatre department)
THTR 504 Contemporary Theatre .................................................... 3
THTR 507 Theatrical Production .......................................................... 3
THTR 508 Internship: Theatrical Practice (3 s.h. maximum) ............... 3
THTR 509 Special Topics in Theatre and Drama ................................. 3
THTR 514 Non-Western Drama and Theatre .................................... 3
THTR 540 The Collaborative Process ............................................... 3
THTR 545 Scenic Design I: The Legitimate Theatre ............................ 3
THTR 546 Scenic Design II: Performing Arts .................................... 3
THTR 554 Stage Lighting Design ....................................................... 3
THTR 555 Advanced Problems in Technical Production ................. 3
THTR 575 Seminar Costume Design & Construction ........................ 3
THTR 580 Theatre Management ....................................................... 3
THTR 581 Stage Management .......................................................... 3
THTR 582 Production Management ................................................ 3
THTR 698 Master’s Thesis ............................................................... 6

IV. Comprehensive Examination Required
May be taken after completing 24 semester hours of graduate work.
Minimum semester hours: 33

CONCENTRATION IN PRODUCTION/STAGE MANAGEMENT

The Candidate must complete all three parts of the requirements and a comprehensive examination for the degree as detailed below:

Semester Hours

I. Required Core (6 semester hours)
THTR 501 Research Methods in Theatre ........................................... 3
THTR 534 Graduate Theatre Readings ............................................. 3

II. Required Courses (15-16 semester hours)
THTR 507 Theatrical Production ..................................................... 3
THTR 508 Internship: Theatrical Practice ....................................... 6-7
THTR 581 Stage Management ........................................................ 3
THTR 582 Production Management ................................................ 3

III. Electives (12 semester hours)
To be selected in consultation with the graduate program coordinator:
THTR 504 Contemporary Theatre .................................................. 3
THTR 505 Dramaturgy ................................................................. 3
THTR 509 Special Topics in Theatre and Drama ......................... 3

395
THTR 511 Tragic Elements in Drama ....................................................... 3
THTR 512 Comic Elements in Drama ....................................................... 3
THTR 513 Modern and Contemporary Theatre History ............................ 3
THTR 514 Non-Western Drama and Theatre ......................................... 3
THTR 517 Theatre Criticism ................................................................. 3
THTR 525 Advance Acting Workshop ...................................................... 3
THTR 535 Advance Directing Workshop ................................................ 3
* THTR 540 The Collaborative Process .................................................... 3
* THTR 545 Scenic Design I: The Legitimate Theatre ................................. 3
THTR 546 Scenic Design II: Performing Arts .......................................... 3
* THTR 554 Stage Lighting Design .......................................................... 3
THTR 555 Advanced Problems in Technical Production .......................... 3
THTR 575 Seminar Costume Design & Construction ............................... 3
* THTR 580 Theatre Management ........................................................... 3
THTR 581 Stage Management ............................................................... 3
THTR 582 Production Management ....................................................... 3
THTR 599 Independent Study ............................................................... 3
* Highly recommended courses

IV. Comprehensive Examination Required
May be taken after completing 24 semester hours of graduate work.
Minimum semester hours: 33

CONCENTRATION IN ARTS MANAGEMENT

The candidate must complete all three parts of the requirements and a comprehensive examination for the degree as detailed below.

Semester Hours

I. Required Core (6 semester hours)
THTR 583 The Business of Art .............................................................. 3
THTR 585 Grantsmanship and Fundraising .......................................... 3
MGMT 505 Management process and Organizational Behavior .......... 3
ACCT 501 Financial Accounting .......................................................... 3

II. Required Courses (12 semester hours)
THTR 501 Research Methods in Theatre
(or a research methods course in another art’s discipline) .............. 3
LSLW 537 Entertainment Law ............................................................ 3
Option A:
THTR 508 Internship ......................................................................... 3
THTR 599 Independent Study .............................................................. 3
OR
Option B:
THTR 698 Thesis .............................................................................. 6

III. Electives
A. Specialization (Select 2 courses):
THTR 580 Theatre Management .......................................................... 3
THTR 582 Production Management ..................................................... 3
ARHM 501 Art and Museum Management .......................................... 3
SPCM 520  Introduction to Public Relations  3
SPCM 545  Issue Management ......................................................... 3
SPCM 547  Seminar in Organizational Management ........................... 3
Or appropriate courses in music with approval of the graduate program coordinator.

B. Business and Legal Studies (Select 1 course)
INBS 501  International Business Concepts and Issues ...................... 3
INBS 530  Export Management .......................................................... 3
LSLW 551  Negotiation Theory and Practice ...................................... 3
LSLW 558  Cross-Cultural Conflict Resolution .................................... 3
MGMT 510  Human Resource Management ........................................ 3
MGMT 513  Leadership and Behavior ................................................. 3
MGMT 525  Entrepreneurship and Small Business Management .......... 3
MKTG 501  Fundamentals of Marketing ............................................. 3
SPCM 510  Special Topics in Communication ...................................... 3

C. Cultural Criticism and Art History (Select 1)
THTR 504  Contemporary Theatre .................................................... 3
THTR 513  Modern and Contemporary Theatre History ...................... 3
THTR 517  Theatre Criticism ............................................................... 3
ARHS 590  Modern Philosophy of Art I
ARHS 591  Modern Philosophy of Art II ............................................. 3
ARST 600  Contemporary Art and Aesthetics ...................................... 3
ANTH 550  Culture Change ................................................................. 3
MUHS 549  Modern Music ................................................................. 3
SPCM 581  Media and Mass Culture .................................................. 3
Or other course in Art History, Philosophy of Art, Theatre or Music subject to approval of graduate program coordinator.

Minimum semester hours: 36

THEATRE AND DANCE DEPARTMENT

Course Descriptions

THTR  501  RESEARCH METHODS IN THEATRE  3
Foundations in research and research methodologies. A survey of resources and methods (including critical, historical and textual) in theatre to assist students in assessing and designing research. **Course must be completed in first two semesters of matriculation.**

THTR  504  CONTEMPORARY THEATRE  3
The theory and practice in today’s professional theatre: writing, acting, directing and producing problems and trends of current theatrical fare. Open to all graduate students.

THTR  505  DRAMATURGY  3
Introduction and overview of dramaturgy as a component of the creative team. Includes units on production dramaturgy, collaboration with directors, new play development, working with playwrights and adaptation.
THTR 507 THEATRICAL PRODUCTION 3
Students pursue projects in one of the following areas: acting, directing, scenic design, lighting design, technical theatre or management. May be repeated for a maximum of six credits.

THTR 508 INTERNSHIP: THEATRICAL PRACTICE 3 - 7
Practical experience in theatre under supervision of staff member of professional, semi-professional, or educational theatre, on- or off-campus.
*Prerequisite: Departmental approval.*

THTR 509 SPECIAL TOPICS IN THEATRE AND DRAMA 3
A selected topic in the history, literature, criticism or theory of theatre and drama not included in the regular departmental offerings will be examined in depth. May be repeated twice for a maximum of six credits.

THTR 511 TRAGIC ELEMENTS IN DRAMA 3
The “evolution” of tragic theory as it manifests itself in each of the periods of theatre history and dramatic criticism. Included in the examination is an evaluation of representative tragic playscripts in terms of style, structure, “tragic devices,” content, and performance.

THTR 512 COMIC ELEMENTS IN DRAMA 3
The “evolution” of comic theory as it manifests itself in each of the periods of theatre history and dramatic criticism. Included in the examination is an evaluation of representative comic playscripts in terms of style, structure, “comic devices”, content, and performance.

THTR 513 MODERN AND CONTEMPORARY THEATRE HISTORY 3
Theatrical history associated with Western culture from 1890 to the present; the contemporary theatrical scene and its direct heritage. Major emphasis on British and continental developments with some attention to American theatre.

THTR 514 NON-WESTERN DRAMA AND THEATRE 3
Theatrical forms and dramatic literature of non-Western cultures (China, Japan, India, Southeast Asia and Africa) in historical and contemporary contexts. The influence of these forms on modern Western theatrical theory and practice (Brecht, Artaud, Brook and others) will be examined.

THTR 517 THEATRE CRITICISM 3
Historical review of the principles involved in theatre criticism from a literary perspective. While attention is given to selected historical periods, dramatic theorists and theatre critics, the focus of class is on contemporary critical methodologies that augment playscript interpretation and production.

THTR 525 ADVANCED ACTING WORKSHOP 3
A workshop of acting styles from the classical to the modern, highlighting traditional periods, including Greek, Elizabethan, Restoration, and realistic acting. The basic assignments of the course are scene study and class presentations, individual and partner work in assignments and exercises.

THTR 534 GRADUATE THEATRE READINGS 3
Reading and assessment of important texts in the theory, history, criticism and practice of theatre. *Course must be completed within the first two semesters of matriculation.*
THTR 535  ADVANCED DIRECTING WORKSHOP  3
A workshop in play directing, including analysis and direction of scenes from realistic and period style plays. Final project includes a director’s analysis and prompt script or the equivalent work in a term report on a particular approach to directing.

THTR 540  THE COLLABORATIVE PROCESS  3
Course explores creative and collaborative strategies among the personnel involved in the mounting and production of a script: directors, designers, dramaturges and production personnel. It will explore techniques of script, analysis, the creation of a production concept, and the effective implementation of this concept in all facets of production.

THTR 545  SCENIC DESIGN I: THE LEGITIMATE THEATRE  3
Scene design as related to the play, director and audience. Theatrical styles, genres, multiple, unit and simultaneous settings discussed. Includes script analysis and design work with an emphasis on visualization of design concepts, perspective sketch and modeling techniques.

THTR 546  SCENIC DESIGN II: PERFORMING ARTS  3
Design problems inherent in musical comedy, opera and dance. Emphasis on planning, design and execution of scenery.

THTR 554  STAGE LIGHTING DESIGN  3
The theory and practice of lighting design from both pragmatic and aesthetic points of view. The student will focus on the function and qualities of lighting as a design medium and its application to various styles of theatrical production. Student will develop several lighting plots and schedules.

THTR 555  ADVANCED PROBLEMS IN TECHNICAL PRODUCTION  3
Physical resources available to technician. Exploration of new materials and techniques as well as extensive work in standard techniques. Knowledge of drafting techniques helpful.

THTR 575  SEMINAR COSTUME DESIGN AND CONSTRUCTION  3
Costume as one visual element of design in the theatre. Research procedure, design theory, construction techniques, use of materials.

THTR 580  THEATRE MANAGEMENT  3
The theatre as a business enterprise: production units; box office procedures; standard contractual arrangements; unions and their regulations; subscription management. Manager as a community relations specialist; publicity; the theatre as a community resource. Open to graduate students with a background in performing arts.

THTR 581  STAGE MANAGEMENT  3
Experiential study of stage management including: pre-production script analysis, organizing a prompt script, function in production meetings, implementing rehearsal schedule and company rules, rehearsal duties, technical rehearsals, and running/closing the show. Student will participate in all productions.

