GRADUATE

CATALOG

2004-2005
The Very Reverend Bernard F. O’Connor, OSFS
President

“For every age there are discoveries to be made.”
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THE UNIVERSITY

The University emphasizes academic excellence, individual attention, community experience, mutual concern, and preparation for careers.
DeSales University (the University), is a Catholic, liberal arts institution established by the Oblates of St. Francis de Sales to share the benefits of higher learning with qualified students. The University seeks to enable its students to contribute to and to enjoy the achievements of civilization. As a Catholic institution, the University relates all that is truly human to the good news of salvation.

**Mission Statement**

The mission of DeSales University is to provide men and women with quality higher education according to the philosophy of Christian humanism as developed by Saint Francis de Sales and his spiritual heirs. The University imparts knowledge about, and develops talents for personal, familial, and societal living. DeSales University enriches the human community and enhances the dignity of the individual through its educational endeavors. In its work, the University fosters a vital and respectful dialogue between Roman Catholic faith and human culture.

**Philosophy**

For DeSales University, Christian humanism means that every aspect of human experience is capable of enlightenment by the Gospel of Jesus Christ. This Gospel brings light to each dimension of personal existence (physical, intellectual, social, moral, aesthetic, and religious) and every environmental domain (natural world, social institutions, cultural achievements, historical periods, and religious societies). The encounter between the Word of God and the concrete world of the human person makes a fully meaningful existence possible. DeSales University strives to teach the student what it means to be Christian in a Salesian way, what it means to embrace one’s own life, and what it means to bring this Good News to the human family.

DeSales University is firmly and publicly committed to the principles of Roman Catholic doctrine and morality. It also fully recognizes that the search for truth requires an atmosphere of intellectual freedom and that love demands an openness to all that is good. DeSales University distinguishes carefully between the free pursuit of truth, which it guarantees every member of the campus community, and its own commitment to the teaching of the Catholic Church.

**History**

On January 28, 1961, His Holiness, Pope John XXIII, appointed His Excellency, the Most Reverend Joseph McShea, Bishop of the Allentown Diocese, which is composed of Berks, Carbon, Lehigh, Northampton, and Schuylkill Counties in northeast Pennsylvania. Although the diocese already possessed well-organized elementary and high school educational facilities, a study commissioned by Bishop McShea indicated that the system needed to be enlarged. Bishop McShea announced a drive to obtain funds for the expansion of the high school system, and he called attention to the fact that the diocese had no Catholic higher education for men. At his request, the Oblates of St. Francis de Sales agreed to assume responsibility for establishing a liberal arts college to serve this need.

Planning for the new college began in April 1962, and the Commonwealth of Pennsylvania granted the charter for the College, with full power to award the Bachelor of Arts and Bachelor of Science degrees, on May 27, 1964. Classes began for freshmen in September 1965. The College was fully accredited by the Middle States Association of Colleges and Schools during the 1969-70 academic year. In September 1970, the College became a coeducational institution.

Recognizing the need to expand and extend the original goals to reflect educational and organizational advancements, the College applied for university status in the Summer of 1999. After a thorough review, the Commonwealth of Pennsylvania Department of Education granted University status in the spring of 2000. The College became DeSales University (DSU) on January 1, 2001.
Undergraduate Programs

Undergraduate studies may be pursued in more than thirty programs. Depending on the major, the Bachelor of Arts, the Bachelor of Science, or the Bachelor of Science in Nursing degrees may be obtained. Information about the programs can be found in the Undergraduate Catalog available from the Undergraduate Admissions Office.

ACCESS

The Continuing Education and Lifelong Learning Division of the University (ACCESS) offers the opportunity to earn a baccalaureate degree within four years for students who are employed full time. Information is available through the ACCESS Office.

Graduate Division

As an extension of its mission, the University has been offering opportunities to pursue advanced study in several areas, many of them multi-disciplinary in nature. The programs enable the students to acquire depth in selected disciplines, reach advanced competency, and explore connectivity between specialized studies and human endeavors.

The first graduate program, the Master of Science Program in Nursing was introduced in the Fall of 1984. It was followed by the Master of Science in Information Systems in the Fall of 1988. In the Summer of 1989, five Master of Education degrees were introduced in the areas of Chemistry, Computers in Education, Computer Science, English, and Mathematics. The offering of the Master of Science Program in Physician Assistant Studies Program began in the Fall of 1997.

The Graduate Division, as a University entity, was established in 1991 and it consists of faculty and administration that teach and direct the scholarly activities of the post-baccalaureate students.

Graduate Education Objectives

The University specifies that its graduate programs strive to enable its students

. to develop specialized competence in a field of study, so that graduates might provide leadership and make significant contributions to their fields,

. to develop the skills necessary for advanced research/application in their specialized fields, and

. to enhance the formation of a Christian conscience as it applies to the ethical problems of their fields of interest.

Graduate Council

The Graduate Council is composed of the Directors of the graduate programs, the University Librarian, appointed and elected faculty members, and two participating students. The duties of the Council include the review and evaluation of academic policies as they pertain to graduate education, the coordination of the graduate curricula, the exploration and development of graduate education opportunities, and the review and evaluation of pertinent academic regulations.

The Council is chaired by the Dean of Graduate Education.

Main Campus

All graduate and undergraduate programs are available at the Main Campus located in Center Valley, PA. Administrative and faculty offices are also housed here.

Easton Area Campus

Courses leading towards the MBA and MSIS degrees are offered at the Easton Area Campus. Information about the courses and the facility is available through the appropriate graduate program.

The ACCESS Program offers the opportunity to earn undergraduate business and computer science degrees. Information about these degrees is available through the ACCESS Office.

Lansdale Campus

Courses leading towards the MBA and MSIS degrees are offered at the Lansdale Campus. Information is available through the appropriate graduate program.
MBA - Delaware Valley College

Under an agreement between the two institutions the MBA Program is offered on the campus of Delaware Valley College in Doylestown, PA. Information about these offerings is available through the MBA Office.

MBA - Lehigh Valley Hospital

Under an agreement between the two institutions the MBA for Physicians and the MBA/MSN Programs are offered at the Lehigh Valley Hospital, Cedar Crest Boulevard site. Information about these offerings is available through the MBA or MSN Office.

Counseling Psychology and Human Services Programs

Under a cooperative agreement Chestnut Hill College offers the Master of Science and Master of Arts in Counseling Psychology and Human Services at the Main Campus. A section of this catalog provides detailed information about these programs.

Accreditations and Approvals

DeSales University is fully accredited by the Middle States Association of Colleges and Schools, and approved by the Commonwealth of Pennsylvania, Department of Education. Documentation describing this accreditation and approval is available for review in the office of Academic Affairs upon request.

All graduate programs are explicitly approved for Veterans Education under the provisions of Title 38, United States Code, Section 2675.

The Master of Science in Nursing program is accredited by the National League for Nursing.

The Master of Science in Physician Assistant Studies is accredited by the Commission on Accreditation of Allied Health Education Programs.

The Master of Science in Business Administration (MBA) program is accredited by The Association of Collegiate Business Schools and Programs.

Campus Security

Campus security is the responsibility of the Office of University Police. Information and crime statistics are available for review by calling 610.282.1100 x 1514 or 1250.

Nondiscrimination

The University will make available to all students, faculty members, and employees, on a nondiscriminatory basis, without regard to age, sex, race, color, handicap, or national and ethnic origin, all the rights, privileges, programs, and activities generally accorded or made available to students, faculty members, and employees. The University does not discriminate on the basis of age, sex, race, color, handicap, or national and ethnic origin in the administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other school-administered programs.

The University is committed to conduct its activities and employment policies as required by Title IX of the 1972 Education Amendments and other applicable statutes. Inquiries regarding compliance with Title IX may be directed to the Affirmative Action Coordinator, DeSales University, 2755 Station Avenue, Center Valley, PA, 18034-9568, phone 610.282.1100, or to the Director of the Office of Civil Rights, Department of Health and Human Services, Washington, D.C.
ACADEMIC REGULATIONS

Academic regulations of the University safeguard the fairness and integrity of the graduate programs.
Course Numbering

Graduate level courses are numbered 500 and above.

Leave of Absence

Students who wish to interrupt their education may petition the appropriate director. The petition should contain the reasons for requesting a leave of absence, and an estimate of its duration that cannot be longer than two calendar years. For additional clarification consult the appropriate graduate program section of this Catalog.

Time Limit

The maximum time for completion of a master's degree is seven years from the date of enrollment in the first course (including any leaves of absence).

A student who does not take a course within a twelve month period will be considered withdrawn from the program. The student must then re-apply for admission and pay the appropriate fee.

Grade Point Average (GPA)

The GPA is the sum of all course quality points divided by the number of credit hours they require. Courses, which have grades other than A - F, are excluded from the GPA.

Grading System

The following system of grades is used:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>Indicates mastery of the course content accompanied by evidence of exceptional achievement in critical, independent, and creative thought competently expressed.</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>Indicates a good grasp of the course content accompanied by evidence of marked achievement in critical, independent, and creative thought competently expressed.</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>Indicates an adequate grasp of the course content accompanied by evidence of minimum achievement in critical, independent, and creative thought competently expressed.</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>Indicates an insufficient grasp of the course content accompanied by evidence of an unacceptable low level of achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>Indicates an insufficient grasp of the course content accompanied by evidence of minimum achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>Indicates a limited grasp of the course content and evidence of marked achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>Indicates an incomplete grasp of the course content accompanied by evidence of minimum achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
<td>Indicates an insufficient grasp of the course content and evidence of an unacceptable low level of achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
<td>Indicates a limited grasp of the course content and evidence of minimal achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>Indicates an insufficient grasp of the course content accompanied by evidence of an unacceptable low level of achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>Indicates an insufficient grasp of the course content accompanied by evidence of an unacceptable low level of achievement in critical, independent, and creative thought.</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td>Satisfactory. Used only in courses that require projects, research guidance, or the thesis option to indicate satisfactory completion of work for degree requirements. Credit is awarded, but the grade is not computed in the student’s GPA.</td>
</tr>
<tr>
<td>AU</td>
<td></td>
<td>Indicates satisfactory completion of an audited course.</td>
</tr>
<tr>
<td>US</td>
<td></td>
<td>Unsatisfactory. Indicates that no credit is awarded for projects, research guidance, or the thesis option. The grade is not computed in the student's GPA.</td>
</tr>
<tr>
<td>PO</td>
<td></td>
<td>Pass on a Pass-Fail option. Used only in courses that do not satisfy degree requirements. Credit is awarded, but the grade is not computed in the student's GPA.</td>
</tr>
<tr>
<td>FO</td>
<td></td>
<td>Failure on a Pass-Fail option. No credit is awarded and the grade is not computed into the student's GPA.</td>
</tr>
</tbody>
</table>
| I     |                | Incomplete. This grade is given only when the student, through no fault of his/her own, is unable to complete course requirements within the regular time. The limit for the make-up of an incomplete grade is six months after the last
class day of the course. The student is responsible to arrange with the instructor the completion of course requirements.

W  Official withdrawal, allowed no later than the date indicated on the calendar of the appropriate graduate program. The grade will become part of the student's permanent record but will not be used in the computation of the GPA.

WP  Official withdrawal with a passing grade at time of withdrawal, allowed no later than the date indicated on the calendar of the appropriate graduate program. The grade will become part of the student's permanent record but will not be used in the computation of the GPA.

WF  Official withdrawal with a failing grade at time of withdrawal, allowed no later than the date indicated on the calendar of the appropriate graduate program. The grade will become part of the student's permanent record but will not be used in the computation of the GPA.

Retention, Probation, and Dismissal

A GPA of 3.0 or above is required for graduation. A degree candidate must maintain a GPA of 3.0 for acceptable academic standing in his or her graduate program. A student whose GPA falls below 3.0 will be placed on probation for one year and must meet with his or her advisor to develop a plan of study. Failure to raise the GPA to at least 3.0 at the end of the probation period may result in dismissal.

A student has the right to appeal an academic dismissal in writing to his or her Admissions and Academic Policies Committee. The words “Academic Dismissal” appear on the official transcript of a student who is dismissed for academic reasons.

Academic Schedule

Academic schedule is organized to meet specific program objectives and are described in the appropriate program section.

- Semester refers to instruction within a fifteen (15) week period. The calendar year is divided into fall, spring, and summer.
- Session refers to instruction within a twelve (12) week period. The calendar year is divided into fall, winter, and spring sessions.
- Summer Session refers to instruction offered between the spring and fall sessions.

Course Drop and Add

A student may drop or add a course by the date noted on the academic calendar of his or her graduate program. The dropped course is not listed on the student's permanent record. Dropping or adding a course requires the approval of the student's advisor.

Course Withdrawal

A student who withdraws during the first half of the course will be given a grade of "W", or "WP", or "WF". The grade depends upon the completion of course requirements to the date of withdrawal. Such withdrawal requires the approval of the student's advisor and the appropriate program director.

Withdrawal after the second half of the course has begun results in a failing grade ("F"), except in cases exempted by the appropriate Admissions and Academic Policies Committee as the result of the student's appeal.

Course Repetition

With the permission of the program director a student may repeat a course. Both the original and the repeated course will be recorded on the transcript but only the higher grade will be used in the calculation of GPA.

Auditing

Permission to audit selected courses may be
granted to qualified applicants. Such applicants must fill out the graduate application form, pay the non-refundable application fee, and pay the full tuition. The auditing student does not take examinations, receive grades, or earn credits. An audited course may not be used for credit. The approval of the appropriate program director is needed for a student to audit any course. The instructor may request, through the appropriate program director, that an auditor be officially withdrawn whenever it is clear that he or she is not profiting from the course, or that the auditor's presence in the class interferes with the learning process of the other students. A student may not change from audit to credit once the course has begun.

Credit by Examination (CBE)
Depending on the program, graduate credits may be earned without attending formal instruction by verifying previously acquired knowledge through an examination process. The following conditions must be satisfied:

- The student who desires to receive credit by examination must have been admitted to one of the graduate programs and be in acceptable academic standing.
- The subject of the examination must be compatible with and regularly covered by one of the courses offered in the student's graduate program.
- The student must register for the course and pay the applicable graduate tuition.
- Mastery of the subject must be demonstrated by a final examination as well as other evidence normally required from students who earn their credit by attending formal classroom instruction.
- Ordinarily the time and place of the examination coincide with the final examination of the regularly offered class and is administered by the course instructor.
- No course in which the student has been previously registered for graduate credit may be completed under the CBE.
- A student attempting CBE will not be entitled to formal instruction in the subject matter of the course.

- Ordinarily, a student may attempt one CBE in a given session or semester.
- No more than 12 credits may be obtained through CBE.
- The student may accept or decline the grade earned through CBE. In case of acceptance the grade will be included in the student's GPA. If the student does not accept the grade, it will not be recorded, no tuition will be refunded, and all further examination opportunities in the subject matter will be forfeited.

Interested candidates should consult their program director about the courses open for CBE.

Withdrawal from the Graduate Program
In order to withdraw from the graduate program, the student must

- resolve all financial indebtedness to the University, and
- complete a program withdrawal form available from the program director. The date of the filing of the official withdrawal form is considered to be the date of withdrawal in all cases.

Graduation
Candidates have the option to graduate either in May or January. It is the student's responsibility to apply by October 15 for the January graduation and by March 1 for the May graduation.

Transcripts
A fee of $5.00 will be charged for each transcript of credits. Transcripts of credits will not be issued unless all financial obligations have been satisfied.

Undergraduate Student Participation
Undergraduate students who maintain a GPA of at least 3.0 and attained senior status may complete a total of six graduate credits with the permission of the appropriate department chair and the appropriate graduate program director.
graduate credits earned may be used to satisfy the requirements of both the undergraduate and the graduate degrees.

**English Competency**

Applicants whose native language is not English may be required to take and to obtain acceptable scores on the Test of English as a Foreign Language (TOEFL) and the Test of Spoken English (TSE).

**International Students**

An international student (F1 visa) may pursue graduate studies upon satisfying the following requirements:

- The student must maintain legal immigration status and must have sufficient resources to cover all educational and personal expenses while staying in the United States. No scholarship or financial aid is available.
- The student must meet the conditions described in the English Competency Section.
- The student must be admitted to one of the graduate programs.
- The student must maintain full time status as described by his/her program.

**Conduct and Integrity**

The University expects that its graduate students will conduct themselves in accordance with the highest level of administrative, legal, professional, and ethical standards. Behavior, which violates the letter or spirit of such standards, may result in disciplinary action, ranging from a warning to dismissal. All cases involving such violations will be acted upon by the Graduate Council, whose decision is final.

**Plagiarism**

Plagiarism is the act of copying the ideas, and/or speculations, and/or language of any other person or persons, and presenting this material as one’s own original work in order to satisfy any academic requirement or complete any academic project. Plagiarism takes place when a person makes any use of another person’s unique and distinctive terminology, whether it is a single work or phrase or extended passage, without acknowledgement. This need not be verbatim use; it is considered plagiarism when a person uses his or her own language to alter the original expression of the ideas or speculations of another person or persons.

Plagiarism also takes place when a person disguises the language of another person or persons by altering the formal elements of the original (e.g., diction, syntax, grammar, punctuation) and submitting it as his or her own, to satisfy any academic requirement or complete an academic project.

Plagiarism will be considered to have occurred regardless of the person’s intent to deceive.

The following acts will be deemed acts of plagiarism, though the list is not exhaustive:

- Presenting published or unpublished work prepared by others, or dictated by others, as your own, including papers purchased or borrowed from any person or organization.
- Presenting, as your own, lab report or exercise copied from or dictated by others.
- Presenting, as your own, homework assignments of any kind copied from or dictated by others.
- Presenting, as your own, oral reports copied from or dictated by others.
- Incorporating formal lecture notes and presenting them as your own work.
- Presenting, as your own, a computer solution developed by someone else.
- Copying the ideas, and/or speculations, and/or language of any other person or persons, without acknowledgement, and presenting this as your own original work.

**Cheating**

Cheating violates the deepest convictions of the University community.

The following acts are examples of cheating, though the list is not exhaustive:
• Using prepared materials not specifically allowed by the instructor during the taking of an examination, test, or quiz; e.g.
  a. Use of material written by another student during the taking of an examination, test, or quiz,
  b. Use of crib note, no matter by whom prepared,
  c. Use of texts and/or supplementary marginal notations in texts,
  d. Use of notes written on the surface of the desk at which examination is being taken,
  e. Use of unauthorized calculators or any other unauthorized aids.

• Collaborating during an in-class examination, test, or quiz, either in the giving or receiving of information or improper collaboration on a take-home examination or laboratory report.

• Stealing, using, or transmitting verbally or otherwise actual examinations, tests, quizzes or portions thereof, or other likewise confidential information before or during the time of the examination. Once an examination has been given, however, it becomes part of the public domain.

• Submitting for a grade in one class any material previously or simultaneously submitted for a grade in another class without documented authorization for both instructors.

• Taking an examination by proxy.

• Falsifying laboratory or research data or results, or falsifying or inventing bibliographical entries for research papers.

• Withholding knowledge of cheating or plagiarism from the instructor to whom the work is submitted.

• Willfully aiding or abetting any act of cheating.

• Willfully aiding and abetting any act of plagiarism.

Other Inappropriate Behaviors
A number of improper behaviors cannot properly be termed either plagiarism or cheating, yet they are also unacceptable. The following are considered acts of inappropriate behavior, though this is not an exhaustive list. Any student who engages in any one of the following acts will be subject to the same sanctions that apply in cases of cheating or plagiarism.

• Unauthorized removing of library resources.

• Hiding Trexler Library resource materials of any kind within the Library.

• Defacement or mutilation of Trexler Library resources, such as:
  a. underlining, highlighting, or removing paragraphs or pages,
  b. reprogramming library software.

• Copying right-protected print or non-print materials beyond accepted norms.

• Borrowing another’s library ID or signing another’s name and/or number.

• Falsifying the reason for an absence from class.

• Possessing or using an unauthorized copy of an examination, test, or quiz.

• Any behavior contrary to the standards established in the University’s Computer Use Policy.

Procedures Dealing with Inappropriate Behavior
The faculty member or, when appropriate, college professional staff member, who discovers or is made aware of a case of plagiarism, cheating, or improper behavior will, on his/her own initiative and in a manner he or she deems
appropriate, normally resolves the situation with the student in a private, one-on-one setting. The faculty/staff member may alternatively choose to resolve matters in consultation with the Dean of Graduate Education.

When a faculty/staff member and student meet to resolve case of plagiarism, cheating or improper behavior, the faculty/staff member, having previously determined that the case before him/her is beyond question a proven and unmistakable offense, will present his/her position, hear the student’s position, and in the end, may determine that ignorance on the part of the student warrants only a warning to the student. If, however, s/he determines a degree of guilt on the part of the student, s/he is empowered to levy any one of the following sanctions:

a. grade penalty for the individual assignment,
b. grade penalty for the course,
c. failure in the course.

In the case of library or computing violations, the following sanctions may be levied:

a. temporary suspensions of library and/or computing privileges,
b. permanent loss of library and/or computing privileges.

The faculty member will compose a letter stating the nature of the offense as well as the sanction imposed. The faculty/staff member will send the letter to the student and will send a copy to the Dean of Graduate Education to be placed in the student’s file. Should there be an appeal, the Dean of Graduate Education will duly record any subsequent actions in regard to the incident.

Should it be determined that this is a second offense involving this student, the incident will then be resolved by the Dean of Graduate Education in conjunction with the faculty/staff member. In such cases the Dean of Graduate Education’s decision for resolution may supersede the original decision of the faculty/staff member, when made without knowledge of the first offense.

The Dean of Graduate Education will solicit written statements from the faculty/staff member and the student in question. S/he may then meet with the student and/or faculty/staff member for any needed clarification.

On occasion of a second offense, the Provost/Vice President for Academic Affairs may impose the penalty of dismissal from the University.

In the event a faculty/staff member and the Dean of Graduate Education working in consultation determine an egregious breach of academic ethics has been committed, the student may be liable for dismissal from the University, even on the first offense.

After reaching the decision, the Dean of Graduate Education will inform the student in writing. Both the student and the faculty staff member have the right to appeal the decision before the Graduate Council.

The words “Academic Dismissal” appears on the official transcript of a student who is dismissed for academic reasons.

Academic Due Process

The student who has an academic grievance should first discuss the problem with the faculty/staff member. If, following discussion, the student is not satisfied and continues to believe that he/she has not been dealt with fairly, he/she may discuss the grievance with the graduate program director. If the matter is not resolved at that level, the student has recourse to the Dean of Graduate Education.

As a final appeal, the student may request the Graduate Council to evaluate the situation and make a recommendation to the Provost and Vice President for Academic Affairs. This request should be presented in writing and include all pertinent information. The Graduate Council will
normally act upon such an appeal within one month of its receipt. The decision of the Provost and Vice President for Academic Affairs is final.

**Notification of Rights**

The Family Educational Rights and Privacy Act (FERPA) afford students certain rights with respect to their educational records.

. The right to inspect and review the student’s educational records within 45 days after the University receives the request for access. Such request should be submitted in writing to the Registrar identifying the record(s) the student wishes to inspect. The Registrar will notify the student of the time and place where the records may be inspected.

. The right to request the amendment of the education records that the student believes is inaccurate or misleading. The student should write the Registrar identifying the record, and specifying why it is inaccurate or misleading. The student will be advised of his/her right to a hearing if the University decides not to amend the record.

. The right to consent to disclosures of information contained in the student’s education records. FERPA authorizes the disclosure of information with written consent.

. Disclosure without consent may be available to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic, research, or support staff position; a person or company with whom the University has a contract; a person serving on the Board of Trustees; a student serving on an official committee or assisting another school official in performing his/her professional responsibilities.

. The right to file a complaint with the US department of Education concerning alleged failures by the University to comply with the requirements of FERPA:

   Family Policy Compliance Office
   US Department of Education
   600 Independence Avenue, SW
   Washington, DC 20202-4605

**Directory Information**

The University may use its discretion to disclose Directory Information upon request unless specifically requested by the student in writing not to do so. Directory Information includes:

- student name
- address and telephone number
  (local and permanent)
- major of study
- sports and activities participation
- school attended previously
- height and weight of athletic team members
- photographs
- birth date
- e-mail address
- dates of attendance, degrees and awards
- high school attended

Written requests to withhold Directory Information must be submitted to the Registrar no later than September 15. Written notice must be received annually to renew the request.
RESOURCES and SERVICES

The resources and services of the University supplement and enhance the learning process.
Library
Located at the center of the DSU Campus, Trexler Library is a spacious information center designed to provide study and learning space for 300 students, and shelving space for 160,000 volumes. The general collection of 140,000 volumes and 910 print periodicals is augmented by access to over 1000 full text electronic journals, extensive reference and bibliographic information, and by periodical indexes in both paper and computer formats. Automated in 1993, the Library's on-line public catalog is accessible on the campus network and through Internet. Most databases are available to students over the Internet, creating a “virtual library.”

The libraries of the Lehigh Valley Association of Independent Colleges (Lehigh, Lafayette, Muhlenberg, Moravian, and Cedar Crest), a collection of over one million volumes, are available to students of the University. The library databases of these colleges are accessible on-line through Trexler Library.

The Library is a member of the Pennsylvania Library Network (PALINET) and On-Line Computer Library Center (OCLC). Interlibrary loans are processed daily through these networks.

Information Technology
The University provides extensive computing and information technology resources and services as well as universal access for all students, faculty, and administrators in all of its campuses. The use of technology as an interdisciplinary problem-solving tool, as a change agent, and as a vehicle for education has been encouraged and integrated for the whole of the learning environment. Facilities are continuously updated to meet the most current and the latest educational trends and standards.

A number of computing laboratories and several smart classrooms provide the University with both the ‘virtual’ and the ‘real’ learning environments. All computing laboratories have broadcasting systems for instructor control and interaction with client stations.

Academic computing is provided through a distributed client server environment, which is connected to high speed Internet access using a network backbone. Wireless Ethernet allows access to local as well as Internet resources.

The University provides a variety of services to its members. In addition to a wide variety of software resources, email address is available for each registered student. Student and user consultants as well as faculty are available for assistance. The Trexler Library supports on-line catalog, as well as educational, scientific, and accounting databases.

A number of platforms including Blackboard, Ser, and First Class are available for asynchronous distance learning.

There is no charge for using the information technology facilities of the University.

Distance Learning Facility (DLF)
The University as a member of the Center for Agile Pennsylvania educational institutions has established a modern distance-learning center for the purpose of delivering and receiving education to and from remote locations.

The DLF consists of the following
- classroom with audio stations accessible for all seats,
- two-way audio/video equipment,
- instructor station capable of transmitting software and other educational material,
- viewing screens allowing the display of local and remote classes.

The facility is regularly used for tele-education and tele-conferencing.

Student Services
With the intention of making the time spent on campus pleasant and productive, the University provides a variety of services for the graduate students
- Campus Ministry
- Office of Career Services
- Cafeteria
- Bookstore

Descriptions of these services are available through the graduate directors.
Resources and Services

**Theatre**

The acclaimed and respected Labuda Center for the Performing Arts managed by the Performing and Fine Arts Department presents several productions throughout the season. Student discount tickets are available on occasion. Interested students should consult the theatre's box office.

**Athletic Facilities**

Students interested in using the University's athletic facilities should consult the Athletic Department for availability and hours.

**Parking**

Ample parking is available in the proximity of the classrooms. Parking permits are available through graduate program offices.

**Tuition Deferment Policy**

Qualified students may defer the payment of their tuition until the end of the semester or session in which they have registered.

- Tuition may be deferred for a student who has a government grant until such grant is received.
- Only the reimbursable portion of the tuition may be deferred, when the student is eligible for employee tuition reimbursement.
- In the case of a bank or other institution, loan tuition may be deferred until the student receives the loan.
- Application for deferment must be made during registration. The student is required to pay a deposit per course, which is applicable towards the tuition, and to sign a demand note for the deferred amount.
- All bills for all previous semesters and sessions must be fully paid prior to registration.

**Refund on Withdrawal Policy**

A refund of tuition payments will be made to a student who withdraws from a course. In all cases, credits will be calculated from the date the student completed the official withdrawal form, and the rebate will be based on the schedule shown in the Refund Amount Sections.

Refunds apply to tuition only; no appendant fees or other charges are refundable. If a student is allowed to enroll by use of the deferred payment procedure, any funds due the University are immediately due and payable upon withdrawal.

**Financial Aid**

Degree candidates who receive no or less than 100% tuition reimbursement may be eligible for financial aid. All financial aid programs are loans and depend on the candidate’s student status and financial need. Additional information may be obtained through the Financial Aid office or through the appropriate graduate program office.

**Credit Cards**

Master Card or Visa is acceptable for payment of tuition or other expenses.

**Assistantships**

Assistantships may be available to qualified students who have been admitted to one of the graduate programs. Such assistantships provide professional growth and personal development to the participating student. Specific duties, activities, and responsibilities are drawn by the appropriate program director. Graduate assistants receive tuition remission, which is based on the nature and amount of work they are required to perform.

Assistantships are limited and applications are considered on a competitive basis. Interested students should consult their program director about the availability of assistantships in their area of interest.
MASTER OF BUSINESS ADMINISTRATION

Dr. Mohamed A. S. Latib, Director
610.282.4625
Toll free: 1.888.MBA.EXCEL
E-mail: mba@desales.edu

The MBA Program develops corporate and community leaders.
The MBA Program is designed to prepare students for leadership positions in the management of business enterprises, government agencies, health care organizations, or not-for-profit organizations. Distinguishing characteristics of the Program are its emphasis on executive skills development, its general management orientation, its aim of integrating skills and values, its explicit attempt to link theory and practice, and its underlying sensitivity to the Christian-Humanist history and traditions of the University. It is the intent of the Program to provide students with the foundations for socially useful and professionally rewarding careers. The training of narrow, technical specialists is not a primary goal; the development of corporate and community leaders is.