THTR 582  PRODUCTION MANAGEMENT  3
Experiential study of season scheduling; space scheduling; rehearsal scheduling; budgeting and pricing out costs for sets, costumes, lighting and props; management of backstage personnel; union contracts; and safety issues in the theatre and backstage. Course work supplemented by hands-on work on theatre/dance projects and spaces.
THTR 583  THE BUSINESS OF ART  3
The course is designed to provide an overview of the economic, organizational and social factors that influence contemporary art organizations. The students will examine structures, practices and issues concerning the visual and performing arts in both the nonprofit, government and commercial sectors. Structures to be studied include theatres, dance companies, art galleries and museums, arts councils, presenting organizations, orchestras and other music groups. The student will analyze the impacts of unions and professional organizations on these structures. With an introduction to various practices including audience development, fund-raising, grantsmanship, lobbying, advocacy, planning and organizational development, this course prepares the student for more extensive and advanced work in the Arts Management concentration. Cross listed with Art and Design ARHM 583.

THTR 585  GRANTSMANSHIP AND FUNDRAISING  3
Methods of grantsmanship, fundraising and other strategies to secure support for institutional operations and programs in the arts.

THTR 599  INDEPENDENT STUDY  1 - 3
Individual projects in theatre that result in significant research. May be repeated without limit as long as the topic is different.
Prerequisite: Departmental approval.

THTR 698  MASTER’S THESIS  6
Independent research project done under faculty advisement. Students must follow the MSU Thesis Guidelines, which may be obtained from the Graduate School. Students should take THTR 699 if they don’t complete THTR 698 within the semester.
Prerequisite: Departmental approval.

THTR 699  MASTER’S THESIS EXTENSION  1
Continuation of Master’s Thesis Project. Thesis Extension will be graded as IP (In Progress) until thesis is completed, at which time a grade of Pass or Fail will be given.
Prerequisite: THTR 698.
GRADUATE CERTIFICATE PROGRAMS

Graduate certificate programs are a focused collection of courses that, when completed, affords the student some record of coherent academic accomplishment in a given discipline or set of related disciplines. The Graduate School offers credit certificate programs. Certificate programs at Montclair State University vary in length, but most are designed to be able to be completed within one to two years of study.

The following is a list of Graduate Certificate Programs offered by Montclair State University:

- American Dietetic Association Didactic Program in Dietetics
- Artist Diploma
- Child Advocacy
- CISCO
- Collaborative Teaching for Inclusive Settings
- Food Safety Instructor
- Health Education
- Molecular Biology
- Nutrition and Exercise Sciences
- Object Oriented Computing
- Paralegal Studies
- Philosophy for Children
- Performer’s Certificate
- Teaching English to Speakers of Other Languages
- Teaching Middle Grades Mathematics
- Translation and Interpretation in Spanish
- Water Resource Management

Program description, admission information, and undergraduate course descriptions are included under each program. There is also a reference to the index entry for the program under which graduate course descriptions are printed. A list of current Graduate Program Coordinators is available at www.montclair.edu/graduate/current/adviserlist.shtml.

Admission to a certificate program does not guarantee acceptance into a Montclair State University degree program. Students must reapply if interested in a graduate degree program.

The Graduate School will notify first time certificate students that they have been admitted and are eligible for registration via a letter. Please refer to the Schedule of Courses booklet available from the Office of the Registrar for more information. Students must meet appropriate deadlines to be eligible for registration.
The ADA Certificate program is approved by the American Dietetic Association. It involves completion of an undergraduate curriculum known as the Didactic Program in Dietetics (DPD), which is offered within the Department of Health and Nutrition Sciences. Individuals with a Bachelor of Arts or Sciences in any field may complete the course work to achieve an American Dietetic Association (ADA) Verification Statement. The Verification Statement is required for applying to ADA dietetic internships or supervised practice programs as well as active membership in the Association and some employment applications. The internship/AP4 is the supervised practice requirement which is a prerequisite to taking the national registration exam the status of the Registered Dietician is achieved and the credentials RD may be used in practice.

ADA Approved Preprofessional Practice Program (AP4) - For AP4 (internship) application and program information, please call Life Skills Center (973) 655-4172 or AP4 Office at (973) 655-4375. This supervised practice program is highly competitive and open only to those who have successfully completed the ADA Didactic program.
The Artist Diploma is a unique, conservatory-inspired program focused on developing both the artistry and professionalism of gifted young musicians. Except in unusual and compelling circumstances, the Artist Diploma is limited to areas of performance with substantial and significant solo repertoire.

Candidates for Artist Diploma possess not only great talent, but also the ability and determination to realize that talent in the contemporary musical world. They may have already embarked on solo performing careers, or may be on the brink of such careers.

The two-year program is tailored to their individual needs; working in close collaboration with studio faculty and graduate program coordinators, Artist Diploma students focus on performance, deepening their artistry in close collaboration with master teachers. In addition, some will want to enhance their education through studies of music theory, languages, etc., while others will want to begin practical preparations for careers to which their talents have led.

In each case, the candidates have opportunities to reflect on their music, to enjoy the support of an educational environment and to feel the freedom to create their music. As part of their program responsibilities, these young artists play an active role in the musical life of the department during the required one year residence, participating in institutional outreach and demonstrating the commitment of musical artistry.

ADMISSION REQUIREMENTS
Students must have a baccalaureate degree or equivalent from an accredited institution. Audition information and requirements are available on-line at http://www.montclair.edu/music/pages/audition/audition.html

REQUIREMENTS FOR THE ARTIST DIPLOMA CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Required Courses (16 semester hours):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MUAP 541 Applied Music I .................. 4</td>
</tr>
<tr>
<td></td>
<td>MUAP 542 Applied Music II .................. 4</td>
</tr>
<tr>
<td></td>
<td>MUAP 643 Applied Music III ............... 4</td>
</tr>
<tr>
<td></td>
<td>MUAP 644 Applied Music IV .................. 4</td>
</tr>
<tr>
<td></td>
<td>Chamber Ensembles (4 semester hours)</td>
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<tr>
<td></td>
<td>MUPR 550 Chamber Ensemble Performance I .... 1</td>
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<tr>
<td></td>
<td>MUPR 551 Chamber Ensemble Performance II .......... 1</td>
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<tr>
<td></td>
<td>MUPR 552 Chamber Ensemble Performance III .......... 1</td>
</tr>
<tr>
<td></td>
<td>MUPR 553 Chamber Ensemble Performance IV .......... 1</td>
</tr>
<tr>
<td></td>
<td>Large Ensembles (4 semester hours):</td>
</tr>
<tr>
<td></td>
<td>MUPR 533 Ensemble: Opera Workshop .......... 1</td>
</tr>
<tr>
<td></td>
<td>MUPR 535 Ensemble: Band ..................... 1</td>
</tr>
<tr>
<td></td>
<td>MUPR 537 Ensemble: Orchestra ............... 1</td>
</tr>
<tr>
<td></td>
<td>MUPR 561 Harry Partch Ensemble ............. 0.5</td>
</tr>
</tbody>
</table>

Minimum semester hours: 15
The Center for Child Advocacy offers two programs: a Post-Baccalaureate Certificate in Child and a Master of Arts in Child Advocacy with an optional concentration in Public Child Welfare. Students completing the Post-BA certificate may apply for the MA in Child Advocacy. Once successfully admitted into the MA program students may transfer the 15 credits from the Post-BA into the master’s program. Students may also elect to complete the Post-BA program and not continue for the MA.

The Post-BA Certificate in Child Advocacy
The Child Advocacy certificate has been designed to provide students with a multidisciplinary understanding of the role of the child advocate as seen through the disciplines of law, sociology and psychology. This unique perspective encompassing these three areas of learning equip graduates with training that will enhance their skills in a variety of settings. The certificate is also available through a distance learning component.

ADMISSION REQUIREMENTS
To be considered for admission into the Child Advocacy Post-Baccalaureate Certificate program, students must have a baccalaureate degree in any discipline. Students must submit to the Graduate School a completed Graduate Application, which includes official transcripts from each college/university attended and a statement of objectives. Students can begin the program any semester. Courses are offered during the fall and spring semester and during summer session. These courses may be transferred into the Master of Arts in Child Advocacy provided they meet the requirements for this program and the student is admitted.

REQUIREMENTS FOR THE CHILD ADVOCACY CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses (15 semester hours):</td>
<td></td>
</tr>
<tr>
<td>CHAD 501 Introduction to Applied Child Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 502 Child Abuse and Neglect</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 503 Current Social Issues in Child Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 504 Children and Justice</td>
<td>3</td>
</tr>
<tr>
<td>CHAD 505 Theoretical and Applied Models for Interviewing Children</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 15

Graduate course descriptions are listed with the Master of Arts in Child Advocacy. Please refer to the index for the page number.
The CISCO program is MSU’s local implementation of the nationally recognized and CISCO developed CISCO Networking Academy. Completion of the program with satisfactory standing prepares students to take the CISCO Certified Network Associate (CCNA) exam. The program includes four required and sequential half semester courses, CISCO I, II, III, and IV through the fall and spring semesters for a total of 4 academic credits. The courses are delivered through lecture and hands-on activities by a CISCO certified instructor.

The CISCO program provides students with classroom and laboratory experiences as a basis for preparation for the CCNA exam, for further education in computing networking and for expanding career opportunities in industry.

ADMISSION REQUIREMENTS

Prerequisites for the program include permission of the Department, Precalculus, a year’s experience with Java, C++, FORTRAN, or Pascal, or in some cases, Visual BASIC, and an undergraduate degree. The department provides a one-time waiver for the CCNA exam fee for students with satisfactory course grades.

REQUIREMENTS FOR THE CISCO CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses:</td>
<td></td>
</tr>
<tr>
<td>CISCO I ........................................................................................................... 1</td>
<td></td>
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<tr>
<td>CISCO II ......................................................................................................... 1</td>
<td></td>
</tr>
<tr>
<td>CISCO III ......................................................................................................... 1</td>
<td></td>
</tr>
<tr>
<td>CISCO IV ......................................................................................................... 1</td>
<td></td>
</tr>
</tbody>
</table>

Minimum semester hours: 4

For further information contact the Computer Science department.
COLLABORATIVE TEACHING FOR INCLUSIVE SETTINGS CERTIFICATE PROGRAM

Telephone: (973) 655-5187

The certificate program Collaborative Teaching for Inclusive Settings, offered by the department of Curriculum and Teaching, is available only to school districts interested in working on increasing the capacity of school personnel to meet the needs of students in inclusive classrooms. This course of study is designed to have school-based faculty approach inclusion from a team perspective. Because of this, districts are asked to register their faculty in teams. Teams are to consist of general education, special educators, child study team members and, if possible, representatives from administration. Classes may be held at off-campus sites in the district(s). Enrollment is open only to those in the affiliated district. Students interested in future offering of the program should contact the graduate program coordinator.

ADMISSION REQUIREMENTS

Students must have a valid education certificate (Elementary; Secondary; Teacher of the Handicapped; Learning Disabilities Teacher-Consultant) or alternate school certificate (Speech Language Specialist; School Occupational Therapist; School Psychologist; School Business Administrator); affiliation with a participating district; and commitment to take the five course sequence; waiver on SPED 579 will be available with graduate program coordinator approval if equivalent course with inclusion focus has been taken.

REQUIREMENTS FOR THE COLLABORATIVE TEACHING FOR INCLUSIVE SETTINGS CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Required Courses (15 semester hours):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPED 566 Language-Based Learning Strategies for Use in Inclusive Settings ................................................................. 3</td>
</tr>
<tr>
<td></td>
<td>SPED 567 Instructional Planning for Students with Disabilities in Inclusive Settings I (Preschool to Third Grade)</td>
</tr>
<tr>
<td></td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>SPED 568 Instructional Planning for Students with Disabilities in Inclusive Settings II (4th through 12th grade) ....................... 3</td>
</tr>
<tr>
<td></td>
<td>SPED 588 Managing Student Behavior in Inclusive Settings ....................... 3</td>
</tr>
<tr>
<td></td>
<td>SPED 579 Special Education for Students with Disabilities ....................... 3</td>
</tr>
<tr>
<td></td>
<td>SPED 668 Consultation Methods ......................................................................................... 3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 15

Graduate course descriptions are listed in Curriculum and Teaching Department. Please refer to the index for the page number.
The certificate program is designed for health professionals who are currently involved in or are interested in education of workers in the food industry about the principles and practices of food safety. The program affords the candidates the educational experiences to expand their expertise in developing food safety education programs for different population groups and different settings, selecting or designing effective instructional strategies for the teaching of such programs, and developing appropriate means for measuring and evaluating the effectiveness of their programs. The program flexibility in terms of selection of courses permits the candidates to choose a combination of courses that best meet their professional needs.

Any student who successfully completes the requirements of the program with a cumulative grade point average of 3.00 or higher will be eligible for admission to the health education graduate program without the requirement of taking the GRE (Graduate Record Exam). The student will need to complete a second application for the master’s degree and be accepted into the program. All the health courses (HLTH designation) and one of the nutrition courses (NUFD designation) that the student has completed as part of the requirements of this certificate program will be transferable to the health education graduate program should the student decide to apply for admission to the program.

ADMISSION REQUIREMENTS

To be admitted into the program an applicant must hold a baccalaureate degree in health education, public health or related health field from an accredited college or university with a grade point average of 2.65 or higher on a 4-point scale or equivalent on a 5-point scale, and meet all the other requirements set by the university.

REQUIREMENTS FOR THE FOOD SAFETY INSTRUCTOR CERTIFICATE PROGRAM

The program consists of 12 semester hours of graduate courses. The applicant must successfully complete a total of four courses (12 semester hours of credit) from the following list with a cumulative grade point average of 2.800 or higher to receive the certificate. A minimum of one course must be taken from each of the following three groups:

<table>
<thead>
<tr>
<th>Group I</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 520 Foundations and Methods in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 526 Curriculum Development and Program Planning in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>Group</td>
<td>Course Code</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Group II</td>
<td>HLTH 560</td>
</tr>
<tr>
<td></td>
<td>HLTH 565</td>
</tr>
<tr>
<td>Group III</td>
<td>NUFD 557</td>
</tr>
<tr>
<td></td>
<td>NUFD 573</td>
</tr>
</tbody>
</table>

Minimum semester hours: 12

Graduate course descriptions are listed in the Health and Nutrition Sciences department. Please refer to the index for the page number.
The certificate program in Health Education, offered by the Department of Health and Nutrition Sciences, is designed to serve practicing classroom teachers who seek further background in health education in the areas of content and pedagogy. This graduate certificate can be completed in two semesters.

ADMISSION REQUIREMENTS

Students must have a baccalaureate degree from an accredited institution of higher education with a minimum cumulative grade point average of 2.5 on a 4-point scale or the equivalent on a 5-point scale and a teaching certificate.

REQUIREMENTS FOR THE HEALTH EDUCATION CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>HLTH 520 Foundations and Methods in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 526 Curriculum Development and Program Planning in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>II. Select three of the following:</td>
<td></td>
</tr>
<tr>
<td>HLTH 511 Biomedical Psychosocial Perspectives on Drugs</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 530 Health Issues Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 540 Selected Topics in Mental Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 560 Human Diseases</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 575 The Teaching of Human Sexuality</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 12

Graduate course descriptions are listed with the Health and Nutrition Sciences program. Please refer to the index for the page number.
The Molecular Biology certificate is designed for individuals seeking employment in the biotechnology and pharmaceutical industries, those currently employed seeking to learn new techniques or update their skills and for those individuals that want to strengthen their preparation for further postgraduate work. The unique feature of the Molecular Biology certificate program is its focus on laboratory methodologies in molecular biology and biotechnology. The recommended course of study will provide both theoretical and applied instruction in modern, well-equipped biology laboratories. Students in this program will gain expertise in a variety of essential molecular methodologies including PCR, automated DNA sequence analysis, molecular cloning, gene expression, fermentation technology, site-directed mutagenesis, immunology and cell manipulation techniques.

All courses for the certificate program will be offered on evenings and/or weekends in the 60,000 square foot Science Hall which features state-of-the-art biological teaching laboratories. A total of 14 - 15 semester hours (depending on elective course selected) are required for this program.

ADMISSION REQUIREMENTS

Students must have a bachelor’s degree in biology, biochemistry or a related field or approval of the graduate program coordinator. Students must submit the application form and transcripts from all undergraduate institutions attended.

The matriculation program for certificate candidates is prepared in consultation with the graduate program coordinator. Changes in the program can be made only with the written approval of the graduate program coordinator. It is the responsibility of the student to keep the coordinator informed of progress in the program.

REQUIREMENTS FOR THE MOLECULAR BIOLOGY CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Required Courses (11 semester hours):</td>
<td></td>
</tr>
<tr>
<td>BIOL 547 Molecular Biology I (lecture)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 548 Molecular Biology II (laboratory)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 592 Graduate Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 598 Selected Techniques in Molecular Biology</td>
<td>1.5</td>
</tr>
</tbody>
</table>

(Students take this course twice, for a total of 3 credits)
II. Elective (Select 1 of the following for 3-4 semester hours):

BICL 405  Cell Culture ................................................................. 4
BIOL 512  Topics in Modern Genetics ........................................... 3
BIOL 513  Instrumentation and Techniques for Biological Science ...... 4
BIOL 533  Advanced Cell Biology ................................................... 3
BIOL 550  Topics in Microbiology .................................................. 3
CHEM 570  Selected Topics in Advanced Biochemistry ...................... 3

Minimum semester hours: 14-15

**BIOLOGY AND MOLECULAR BIOLOGY**

*Course Descriptions*

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
</table>

**BICL 405  CELL CULTURE**

Theory of and practice in working with living cells: tissue culture techniques, cell communication, differentiation, regeneration and aging in several living cell systems.

*Prerequisites: Departmental approval. Special fee.*

Graduate course descriptions are listed with the Biology M.S. program and the Chemistry M.S. program. Please refer to the index for the page numbers.
The graduate certificate program in Nutrition and Exercise Science provides students the opportunity to gain knowledge in the closely related fields of nutrition and exercise science. The program is designed to develop and enhance competencies necessary for creating applied nutrition and exercise programs for clients interested in wellness and weight management, as well as athletes striving to optimize performance. Both theoretical and practical approaches are emphasized throughout the program. Students are required to take two courses from each of the content areas and one elective, yielding a total of 15 semester hours. The certificate issued by Montclair State University signifies completion of the specified coursework. This program does not lead to a Master’s degree or certification in the respective fields of nutrition and exercise science. However, students who apply for a master’s degree program after the completion of this certificate may transfer some coursework toward the degree.

ADMISSION REQUIREMENTS

Students must have a baccalaureate degree from an accredited college or university with a minimum cumulative grade point average of 2.5 on a 4-point scale. Applicants must also have evidence of previous coursework in anatomy and physiology, chemistry (including a lab), nutrition, and physiology of exercise. Students lacking adequate preparation may be required to take additional coursework at the undergraduate level as a prerequisite to entry in the certificate program.

REQUIREMENTS FOR THE NUTRITION AND EXERCISE SCIENCE CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Core Courses (12 semester hours):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUFD 482 Nutrition Counseling ......................3</td>
</tr>
<tr>
<td></td>
<td>NUFD 580 New Findings in Nutrition .................3</td>
</tr>
<tr>
<td></td>
<td>PEMJ 541 Aerobic Exercise: Testing and Programming ..3</td>
</tr>
<tr>
<td></td>
<td>PEMJ 543 Anaerobic Exercise: Testing and Programming ..3</td>
</tr>
</tbody>
</table>

II. Elective (3 semester hours):
(Must be selected from one of the following or with approval by the graduate program coordinator.)

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>I. Required Core Courses (12 semester hours):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUFD 585 Food and Nutrition Issues ..............3</td>
</tr>
<tr>
<td></td>
<td>NUFD 560 Advanced Nutrition Counseling for Diverse Population Groups ..3</td>
</tr>
<tr>
<td></td>
<td>PEMJ 539 Advanced Exercise Physiology ............3</td>
</tr>
<tr>
<td></td>
<td>PEMJ 540 Applied Exercise Physiology .............3</td>
</tr>
<tr>
<td></td>
<td>PEMJ 542 Applied Cardiac Rehabilitation ..........3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 15
### NUFD 482 NUTRITION COUNSELING  
This course offers practical experience dealing with the principles of marketing, adult learning, helping skills, assessment, documentation, and evaluation as related to weight control and the role of food in promotion of a healthy life-style. Six hours of clinical experience is required.

*Prerequisite: NUFD 412 or departmental approval.*

NUFD graduate course descriptions are listed with the Health and Nutrition Sciences department and PEMJ graduate course descriptions are listed with the Exercise Science and Physical Education department. Please refer to the index for the page numbers.
OBJECT ORIENTED COMPUTING
CERTIFICATE PROGRAM

Telephone: (973) 655-4166

Object Oriented Computing (OOC) integrates C++, JAVA, and UML (Unified Modeling Language) for an object oriented approach to tasks. The student gains experience with Sun Solaris and Windows making the student more valuable as an employee and education consumer. OOC is three required and sequential graduate computer science courses in the fall (CMPT 505), spring (CMPT 507), and extended pre-session (CMPT 585). The first two courses consider object oriented programming through Java and the last course, Special Topics: Design of Distributed Object-Oriented Systems, considers UML and distributed Java Programming.

ADMISSION REQUIREMENTS
Prerequisites for the program include a B.S. or B.A. from an accredited institution, evidence of precalculus knowledge, and a year of programming experience. Permission from the Computer Science chairperson or graduate program coordinator is necessary.

REQUIREMENTS FOR THE
OBJECT ORIENTED COMPUTING
CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Required Courses (11 semester hours):</td>
<td></td>
</tr>
<tr>
<td>CMPT 505 Fundamentals of Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CMPT 507 Fundamentals of Computer Science III</td>
<td>4</td>
</tr>
<tr>
<td>CMPT 585 Topics in Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>(When topic is: Design of Distributed Object-Oriented Systems)</td>
<td></td>
</tr>
</tbody>
</table>

Minimum semester hours: 11

Graduate course descriptions are listed with the Computer Science M.S. program. Please refer to the index for the page number.
The Department of Legal Studies offers a Paralegal Studies Certificate Program for post-baccalaureate students which includes a balanced and varied background in the legal fundamentals, appropriate skills, and practical field work experience necessary for employment as a legal assistant. The program develops intellectual and analytical skills, educates students for direct employment opportunities in the paralegal field, and provides additional career possibilities in combination with a student’s undergraduate degree.