Objectives

The MBA Program is intended to provide students with a sophisticated level of understanding of the basic functional areas of business, as well as an appreciation of the role of business in our pluralistic society and the international community in which it exists. The ethical dimension of personal and corporate behavior and decision-making will be stressed throughout the Program. More specifically, students will gain

- an understanding of organizations as complex systems which function within a broader social, political, and economic environment,
- an ability to comprehend the forces at work and to operate within a dynamic, economic, technological, social, legal, and political environment, one increasingly international in scope,
- a balanced exposure to theory and practice which will foster an enhanced capability to conceptualize, synthesize, and integrate diverse inputs of both quantitative and qualitative data,
- a heightened sensitivity to the subjective, value-laden, ethical dimensions of executive behavior and decision-making within the context of the Christian Humanist traditions of the University,
- a greater sensitivity to the complexity and importance of human resources management, and an enhancement of personal leadership skills,
- a theoretically sound yet operationally useful understanding of the various functions of business management, from an integrated, systems perspective,
- an action oriented, graduate level grasp of a professional specialization,
- a graduate level competency in the use of analytical tools and techniques necessary for effective decision-making and problem-solving in complex organizations, and
- a desire to move beyond "mere" problem-solving toward the capability to become creative "opportunity-seekers" in a dynamically changing and increasingly inter-dependent world.

Admission Requirements

Requirements for admission to the MBA Program are

- Baccalaureate degree from an accredited college or university under conditions substantially equivalent to the undergraduate program at this University.
- Acceptable level of academic quality in undergraduate work. Normally, this is defined as having achieved an undergraduate GPA of at least 3.0.
- Computer literacy and familiarity with basic, business-oriented software.
- Acceptable score on the Graduate Management Admissions Test (GMAT). The GMAT may be waived for the applicant who presents evidence of a strong undergraduate academic record. In addition to the above requirements two years of work experience is desirable.

All admission decisions and admission related matters must be approved by the MBA Committee.
Prerequisite Foundation Courses

Applicants who have not successfully completed undergraduate courses equivalent to those listed in the Undergraduate Foundation Courses section must make up their deficiencies by any or the combination of the following options

- Completion of the equivalent undergraduate courses identified in the Undergraduate Foundation Courses section of this catalog.
- Undergraduate level CLEP examination, which is described in the University's Undergraduate Catalog.
- CBE which is described in the Credit by Examination section of this catalog.
- Completion of equivalent graduate courses described in the Graduate Level Foundation Courses section of this catalog.

Deficiencies in Prerequisite Foundation Course requirements should be satisfied prior to pursuing graduate level Core, Concentration, or Elective courses so as to ensure adequate academic background, which is assumed in these advanced courses.

Prior academic course work to satisfy the undergraduate foundation course requirements should normally have been completed within the seven years preceding the date of acceptance into the Program, with course grades of "C" or better. Each course should be the equivalent of at least three credit hours of academic work.

Undergraduate Foundation Courses

Undergraduate Foundation Courses are listed:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroeconomic Principles</td>
<td>EC 109</td>
</tr>
<tr>
<td>Microeconomic Principles</td>
<td>EC 110</td>
</tr>
</tbody>
</table>

Graduate Level Foundation Courses

As an alternative to completing the Undergraduate Foundation Course requirements, students may elect to complete the corresponding graduate level Foundation Course(s) from the list below:

- FD 501 Essentials of Economics
- FD 502 Management and Marketing Principles
- FD 503 Accounting for Decision Makers
- FD 504 Managerial Finance

These courses facilitate accelerated coverage of prerequisite subject matter. The pace is rapid and significant preparation outside of class is expected.

Candidates for the MBA for Physicians and MBA/MSN programs may substitute the above listed foundation courses by completing FD 505 Foundations in Business. The foundation course is offered in an accelerated sixteen-week session covering six modules: Management, Marketing, Macroeconomics, Microeconomics, Accounting and Finance. The course requires a substantial amount of independent study.

Completion of any of the above listed courses (FD 501-FD 505) does not reduce or substitute the MBA graduation requirements. Grades earned in these courses will not be computed in the graduate GPA. Information about the equivalency between Undergraduate Foundation Courses and Graduate Level Foundation Courses is available through the MBA office.

Computer Literacy

The University expects all incoming students to be "computer-literate," which is defined as being familiar with and capable of using basic word processing, spreadsheet, database software, and the Internet. Applicants lacking this background should acquire it by completing relevant coursework at the University or by some approved alternative.
Academic Schedule
The Academic Year of the MBA program consists of four sessions, like the following calendar:

- **Winter** (12 weeks) early January - late March
- **Spring** (12 weeks) early April - mid June
- **Summer** (6 weeks) early July - mid August
- **Fall** (12 weeks) late August - mid Nov.

In the 12 week sessions, courses meet once a week on a weekday evening from 6:00 - 9:30 pm, or on Saturday from 9:00 am - 12:30 pm.

In the 6 week summer session, each course meets twice a week on weekdays from 6:00 - 9:30 pm.

Student Status
For the purpose of defining student status, the calendar year (January 1 – December 31) is divided into two terms: from January 1 to June 30, and from July 1 to December 31.

- A full time student is one who carries at least nine (9) credits in a given term.
- A half time student is one who carries at least six (6) credits in a given term.
- A less than half time student is one who carries less than six (6) credits in a given term.

International Student Status
In addition to the criteria described in the Academic Regulations section, an international student (F-1 visa) needs to
- maintain full time student status,
- carry at least one classroom based course in each session, and
- take no more than one distance-education course in each session.

Student Categories
Applicants may be admitted to the MBA Program in one of the following categories:

**Regular Student Category**
A student in this category must have met all admission and foundation course requirements.

**Provisional Student Category**
A student in this category needs to fulfill foundation or specified requirements as set forth by the Admissions committee. The student will be eligible for Regular Student status when all requirements have been met.

**Special Student Category**
A qualified applicant who has not formally applied to the program may be permitted by the Director to enroll as a special student in a maximum of two MBA courses. The applicant must satisfy all admission requirements before enrolling in any additional MBA courses.

**Auditing Student Category**
The MBA Program Director may permit qualified applicants to audit selected courses. Such applicants must complete the MBA application form, and must pay the non-refundable application fee and tuition for any courses to be audited. Audited courses may not be counted toward graduation requirements.

Application Procedure
Application forms may be obtained from the MBA Program Office, or on line. Interested students are encouraged to discuss their background with a Program Coordinator prior to submitting their formal application for admission.

Formal action on a prospective student's application for admission cannot be taken until all of the following have been received:

1. A completed application form.
2. Three letters of recommendation from appropriate individuals.
3. Official transcripts of all prior undergraduate and graduate work.
4. GMAT (Graduate Management Admissions Test), and TOEFL and TSE scores, if required.
5. A personal letter in which the applicant outlines objectives, capabilities, and motivation for pursuing graduate study.
6. A non-refundable application fee.

When all of the materials are received, a member of the MBA Committee on Admissions and Academic Standards may interview the applicant. The following points are typical of the issues appropriate for discussion at such an interview.
Master of Business Administration (MBA)

- Factors in the applicant's background to justify the desire to pursue the MBA degree.
- Aptitude for graduate study.
- Commitment to the ideals associated with the management profession.
- Plans for completion of the program.

Completed applications should be submitted at least sixty days in advance of the date on which the applicant plans to begin graduate course work.

Transfer Policy

Normally, regular students may transfer a maximum of six graduate credits into the MBA Program. Transfer credits are acceptable for courses completed with a minimum grade of "B" at an accredited institution within seven years of acceptance into the program, must be compatible with the MBA curriculum, and must be approved by the Program Director. Additional transfer credits must be approved by the Dean of Graduate Education, upon the recommendation of the Program Director and the MBA Graduate Committee on Admissions and Academic Standards.

Matriculation

Regular students are eligible for matriculation after completing twelve credits of graduate course work with at least a 3.0 GPA. In general, the MBA core courses will be used to satisfy the twelve-credit requirement for matriculation.

Registration

Registration for a session normally takes place during the month prior to the first class meeting. Registration must be pre-approved by the student's advisor or the Program Director.

Tuition and Fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition per credit hour</td>
<td>$495.00</td>
</tr>
<tr>
<td>Application Fee</td>
<td>50.00</td>
</tr>
<tr>
<td>Certificate Fee</td>
<td>30.00</td>
</tr>
<tr>
<td>Graduation Fee</td>
<td>105.00</td>
</tr>
<tr>
<td>Returned Check Fee</td>
<td>30.00</td>
</tr>
</tbody>
</table>

Refund Amount

<table>
<thead>
<tr>
<th>Withdrawal after 1st class:</th>
<th>80% of tuition refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal after 2nd class:</td>
<td>65% of tuition refunded</td>
</tr>
<tr>
<td>Withdrawal after 3rd class:</td>
<td>50% of tuition refunded</td>
</tr>
<tr>
<td>Withdrawal after 4th class:</td>
<td>25% of tuition refunded</td>
</tr>
<tr>
<td>Withdrawal after 5th class:</td>
<td>no refund</td>
</tr>
</tbody>
</table>

Graduation Requirements

The Master of Business Administration Degree will be awarded to candidates who have satisfied the following requirements:

- Satisfactory completion of all Foundation Course Requirements.
- Completion of the required twelve graduate level courses (36 credit hours) with a GPA of at least 3.0, and having received no more than two grades below the "B-" level. The required twelve graduate level courses are described in the Program Structure Section.
- Achievement of a minimum grade of "B" in the required Capstone Course, CR 510 Policy and Strategy.
- Fulfillment of all financial obligations to the University.

No special written or oral examination or special research project report is necessary to meet the minimum graduation requirements. Similarly, there is no thesis requirement.

Course Waiver

The Director may waive one of the following courses:

CR 501  Financial and Managerial Accounting
CR 504  Marketing Management

for a student who had completed 12 undergraduate credits in accounting or marketing with at least a 3.2 GPA.

PROGRAM OF STUDY

In addition to developing an understanding of the sophisticated nature and inter-relationship among the basic functional areas of business, the MBA Program will emphasize executive skills development in the following primary areas.
The Program will utilize a holistic and strategic approach in dealing with organizational problems. Thus, functional areas of business will be considered in the context of the organizational whole, while maintaining an external and international perspective and providing a multi-stakeholder rather than a single-interest advocacy approach. Further, a strategic, long-run perspective will be stressed rather than a short-run, tactical view. Within individual courses, as well as throughout the program, a balance between cognitive and affective learning will be sought. The entire Program will give primacy to matters of ethics and values, as well as to a concern for the rights and responsibilities of business organizations within the context of the broader society of which they are a part.

The Online MBA
The MBA Program has continued its commitment to stay in the forefront of education by offering courses completely online. Using the latest technology, students may have the flexibility and convenience to take courses at times convenient for them: home, after work, or during travel.

Online degrees may be earned in E-Commerce, Marketing, Health Care Systems Management, or Self-Designed Concentrations without ever visiting any of the five physical locations where MBA is offered.

Class structures differ with instructors and courses, but in general involve a combination of chat sessions, research, independent reading, and projects. The University provides the latest downloadable interactive educational software, including Net Meeting, Real Video, Blackboard, and First Class.

For additional information contact the MBA Office.

Program Structure
Beyond the required Prerequisite Foundation Courses, the basic MBA Program structure consists of four "building blocks" as shown below.

- Core Courses
- Concentration Courses
- Elective Course (not applicable for HCSM, CIS, E-Commerce, and Self-Design)
- Capstone Integrating Course

Core Courses
CR 501 Financial and Managerial Accounting
CR 502 Quantitative Methods
or
CR 508 Business Computing
CR 503 Business and Society
CR 504 Marketing Management
CR 505 Organization Management
CR 506 Financial Management
CR 507 Executive Skills Development

A minimum of five Core Courses should be completed prior to taking Elective or Concentration courses.

Capstone Integrating Course
CR 510 Policy and Strategy

All students, with a minimum grade of “B”, must complete this course. This course must be taken as the last or second to last course before graduation.

Electives
In addition to the above-required courses, and in order to provide meaningful options, added breadth, greater diversity, and positive enrichment, a variety of elective courses will be scheduled as demand requires and resources permit. Any concentration course can be used as an elective.

Areas of Concentration
Students may select one of eight specified Areas of Concentration from those below:

(I) Accounting
(II) Computer Information Systems
(III) E-Commerce
(IV) Finance
(V) Health Care Systems Management
Master of Business Administration (MBA)

(VI) Management
(VII) Marketing
(VIII) Self Design

**Accounting Concentration**
Successful completion of three courses and one elective are required.

- AC 501 Corporate Financial Reporting
- AC 502 Auditing Concepts and Practices
- AC 503 Advanced Financial Accounting Topics
- AC 504 Federal Income Taxation
- AC 505 International Accounting
- AC 510 Seminar in Accounting
- AC 520 Special Topics in Accounting

**Computer Information Systems (CIS) Concentration**
Successful completion of four courses is required. All students require the following two courses.

- IT 531 Information Systems Planning
- IT 565 Electronic Commerce

Two additional courses are to be selected from the menu of IT offerings available in the MSIS Program. Approval of the MBA Director is required prior to registering for these courses.

In addition to the four courses CR 508 Business Computing replaces CR 502 Quantative Methods in the core course requirements.

**E-Commerce Concentration**
Successful completion of a minimum of four courses is required.

- EC 504 E-Commerce and Internet Marketing
- EC 505 Consumer Behavior in an E-Commerce Environment
- EC 506 Introduction to E-Commerce and the Digital Economy
- EC 507 The Internet and Information Superhighway
- EC 508 E-Commerce Models
- EC 509 Startup.com
- EC 510 Seminar in E-Commerce
- ED 520 Special Topics in E-Commerce

**Health Care Systems Management (HCSM) Concentration**
Successful completion of a minimum of four courses is required.

- HC 501 Foundations of Health Care Systems
- HC 502 Fiscal Issues in Health Systems Management
- HC 503 Legal Aspects of Health Systems Management
- HC 504 Quality Management for Health Care Systems
- HC 505 Principles and Strategies for Managed Health Care
- HC 506 Community Health Assessment and Planning
- HC 507 Contemporary Issues in Health Care Policy
- HC 508 Management of Information and Communication Technologies in Health Care Systems

**Finance Concentration**
Successful completion of a minimum of three courses and one elective is required. FN 502 Financial Markets and Institutions is a required course for the Finance Concentration for any student who has not taken a Money and Banking course at the undergraduate level.

- AC 501 Corporate Financial Reporting
- FN 501 Investment and Portfolio Management
- FN 502 Financial Markets and Institutions
- FN 503 Risk Management and Insurance
- FN 504 International Financial Management
- FN 510 Seminar in Finance
- FN 520 Special Topics in Finance

**Management Concentration**
Successful completion of a minimum of three courses and one elective is required.

- MG 501 Management of Human Resources
- MG 502 Organizational Analysis and Design
- MG 503 Entrepreneurship
- MG 504 Managerial Decision Making
MG 505  International Management
MG 510  Seminar in Management
MG 520  Special Topics in Management

Marketing Concentration
Successful completion of a minimum of three courses and one elective is required.
MK 501  Buyer Behavior
MK 502  Advanced Marketing Strategy
MK 503  Marketing Research and Analysis
MK 504  Marketing Simulation
MK 505  International Marketing
MK 510  Seminar in Marketing
MK 520  Special Topics in Marketing

Self-Design Concentration
A student may construct a group of four graduate courses (from those offered by the University) aimed at achieving some worthwhile academic and/or professional objective. This option will be particularly useful to those students who prefer to pursue breadth and diversity in their program of study.

MBA/MSN Program
The dual degree program provides a well-rounded knowledge of both the clinical and the business side of nursing. Students with RSN or RN degrees are eligible for admission. The program consists of 58 credit hours of course work and can be completed within three years of full time study.
Detailed information can be found in the MSN section of this catalog.

MBA for Physicians Program
Through cooperation with the Lehigh Valley Hospital this program has been designed for physicians and other health care professionals. Participants will acquire the knowledge and skills used in today’s health care industry. The program consists of 39 credit hours of study and can be completed at the Lehigh Valley Hospital location or on Main Campus.
Information is available through the MBA office.
MBA CALENDAR

Fall Session 2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 22</td>
<td>Sunday</td>
<td>Opening Mass of the Holy Spirit</td>
</tr>
<tr>
<td>August 30</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 13</td>
<td>Monday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>October 8</td>
<td>Friday</td>
<td>Last day for submitting applications for Winter Graduation</td>
</tr>
<tr>
<td>October 11</td>
<td>Monday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
</tr>
<tr>
<td>November 22</td>
<td>Monday</td>
<td>Last day of Fall Session</td>
</tr>
</tbody>
</table>

Winter Session 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 3</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 15</td>
<td>Saturday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>January 23</td>
<td>Sunday</td>
<td>Celebration of Excellence in Graduate and ACCESS Programs (Winter Graduation)</td>
</tr>
<tr>
<td>February 2</td>
<td>Wednesday</td>
<td>Patron's Day Celebration</td>
</tr>
<tr>
<td>February 14</td>
<td>Monday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
</tr>
<tr>
<td>February 25</td>
<td>Friday</td>
<td>Last day for submitting application for May Graduation</td>
</tr>
<tr>
<td>March 26</td>
<td>Saturday</td>
<td>Last day of Winter Session</td>
</tr>
</tbody>
</table>

Spring Session 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 4</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>April 16</td>
<td>Saturday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>May 6</td>
<td>Friday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
</tr>
<tr>
<td>May 20</td>
<td>Friday</td>
<td>PM Baccalaureate</td>
</tr>
<tr>
<td>May 21</td>
<td>Saturday</td>
<td>AM Commencement</td>
</tr>
<tr>
<td>May 30</td>
<td>Monday</td>
<td>Memorial Day holiday</td>
</tr>
<tr>
<td>June 27</td>
<td>Monday</td>
<td>Last day of Spring Session</td>
</tr>
</tbody>
</table>

Summer Session 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 5</td>
<td>Tuesday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 13</td>
<td>Wednesday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>July 25</td>
<td>Monday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
</tr>
<tr>
<td>August 15</td>
<td>Monday</td>
<td>Last day of Summer Session</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

GRADUATE LEVEL FOUNDATION COURSES

FD 501 Essentials of Economics (3 credits)
This course will cover the basic concepts of macroeconomics, microeconomics, and money and banking. Topics included are supply and demand, national income accounting, international trade policy, critical economic indicators, price elasticity, market structures, monetary and fiscal policy, theories of interest rate determination, globalization of monetary policy, foreign exchange markets, and budget deficits and public debt.

FD 502 Management and Marketing Principles (3 credits)
The management portion of this course will cover the history and evolution of management theory as well as long range planning, organization design, management style, organizational communication systems, motivation/rewards, and problem solving. Emphasis will be on developing a systemic, holistic perspective. The marketing portion of this course will examine the basic functions of marketing, i.e., the marketing mix, market research, product analysis, promotional communications, etc. as they relate to the exchange factor in satisfying consumer needs and wants.

FD 503 Accounting for Decision Makers (3 credits)
This course presents accounting as an information development and communication function that supports decision-making by managers, owners, creditors, and others. Topics included are: the conceptual framework of financial accounting, statements of financial position, income and cash flows, asset and liability measurement, concepts of income, the accounting process, taxation, cost classifications, determining the cost of products and services, cost-volume-profit analysis, and budgeting.

FD 504 Managerial Finance (3 credits)
This course will examine basic financial management issues faced by business decision makers and will build the essential analytical skills necessary for dealing with such problems. Topical coverage will include present value, cost of capital, capital budgeting, capital asset management, fundamentals of portfolio management, and capital asset pricing. Prerequisite: FD 501 and FD 503.

FD 505 Foundations in Business (3 credits)
The course consists of six modules: Management, Marketing, Macroeconomics, Microeconomics, Accounting, and Finance covering the materials in FD 501 - FD 504 in an accelerated sixteen week session. Successful completion of the course requires significant amount of independent study.

CORE COURSES

CR 501 Financial and Managerial Accounting (3 credits)
Development of an advanced level understanding the preparation, analysis and utilization of financial statements and reports by means of an examination in both domestic and international accounting theory, concepts, and practices. Interpretation and application of both domestic and international accounting data for internal planning, reporting, control, and decision-making will be stressed. Students will learn through lectures, case studies, projects, and when available, external academic partners.

CR 502 Quantitative Methods for Business (3 credits)
Development of an understanding of and the capability to apply basic quantitative techniques commonly used in business analysis and decision-making. Both the power and limitations of such analytical tools and techniques will be examined, along with an appreciation of the conditions under which the use of such quantitative approaches is most appropriate. The perspective of the manager/user will be stressed. Computer software is normally employed. (This course can be taken as an alternative for CR 508 Business Computing.)

CR 503 Business and Society (3 credits)
An exploration of the rights, responsibilities, problems, and opportunities facing the business manager operating within a system in which the
demands and expectations of the social, political, and legal subsystems often compete or conflict with purely economic factors normally affecting internal managerial decision-making and behavior of a firm. Issues of ethics and values, as they operate in an increasingly pluralistic society, will be stressed. The concept of corporate responsibility to stakeholders will be examined in some depth. The course will explore alternative responses to the question, "To whom is the corporation responsible, and for what?"

CR 504  Marketing Management  (3 credits)
An understanding of the application of marketing theories, concepts, and practices as they relate to the management of the marketing function in a complex organization. Emphasis will be on the managerial aspects of marketing plans, including analysis of the external environment. A key element of the course will include the relationship of the "marketing mix" to strategic planning.

CR 505  Organization Management  (3 credits)
An examination of the concepts of organizational efficiency and effectiveness, which introduces non-economic variables into the total management equation. This course will stress organization structure and process as key determinants of organizational survival and success. Emphasis will be on affective dimensions, which view the organization as an economic-socio-technical system. The roles, responsibilities, and contributions of the general manager will be emphasized.

CR 506  Financial Management  (3 credits)
Development of an understanding of current theory and practice relating to alternative approaches to meeting the financial needs of the firm. Analysis and planning, from a managerial perspective, will be stressed. There will be an emphasis on the development of decision-making criteria in dealing with topics such as financial planning, working capital, capital budgeting, and debt-management.

CR 507  Executive Skills Development  (3 credits)
This is an eclectic course aimed at developing a deep understanding of selected topics, which contribute to personal, and career development and effectiveness. The course will examine the interrelatedness between cognitive and affective aspects of executive behavior and managerial decision-making. Depending upon student needs, course coverage would include some combination of topics, such as individual self-analysis of leadership style, communications skills, personal goals and values, and interpersonal skills. Team building, negotiation skills, conflict management, and small group dynamics may also be treated.

Prerequisite: CR 505.

CR 508  Business Computing  (3 credits)
This course will focus on advanced features of integrated Excel spreadsheet applications, and database development using Access to solve business problems. Macro designed concepts, web page document creation using HTML, overview of computer systems architecture, computer systems analysis and design, and communications and networking will also be covered. (This course can be taken as an alternative for CR 502 Quantative Methods)

CR 510  Policy and Strategy  (3 credits)
This is a required Capstone Course, which should be taken as (or near) the final course. An integral part of the course will be preparation of a comprehensive, written case analysis, or a significant project or research report. The perspective is a holistic one, which views the organization as a total system, comprised of internal, specialized sub-systems interacting with an external, dynamic environment. The emphasis will be on the organization policies and strategies, which influence a firm’s survival and success in an increasingly competitive world. The role of the general manager (versus the functional specialist) will be stressed.

The course will utilize the Internet to research business cases, and to provide the opportunity for collaboration with individuals from other nations. Students will bring together their total learning experience via teams running simulated competing companies and implementing their own strategic plans. Due to the need for schedule flexibility and the amount of work involved, it is recommended that CR 510 be taken as a single course.
Course delivery will include the use of file sharing, email, discussion boards, Internet chats, and video-conferencing. Particular emphasis will be placed on developing opportunities for students to collaborate with students from other parts of the world.

Prerequisite: Successful completion of all Core and Concentration Courses.

AREAS OF CONCENTRATION COURSES

ACCOUNTING

AC 501 Corporate Financial Reporting (3 credits)
An examination of accounting valuation and reporting practices as promulgated by the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC). Current issues will be emphasized.
Prerequisite: Twelve credit hours of undergraduate accounting or CR 501.

AC 502 Auditing Concepts and Practices (3 credits)
A conceptual examination of the audit process with appropriate linkages to the applied aspects of the discipline. Using readings, case studies, and authoritative issuances of regulatory bodies, attention will be given to auditing principles and practices against a background of concern for the auditor's legal liability, ethics, and potential for fraud.
Prerequisite: Twelve credit hours of undergraduate accounting and CR 501.

AC 503 Advanced Financial Accounting Topics (3 credits)
An examination of the accounting implications of partnerships, governmental and not-for-profit organizations, other complex corporate groupings, and multi-national reporting.
Prerequisite: Twelve credit hours of undergraduate accounting or CR 501, and AC 501.

AC 504 Federal Income Taxation: Concepts and Applications (3 credits)
A survey of current federal tax law, policy, and implementation. Emphasis will be on application of the current Internal Revenue Code and key tax cases to business operations.
Prerequisite: Twelve credit hours of undergraduate accounting or CR 501, and AC 501.

AC 505 International Accounting (3 credits)
An examination of worldwide accounting principles and reporting practices. Comparative study of accounting practices with reference to International Accounting Standards. Special attention will be given to the problems facing the multi-national corporation in regards to such issues as inventory methods, currency translation, consolidations, transfer pricing, taxes, and treaties.
Prerequisite: CR 501.

AC 510 Seminar in Accounting (3 credits)
An in-depth exploration of a topical aspect of accounting. A conceptual examination of basic issues involved in determining income and fairly presenting an organization's financial position. The impacts of regulatory agencies on the accounting standard-setting process would be an illustrative topic to be treated in some depth in this seminar.
Prerequisite: CR 501. AC 502 and CR 506 recommended.

AC 520 Special Topics in Accounting (3 credits)
A course tailored to special interests of students and faculty may be offered when demand warrants.
Prerequisite: Instructor's permission.

COMPUTER INFORMATION SYSTEMS

See MSIS section for detailed descriptions.

E-COMMERCE

CR 504 must be taken prior to any E-Commerce Electives

EC 504 E-Commerce and Internet Marketing (3 credits)
This course will investigate the strategic implications, key issues, and the capability provided by the Internet in contemporary marketing. Issues addressed are marketing strategy, ineffective marketing efforts, and marketing plan development for products and services sold via the Internet.
EC 505 Consumer Behavior in an E-Commerce Environment (3 credits)

This course will explore consumer behavior specifically in relation to technology, the digital economy and e-commerce. Issues such as: How is the decision making process different in an e-commerce environment? How will business build relationships with customers in a virtual economy? will be investigated. The course will also review the differences between the Web and the traditional media, demographics, usage, and trends. Latest research and its relation to current business practices will be covered. (May not be taken if MK 501 has been completed.)

EC 506 Introduction to E-Commerce and the Digital Economy (3 credits)

A survey of business and technical issues including navigation, design, channel conflict, security, privacy, intellectual property, and regulation. E-commerce is rapidly emerging as an efficient yet effective mode of conducting global business. Enabled by global telecommunication networks and the convergence of computing, telecommunication, entertainment, and publishing industries, e-commerce is supplanting (and in some cases replacing) traditional commerce. In the process it is creating new opportunities and challenges for today’s Businesses as well as creating new market structures.

EC 507 The Internet and the Information Superhighway (3 credits)

Focus is on the history of Internet and its impact on a traditional business model. Students explore the tools, skills, business and social implications of the emergence of e-commerce in cyberspace.

EC 508 Electronic Commerce Models (3 credits)

A focus on how e-commerce changes traditional business practices, from the creation and marketing of new products and services to supply chain management and customer service. The course provides both the strategic and technical essentials of what a manager needs to know to manage and lead an e-commerce effort.

EC 509 Startup.com (3 credits)

The course examines, from a managerial viewpoint, the contribution of a Web site to an organization. Emphasis will be on starting up a Web company or migrating an existing business onto the Internet.

EC 510 Seminar in E-Commerce (3 credits)

An in-depth study of advanced topics in E-Commerce with a balance between theoretical and applied perspectives.

EC 520 Special Topics in E-Commerce (3 credits)

A course tailored to special interest of students and faculty may be offered when demand warrants. Prerequisite: Instructor’s permission.

FINANCE

FN 501 Investment and Portfolio Management (3 credits)

With balanced attention to both theory and contemporary practice, this course will deal with the characteristics of individual securities and portfolios, as well as strategy and models for establishing portfolios to meet various objectives. Evaluating performance against stated criteria will be discussed. The impact of government regulations and other external environmental factors will be considered. Implications of modern portfolio theory on financial management practices will be an integrating theme. Prerequisite: CR 501, CR 502, and CR 506.

FN 502 Financial Markets and Institutions (3 credits)

An examination of the sectoral supply and demand for funds, interest rate determination and forecasting, the role of the Federal Reserve System, the impact of government regulation and deregulation, and current topics in the financial system. Collaborative teaching methods and technology will be used for financial analysis, cases, and projects to learn about global financial markets and the role these markets play in the allocation of scarce resources in the U.S. and the world economy. Prerequisite: Instructor’s permission.
FN 503    Risk Management and Insurance    (3 credits)
An introductory survey course covering essential principles, practices, and basic legal aspects of insurance and risk management from the perspective of the individual, the finance manager, and the government. An analysis of the attributes of various alternative types of insurance contracts from a risk management perspective will be a central theme. The alternative of self-insurance will be examined.
Prerequisite: CR 501. CR 506 recommended.

FN 504    International Financial Management    (3 credits)
An analysis of the structure and function of international money and capital markets with special attention on the operation of foreign exchange markets, export/import finance, comparative analysis of international financial institutions, Euro markets, and risk management in this dynamic environment. The primary perspective will be the application of the foregoing to the multi-national enterprise.
Prerequisite: CR 501 and CR 506. FN 502 recommended.