The Montclair State University Paralegal Studies Program is the first and only program at a state college or university in New Jersey to receive American Bar Association approval. A certificate of completion is awarded to all students who meet program standards, fulfill the 24 credit hours required in the program, and have completed a bachelor’s degree. Post-baccalaureate students who meet all course prerequisites may, with departmental permission, substitute up to two graduate Legal Studies courses (at the 500 level) within the Paralegal Studies Program.

By advisement, a student may focus upon one of three optional areas of emphasis in the selection of Group II courses: Legal Information and Technology, Hispanic Perspectives and Patent, Trademark, and Copyright Law. These are informal groupings of courses clustered in accordance with student interests and career goals. A student is not required to take them and they are not formally recorded with the Registrar’s Office. The required Paralegal Seminar and Internship course will focus upon the student’s area of interest.

ADMISSION REQUIREMENTS

Candidates for admission must have a baccalaureate degree from an accredited college or university.

REQUIREMENTS FOR THE PARALEGAL STUDIES CERTIFICATE PROGRAM

LSLW 200 Introduction to Law is a recommended program prerequisite.

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Required Courses (9 semester hours):</td>
</tr>
<tr>
<td>LSPR 210 Law and Litigation ................................................................. 3</td>
</tr>
<tr>
<td>LSPR 312 Foundations of Legal Research .................................................. 3</td>
</tr>
<tr>
<td>LSPR 362 Legal Writing ............................................................................ 3</td>
</tr>
<tr>
<td>II. Choice of 4 of the following (12 semester hours):</td>
</tr>
<tr>
<td>A. Students must include at least one course from the following group:</td>
</tr>
<tr>
<td>LSPR 304 Real Estate Law ................................................................. 3</td>
</tr>
</tbody>
</table>
B. Students may include up to three courses from the following group:

- LSPR 301 Criminal Law and Procedure ................................................... 3
- LSPR 305 Immigration Law ..................................................................... 3
- LSPR 308 Negotiation, Mediation and Arbitration ................................... 3
- LSPR 317 Evidence ................................................................................... 3
- LSPR 332 Personal Injury Law ................................................................. 3
- LSPR 339 Computer Applications in the Legal Environment .................. 3
- LSPR 411 Advanced Patent, Trademark and Copyright Law ................. 3
- LSPR 412 Consumer Law ....................................................................... 3
- LSPR 420 Advanced Civil Litigation ....................................................... 3
- LSPR 437 Entertainment Law .................................................................... 3
- LSPR 438 Trademark Law ....................................................................... 3
- LSPR 441 Advanced Computer Applications in the Legal Environment .... 3
- LSPR 450 Law Office Management and Technology .............................. 3
- LSPR 460 Advanced Legal Research and Writing ..................................... 3
- LSPR 499 Selected Topics in Paralegal Studies ........................................ 3

C. Students may include one law-related course from the following list:

- LSLW 388 Advocacy and Persuasion ........................................................ 3
  (open only to undergraduates)
- LSPR 316 Skills for Bilingual Legal Personnel ....................................... 3
  (fluency in Spanish required)
- POLS 321 Law in Society: Criminal Law ................................................. 3
  (precludes program credit for LSPR 301)

D. With departmental permission, seniors and post-baccalaureate students who meet all prerequisites, may include up to two courses at the 500 level from the Legal Studies Department.

III. LSPR 497 Paralegal Seminar and Internship ....................................... 3

or

LSPR 498 Cooperative Education: Paralegal Studies .............................. 4-8

Minimum semester hours: 24-25

Optional Areas of Emphasis:
By advisement, a student may focus upon optional areas of emphasis in the selection of Group II courses. These are informal groupings of courses clustered in accordance with student interests and career goals. A student is not required to take them and they are not formally recorded with the Registrar’s office. The required Paralegal Seminar and
Internship course will focus upon the student’s area of emphasis.
1. Legal Information and Technology (LSPR 339, LSPR 441, LSPR 450)
2. Patent, Trademark, and Copyright Law (LSPR 310, LSPR 411, and LSPR 438)
3. Hispanic Perspectives (Fluency in Spanish required) (LSPR 316 and PSYC 245 or PCOM 245 or SOCI 202)

LEGAL STUDIES
Undergraduate Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSPR 210</td>
<td>LAW AND LITIGATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An introduction to the legal system with a focus on the New Jersey court system. Review of substantive areas of law and application of procedural concepts from initiation of a civil lawsuit through entry of judgment. The unique role and function of attorney and paralegal in the process of client interviewing, ethical considerations, investigation and preparation for trial. Drafting of pleadings and other documents used in litigation and trial. Introduction to Law (LSLW 200) is a recommended prerequisite.</td>
<td></td>
</tr>
<tr>
<td>LSPR 301</td>
<td>CRIMINAL LAW AND PROCEDURE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Legal concepts of criminal law and their application to criminal procedure. Contrast between civil law and criminal law. Study of crimes against persons, property and the public. Searches and seizure, arrest and interrogation. Students may take LSPR 301 or POLS 321, but not both courses as part of the Paralegal Studies program, the Political Science major or the Criminal Justice Minor.</td>
<td></td>
</tr>
<tr>
<td>LSPR 304</td>
<td>REAL ESTATE LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Principles of real estate law and transactions. Contracts, mortgages, surveys, title, RESPA. Conveyances of real property from the standpoint of seller and purchaser. Landlord-tenant relations. Forms and documents utilized by paralegals in real estate law.</td>
<td></td>
</tr>
<tr>
<td>LSPR 305</td>
<td>IMMIGRATION LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Basic overview of Immigration and Nationality Act, including historical and sociological perspectives of United States immigration. Practice and procedure of immigration law as it pertains to both administrative agency processing and consular processing. Non-immigrant visas, family-based immigration, employment-based immigration, naturalization, removal, asylum and refugee practice. Recent developments in this continually evolving area of law and practice.</td>
<td></td>
</tr>
<tr>
<td>LSPR 306</td>
<td>CONTRACT LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Theoretical foundations and practical applications of contract law in the common law tradition as modified by the Uniform Commercial Code. Drafting of contracts.</td>
<td></td>
</tr>
<tr>
<td>LSPR 308</td>
<td>NEGOTIATION, MEDIATION AND ARBITRATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An in-depth study of complementary forms of dispute resolution as compared and contrasted with the traditional judicial system. Students study the theoretical background and receive training in mediation, negotiation and arbitration. Students may take LSLW 220 or LSPR 308, but not both courses. Students in the Paralegal Studies Program should take LSPR 308.</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>LSPR 310</td>
<td>FUNDAMENTALS OF PATENT, TRADEMARK AND COPYRIGHT LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Substantive principles of patent, trademark and copyright law including categories and standards of patentability, categories of trademarks and categories of copyrightable subject matter. Assignment and licensing of such proprietary rights. Litigation involving acts of infringement including related areas of anti-trust law and unfair competition.</td>
<td></td>
</tr>
<tr>
<td>LSPR 312</td>
<td>FOUNDATIONS OF LEGAL RESEARCH</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Study of principles, methods and applications of legal research. The use of a law library, including case law, statutory law and other sources. The development of legal research skills in the preparation of work in the field of law. Familiarization with computer-assisted legal research.</td>
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<tr>
<td></td>
<td><strong>Prerequisite</strong>: Not open to freshmen.</td>
<td></td>
</tr>
<tr>
<td>LSPR 316</td>
<td>SKILLS FOR BILINGUAL LEGAL PERSONNEL</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Translating, interpreting and cultural fluency as applied to the legal field and in particular to the role of bilingual paralegals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Prerequisite</strong>: Fluency in Spanish required.</td>
<td></td>
</tr>
<tr>
<td>LSPR 317</td>
<td>EVIDENCE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An examination of the basic principles and rules governing trial advocacy in federal and state (NJ) cases. Areas to be examined include: the hearsay rule and its exceptions, examination of witnesses (lay and expert), impeachment, privileges, real and demonstrative evidence, inference, judicial notice and presumptions.</td>
<td></td>
</tr>
<tr>
<td>LSPR 322</td>
<td>WILLS, TRUSTS AND PROBATE LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Basic concepts, practice, and procedure in wills, probate, and trusts. Includes will drafting, estate planning, probate procedures and estate administration. Forms and questionnaires utilized by paralegals in these areas.</td>
<td></td>
</tr>
<tr>
<td>LSPR 330</td>
<td>FAMILY LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Basic concepts of domestic relations law and family law practice. Includes ante-nuptial agreements, formal ties of marriage, separation agreements, and divorce. Familiarization with forms and procedures utilized by paralegals in domestic relations law.</td>
<td></td>
</tr>
<tr>
<td>LSPR 332</td>
<td>PERSONAL INJURY LAW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Legal concepts and terminology of personal injury law, both substantive and procedural. Negligence, medical malpractice, products liability. Drafting of pleadings and other documents utilized by paralegals in personal injury practice.</td>
<td></td>
</tr>
<tr>
<td>LSPR 336</td>
<td>CORPORATIONS AND PARTNERSHIPS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Legal characteristics and tax aspects related to sole proprietorship, partnership, limited partnership and corporations. Formation, operation and dissolution of the corporate entity. Drafting of legal forms utilized by paralegals in these areas.</td>
<td></td>
</tr>
<tr>
<td>LSPR 339</td>
<td>COMPUTER APPLICATIONS IN THE LEGAL ENVIRONMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Applications of computer software in the legal environment. Legal applications of word processing, databases and spreadsheets. Legal software for document generation, document management, financial management, time billing, time and docket management, computer-assisted legal research and information management in the workflow process. <strong>Prerequisite</strong>: Undergraduates must complete the Computer Science General Education Requirement before taking this course.</td>
<td></td>
</tr>
</tbody>
</table>
LSPR 362  LEGAL WRITING  3
Application of legal research, method and analysis to legal writing. Students are required to perform various kinds of legal writing assignments and to demonstrate ability to identify legal problems, analyze them based upon the related law and theory, and solve problems with resulting written work product.
Prerequisite: LSPR 312.

LSPR 390  INDEPENDENT STUDY IN PARALEGAL STUDIES  3
Guided study of a particular area of Paralegal Studies arranged individually between student and professor. The topic may be a more advanced treatment of a regularly offered course or the exploration of a timely and significant area of paralegal Studies.
Prerequisite: Departmental approval.

LSPR 411  ADVANCED PATENT, TRADEMARK AND COPYRIGHT LAW  3
Procedural principles of patent, trademark and copyright law including prosecution of patent and trademark applications in the United States Patent and Trademark Office, preparation and filing of trademark applications and preparation of applications to register claims to copyright in the United States Copyright Office. Litigation procedures for acts of infringement relating to such proprietary rights.
Prerequisite: LSPR 310.

LSPR 412  CONSUMER LAW  3
This course provides students with the theoretical foundations and practical applications of consumer law. The course utilizes a model and method approach, which presents theory and procedure in a case problem context. The course acquaints students with various traditional legal theories and compares and contrasts them with law as it has evolved to meet new changes in society. Areas to be covered include compulsory disclosure of information, consumer claims and defenses, abusive collective practice, state and federal regulation of the cost of credit and alternative dispute resolution.

LSPR 420  ADVANCED CIVIL LITIGATION  3
Refinement of substantive and procedural principles relating to all stages of a civil law suit from commencement of suit through judgment and appeal as applied in New Jersey. Theoretical foundations and practical applications in the state court system contrasted with the federal court system.
Prerequisite: LSPR 210 and 312.

LSPR 437  ENTERTAINMENT LAW  3
The goal of this course is to provide students with the theoretical foundations and practical applications of entertainment law. The course will utilize a model and method approach, which will present theory and procedure in a case problem context. The course will acquaint students with various traditional legal theories and compare and contrast them with entertainment law as it has evolved to meet the changes in society. Areas to be covered include representing minors, contract preparation, copyright infringement, publishing, theatrical and musical performance, film and television.
LSPR 441 ADVANCED COMPUTER SYSTEMS IN THE LEGAL ENVIRONMENT 3
Applications of operation of computer systems, including hardware and software, designed specifically to assist in the practice of law or the management of law office and to provide students with a conceptual basis for evaluation, application and operation of other legal application and systems programs which may become available.
Prerequisites: LSPR 312 and LSPR 339.

LSPR 450 LAW OFFICE MANAGEMENT AND TECHNOLOGY 3
Theoretical foundations and practical applications of law office management and technology. Hands-on and theoretical problems dealing with work product, human resources, and workflow in assembly, case management, database management, human resource management, and technological interfaces with traditional processes.

LSPR 460 ADVANCED LEGAL RESEARCH AND WRITING 3
Refinement of principles and methods of legal research in working with statutes, case law and other legal sources. Application of legal research techniques to practical legal problems. Preparation of more complex legal research projects.
Prerequisites: LSPR 312 and LSPR 362.

LSPR 497 PARALEGAL SEMINAR AND INTERNSHIP 3
Field work experience of 90 hours in a private sector law office, corporation, bank, or public sector agency. Required classroom seminar supplements experiential component and includes discussion of field work experience, ethical considerations and career options.
Prerequisites: LSPR 210, and LSPR 312, and LSPR 362; a minimum grade of C- is required in LSPR 312 and LSPR 362; two legal specialty courses; departmental approval.
Prerequisites or Corequisites: 2 legal specialty courses selected from courses approved within the Paralegal Studies Program or from the approved departmental list.

LSPR 498 COOPERATIVE EDUCATION: PARALEGAL STUDIES 4 - 8
Academic study integrated with supervised paid employment situation in the legal environment outside of the formal classroom setting. Part-time (20 hours per week) or full-time (40 hours per week). Required classroom seminar supplements experiential component and includes discussion of field work experience, ethical considerations and career options.
Prerequisites: LSPR 210 and LSPR 312 and LSPR 362; a minimum grade of C- is required in LSPR 312 and LSPR 362; two legal specialty courses; departmental approval.
Prerequisites or Corequisites: 2 legal specialty courses selected from courses approved within the Paralegal Studies Program or from the approved departmental list.

LSPR 499 SELECTED TOPICS IN PARALEGAL STUDIES 3
Exploration of a significant area of Paralegal Studies such as administrative law, bankruptcy, environmental law, as well as new and evolving legal areas. The specific topic will be announced each time the course is offered.
PERFORMER’S CERTIFICATE

Telephone: (973) 655-7212

The Performer’s Certificate is a unique, conservatory inspired program focused on developing both the artistry and professionalism of gifted young musicians. Except in unusual and compelling circumstances, the Performer’s Certificate is limited to areas of performance with substantial and significant solo repertoire.

Candidates for Performer’s Certificate possess not only great talent, but also the ability and determination to realize that talent in the contemporary musical world. They may have already embarked on solo performing careers, or may be on the brink of such careers.

The one-year program is tailored to their individual needs; working in close collaboration with studio faculty and graduate program coordinator, Performer’s Certificate students focus on performance, deepening their artistry in close collaboration with master teachers. In addition, some will want to enhance their education through studies of music theory, languages, etc., while others will want to begin practical preparations for careers to which their talents have led.

In each case, the candidates have opportunities to reflect on their music, to enjoy the support of an educational environment, and to feel the freedom to create their music. As part of their program responsibilities, these young artists play an active role in the musical life of the department during the required one year residence, participating in institutional outreach and demonstrating the commitment of musical artistry.

ADMISSION REQUIREMENTS

Students must have a baccalaureate degree or equivalent from an accredited institution. Audition information and requirements are available on-line at http://www.montclair.edu/music/pages/audition/audition.html

REQUIREMENTS FOR THE PERFORMER’S CERTIFICATE PROGRAM

Required Courses (8 semester hours):
MUAP 541 Applied Music I ................................................................. 4
MUAP 542 Applied Music II ................................................................. 4
Chamber Ensembles (2 semester hours)
MUPR 550 Chamber Ensemble Performance I ............................... 1
MUPR 551 Chamber Ensemble Performance II ............................ 1
MUPR 552 Chamber Ensemble Performance III ............................ 1
MUPR 553 Chamber Ensemble Performance IV ............................ 1
Large Ensembles (2 semester hours):
MUPR 533 Ensemble: Opera Workshop ........................................ 1
MUPR 535 Ensemble: Band .............................................................. 1
MUPR 537 Ensemble: Orchestra ....................................................... 1
MUPR 561 Harry Partch Ensemble .................................................... 0.5

Minimum semester hours: 12
Philosophy for Children is an internationally recognized program which focuses on cultivating dialogue, inquiry and good judgment in children and adolescents. The Certificate program is designed especially for teachers who are interested in helping young people become better thinkers. This program of study invites candidates to construct a community of inquiry focusing on key issues relating to democratic pedagogy, curriculum, and cognitive, affective, social and ethical development. It will also assist teachers in transforming their own classrooms into communities of inquiry. Such a transformation represents a new paradigm in teaching and learning one which builds upon, but goes beyond those traditionally on offer.

The Certificate Program in Philosophy for Children offers 15 credits, which count toward the Master of Education degree, and also provides New Jersey teachers a total of 225 hours of professional development applicable to the State requirement. The Certificate program is tailored to fit the professional interests and schedules of practicing teachers. Candidates are asked to select from a range of graduate courses - but only one per semester, on average - covering such key areas as critical thinking, personal and social development, reasoning in science, math and language arts, and values education. Additionally, candidates will take two new courses, over two semesters designed to introduce teachers to the theory and practice of teaching philosophy in the classroom, improving the quality of thinking, and building communities of inquiry. These courses will be held after regular school hours at one or more schools of participating teachers, so that participants can receive consultation from Faculty regarding their practice of Philosophy for Children in their own classrooms, and work together in small groups, reflecting on actual classroom practice.

Montclair State University has been the international home of Philosophy for Children since the inauguration of the Institute for the Advancement of Philosophy for Children (IAPC) thirty years ago. IAPC faculty members have international reputations in philosophy for children and the teaching of thinking, and are at the forefront of teaching and research in these areas. Since 1974, students and scholars from all over the world have made their way to Montclair to study together, under the guidance and direction of this outstanding faculty.

The courses offered as part of the Certificate program will encapsulate professional development at its best, blending together outstanding pedagogy and practice with the opportunity to think about some of education’s most interesting and pressing issues, all in an environment of friendly, stimulating collegiality. School districts in and around Montclair have expressed significant interest in our work, rightly perceiving that it addresses key aspects of the New Jersey Core Curriculum Standards. They have offered to provide support to teachers and schools interested in participating in the Certificate program.
ADMISSION REQUIREMENTS

Applicants to the Certificate Program in Philosophy for Children are required to be certified teachers with at least one year of experience. They should also have a B.A. degree.

REQUIREMENTS FOR THE PHILOSOPHY FOR CHILDREN CERTIFICATE PROGRAM

Students will be required to pass the courses with a grade point average of at least 3.00 and with no more than two course grades below a B-minus.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses (6 semester hours):</strong></td>
<td></td>
</tr>
<tr>
<td>PHLC 501 Teaching Children Philosophical Thinking I</td>
<td>3</td>
</tr>
<tr>
<td>PHLC 502 Teaching Children Philosophical Thinking II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Elective Courses (9 credits from the following):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Summer (two week, off-campus residential session):</strong></td>
<td></td>
</tr>
<tr>
<td>PHLC 508 Teaching Philosophical Reasoning I</td>
<td>2</td>
</tr>
<tr>
<td>PHLC 509 Teaching Philosophical Reasoning II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Fall/Spring</strong></td>
<td></td>
</tr>
<tr>
<td>PHLC 511 Teaching Philosophical Reasoning III</td>
<td>3</td>
</tr>
<tr>
<td>PHLC 512 Value Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>PHLC 513 Social Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>EDFD 522 Pragmatism in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDFD 581 Critical Thinking, Community and Self</td>
<td>3</td>
</tr>
<tr>
<td><strong>Summer (two week, off-campus residential session)</strong></td>
<td></td>
</tr>
<tr>
<td>PHLC 614 Scientific Reasoning</td>
<td>2</td>
</tr>
<tr>
<td>PHLC 615 Foundations of Philosophy for Children</td>
<td>2</td>
</tr>
</tbody>
</table>

Minimum semester hours: 15
TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) CERTIFICATE PROGRAM

Telephone: (973) 655-4286

In 1998, the University reorganized its long-standing, successful credit and non-credit English as a second language (ESL) programs within the Center for Language Acquisition, Instruction and Research (CLAIR). The Institute serves as a center for the teaching and learning of languages. CLAIR also provides a venue for the exploration of innovative language teaching formats as well as a site for training of language teachers. CLAIR offers an 18 credit program leading to a Montclair State university certificate in TESOL. This professional certificate program is designed to provide participants with a background in the principles of linguistics and language education along with an understanding of the classroom applications of these principles. These experiences culminate in an ESL teaching practicum in CLAIR or at another appropriate off-campus site. The entire program is designed to be completed in two semesters of full-time study. For more information about the program, please contact the Linguistics Department at (973) 655-4286.

ADMISSION REQUIREMENTS

Students interested in applying for the TESOL Certificate program should contact the Graduate School to request an application. Applicants must submit a graduate application and official transcripts from all colleges and universities attended. International students must also submit an official Test of English as a Foreign Language (TOEFL) score and have their foreign transcripts evaluated by World Education Services.