FN 510    Seminar in Finance    (3 credits)
An in-depth study of advanced topics in finance with a balance of both theoretical and applied perspectives. The theory of financial markets and other topics not addressed in depth in other courses would be an illustrative focus for this seminar.
Prerequisite: AC 501 and CR 506.

FN 520    Special Topics in Finance    (3 credits)
A course tailored to special interests of students and faculty may be offered when demand warrants.
Prerequisite: Instructor’s permission.

HEALTH CARE SYSTEMS MANAGEMENT
HC 501    Foundations of Health Care Systems    (3 credits)
This course is designed to serve as a foundation course for the health systems management program. It is organized to provide a comprehensive overview of the U.S. health care system. The first section of the course presents a descriptive analysis of the continuum of health care services: from primary care to long-term care. Emphasis will be given to the organization of health services and the delivery of services within these systems. The second part of this course concentrates on the changes in the health services system and associated issues in the management of health care systems. Topics of discussion include changes in the organization and structure of health services and concomitant strategies for managing a changing health care system. Topics include standards and guidelines for the accreditation of health care organizations, as well as specific quality assessment, management, and performance indicators.

HC 502    Fiscal Issues in Health Systems Management    (3 credits)
This course presents the theoretical and applied aspects of health care finance. The course first examines specific economic theories and issues related to the financing and delivery of health care services. Topics include: determinants for medical care demand, issues in the supply of health care services, production theory, determinants of costs for health care services, public and private health insurance, competition in health care markets, and the political economy of health care services.

This course also provides an in-depth examination of specific health financing topics such as the use of financial information in health care decision-making, rate-setting and prospective reimbursement, and assessing new health care services and ventures.

HC 503    Legal Aspects of Health Systems Management    (3 credits)
The course will address the major areas of law, which influence the management of health care organizations. Health care managers will be provided with a general knowledge of legal issues and problems in terms of their profession, institution, medical and allied health staff, and in day-to-day operation of health care facilities. The course examines a range of medical-legal issues such as the role and obligations of administration, the governing board, and medical
and nursing staff. It also addresses the following specific topics: liability issues, antitrust and taxation laws, legal issues in mergers and consolidations, patient rights, confidentiality, labor law, and the general principles of risk management.

HC 504  Issues in Quality Management for Health Care Systems  (3 credits)
Quality improvement is not a passing fad, but a necessity if the U.S. is to remain competitive in the world marketplace. The course will define the necessary comprehensive approach to quality improvement. The additional focus is the application of quality management principles to health care organizations. This focus will encompass topics such as Joint Commission on the Accreditation of Hospital Organizations standards, applications of total quality improvement, continuous quality improvement, critical pathways, and the use of outcome measures in health services delivery.

HC 505  Principles and Strategies for Managed Health Care  (3 credits)
Managed health care is a rapidly expanding component of our health care system, and health care managers will need to have a strong understanding of this trend. This course provides a comprehensive background in the key concepts of managed care. It also explains the strengths and weaknesses of various managed care models such as Health Maintenance Organizations (HMO), Point of Service Plans (POS), and Preferred Provider Organizations (PPO), as well as the different forms of vertically integrated systems. The course also examines operational issues to include case management, contracting, compensation, and utilization management. The unique requirements for Medicaid and Medicare managed care plans are also analyzed.

HC 506  Community Health Assessment and Planning  (3 credits)
This is a survey course divided into two sections. The first section introduces the principles of community health. It reviews epidemiology and public health demography, social and economic determinants of health and disease, community health assessment, population-specific health care delivery issues, and the concepts of community-oriented care.

HC 507  Contemporary Issues in Health Care Policy  (3 credits)
This course studies American health care policy, its origins, and contemporary policy issues in the financing and delivery of health care services. The role of legislative committees, bureaucratic agencies, interest groups, and major health care policies are examined as they have developed from the New Deal to the present. Attention is given to issues that relate to the concepts and/or quality of life and death. This is broadly defined to include AIDS policy, infant mortality, and government regulation of consumer products, occupational safety, and fiscal issues such as prospective payment, national health insurance, and the rationing of health care. Primary attention will be given to the legislative and political aspects of these various policy areas, but the unavoidable ethical issues will also be considered.

HC 508  Management of Information and Communication Technologies in Health Care Systems  (3 credits)
The management of current and emerging information and communication technologies in health care organizations. Topics include the evolution of health care information, the organization of information systems, and financial information technologies on quality of care. Utilization of telecommunication technologies to share medical information and education among health care institutions will also be explored.

MANAGEMENT

MG 501  Management of Human Resources  (3 credits)
A survey of basic principles and practices, which govern personnel, needs analysis and the selection and development of organizational human resources. Topics such as recruitment, testing,
development, performance evaluation, and compensation will be examined against a backdrop of changing demographics. Legal ramifications and implications of personnel policies and practices will be considered. The management of human resources will be studied within the context of an organization's total strategy and structure. 
Prerequisite: CR 505.

MG 502 Organizational Analysis and Design (3 credits)
An introduction to open systems theory and other approaches useful for the nature, operation, and effectiveness of purposive organizations. Topics to be emphasized will include organization structure, the relationship between structure and process, intra- and inter-organizational dynamics, and environmental influences. Students will be expected to develop an analytical framework for analysis and design, and to apply it to a substantive organization with which they have more than superficial familiarity. 
Prerequisite: CR 505.

MG 503 Entrepreneurship (3 credits)
The examination of principles and contemporary practices underlying the development and conversion of ideas into organizational and market-place reality. Topics to be explored include risk, leadership, creating and developing an organizational team, defining and obtaining necessary resources, and developing and implementing a viable business plan. 
Prerequisite: CR 501, CR 504, and CR 506 recommended.

MG 504 Managerial Decision-Making (3 credits)
A survey of both theory and practice of managerial decision-making in an organizational context. The relative strengths, weaknesses, and contributions of both quantitatively and qualitatively oriented tools, techniques, and approaches to the management level decision-making process will be explored. The role of managerial experience, judgment, and intuition will be given special attention. 
Prerequisite: CR 505.

MG 505 International Management (3 credits)
A survey course, which will deal with both comparative management systems and philosophies, and the unique management challenges facing the multi-national firm. 
Prerequisite: Successful completion of all Core Courses.

MG 510 Seminar in Management (3 credits)
An in-depth study of selected topics in management with a balance of both theoretical and applied perspectives. A review of some of the classic writings in management or the history of management development would be illustrative of topics appropriate for treatment in this seminar setting, as would be various other topics introduced but not explored in depth in other courses. 
Prerequisite: Successful completion of all Core Courses.

MG 520 Special Topics in Management (3 credits)
A course tailored to special interests of students and faculty that may be offered when demand warrants. 
Prerequisite: Varies with topics.

MARKETING

MK 501 Buyer Behavior (3 credits)
An analysis of interaction among the major social, cultural, psychological, and economic influences on the behavior of the buyer, in both the consumer and industrial sectors. The application of behavioral principles to the development of effective marketing strategies will be explored. 
Prerequisite: CR 504.

MK 502 Marketing Strategy (3 credits)
An advanced course which interprets the principles, tools, and techniques of marketing analysis from a strategic perspective. The course focuses on the development of a comprehensive marketing plan. 
Prerequisite: Completion of all Core Courses.

MK 503 Marketing Research (3 credits)
An examination of the objectives, techniques, and limitations of marketing research as a tool of
effective marketing management. Topical coverage will include: formulation of research objectives, selection of research design, and the collection, analysis, interpretation and use of data. The use of models, simulations, and other research tools and techniques will also be examined. The perspective will be that of the user of marketing research products.

Prerequisite: CR 504.

**MK 504 Marketing Simulation** (3 credits)
A computer-based simulation, which allows students to make interactive decisions and to receive feedback from the model, so as to create an appreciation of the interrelatedness of the numerous variables, which affect key marketing decisions. Normally, student teams compete by making decisions about price levels, production levels, promotion policies, distribution systems, product features, research budgets, etc. which affect their company and/or industry.

Prerequisite: Completion of all Core Courses.

**MK 505 International Marketing** (3 credits)
Designed to provide students with the opportunity to apply basic marketing concepts, principles, strategies, and techniques to the special challenges of the international setting. This is done by examining and applying marketing decision-making processes, determining marketing information requirements, developing criteria for planning and control systems, and becoming familiar with alternative organizational designs and marketing strategies most effective in the global context increasingly faced by the multinational firm.

Prerequisite: MK 501 and MK 502.

**MK 510 Seminar In Marketing** (3 credits)
An in-depth study of selected, contemporary topics in marketing, with a balance between the theoretical and applied perspectives. Disciplinary foundations of marketing will be stressed.

Prerequisite: MK 501 and MK 502.

**MK 520 Special Topics in Marketing** (3 credits)
A course tailored to special interests of students and may be offered when demand warrants.

Prerequisite: Instructor’s permission.

**GRADUATE ELECTIVES**

MBA candidates may select any one of the electives listed below, or any concentration course not previously taken, to complete the elective requirement for the degree.

**EC 501 Managerial Economics** (3 credits)
The application of economic theory to the analysis of managerial problems.

**EC 502 Managerial Statistics** (3 credits)
An expanded application of statistical techniques necessary for managerial decision-making and for understanding business and economic research. Topics include probability theory, sampling distribution, density function and distributions, estimation, hypothesis testing, analysis of variance, multiple regression, and correlation.

Prerequisite: Undergraduate statistics.

**EC 503 Macroeconomic Analysis** (3 credits)
Development of an understanding of how the overall economy and its various sectors influence the operation of given industries and their constituent firms. The uses and abuses of macroeconomic forecasting and the role of monetary and fiscal policy will be examined.

**EC 511 International Business and Economics** (3 credits)
An interdisciplinary application of business, and economic theory and practice to the international sphere of operations.

Prerequisite: CR 501-506.

**EL 501 Management Information Systems** (3 credits)
An examination of theory and practice related to the flow of, access to, and utilization of information in an organization. The evolving metaphor which views organizations as information processing networks and learning organisms will be evaluated from a managerial perspective.

**EL 502 Organizational Systems** (3 credits)
Advanced application of "open systems theory" to the understanding of human organizations.

Prerequisite: Successful completion of all Core Courses and MG 502.
EL 503 Management of Not-For-Profit Organizations (3 credits)
An examination of management principles and practices as applied to the non-profit sector. Consideration of leadership in this special environment, motivation of staff and volunteers, the influence of the founder(s) and the governing board, and alternative structures will be considered.

EL 504 Business History (3 credits)
The evolution of the corporation, and of management theory and practice in the US economic, social, political, and legal systems.

EL 506 Legal Environment of Business (3 credits)
Constraints on and opportunities for business enterprises posed by the U.S. legal system, from a managerial perspective. Prerequisite: Successful completion of all Prerequisite Foundation Courses or instructor's permission.

EL 507 Small Business Management (3 credits)
Application of management principles and practices to the small business enterprise. Prerequisite: Successful completion of all Core Courses, or instructor's permission.

EL 508 Production and Operations Management (3 credits)
An exposure to the principles and practices of production and operations management. Application of advanced, quantitative decision techniques is included. A managerial perspective is stressed. Prerequisite: CR 502. EC 501 and EC 502 recommended.

EL 509 Labor-Management Relations (3 credits)
A survey of the evolution of labor-management relations in the U.S. corporate sector. Prerequisite: Successful completion of all Prerequisite Foundation Courses or instructor's permission.

EL 516 The Free Enterprise System (3 credits)
A survey of alternative economic systems with an emphasis on the strengths and weaknesses of the Free Enterprise system. Prerequisite: Successful completion of all Prerequisite Foundation Courses.

EL 550 Special Topics (3 credits)
An in-depth exploration of a special topic(s) of interest to selected faculty and graduate students. Prerequisite: Instructor's permission.

EL 600 Independent Study/Research/Special Projects (3 credits)
To be used for faculty supervised independent study, special projects, or research. Prerequisite: Permission of the instructor and Program Director.

PM 501 Project Management Essentials (3 credits)
Investigates the increasing use of projects to accomplish important organizational goals and the unique style of administration required to manage them. To illustrate and reinforce concepts, a variety of projects, organizational settings, and issues will be investigated through Harvard cases. Topics to be addressed include the selection and role of the project manager, organization and planning, budgeting and cost estimation, scheduling and resource allocation among multiple projects, monitoring, controlling, auditing, and terminating projects.

PM 502 Project Management for eBusiness (3 credits)
This course will explore the emerging issues of project management in an e-commerce or e-business environment. The course will examine real world examples of project management activity in e-commerce applications and companies. The relevant characteristics for e-Business activity with respect to project management will be discussed.
SS 540  Legal Aspects of Sport Studies  
(3 credits)  
This course is designed to help students understand the basic tenets of contract and tort law, become familiar with the latest court decisions and legislation regarding many topics including gender equity and drug testing, and learn the implication of legal liability in the sport profession. The course provides the student with the requisite legal knowledge and sensitivity necessary to function within a professional environment, and demonstrates to the prospective sport professional the importance of sport law basics.

SS 550  Issues in Athletic Administration  
(3 credits)  
This course is an overview of the problems and issues that concern intercollegiate and interscholastic athletic programs. Focus is on the relation of athletics to education, problems of athletic organization, eligibility, finance, budgeting, and current trends in athletic administration.
GRADUATE PROGRAMS IN EDUCATION

Dr. Judith I. Simons, Director
610.282.1100, ext. 1461
E-mail: MEd@desales.edu

The Graduate Programs in Education emphasize professional development through inquiry, reflection, and the application of research-based methods to improve teaching and learning.
The Graduate Programs in Education foster teacher professional development through inquiry, reflection, and the application of research based methods to improve teaching and learning. Building on undergraduate studies and teaching experience, the programs aim to broaden theoretical and practical knowledge of educational professionals. Participants in the programs critique, discuss, and engage in educational research. The use of technology as an instructional tool and motivational device to enhance and extend learning is emphasized. Our graduates are well-prepared to address ethical concerns in the profession and to serve as informing voices in the development of educational policy.

A candidate may pursue one of the following degrees:

**Master of Education Degrees (Initial Certification)**

- MEd in Academic Standards (K-6 with Initial Certification in Elementary Education)
- MEd in Special Education (K-12 with Initial Certification)

**Master of Education Degrees (Certified Teachers)**

- MEd in Academic Standards and Reform
- MEd in Biology
- MEd in Chemistry
- MEd in Computers (K-8)
- MEd in Computers (K-12)
- MEd in English
- MEd in Mathematics
- MEd in Special Education (with add-on certification)
- MEd in Special Education (degree only for those already certified in special education)
- MEd in TESOL (Teaching English to Speakers of Other Languages)

**Certificate Programs**

- Instructional Technology Specialist
- ESL Program Specialist

Graduate education courses are open to all interested educators. Students may apply as Degree, Non-degree or Certificate candidates. An online application is available at www.desales.edu/med.

**Objectives**

The Graduate Programs in Education enable students to

1. strengthen subject matter competence,
2. improve teaching effectiveness,
3. acquire facility in the use of technology to improve education, and
4. implement strategies to address current issues faced by educators in today's society.