REQUIREMENTS FOR THE TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses (18 semester hours):</td>
</tr>
<tr>
<td>APLN 500 Language and Linguistics ........................................ 3</td>
</tr>
<tr>
<td>APLN 520 Current Theories of Second language Acquisition ........... 3</td>
</tr>
<tr>
<td>APLN 524 Advanced Structure of American English ..................... 3</td>
</tr>
<tr>
<td>APLN 525 Methodology of Teaching ESL ...................................... 3</td>
</tr>
<tr>
<td>APLN 532 Language and Culture ............................................. 3</td>
</tr>
<tr>
<td>APLN 529 TESL Practicum .................................................... 3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 18

Graduate course descriptions are listed with the Linguistics program. Please refer to the index for the page number.
TEACHING MIDDLE GRADES MATHEMATICS CERTIFICATE PROGRAM

Telephone: (973) 655-5132

The certificate is designed for teachers already certified in a discipline other than mathematics or a closely related field who are either teaching mathematics in the middle grades or preparing for such an assignment. The certificate is offered through the Department of Mathematical Sciences. The program of study increases the mathematical knowledge and related pedagogical skill of middle grades mathematics teachers by providing them with a broad understanding of the fundamental principles that underlie school mathematics while making connections to the mathematics they teach. Teachers who successfully complete the sequence of five courses will be able to make connections across the mathematics curriculum and to other disciplines. Their increased content knowledge and pedagogical skill will result in an observable, enhanced level of enthusiasm and comfort with mathematics, which will in turn foster a deeper understanding and appreciation of mathematics in their students.

ADMISSION REQUIREMENTS

To be admitted to the program applicants must hold a baccalaureate or master’s degree from an accredited institution with the equivalent of at least a 2.5 GPA on a four-point scale for the baccalaureate and a teaching certificate. The baccalaureate or masters’ degree and the teaching certificate cannot be in mathematics or a closely related field. Also required is a recommendation from the applicant’s supervisor.

REQUIREMENTS FOR THE TEACHING MIDDLE GRADES MATHEMATICS CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses (15 semester hours):</td>
<td></td>
</tr>
<tr>
<td>MATH 505 Number and Operations in the Middle Grades .................. 3</td>
<td></td>
</tr>
<tr>
<td>MATH 506 Algebra and Algebraic Thinking in the Middle Grades .......... 3</td>
<td></td>
</tr>
<tr>
<td>MATH 507 Geometry for Middle Grade Math Teachers ........................... 3</td>
<td></td>
</tr>
<tr>
<td>MATH 508 Data Analysis and Probability in the Middle Grades ............ 3</td>
<td></td>
</tr>
<tr>
<td>MATH 509 Measurement in the Middle Grades ...................................... 3</td>
<td></td>
</tr>
<tr>
<td>Minimum semester hours: 15</td>
<td></td>
</tr>
</tbody>
</table>

Graduate course descriptions are listed with the Mathematical Sciences programs. Please refer to the index for the page number.
TRANSLATION AND INTERPRETATION IN SPANISH CERTIFICATE PROGRAM

Telephone: (973) 655-4285

The Translation and Interpretation in Spanish certificate, offered by the department of Spanish and Italian, provides basic preparation for entry-level translating and interpreting positions in government, telecommunications, the judiciary, the helping professions, business and the arts. Designed for students who have good speaking and writing skills in both English and Spanish, the four-course sequence focuses on the specific skills of translation and interpretation.

The certification examination is given in May when the sequence of courses has been completed. Candidates select the language direction in which they will take the examination - English into Spanish or Spanish into English. Successful candidates receive a certificate in translation in the language direction of their examination.

ADMISSION REQUIREMENTS

Students who have a bachelors degree from an accredited college may obtain an application from the Graduate School, (800) 331-9207. When completing the application, please follow the instructions for professional non-degree students. International students must also submit an official TOEFL score and have their foreign transcripts evaluated by World Education Services.

REQUIREMENTS FOR THE TRANSLATION AND INTERPRETATION IN SPANISH CERTIFICATE PROGRAM

Prerequisite SPAN 241 Fundamentals of Spanish Grammar or equivalent

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses (12 semester hours):</td>
</tr>
<tr>
<td>SPAN 350 Translating I ................................................................. 3</td>
</tr>
<tr>
<td>SPAN 351 Translating II ................................................................. 3</td>
</tr>
<tr>
<td>SPAN 452 Translating III ................................................................. 3</td>
</tr>
<tr>
<td>SPAN 450 Introduction to Interpreting ........................................... 3</td>
</tr>
</tbody>
</table>

Minimum semester hours: 12
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
<th>Description</th>
</tr>
</thead>
</table>
| SPAN 350 | TRANSLATING I                              | 3              | Introduction to the techniques of translating Spanish/English and English/Spanish. Students translate actual documents and texts from a wide variety of fields in order to gain experience in methods of analysis, research and verification.  
*Prerequisite: Special fee.*                                                                                                                                                                                                                      |
| SPAN 351 | TRANSLATING II                             | 3              | A continuation of Translating I. Materials chosen for translation reflect the career interests of the students in the class. Emphasis on professional ethics and the rudiments of translation theory.  
*Prerequisite: Special fee.*                                                                                                                                                                                                                      |
| SPAN 452 | TRANSLATING III                            | 3              | Under careful supervision, the student will prepare a translation project, usually consisting of the translation of a text of approximately 50 typewritten pages.  
*Prerequisite: SPAN 350. Special fee.*                                                                                                                                                                                                                   |
| SPAN 450 | INTRODUCTION TO INTERPRETING              | 3              | This course is designed to teach the student the specialized techniques of oral interpreting and to prepare them for a career in the field. Visits to observe professional interpreters at work will be arranged.  
*Prerequisite: Special fee.*                                                                                                                                                                                                                      |
The Water Resource Management certificate program, offered by the department of Earth and Environmental Studies, takes advantage of faculty expertise by assembling water-related courses into one coherent program. This certificate will provide an integrated sequence of courses covering drainage basin-scale cycling of water, water contamination, surface and groundwater modeling, and water-related policy and resource management issues.

The certificate program is designed primarily for people employed or seeking employment in a wide array of careers related to water management. These include private environmental engineering and consulting companies; public agencies involved in environmental assessment and regulation enforcement agencies on the federal, state and county levels; manufacturing, transportation, and service industry (both public and private); public and private utilities. The certificate program will provide people already employed in these industries the opportunity to gain new skills directly applicable to their employment.

The required courses are selected to provide students with training in four areas: general surface and ground water hydrology, ground water modeling, drainage basin management (decision-making and policy development) and water quality. The courses will be offered in a sequence that will allow completion of the certificate in two years, provided students enter with the prerequisites required for the certificate course.

ADMISSION REQUIREMENTS

Students must have completed a bachelor’s degree that includes a year each of college chemistry, physics and calculus. At least one college course in geology is also desirable. Students must submit a graduate application and official transcript(s) from all colleges/universities attended. The graduate program coordinator, who will ascertain whether the student has sufficient background to succeed in the required coursework, must interview students who do not meet the prerequisite criteria. Students may apply to start the program in the fall or spring semester.

REQUIREMENTS FOR THE WATER RESOURCE MANAGEMENT CERTIFICATE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses:</td>
<td></td>
</tr>
<tr>
<td>GEOS 452 Geohydrology</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 454 Environmental Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 509 Water Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>GEOS 552 Applied Groundwater Modeling</td>
<td>4</td>
</tr>
</tbody>
</table>

Minimum semester hours: 13
GEOS 452 GEOHYDROLOGY
3
The study of ground-water with particular emphasis given to its mode of migration, chemistry and relation to the geographic environment. Particular attention is given to Darcy’s law, soil porosity, soil permeability and the ability to withdraw water for human consumption. Water pollutants and salt water incursions are investigated. Spatial distributions are analyzed and the processes examined. Cross listed with Earth and Environmental Studies, ENVR 452.
Prerequisites: GEOS 112, or 252, or ENVR 252. Special fee.

GEOS 454 ENVIRONMENTAL GEOCHEMISTRY
3
Chemical principles and methods applied to the study of interactions among lithosphere, hydrosphere and atmosphere. Topics such as water pollution, waste disposal and human impact on global geochemical cycles will be discussed. Laboratory will stress the measurement of chemical properties related to water and soil quality as well as computer modeling of chemical transport in porous media.
Prerequisites: GEOS 112 and CHEM 121. Special fee.

Graduate course descriptions are listed with the Geoscience M.S. program. Please refer to the index for the page number.
A student with a baccalaureate degree may pursue a New Jersey teaching certificate and a fully certified teacher may obtain additional teaching field endorsements or advanced certification by attending Montclair State University.

Montclair State’s Teacher Education Program has a number of distinctive features. The Center of Pedagogy oversees teacher education functions including a network of partner schools which provides real world settings for students to complete their field experiences with a programmatic emphasis on teaching for critical thinking. The Program was awarded the Christa McAuliffe Showcase for Excellence award by the American Association of State Colleges and Universities for its collaboration with public schools and in 2002 was awarded the American Association for Colleges of Teacher Education Best Practice Award in Support of Diversity. It is a member of the National Network for Educational Renewal and the National Education Association’s National Center for Innovation. The commitment of the faculty in the Teacher Education Program is to the enculturation of students into a political and social democracy, the moral dimensions of teaching, as well as competence and knowledge both in pedagogy and the content to be taught.

General questions about certification programs at Montclair State should be directed to the Teacher Education Admissions office, (973) 655-7976. Visit the website at http://cehs.montclair.edu/academic/cop/teacher.

Requirements for certification are subject to change by the New Jersey Department of Education regulation and university policy. Students should consult with their graduate program coordinator or assigned faculty advisor on a regular basis. They should also review important notices posted on the Center of Pedagogy website at http://cehs.montclair.edu/academic/cop/teacher.

For information regarding the Ed.D. in Pedagogy, see Doctoral Programs.

**Initial Instructional Certificates**

At Montclair State University, those who hold a bachelor’s or master’s degree and who wish to gain their first teaching certificate are offered two graduate programs:

A. **Post-baccalaureate Initial Instructional Certification Program** - In this program, students who have strong academic preparation in the subject they wish to teach are required to complete approximately 30 semester hours of professional education courses and field work including student teaching. Candidates who do not have an undergraduate or graduate degree, in the area they wish to teach, will have to complete additional
undergraduate coursework in that subject, which could be in excess of 30 credits. After filing an application to the Program, candidates’ academic backgrounds are assessed by faculty; additional course work in the subject they wish to teach may be required. These courses may be taken concurrently with the course work in professional education, but must be completed prior to student teaching.

B. Master of Arts in Teaching (M.A.T.) Program - Students who wish to obtain a master’s degree and teacher certification simultaneously may consider this program, which requires additional graduate level courses and passing a comprehensive exam. By carefully planning their schedules, students in the M.A.T. program pursuing a subject certification may be able to obtain certification before the completion of the master’s degree. Course requirements and admission requirements for the M.A.T. programs, with the exception of Early Childhood (Preschool-3) and Elementary Education (K-5), are outlined in this catalog under the Department of Curriculum and Teaching. Course requirements for the M.A.T. in Early Childhood (P-3) and Elementary Education (K-5) are outlined in this catalog under the Department of Early Childhood, Elementary and Literacy Education.

Candidates for admission to the M.A.T. programs must file an Application for Graduate/Post Baccalaureate Admission to the Graduate School, including all supporting materials by February 15 to be considered for Summer/Fall admission or by September 15 for Spring admission. An undergraduate grade point average (GPA) of at least 2.70 overall, and in the teaching field is required, along with qualifying scores on the general Graduate Record Exam. A higher GPA in the teaching field may be required by some departments.

In addition, applicants to the M.A.T. and Post Baccalaureate Programs are required to take the appropriate Praxis II Subject Assessment test, prior to being admitted into the Program. Montclair State University has a specific Praxis policy published on the website and in the Teacher Education Handbook. Students are responsible for satisfying the requirements of this policy. In addition to transcripts and GRE and Praxis II scores, two recommendations from school or college faculty, or administrators, must be submitted. It is expected that students will be able to demonstrate proficiency in the use of the English language.

Candidates for the TESL program (Teacher of English as a Second Language) must also satisfy the requirements for a linguistics major which may add 36 semester hours to their programs.

Upon successful completion of the Post-baccalaureate Initial Instructional Certification Program or the M.A.T. program, students are recommended to the New Jersey Department of Education for a Certificate of Eligibility with Advanced Standing. Under the conditions of New Jersey’s Provisional Teacher Program, those who have completed certification programs must successfully complete an induction program of teaching under a provisional certificate to be eligible for a permanent, standard New Jersey instructional certificate.

In order to receive recommendation by the University for certification, students must have successfully passed the required Praxis II Subject Assessment Test, and complete the
program with a minimum GPA of 2.75. They will then receive a “Certificate of Eligibility With Advanced Standing” which authorizes the holder to seek and accept offers of employment in New Jersey schools. The certificate is valid for the lifetime of its holder. Students interested in teaching outside of New Jersey should seek information from the appropriate state authorities. **United States citizenship or intent to become a citizen is required for New Jersey certification. A temporary, non-citizen certificate is available to those who will become U.S. citizens.**

As reported under Title II of the Higher Education Act, 100% of students who completed Montclair State University’s programs for initial teacher certification in AY 2003-2004 passed the Praxis test. A summary of the Title II report can be found at the end of this section.

**Additional and Advanced Certificates**
Students already holding teaching certificates may apply to the University to take coursework leading to additional endorsements or advanced certificates. They are not eligible for the Master of Arts in Teaching (M.A.T.) program. However, other education-related master’s programs are available and are described elsewhere in this catalog.

**POST BACCALAUREATE INITIAL INSTRUCTIONAL CERTIFICATION PROGRAM**

**Program Goals and Admissions Criteria**
In selecting students for the post-baccalaureate Initial Instructional Certification Program, Montclair State University uses criteria which are related to the kinds of knowledge, abilities, dispositions and character we expect graduates of our Program to possess. The **Portrait of a Teacher** outlined below is a model toward which students in the Program strive. In making decisions on acceptance to the Program, faculty consider such criteria as GPA, knowledge of content of major area of study, commitment to teaching and its varied responsibilities and communication abilities, both written and oral. These criteria enable faculty to assess the likelihood that candidates will achieve the goals inherent in the **Portrait of a Teacher**.

**Portrait of a Teacher**
The Montclair State University community is committed to the continuing development of teachers who exemplify the character, dispositions and habits of mind reflected in this portrait. They:

1. Have expert knowledge of the disciplines they will teach and can use various strategies, including media and technology, for creating learning experiences that make the subject matter accessible and meaningful to all students.
2. Understand how children and adolescents learn and develop in a variety of school, family and community contexts, and can provide learning opportunities that support their students’ intellectual, social, and personal development.
3. Understand the practice of culturally responsive teaching. They understand that children bring varied talents, strengths, and perspectives to learning; have skills for learning about the diverse students they teach; and use knowledge of students and their lives to design and carry out instruction that builds on students’ individual and cultural strengths.
4. Plan instruction based upon knowledge of subject matter, students, families, communities, and curriculum goals and standards; and taking into account issues of class, gender, race, ethnicity, language, sexual orientation, age, and special needs in designing instruction.

5. Understand critical thinking and problem solving, and create learning experiences that promote the development of students’ critical thinking and problem solving skills and dispositions.

6. Understand principles of democracy and plan and carry out instruction that promotes democratic values and communication in the classroom.

7. Understand and use multiple forms of assessment to promote the intellectual, social, and physical development of learners and to inform instruction.

8. Create a community in the classroom that is nurturing, caring, safe, and conducive to learning.

9. Are reflective practitioners who continually inquire into the nature of teaching and learning, reflect on their own learning and professional practice, evaluate the effects of their choices and actions on others, and seek out opportunities to grow professionally.

10. Build relationships with school colleagues, families, and agencies in the community to support students’ learning and well-being, and work to foster an appreciation of diversity among students and colleagues.

11. Possess the literacy skills associated with an educated person; can speak and write English fluently and communicate clearly.

12. Develop dispositions expected of professional educators. These include belief in the potential of schools to promote social justice; passion for teaching; and commitment to ensuring equal learning opportunities for every student, critical reflection, inquiry, critical thinking, and life-long learning, the ethical and enculturating responsibilities of educators, and serving as agents of change and stewards of best practice.

**Criteria for Retention in Program**

Students who are accepted to the Program are evaluated periodically. Please review the Teacher Education Program Handbook to determine criteria used to determine eligibility for student teaching and the University’s recommendation for certification. Copies are available on the Center of Pedagogy website. By New Jersey Department of Education regulation and University policy, teacher education students in most majors must pass the PRAXIS II: Subject Assessment Test. Consult the Center of Pedagogy website [http://cehs.montclair.edu/academic/cop/teacher](http://cehs.montclair.edu/academic/cop/teacher) to determine which test you must take.

**Admission Procedures**

Admission to the post-baccalaureate Initial Instructional Certification Program at Montclair State University is a two-step process. Candidates must file an Application for Graduate/Post-Baccalaureate Admission including all supporting materials, by **February 15** to be considered for Summer/Fall admission or by **September 15** for Spring admission. Applications are available in the Graduate School, Room 203, College Hall and on the Graduate School website. Applicants are required to take the appropriate Praxis II Subject Assessment test, prior to being admitted into the Program. Montclair State University has a specific Praxis policy published on the website and in the Teacher Education Program Handbook. Students are responsible for satisfying the requirements
of this policy. In addition to transcripts and Praxis II scores, two recommendations from school or college faculty, or administrators, must be submitted. After the deadline, a preliminary review of the student’s credentials is conducted to ascertain that the undergraduate cumulative grade point average, and the average in the teaching field, are at least 2.50. (In some departments the required average in the teaching field may be higher.) Candidates for Early Childhood (P-3) and Elementary Education (K-5) should note that their credentials must include evidence of substantial and meaningful experience with groups of children over time or equivalent. Students are then notified by mail about the second step in the admissions process, which may include interviews (by graduate program coordinators and/or admission committee), writing samples, and portfolio review/audition.

All students should note that admission to the University to take courses does not guarantee admission to the Program, and that any courses taken prior to admission to the Program are taken at the student’s own risk. Students admitted to the Program can access their certification/degree requirements through the Web Enrollment Services for Students (WESS) system.

Initial Instructional Certificates Course Requirements
[for all programs except Early Childhood (P-3) or Elementary Education (K-5)]

A. Prerequisites:
   It is expected that students in the Program will be able to demonstrate proficiency in the use of the English language. In addition, their academic backgrounds should include at least 60 semester hours of general education, distributed among the arts, humanities, mathematics, science, technology and the social sciences. Those students who have not had a course in human biology or health must successfully complete an examination in physiology and hygiene.

B. Social Behavioral Science Component
   PSYC 101 General Psychology I: Growth and Development ......................... 3
   PSYC 200 Educational Psychology
   OR
   PSYC 560 Advanced Educational Psychology ........................................3
   Human and Intercultural Relations Elective ............................................3

C. Professional Education Component
   CURR 599 Curricular and Social Dynamics of Schooling ........................... 3
   EDFD 520 Development of Educational Thought .................................... 3
   A course in teaching reading ....................................................................3
   CURR _ _ _ Educational Elective .................................................................3
   A course in teaching for critical thinking ................................................3
   Major Departmental Methods Course(s) .................................................. 2 - 4 min.
   CURR 500 Fieldwork in Education ......................................................... 2
   The Fieldwork Application must be filed with the Center of Pedagogy by October 1 for the spring semester and March 1 for the fall semester.

D. Teaching Field Requirements
   Course requirements in teaching field (major) to be determined by departmental advisor.
E. **Professional Semester**

Note: To be eligible for the professional (student teaching) semester, students must pass pre-student teaching retention review by the Teacher Education Program. This includes successful completion of all teaching field and professional education courses with a 2.75 GPA (minimum) overall, in teaching field, and in professional education courses. (Some departments require a higher GPA in the teaching field. Consult graduate program coordinator.) Beginning fall 2006, students must also pass the required Praxis II test to be eligible for student teaching. See *Teacher Education Program Handbook* for additional retention criteria. In addition, the Fieldwork Application must have been filed with the Center of Pedagogy. There is a separate application and specific requirements for “In-Service Student Teaching.” In-Service candidates must submit an In-Service Fieldwork Application to the Center of Pedagogy following the fieldwork application deadlines shown in C. above.

CURR 511 Supervised Student Teaching

OR

CURR 514 In-Service Supervised Graduate Student Teaching .......... 4-8
CURR 502 Seminar in Professional Education ........................................ 1
CURR 528 Teaching for Learning ............................................................ 3

Departmental (major) Seminar (if required) ........................................... 1

(*Applicants interested in the course requirements for the MAT should consult Curriculum and Teaching.*)

**Initial Instructional Certificates Course Requirements**

for Early Childhood (P-3) or Elementary Education (K-5)

(*Students must select one of these programs.*)

*Complete outlines of the requirements for Early Childhood (P-3) and Elementary Education (K-5) are listed under the Early Childhood, Elementary, and Literacy Education Department.*

A. **Prerequisites:**

It is expected that students in the Program will be able to demonstrate proficiency in the use of the English language. In addition, their academic backgrounds should include a course in general psychology, two semesters of Child Development, and at least 60 semester hours of general education distributed among the arts, humanities, mathematics, science, technology and the social sciences. Those students who have not had a course in human biology or health must successfully complete an examination in physiology and hygiene.

B. **Core Courses (9 semester hours):**

ECEL 501 Models of Early Childhood and Elementary Education .......... 3
ECEL 518 Families, Communities and Schools: Diversity, Culture, and Democracy ................................................................. 3
READ 500 The Nature of Reading .............................................................. 3
C. Content/Methods (Select one course):
  MATH 577 Mathematics Education in the Elementary Schools ...................... 3
  ECEL 516 Social Studies and the Arts: Understanding Democracy in
       Elementary Classrooms .................................................................. 3
  ECEL 517 Integrating Science and Technology in Early Childhood and
       Elementary Classrooms ................................................................ 3

D. Professional Sequence (12-13 semester hours)
  ECEL 528 Early Childhood Development and Learning
       (required for P-3 only) ................................................................... 3
  OR
  ECEL 522 Curriculum Development and Assessment in Diverse
       Elementary Classrooms (required for K-5 only) ........................... 3
  AND
  ECEL 510 Clinical Experience I in Inclusive Early Childhood and
       Elementary Settings ................................................................. 2
  ECEL 502 Seminar I: Inclusive Early Childhood and
       Elementary Classrooms ........................................................... 1
  ECEL 511 Clinical Experience II in Inclusive Early Childhood and
       Elementary Settings ............................................................... 5
  ECEL 504 Seminar II: Inclusive Early Childhood and
       Elementary Classrooms ........................................................... 1
  OR
  CURR 514 In-Service Supervised Graduate Teaching ......................... 4-8
       (CURR 514 replaces ECEL 510/511 for those in full-time teaching positions.)
Note: To be eligible for Clinical Experience II in Inclusive Early Childhood and
       Elementary Settings (student teaching), students must pass pre-student teaching
       retention review by the Teacher Education Program. This includes successful
       completion of all teaching field and professional education courses with a 2.75
       GPA (minimum) overall, in teaching field, and in professional education courses.
       Beginning fall 2006, students must also pass the required Praxis II test to be eligible
       for student teaching. See Teacher Education Program Handbook for additional
       retention criteria. In addition, the Fieldwork Application must have been filed with
       the Center of Pedagogy. There is a separate application and specific requirements
       for “In-Service Student Teaching.” In-Service candidates must submit an In-
       Service Fieldwork Application to the Center of Pedagogy following the fieldwork
       application deadlines shown in C. above.