**Admission Requirements, MEd Programs**

1. A baccalaureate degree from an accredited institution.
2. Undergraduate GPA of at least 3.0.
3. Three letters of recommendation from professionals who can attest to the candidate’s preparedness for graduate studies.
4. A letter articulating the candidate’s professional goals.
5. Non-native speakers of English must demonstrate written English language proficiency.

Applicants may be admitted on a provisional basis. Individuals with special needs or goals may be considered for admission. Contact the Director, MEd Programs for information.
Admission Requirements, Instructional Technology Specialist Certificate Program

1. A baccalaureate degree from an accredited institution.
2. Competency in the content covered by CE 500 Computer Tools for Educators. This competency may be demonstrated by portfolio documentation. (For further information contact the Director, MEd Programs.)
3. Undergraduate GPA of 3.0.

Applicants may be admitted on a provisional basis. Individuals with special needs or goals may also be considered for admission.

Admission Requirements, ESL Program Specialist Certificate Program

1. A baccalaureate degree from an accredited institution.
2. Completion of a teaching certification program acceptable to the Commonwealth of Pennsylvania Department of Education.
3. Undergraduate GPA of at least 3.0.

Applicants may be admitted on a provisional basis. Individuals with special needs or goals may also be considered for admission.

Application Procedure

Application forms and information can be obtained from the Director, MEd Programs or www.desales.edu/med online.

A complete application will include:

1. A completed application for Admission Form.
2. Official transcripts of all college work, undergraduate and graduate.
3. Three letters of recommendation: one from a previous teacher or colleague, one from a present supervisor, and one from a person who has known the applicant in a professional capacity.
4. Copies of Teaching Certificates, if applicable.
5. A letter in which the applicant states his/her professional goals and how the Program will assist in obtaining these goals. The letter may include additional information the applicant wants the Committee to consider.
6. A non-refundable application fee.
7. Demonstration of English language proficiency.

A complete application for a non-degree candidate will include:

1. A completed Application for Admission Form.
2. Copies of transcripts of all undergraduate and graduate college work, or copies of Teaching Certificates.
3. A non-refundable application fee.

The MEd Program Director or Program Coordinator may request an interview with the applicant to discuss his/her application. The interviewer will submit a recommendation to the Committee based on the interview and application materials.

Internal Transfer

Students who have been admitted to graduate programs offered by the University may request transfer to another one of the MEd Graduate Programs. An additional application fee is not required and ordinarily admissions credentials need not be resubmitted. Depending on the Director’s approval, credits earned in the original program may be partially or fully applied toward the new degree.

Transfer Policy

Nine credits with grades of a “B” or better may be transferred to the Program provided that such credits have been completed within five years prior to the admission.

Transfer of credits must be requested in writing at the time of application for admission. Applicants are expected to provide official transcript, course description, and any additional documentation requested by the University. All transfers must be approved by the Director, MEd Program.
Additional transfer credits must be approved by the University upon the recommendation of the Director, MEd Program.

**Academic Schedule**

Courses are offered during the summer and throughout the academic year. Fall and spring three-credit courses normally meet from 5:30 PM to 8:30 PM once a week. One-credit courses generally meet on two Saturdays from 9:00 AM to 5:00 PM. Select courses may be offered alternately in class and online. Other classes may follow an accelerated weekend format. Summer classes are offered in several different formats.

**Student Status**

For the purpose of defining the student status, the calendar year (January 1 – December 31) is divided into a fall semester, a spring semester, and summer sessions.

A full time student is one who carries at least nine (9) credits in each of the fall or spring semesters. Taking courses in the summer session is optional.

A half time student is one who carries at least six (6) credits in each of the fall or spring semesters. Taking courses in the summer session is optional.

A less than half time student is one who carries less than six (6) credits in a given semester.

**International Students**

In addition to the criteria described in the Academic Regulations section, an international student (F-1 visa) needs to

- maintain full student status,
- carry at least one classroom based course in each semester, and
- take no more than one distance-education course in each semester.

**Student Categories**

Applicants may be admitted to the MEd Program in one of the following categories:

- **Regular Student Category**
  An applicant in this category is pursuing a degree only or degree and certification and meets all admission requirements.

- **Non-degree Category**
  An applicant in this category is pursuing certification only and meets all admission requirements.

- **Provisional Student Category**
  An applicant in this category needs to fulfill specified requirements as set forth by the Program Director. The student will be eligible for Regular Student status when all requirements have been met. Students wishing to change from Non-degree to Degree status must do so before completing five courses (15 credits) with an overall GPA of at least 3.0. Students must submit a letter requesting Regular Student status to the Program Director before the completion of the five courses.

- **ACT 48 Credit**
  An applicant seeking Act 48 credit must submit an application, application fee, and a copy of their undergraduate transcript or their teaching certificate. Applicants for Act 48 credit need not meet admission requirements.

- **Auditing Student Category**
  The Director, MEd Programs may permit qualified applicants to audit selected courses. Such applicants must complete the MEd Application form, and must pay the non-refundable application fee and tuition for any courses to be audited. Audited courses may not be counted toward graduation requirements.

- **Elective Courses**
  The student’s Program Coordinator should approve all elective courses taken as part of the degree program.

- **Attendance Policy**
  Students are expected to attend all scheduled class hours. An absence of more than two hours (total) from a one-credit course or five hours (total) from a three-credit course shall result in a grade of “F”.

- **Registration**
  Registration normally begins eight weeks prior to the first class meeting. Registration material is available from the MEd office or online at www.desales.edu/med. The University reserves
the right to limit enrollment, or cancel a course if registration is insufficient. A non-refundable, non-transferable deposit must accompany the registration for each course. The deposit is credited toward the tuition of the course for which the student has registered. Registrations must be received ten days prior to the start of the course. A $35 fee will be charged for late registrations.

**Tuition and Fees**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Courses per credit hour</td>
<td>$330</td>
</tr>
<tr>
<td>Application Fee</td>
<td>35</td>
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<tr>
<td>Instructional Technology</td>
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</tr>
<tr>
<td>Practicum Fee</td>
<td>300</td>
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<tr>
<td>Certificate Fee</td>
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</tr>
<tr>
<td>Graduation Fee</td>
<td>105</td>
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<tr>
<td>Returned Check Fee</td>
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</tr>
<tr>
<td>Late Registration Fee</td>
<td>35</td>
</tr>
</tbody>
</table>

**Refund Amount**

Three-Credit Courses:

- Withdrawal in 1st or 2nd week: 80% of tuition refunded
- Withdrawal in 3rd or 4th week: 50% of tuition refunded
- Withdrawal in 5th or 6th week: 25% of tuition refunded
- Withdrawal after 6th week: no refund

Weekend Courses:
No refund is made after the course has begun.

One-Credit Courses:
There are no refunds for one-credit courses once they have commenced.

**Graduation Requirements, MEd Programs**

The following graduation requirements apply to all MEd degrees:

1. Completion of the required number of graduate credits in an approved program of study.
2. An overall 3.0 GPA for all course work taken at the University towards the completion of the degree.
3. Resolution of all incomplete grades.
4. Completion of an approved project or thesis, or completion of the capstone course, ED 600 with a grade of B or higher.
5. Presentation of the completed project or thesis at a public meeting, class session, or conference.

**Commonwealth of Pennsylvania Requirements**

In accordance with the Commonwealth’s Act 34 of 1985, background checks are required of all new employees of public and private schools.

Initial and add-on Certifications require passing of a series of PRAXIS tests. See the MEd Director for additional information.

**PROGRAM OF STUDY, MEd PROGRAMS**

Each Program of Study for the MEd degree consists of graduate credits made up of Core, Major, Capstone, and Elective courses.

**Core Courses** (9-10 credits)

The Core Courses provide a firm foundation in curriculum design, instruction, assessment, educational research, and teaching for all MEd programs. These courses are required for all MEd degree candidates.

- ED 501 Educational Research* 3 credits
- ED 504 Philosophy and Ethics in Education 3 credits
- ED 507 Teaching Diverse Learners 3 credits
- ED 577 Research Tools 1 credit

Specific programs may have additional core course requirements.

*ED 501 must be taken within the first 12 credits in all programs.

**Major Courses** (12 credits)

Students must complete the major courses as required by their specific program. Major course requirements are described by the curriculum matrix of the specific programs.

**Capstone Course** (3 credits)

ED 600 Critical Issues and Research Seminar
Students must complete ED 501, ED 577, and 24 credits in the program before registering for ED 600.
In place of ED 600, students may elect to complete a project in their major by taking BI 600, CE 600, CH 600, EN 600, MA 600, or ES 600.

**Elective Courses**

The elective credits may be chosen from any of the MEd courses with the Program Coordinator's approval.

The number of core, major and elective courses may vary depending on the program of study. Students should check the requirements with their Program Coordinator or the Director, MEd Programs.

**PROGRAM OF STUDY, INSTRUCTIONAL TECHNOLOGY SPECIALIST CERTIFICATE**

The Program of Study consists of Core and Major courses, and the Practicum experience. Contact the Program Coordinator for additional information or visit www.desales.edu/med.

**PROGRAM OF STUDY, ESL PROGRAM SPECIALIST CERTIFICATE**

Designed for certified teachers who need the skills and techniques to teach English language learners. The Program of Study consists of 12 credits. Contact the Program Coordinator for additional information or visit www.desales.edu/med.
**MEd CALENDAR**

### Fall Semester 2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 22</td>
<td>Sunday</td>
<td>Opening Mass of the Holy Spirit</td>
</tr>
<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 10</td>
<td>Friday</td>
<td>Last day to register without a late fee</td>
</tr>
<tr>
<td>September 13</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 20</td>
<td>Monday</td>
<td>Last day to Drop/Add a 3-credit course</td>
</tr>
<tr>
<td>October 13</td>
<td>Wednesday</td>
<td>Deadline for submitting application for Winter Graduation</td>
</tr>
<tr>
<td>November 25-26</td>
<td>Thursday/Friday</td>
<td>Thanksgiving holiday</td>
</tr>
<tr>
<td>November 29</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December 17</td>
<td>Friday</td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>

### Spring Semester 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 18</td>
<td>Tuesday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 23</td>
<td>Sunday</td>
<td>Winter Graduation</td>
</tr>
<tr>
<td>January 24</td>
<td>Monday</td>
<td>Last day to Drop/Add a 3-credit course</td>
</tr>
<tr>
<td>March 2</td>
<td>Tuesday</td>
<td>Deadline for submitting application for May Graduation</td>
</tr>
<tr>
<td>April 22</td>
<td>Friday</td>
<td>Last day of semester for Thurs. classes</td>
</tr>
<tr>
<td>May 20</td>
<td>Friday</td>
<td>PM Baccalaureate</td>
</tr>
<tr>
<td>May 21</td>
<td>Saturday</td>
<td>AM Commencement</td>
</tr>
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</table>

### Summer Sessions 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 13</td>
<td>Monday</td>
<td>Last day to register without a late fee for Summer Session I</td>
</tr>
<tr>
<td>June 20</td>
<td>Monday</td>
<td>Classes begin for Summer Session I</td>
</tr>
<tr>
<td>June 27</td>
<td>Monday</td>
<td>Last day for withdrawal from Session I</td>
</tr>
<tr>
<td>July 4</td>
<td>Monday</td>
<td>No Classes</td>
</tr>
<tr>
<td>July 5</td>
<td>Tuesday</td>
<td>Last day to register without a late fee for Summer Session II</td>
</tr>
<tr>
<td>July 15</td>
<td>Friday</td>
<td>Last day of classes for Summer Session I</td>
</tr>
<tr>
<td>July 18</td>
<td>Monday</td>
<td>Classes begin for Summer Session II</td>
</tr>
<tr>
<td>July 25</td>
<td>Monday</td>
<td>Last day for withdrawal from Summer Session II</td>
</tr>
<tr>
<td>August 26</td>
<td>Friday</td>
<td>Last day of classes for Summer Session II</td>
</tr>
</tbody>
</table>
BIOLOGY PROGRAM

Fr. Peter Leonard, Program Coordinator
Department of Natural Science
610.282.1100, ext. 1289
E-mail: Peter.Leonard@desales.edu

The Master of Education in Biology Program is designed to present teachers with the latest advances in the field of biology. The rapid evolution of the biological sciences has resulted in numerous advances in knowledge and technology. These technological advances have been accompanied by the development of numerous innovative laboratory-teaching programs. A graduate of this Program will be able to design and teach an innovative high school biology curriculum with appropriate investigative laboratory exercises.

### Program Requirements

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>(1 credit)</th>
<th>Major Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 577 Research Tools</td>
<td>1 credit</td>
<td>BI 540 Molecular Biology for Teachers 3 credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BI 545 Toxicology for Teachers (May be taken as CH 545) 3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>(9 credits)</th>
<th>Capstone Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 501 Educational Research 3 credits</td>
<td>BI 600 Project: Biology 3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 504 Philosophy and Ethics in Education 3 credits</td>
<td>or ED 600 Critical Issues and Research Seminar 3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 507 Teaching Diverse Learners 3 credits</td>
<td>Prerequisites: ED 501 and completion of 24 credits in the program.</td>
<td></td>
</tr>
<tr>
<td>ED 518 Classroom Management 3 credits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(12 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI 510 Cell Biology for Teachers 3 credits</td>
<td>BI 540 Molecular Biology for Teachers 3 credits</td>
</tr>
<tr>
<td>BI 515 Plant Biology for Teachers 3 credits</td>
<td>BI 545 Toxicology for Teachers (May be taken as CH 545) 3 credits</td>
</tr>
<tr>
<td>BI 520 Environmental Science for Teachers 3 credits</td>
<td></td>
</tr>
<tr>
<td>BI 525 Physiology for Teachers 3 credits</td>
<td>Capstone Course</td>
</tr>
<tr>
<td>BI 530 Biochemistry for Teachers (May be taken as CH 530) 3 credits</td>
<td>(3 credits)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective Courses</th>
<th>(5 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five elective credits may be chosen from among the Major Courses listed above or from any of the courses with the Program Coordinator's approval.</td>
<td></td>
</tr>
</tbody>
</table>
The Master of Education in Chemistry Program is designed for chemistry teachers to improve their knowledge in the traditional areas of the high school chemistry curriculum. A graduate of the Program is able to offer leadership in the development of a high school chemistry curriculum and to teach a College Entrance Examination Board Advanced Placement course in chemistry.

### Program Requirements

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>(1 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 577</td>
<td>Research Tools</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>(9 credits)</th>
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<tbody>
<tr>
<td>ED 501</td>
<td>Educational Research</td>
</tr>
<tr>
<td>ED 504</td>
<td>Philosophy and Ethics in Education</td>
</tr>
<tr>
<td>ED 507</td>
<td>Teaching Diverse Learners</td>
</tr>
<tr>
<td>ED 518</td>
<td>Classroom Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(12 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 510</td>
<td>General Chemistry for Teachers</td>
</tr>
<tr>
<td>CH 515</td>
<td>Analytical Chemistry for Teachers</td>
</tr>
<tr>
<td>CH 520</td>
<td>Physical Chemistry for Teachers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(12 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 525</td>
<td>Organic Chemistry for Teachers</td>
</tr>
<tr>
<td>CH 530</td>
<td>Biochemistry for Teachers</td>
</tr>
<tr>
<td>CH 545</td>
<td>Toxicology for Teachers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone Course</th>
<th>(3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 600</td>
<td>Project: Chemistry</td>
</tr>
<tr>
<td>ED 600</td>
<td>Critical Issues and Research Seminar</td>
</tr>
</tbody>
</table>

Prerequisites: ED 501 and completion of 24 credits in the program.

<table>
<thead>
<tr>
<th>Elective Courses</th>
<th>(5 credits)</th>
</tr>
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<tbody>
<tr>
<td>Five elective credits may be chosen from the Major Courses listed above or from any other courses with the Program Coordinator's approval.</td>
<td></td>
</tr>
</tbody>
</table>
COMPUTERS IN EDUCATION PROGRAMS

Dr. Judith I. Simons, Program Coordinator
Department of Education
610.282.1100, ext.1461
E-mail: MEd@desales.edu

Candidates interested in the Computers in Education Program may pursue studies in one of the following concentrations:

Computers in Education (K-12)
The Master of Education in Computers in Education is designed for the teacher who is interested in the application of technology to the school setting. This Program enables teachers to select and integrate technology into the curriculum of their subject matter areas by emphasizing the use of technology as a multimedia instructional tool that enhances and extends learning. Word processing, telecommunication, database, spreadsheet, desktop publishing, and other teacher utility applications are included.

Computers in Education for Elementary Teachers (K-8)
The Master of Education in Computers in Education for Elementary Teachers is designed for K-8 teachers who wish to integrate technology into the language arts, mathematics, science, and social studies core curricula. The program highlights academic content and the use of technology to enhance and extend learning in a variety of formats.

Program Requirements, Computers in Education (K-12)

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>(4 credits)</th>
<th>Core Courses</th>
<th>(9 credits)</th>
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</thead>
<tbody>
<tr>
<td>CE 500 Computer Tools for Educators</td>
<td>3 credits</td>
<td>ED 504 Philosophy and Ethics in Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 577 Research Tools</td>
<td>1 credit</td>
<td>ED 507 Teaching Diverse Learners</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or ED 518 Classroom Management</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(12 credits)</th>
<th>Capstone Course</th>
<th>(3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 525 Software Collections</td>
<td>3 credits</td>
<td>CE 600 Project: Computers in Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>CE 530 Computers in the K-12 Curriculum</td>
<td>3 credits</td>
<td>or ED 600 Critical Issues and Research Seminar</td>
<td>3 credits</td>
</tr>
<tr>
<td>CE 545 Research in Instructional Technology</td>
<td>3 credits</td>
<td>Prerequisites: ED 501 and completion of 24 credits.</td>
<td></td>
</tr>
<tr>
<td>CE 550 Multimedia Classroom Applications</td>
<td>3 credits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE 553 Web Design for Educators</td>
<td>3 credits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program Requirements, Computers in Education for Elementary Teachers (K-8)

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>(4 credits)</th>
<th>Core Courses</th>
<th>(9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 500 Computer Tools for Educators</td>
<td>3 credits</td>
<td>ED 577 Research Tools</td>
<td>1 credit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective Courses</th>
<th>(5 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five elective credits may be chosen from any of the MEd courses with the Program Coordinator's approval.</td>
<td></td>
</tr>
</tbody>
</table>

Program Requirements, Computers in Education for Elementary Teachers (K-8)

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>(4 credits)</th>
<th>Core Courses</th>
<th>(9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 500 Computer Tools for Educators</td>
<td>3 credits</td>
<td>ED 501 Educational Research</td>
<td>3 credits</td>
</tr>
</tbody>
</table>
Graduate Programs in Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 507</td>
<td>Teaching Diverse Learners</td>
<td>3</td>
</tr>
<tr>
<td>ED 504</td>
<td>Philosophy and Ethics in Education</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 518</td>
<td>Classroom Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Courses (15 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 550</td>
<td>Multimedia Classroom Applications</td>
<td>3</td>
</tr>
<tr>
<td>CE 553</td>
<td>Web Design for Educators</td>
<td>3</td>
</tr>
<tr>
<td>LA 525</td>
<td>Teaching Language, Literacy, and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MA 540</td>
<td>Using Calculators and Manipulatives in Mathematics Classes</td>
<td>3 credits</td>
</tr>
<tr>
<td>SC 530</td>
<td>Teaching Elementary Science</td>
<td>3</td>
</tr>
<tr>
<td>SS 535</td>
<td>Teaching Elementary Social Studies</td>
<td>3</td>
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</table>

**Capstone Course (3 credits)**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CE 600</td>
<td>Project: Computers in Education</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 600</td>
<td>Critical Issues and Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Prerequisites: ED 501 and completion of 24 credits.

**Electives (2 credits)**

Two elective credits may be chosen from any of the MEd courses with the Program Coordinator’s approval.

Prerequisites: ED 501 and completion of 24 credits.
ENGLISH PROGRAM

Dr. Annette L. Benert, Program Coordinator
Department of Humanities
610.282.1100, ext. 1372
E-mail: Annette.Benert@desales.edu

The Master of Education in English Program is designed to provide teachers in today's secondary school classrooms with the methods and materials to help their students become better readers and writers. Courses focus on teaching literature in the context of the cultural matrix from which it originated with special attention to the visual arts for a visual generation of students. Courses emphasize teaching the writing process as a mode of expression along with collaborative learning appropriate to adolescent students.

Program Requirements

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>(1 credit)</th>
<th>Core Courses (9 credits)</th>
<th>Major Courses (12 credits)</th>
<th>Elective Courses (5 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 577 Research Tools</td>
<td>1 credit</td>
<td>ED 501 Educational Research</td>
<td>3 credits</td>
<td>EN 555 Teaching Film in the English Classroom</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ED 504 Philosophy and Ethics in Education</td>
<td>3 credits</td>
<td>EN 535 Teaching the American Dream</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ED 507 Teaching Diverse Learners or Classroom Management</td>
<td>3 credits</td>
<td>EN 550 Teaching Writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ED 518 Classroom Management</td>
<td>3 credits</td>
<td>EN 600 Project: English</td>
</tr>
</tbody>
</table>

Prerequisites: ED 501 and completion of 24 credits in the program.

Capstone Course (3 credits)
EN 600 Project: English 3 credits
or
ED 600 Critical Issues and Research Seminar 3 credits

Elective Courses (5 credits)
Five elective credits may be chosen from the Major Courses or from any of the MEd courses with the Program Coordinator's approval.
Graduate Programs in Education

MATHEMATICS PROGRAM

Ms. Annmarie Houck, Program Coordinator
Department of Mathematics and Computer Science
610.282.1100, ext.1336
E-mail: amh2@desales.edu

The Master of Education in Mathematics Program provides the secondary teacher with the breadth and depth of mathematics appropriate for teaching grades 7-12, including the University Entrance Examination Board Advanced Placement course in Calculus. The Program emphasizes foundations of the secondary curriculum, as well as innovative approaches for teaching these topics. Courses feature the use of technology to enhance the teaching and learning of mathematics.

Program Requirements

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>(1 credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 577 Research Tools</td>
<td>1 credit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>(9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 501 Educational Research</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 507 Teaching Diverse Learners</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 504 Philosophy and Ethics in Education or</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 518 Classroom Management</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(12 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 510 Teaching Calculus: Analysis I</td>
<td>3 credits</td>
</tr>
<tr>
<td>MA 515 Teaching Calculus: Analysis II</td>
<td>3 credits</td>
</tr>
<tr>
<td>MA 520 Discrete Mathematics in the Secondary Curriculum</td>
<td>3 credits</td>
</tr>
<tr>
<td>MA 525 Geometry for Mathematics Teachers</td>
<td>3 credits</td>
</tr>
<tr>
<td>MA 530 Probability and Statistics for Mathematics Teachers</td>
<td>3 credits</td>
</tr>
<tr>
<td>MA 590 Special Topics in Mathematics</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone Course</th>
<th>(3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 600 Project: Mathematics or</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 600 Critical Issues and Research Seminar</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Prerequisites: ED 501 and completion of 24 credits in the program.

<table>
<thead>
<tr>
<th>Elective Courses</th>
<th>(5 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five elective credits may be chosen from the Major Courses or from any of the MEd courses with the Program Coordinator’s approval.</td>
<td></td>
</tr>
</tbody>
</table>
SPECIAL EDUCATION PROGRAM

Dr. Judith I. Simons, Program Coordinator
Department of Education
610.282.1100, ext. 1461
Email: MEd@desales.edu

The Master of Education in Special Education Program prepares educators to work with children and youth who have a variety of mild/moderate disabilities. The program emphasizes application of theory into practice, incorporation of reflective problem solving, collaboration with schools and other agencies, and participation in field-based research.

There are three options available to individuals whose career goals include working with special education populations.

**Master of Education in Special Education**
This option is for teachers holding Instructional I Certification and wishing to pursue advanced studies in Special Education.

**Master of Education in Special Education with Certification**
This option is for teachers holding Instructional I Certification, and wishing to earn a MEd as well as Special Education certification.

**Master of Education in Special Education with Initial Certification**
This option is for the person who wants to pursue the MEd degree and teacher certification in Special Education. Entering this option requires an undergraduate degree and a twelve-week student teaching experience.

**Master of Education in Special Education**

**Prerequisite Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 577</td>
<td>Research Tools</td>
<td>1 credit</td>
</tr>
</tbody>
</table>

**Core courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 501</td>
<td>Educational Research</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 504</td>
<td>Philosophy and Ethics in Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 507</td>
<td>Teaching Diverse Learners</td>
<td>3 credits</td>
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</tbody>
</table>

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE 502</td>
<td>Learning and Behavior Challenges</td>
<td>3 credits</td>
</tr>
<tr>
<td>or</td>
<td>Moderate and Severe Disabilities</td>
<td>3 credits</td>
</tr>
<tr>
<td>SE 504</td>
<td>Collaboration and Consultation</td>
<td>3 credits</td>
</tr>
<tr>
<td>SE 508</td>
<td>Special Education Law</td>
<td>3 credits</td>
</tr>
<tr>
<td>SE 510</td>
<td>Instructional Adaptations and Modifications</td>
<td>3 credits</td>
</tr>
<tr>
<td>SE 514</td>
<td>Positive Behavior Management</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Choose 3 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 520</td>
<td>Multiple Intelligences</td>
<td>1 credit</td>
</tr>
<tr>
<td>ED 555</td>
<td>Alternative Assessment</td>
<td>1 credit</td>
</tr>
<tr>
<td>ED 569</td>
<td>Cooperative Learning</td>
<td>1 credit</td>
</tr>
<tr>
<td>SE 520</td>
<td>Special Education Transition</td>
<td>1 credit</td>
</tr>
</tbody>
</table>

**Capstone Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 600</td>
<td>Critical Issues and Research Seminar</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Prerequisites: ED 501 and completion of 24 credits in the program.
### Master of Education in Special Education with Certification

**Prerequisite Course**  
ED 577  Research Tools  
(1 credit)

**Core Courses**  
ED 501  Educational Research  3 credits  
ED 504  Philosophy and Ethics in Education  3 credits  
ED 507  Teaching Diverse Learners  3 credits  
(9 credits)

**Major Courses**  
SE 502  Learning and Behavior Challenges  3 credits  
SE 504  Moderate and Severe Disabilities  3 credits  
SE 508  Collaboration and Consultation  3 credits  
SE 510  Special Education Law  3 credits  
SE 512  Integration of Technology into Special Education Classrooms  3 credits  
SE 514  Instructional Adaptations and Modifications  3 credits  
SE 518  Positive Behavior Management  3 credits  
SE 598  Special Education Internship  3 credits  
(24 credits)

**Capstone Course**  
ED 600  Critical Issues and Research Seminar  3 credits  
(3 credits)

Prerequisites: ED 501 and completion of 24 credits in the program.

### Master of Education in Special Education with Initial Certification

**Prerequisite Course**  
ED 577  Research Tools  1 credit

**Core Courses**  
ED 501  Educational Research  3 credits  
ED 504  Philosophy and Ethics in Education  3 credits  
ED 507  Teaching Diverse Learners  3 credits  
(9 credits)

**Major Courses**  
SE 502  Learning and Behavior Challenges  3 credits  
SE 504  Moderate and Severe Disabilities  3 credits  
SE 508  Collaboration and Consultation  3 credits  
SE 510  Special Education Law  3 credits  
SE 512  Integration of Technology into Special Education Classrooms  3 credits  
SE 514  Instructional Adaptations and Modifications  3 credits  
SE 518  Positive Behavior Management  3 credits  
SE 598  Special Education Internship  3 credits  
(21 credits)

**Capstone Course**  
ED 600  Critical Issues and Research Seminar  3 credits  
(3 credits)

Prerequisites: ED 501 and completion of 24 credits in the program.

Students are required to complete ED 420, 422, 424, and 426 (Special Education Student Teaching) to apply for teacher certification.
TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES  
(TESOL)  
Fr. Joseph DiMauro, Program Coordinator  
Department of Education  
610.282.1100, ext. 1378

The Master of Education in TESOL is designed to provide educators with knowledge of English perceived as a second language, knowledge of ESL teaching and learning strategies, practical experience in applying theoretical knowledge, an awareness of the realities of the multicultural classroom, and a commitment to continued professional growth. The TESOL degree includes the Program Specialist Certification required of all Commonwealth of Pennsylvania Department of Education ESL teachers by the 2005-2006 school year.

Program Requirements

Prerequisite Course  
ED 577  Research Tools  (1 credit)

Core Courses  
ED 501  Educational Research  3 credits  
ES 507*  Teaching Culturally and Linguistically Diverse Learners  3 credits  
ES 537  Collaborative Action Research with English Language Learners  3 credits

Major Courses  
ES 535*  Foundations of Second Language Acquisition  3 credits  
ES 536*  Assessing English Language Learners  3 credits

ES 540  Linguistics  3 credits  
ES 545  Multicultural Community Development  3 credits  
ES 594  Technology and English Language Learners  3 credits  
ES 595*  Linking Language Acquisition and Content  3 credits

Capstone Course  
ES 600  Project: TESOL  3 credits  
or  
ED 600  Critical Issues and Research Seminar  3 credits

Prerequisites: ED 501 and completion of 24 credits in the program.

*Courses required for the ESL Program Specialist.
The Instructional Technology Specialist Certificate Program is designed for technology coordinators, technology trainers, teachers, and other education professionals in K-12 and higher education settings. The Program is structured to include core courses, major courses, and a three-credit practicum. Students may obtain credit for formal training and/or life experience if they meet Commonwealth of Pennsylvania Department of Education Standards for the Instructional Technology Specialist Certificate. Evaluation forms are available online (www.desales.edu/med) or by calling the MEd office. Individuals with significant relevant experience in technology may apply to earn the certificate by completing a minimum of twelve credits.