(Applicants interested in the course requirements for the MAT should consult
       Early Childhood, Elementary, and Literary Education Department.)
Course work is available in the following certification areas:

**INSTRUCTIONAL CERTIFICATES:**
- Art
- Biological Science
- Elementary School Teacher in Grades K-5
- Earth Science
- English
- French
- Health Education
- Italian
- Latin
- Mathematics
- Music
- Physical Education
- Physical Science
- Psychology
- Social Studies
- Spanish
- Teacher of English as a Second Language
- Teacher of Preschool Through Grade 3
- Teacher of Reading (only available as an additional certification with an M.A. in Reading)
- Teacher of Students with Disabilities (only available as M.A.T., dual certification with Teacher of Preschool Through Grade 3 or Elementary School Teacher in Grades K-5)

**ADMINISTRATIVE CERTIFICATES:**
- Principal
- School Business Administrator
- Supervisor

**EDUCATIONAL SERVICES CERTIFICATES:**
- Associate School Library Media Specialist
- Learning Disabilities Teacher-Consultant
- Reading Specialist
- School Counselor
- School Library Media Specialist
- School Psychologist
- Speech-Language Specialist*
- Substance Awareness Coordinator

*Available only to students in MA program leading to Speech Language Specialist certification
Title II Report Summary 2003-2004

As reported to the NJ Department of Education under Title II of the Higher Education Act as the “summary pass rate”, 100% of students who completed Montclair State University’s programs for initial teacher certification in AY 2003-2004 passed the PRAXIS test required for licensure by the state of New Jersey. For comparison, the statewide summary pass rate is 99%. An aggregate pass rate of 100% was calculated for the academic content areas (math, English, biology, etc.).

The percentages of students who passed the individual (“single”) PRAXIS assessments are as follows (the statewide pass rate for each is in parentheses):

<table>
<thead>
<tr>
<th>Area</th>
<th>Pass Rate</th>
<th>Statewide Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>100%</td>
<td>(100%)</td>
</tr>
<tr>
<td>Elementary Education: Content Knowledge</td>
<td>100%</td>
<td>(100%)</td>
</tr>
<tr>
<td>English Language, Literature &amp; Composition</td>
<td>100%</td>
<td>(98%)</td>
</tr>
<tr>
<td>General Science I</td>
<td>100%</td>
<td>(100%)</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>100%</td>
<td>(99%)</td>
</tr>
<tr>
<td>Mathematics</td>
<td>100%</td>
<td>(98%)</td>
</tr>
<tr>
<td>Physical Education</td>
<td>100%</td>
<td>(100%)</td>
</tr>
<tr>
<td>Social Studies</td>
<td>100%</td>
<td>(91%)</td>
</tr>
</tbody>
</table>

As required under Title II, pass rates were reported only for assessments with more than 10 test-takers. Students completing programs who took assessments with less than ten test-takers passed at the following rates (the statewide pass rate, if available, is in parentheses):

<table>
<thead>
<tr>
<th>Area</th>
<th>Pass Rate</th>
<th>Statewide Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>86%</td>
<td>(89%)</td>
</tr>
<tr>
<td>Business Education</td>
<td>100%</td>
<td>(96%)</td>
</tr>
<tr>
<td>Chemistry</td>
<td>100%</td>
<td>(100%)</td>
</tr>
<tr>
<td>Family and Consumer Sciences</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>100%</td>
<td>(100%)</td>
</tr>
<tr>
<td>General Science II</td>
<td>100%</td>
<td>(98%)</td>
</tr>
<tr>
<td>Music</td>
<td>100%</td>
<td>(99%)</td>
</tr>
<tr>
<td>Physics</td>
<td>100%</td>
<td>(90%)</td>
</tr>
<tr>
<td>Technology Education</td>
<td>100%</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

The following information about the teacher preparation program at Montclair State University in AY 2003-2004 was also reported under Title II:

Total number of students enrolled in teacher preparation programs: ...................... 1448
Average number of students enrolled in student teaching experiences: .................... 207
Average number of full-time faculty appointed in professional education who supervised student teachers: .......................................................... 17
Average number of faculty appointed part-time in professional education and full-time in the institution who supervised student teachers: ............................... 26.5
Average number of faculty appointed part-time in professional education, not otherwise employed by the institution, who supervised student teachers: .............. 60.5
Total average number of supervising faculty ..................................................... 104
Student/faculty ratio: .................................................................................. 2/1

The average number of hours per week in student teaching was 35 hours. The total number of weeks required is 15, for a total of 525 hours of student teaching. The program is approved by the NJ Department of Education.

The full Title II report may be obtained from the Center of Pedagogy.

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APPENDIX OF ALPHA COURSE CODES

This appendix identifies each school and department/special program at Montclair State University, the academic subject areas and the alpha codes used as a prefix to each course number. This enables the student to locate the course, its description and prerequisites.

College of Education and Human Services

Center of Pedagogy
Pedagogy EDCO

Counseling, Human Development and Educational Leadership
Counseling, Human Services and Guidance COUN
Educational Administration ELAD

Curriculum and Teaching
Curriculum and Teaching CURR
Educational Media MEDI
Special Education SPED

Early Childhood, Elementary, and Literacy Education
Early Childhood and Elementary Education ECEL
Early Childhood Special Education ECSE
Reading READ

Educational Foundations
Educational Foundations EDFD
Educational Research ELRS

Exercise Science and Physical Education
Physical Education/Major PEMJ

Family and Child Studies
Family and Child Studies FCST

Health and Nutrition Sciences
Health Professions HLTH
Nutrition NUFD

College of Humanities and Social Sciences

Anthropology
Anthropology ANTH

Classics and General Humanities
Classics/Latin LATN
General Humanities GNHU

Communication Sciences and Disorders
Communication Sciences and Disorders CSND

English
English ENGL
English/Literature ENLT
English/Writing ENWR

French, German, and Russian
French FREN
History
  History HIST

Legal Studies
  Legal Studies/Law LSLW
  Legal Studies/Paralegal LSPPR

Linguistics
  Applied Linguistics APLN

Psychology
  Psychology PSYC

Sociology
  Sociology SOCI

Spanish/Italian
  Spanish SPAN

College of Science and Mathematics

Biology and Molecular Biology
  Biology BIOL

Chemistry and Biochemistry
  Chemistry CHEM

Computer Science
  Computer Science CMPT

Earth and Environmental Studies
  Environmental Studies ENVR
  Geoscience GEOS
  Marine Sciences PHMS
  Urban & Geographic Studies EUGS

Environmental Education—New Jersey School of Conservation
  Conservation/Field Studies CNFS

Mathematical Sciences
  Mathematics MATH
  Statistics STAT

School of the Arts

Art and Design
  Art/Ceramics ARCE
  Art/Criticism ARCR
  Art/Drawing ARDW
  Art/Education ARED
  Art/Fibers ARFI
  Art/Film Making ARFM
  Art/Graphic Design ARGD
  Art/General Studies ARGD
  Art/History ARHS
  Art/Metalwork and Jewelry ARMJ
  Art/Museum Studies ARHM
  Art/Painting ARPA
  Art/Papermaking ARPG
Art/Photography ARPH
Art/Printmaking ARPM
Art/Sculpture ARSC
Art/Studio ARST
Art/Therapy ARTH

Broadcasting Broadcasting BDCS

Communication Studies
Speech Communication SPCM

Music
Music/Applied MUAP
Music/Education MUED
Music/History MUHS
Music/Performance MUPR
Music/Technology MUTC
Music/Theory/Composition MUCP
Music/Therapy MUTH

Theatre and Dance
Theatre THTR

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Economics and Finance
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Finance FINC

International Business
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Special Programs
Institute for the Advancement of Philosophy for Children Philosophy for Children PHLC
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Directions to campus
Montclair State University is on Valley Road and Normal Avenue, Montclair, N.J. one mile south of the junction of Routes 3 and 46.

By Car From:

**Bloomfield Avenue, Montclair:** North on Valley Road, 3.3 miles to Normal Avenue light, turn left.

**Route 46 (East and West):** Valley Road, Montclair exit (at Route 3 junction), south for approximately one mile to Normal Avenue light, turn right.

**Route 3:** Valley Road, Montclair exit (at Route 46 junction), south for approximately one mile to Normal Avenue light, turn right.

**Garden State Parkway North:** Exit 153B (left lane) to Route 3 West to Valley Road, Montclair exit, south one mile to Normal Avenue light, turn right.

**Garden State Parkway South:** Exit 154 to Route 46 West, to Valley Road, Montclair exit, south one mile to Normal Avenue light, turn right.

**New Jersey Turnpike:** Exit 16W to Route 3 West, Valley Road, Montclair exit, south one mile to Normal Avenue light, turn right. Motorists traveling on the Turnpike south of Exit 11 may exit there to Garden State Parkway North.

**Lincoln Tunnel:** Follow to Route 3 West.

**George Washington Bridge:** Route 80 West to Garden State Parkway South.

By Public Transportation* From:

**New York City (by train):** Take PATH Service to Hoboken, transfer to NJ Transit Boonton Line, and get off at Montclair Heights Station at southwest corner of campus. *(Service available only on weekdays in the afternoon and evening.)*

**New York City (by bus):** DeCamp Bus No. 66 leaves from the Port Authority Bus Terminal; get off at Mt. Hebron and Valley Roads, turn right (north) on Valley Road, and walk one block to the Normal Avenue traffic light, then turn left to campus entrance.

**Newark:** NJ Transit Bus No. 28 originates at Macy’s, Washington and Hill Streets, and terminates its run on campus.

**Paterson:** NJ Transit Bus No. 72 originates at Broadway Terminal, Paterson, and goes to Broadway Street, Bloomfield. Change to No. 28 at Bloomfield Center.

**The Oranges:** Take One Bus Co. No. 44 to Main and Day Streets in Orange. Connect to NJ Transit Bus No. 92 to Glenwood and Bloomfield Avenues. Change to NJ Transit Bus No. 28.

**Passaic:** NJ Transit Bus No. 705 originates at Main Street and Passaic Avenue in Passaic and travels through Clifton to Montclair State University.

**Wayne:** NJ Transit Bus No. 704 originates at Willowbrook Mall and travels to Montclair State University.

* Schedules subject to change without notice.