### Program Requirements

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>(3 credits)</th>
<th>Core Courses</th>
<th>(9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 500</td>
<td>Computer Tools for Educators</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 507</td>
<td>Teaching Diverse Learners</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 508</td>
<td>Law and Media in Education</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>ED 509</td>
<td>Instructional Media</td>
<td>3 credits</td>
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</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(18 credits)</th>
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<tbody>
<tr>
<td>CE 525</td>
<td>Software Collections</td>
</tr>
<tr>
<td>CE 530</td>
<td>Computers in the K-12 Curriculum</td>
</tr>
<tr>
<td>CE 536</td>
<td>Networking and Microcomputer Systems</td>
</tr>
<tr>
<td>CE 545</td>
<td>Research in Educational Technology</td>
</tr>
<tr>
<td>CE 550</td>
<td>Multimedia Classroom Applications</td>
</tr>
<tr>
<td>CE 553</td>
<td>Web Design for Educators</td>
</tr>
<tr>
<td>CE 555</td>
<td>Management of Technology Resources</td>
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</table>

<table>
<thead>
<tr>
<th>Capstone Course</th>
<th>(3 credits)</th>
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</thead>
<tbody>
<tr>
<td>CE 599</td>
<td>Instructional Technology Practicum</td>
</tr>
</tbody>
</table>
ENGLISH AS A SECOND LANGUAGE PROGRAM SPECIALIST CERTIFICATION
(ESL)
Fr. Joseph DiMauro, Program Coordinator
Department of Education
610-282-1100, ext. 1378

With the approval of the Commonwealth of Pennsylvania Department of Education the University offers the ESL Program Specialist Certification. All teachers in English as a Second Language Programs must obtain the endorsement by school year 2004-2005.

The ESL Program Specialist Certification is designed to assist educators in acquiring the knowledge and skills to teach English language learners. The program is structured to sensitize teachers to the needs of students from various cultures and backgrounds, to impart information on language and literacy acquisition, coaching that will enable teachers to become reflective practitioners.

Candidates may obtain credit for formal training and/or life experience if they meet Commonwealth of Pennsylvania Department of Education Standards for the ESL Program Specialist. Individuals with significant relevant experience in ESL may apply to earn the certificate by completing a minimum of six credits. Visit www.desales.edu/med for more information.

The number of students in the United States, whose English proficiency is limited, has grown by 95% since 1991 according to the U.S. Department of Education’s Office of English Language Acquisition. Teachers who hold the ESL Program Specialist are consequently in great demand.

The program consists of four three-credit courses:

- ES 507 Teaching Culturally and Linguistically Diverse Learners
- ES 535 Foundations of Second Language Acquisition
- ES 536 Assessing English Language Learners
- ES 595 Linking Language Acquisition and Content
The Master of Education in Academic Standards K-6 with Elementary Certification Program is designed to prepare prospective elementary teachers (Kindergarten through Grade 6) for teaching certification by the Pennsylvania Department of Education (PDE). Prospective teachers will be able to enter the elementary education field with an understanding of theories and research for placing, implementing, and assessing high quality learning aligned with PDE Standards.

Program Requirements

Prerequisite Courses (16 credits)
- Compositions and Literature 6 credits
- Mathematics 6 credits
- PS 240 Human Development 3 credits
  or
- PS 245 Child Psychopathology 3 credits
  or equivalent
- ED 577 Research Tools 1 credits

Core Courses (9 credits)
- ED 501 Educational Research 3 credits
- ED 504 Philosophy and Ethics in Education 3 credits
- ED 507 Teaching Diverse Learners 3 credits

Major Courses (22 credits)
- EE 500 Best Practices in Education 3 credits
- EE 513 Teaching Literacy Standards K-3 3 credits
- EE 514 Teaching Literacy Standards 4-8 3 credits

   EE 515 Teaching Social Studies Standards K-6 3 credits
   EE 536 Teaching Science and Technology Standards K-6 3 credits
   EE 543 Teaching Arts Standards K-6 3 credits
   EE 546 Teaching Mathematics Standards K-6 3 credits
   EE 548 Teaching Health, Safety and Physical Education Standards K-6 1 credit

Capstone Course (3 credits)
- ED 600 Critical Issues and Research Seminar 3 credits

Students are required to complete ED 440, 442, 444, 446 (Elementary Education Student Teaching) to apply for certification.
The Master of Education degree in Academic Standards and Reform prepares educators for professional and career enhancement work in the areas of education and social services.

### Program Requirements

<table>
<thead>
<tr>
<th>Prerequisite Course</th>
<th>(1 credit)</th>
<th>Major Courses</th>
<th>(18 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 577 Research Tools</td>
<td>1 credits</td>
<td>Two additional advanced topics in Education may be taken in addition to ED 503.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>(9 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 501 Educational Research</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 503 Advanced Topics in Education</td>
<td>3 credits</td>
</tr>
<tr>
<td>ED 504 Philosophy and Ethics in Education</td>
<td>3 credits</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone Course</th>
<th>(3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 600 Critical Issues and Research Seminar</td>
<td>3 credits</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

Key to Courses
BI – Biology  EN – English
CE – Technology  ES – ESL/TESOL
CH – Chemistry  MA – Mathematics
ED – Education  SE – Special Education
EE – Elem. Education

BI 510  Cell Biology for Teachers  (3 credits)
The biology of cells. Teachers are presented with
a survey of the latest advances in cell biology,
including creative lecture demonstration
techniques. Web-based instructional resources are
examined extensively. The laboratory enables
teachers to experience the technologies used in the
preparation of several commercially available
innovative instructional kits.
A $55.00 laboratory fee is required.

BI 515  Plant Biology for Teachers  (3 credits)
A survey of plant biology and current research
with plants. Aspects of plant biology, including
anatomy, physiology, ecology, survey of the plant
kingdom, and plant evolution are studied.
Laboratory exercises utilize Wisconsin Fast Plants
for studying effects of nutrition, density, and light
as well as experiments on pollination and genetics.
Laboratory exercises will be directly applicable at
the secondary school level.
A $55.00 laboratory fee is required.

BI 520  Environmental Science for Teachers  (3 credits)
An introduction to issues and problem solving in
environmental science. Global, national, regional,
and local issues will be discussed. Students will
learn how to guide secondary school students in
investigations of local environment issues.
Students will use the eb-based source of
environmental information. Field trips will
highlight environmental issues in the Lehigh
Valley.
A $55.00 laboratory fee is required.

BI 525  Physiology for Teachers  (3 credits)
Concepts and laboratory activities in physiology.
This course utilizes a laboratory approach for the
teaching of physiology in a high-school setting.
Lectures cover concepts in vertebrate physiology,
stressing that of the human. Specific approaches
to teaching these concepts at the secondary level
include simple and effective demonstrations of
fundamental ideas. Current multi-media materials
are introduced in the context of each lecture. A
significant portion of the course provides
laboratory experience using computer based
intellitool laboratory packages.

BI 530  Biochemistry for Teachers  (3 credits)
An in-depth study of selected topics in
biochemistry, particularly those directly related to
the high school curriculum with special emphasis
on the use of laboratory exercises and lecture
demonstrations as strategies for instruction.
(Cross-listed as CH 530)
A $55.00 laboratory fee is required.

BI 540  Molecular Biology for Teachers  (3 credits)
The biology of DNA. An overview of the latest
advances in DNA technology is provided,
including those relating to the Human Genome
Initiative. The laboratory provides a hands-on
experience with basic DNA techniques and
molecular evolution.

BI 545  Toxicology for Teachers  (3 credits)
Identification and measurement of toxic
substances. This course examines the clinical and
environmental aspects of chemical toxicity.
Special emphasis is placed on the interaction of
drugs and environmental pollutants. The
laboratory includes demonstrations on the ways in
which toxicity is measured. A number of case
histories are presented. (Cross-listed as CH 545)

BI 560-589  One-credit courses in Biology  (1 credit)
Specialized one-credit courses on the teaching of
biology, developments in the field, and addressing
current issues.
BI 560  Introduction to the Microbial World
BI 561  Techniques in Stream Ecology
BI 562  Products from Plants
BI 564  Creative Student Laboratories with Fast
Plants
BI 565  Innovative Cell Biology Instructions for
High School
BI 566 Computer Applications in Human Physiology
BI 567 Innovative Molecular Biology Laboratory
BI 568 Cloning: The Recipe for Life?

BI 590 Special Topics: Biology (1-3 credits)
Course offered periodically on topics of special interest.

BI 600 Project: Biology (3 credits)
The terminal course in the Biology Program. The student and the instructor design the project.
Prerequisite: Approval of the Program Coordinator

CE 500 Computer Tools for Educators (3 credits)
A course designed to develop basic computer skills in the following areas: basic operations of Windows, word processing, graphics, telecommunications, Power Point, newsletter production, database and spreadsheets.
Required prerequisite (May be satisfied by portfolio documentation.)

CE 515 Teaching Computer Programming (3 credits)
An introduction to the concepts of structured programming using the Visual Basic language.
Methods of teaching novice programmers are emphasized.
Prerequisite: None

CE 525 Software Collections (3 credits)
A comprehensive investigation of the critical elements of developing an educational software collection and the effective use of software in an instructional unit. Topics include classifying and evaluating software, legal issues, staff training in the use of applications, instructional Web resources, and other appropriate current issues.
Prerequisite: CE 500.

CE 530 Computers in the K-12 Curriculum (3 credits)
An examination of how technology can be used to enhance the curriculum. Topics include the use of technology as a learning tool and the role of the teacher in conceptualizing the use of technology to further instructional and curricular objectives.

CE 536 Networking and Microcomputer Systems (3 credits)
An overview of components for the design, construction, and upgrading of computer systems along with the utilization of networking technology to interconnect systems to each other and to the Internet. Networking topics include networking models, protocols, software, and maintenance. Network security and ethical concerns are examined.
Prerequisite: CE 500.

CE 545 Research in Instructional Technology (3 credits)
A study of current issues and research in instructional technology as they apply to K-12 education. Research on emerging technologies and technology management is emphasized.
Prerequisite: CE 500, ED 577, ED 501.

CE 550 Multimedia Classroom Applications (3 credits)
The design of multimedia projects that enhance learning in K-12 classrooms. Students will work with several multimedia programs, and learn to use digital cameras, camcorders, scanners, and other resources in creating multimedia classroom projects. Included are studies of curriculum theory as they apply to learning with technology.
Prerequisite: CE 500.

CE 553 Web Design For Educators (3 credits)
A course introducing web design and authoring in educational settings. Using Microsoft FrontPage and PhotoDraw, participants manipulate text, graphics, sounds, animated objects, and video to author a variety of web-related products. Emphasis is on the design and construction of web pages for classroom settings.
Prerequisite: CE 500

CE 555 Management of Technology Resources (3 credits)
An examination of technology management issues at the building, district, and institutional levels.
Explore the evaluation of district technology plans, leadership techniques, curriculum review and development, the role of the Technology Coordinator, and the management of professional development as it relates to technology.
Prerequisite: CE 500.

**CE 560-589 One-credit courses in Computers in Education (1 credit)**
Specialized courses dealing with the application of technology in the educational environment.
CE 562 Desktop Publishing for Educators
CE 570 PowerPoint I and II
CE 572 Online Course Development
CE 573 Spreadsheets in the Classroom
CE 586 Utilizing Technology Effectively in the One-Computer Classroom
CE 589 Integrating Technology and Instruction with Web Quests

**CE 592 Technology Leadership (3 credits)**
The technology specialist in K-12 education must be a technician, a trainer, advisor, and a manager. The objective of this course is to make future technology specialist aware of the varying roles they will play, the processes associated with those roles, and the skills required to fulfill them.

**CE 599 Instructional Technology Specialist Practicum (3 credits)**
A supervised field experience of ninety hours in a K-12 instructional technology setting. Students are matched with technology coordinators in local school districts where they assist with technology management, technology planning, and staff training. A fee of $300 is required.

**CE 600 Project: Computers in Education (3 credits)**
The capstone project in the Master of Education in Computers in Education Program. The student and the instructor design the project.
Prerequisite: Approval of the Program Coordinator.
* Students must take either CE 600 or ED 600.

**CH 510 General Chemistry for Teachers (3 credits)**
An in-depth study of selected topics in general chemistry, particularly those directly related to the high school curriculum, with special emphasis on the use of laboratory exercises and lecture demonstrations as strategies for instruction. A $55 laboratory fee is required.

**CH 515 Analytical Chemistry for Teachers (3 credits)**
An in-depth study of selected topics in analytical chemistry, particularly those directly related to the high school curriculum, with special emphasis on the use of laboratory exercises and lecture demonstrations as strategies for instruction. A $55 laboratory fee is required.

**CH 520 Physical Chemistry for Teachers (3 credits)**
An in-depth study of selected topics in physical chemistry, particularly those directly related to the high school curriculum, with special emphasis on the use of laboratory exercises and lecture demonstrations as strategies for instruction. A $55 laboratory fee is required.

**CH 525 Organic Chemistry for Teachers (3 credits)**
An in-depth study of selected topics in organic chemistry, particularly those directly related to the high school curriculum, with special emphasis on the use of laboratory exercises and lecture demonstrations as strategies for instruction. A $55 laboratory fee is required.

**CH 530 Biochemistry for Teachers (3 credits)**
An in-depth study of selected topics in biochemistry, particularly those directly related to the high school curriculum, with special emphasis on the use of laboratory exercises and lecture demonstrations as strategies for instruction. (Cross-listed as BI 530) A $55 laboratory fee is required.

**CH 535 Industrial Chemistry for Teachers (3 credits)**
This course will expose high school chemistry teachers to chemistry and chemical engineering applications, which are important to chemical industries. Lectures and demonstrations by the instructors and chemists will provide the background information needed to understand the
important processes, which will be seen during visits to the chemical industries. On-site visits include a laboratory experience. Participants will be expected to develop curriculum materials that synthesize the concepts obtained in the course along with the special laboratory projects. It is expected that these curriculum materials - for use in high school classes - will show real applications in industry that increase high school students’ understanding of an interest in chemistry.

**CH 540  Consumer Chemistry for Teachers**  
(3 credits)  
This course exposes high school chemistry teachers to chemistry and chemical engineering applications, which are important to consumer products. Lectures and demonstrations by the instructors and chemists will provide the background information needed to understand the important steps in creating and characterizing the consumer products, which will be seen during visits to the chemical industries. On-site visits include a laboratory experience. Participants will be expected to develop curriculum materials that synthesize the concepts obtained in the course along with the special laboratory projects. These curriculum materials - for use in high school classes - will show the development, manufacture, and testing of certain consumer products in ways that increase high school student understanding of and interest in chemistry.

**CH 545  Toxicology for Teachers**  
(3 credits)  
Identification and measurement of toxic substances. This course examines the clinical and environmental aspects of chemical toxicity. Special emphasis is placed on the interaction of drugs and environmental pollutants. The laboratory includes demonstrations on the ways in which toxicity is measured. A number of case histories are presented. (Cross-listed as BI 545)

**CH 560-589  One-credit courses in Chemistry**  
(1 credit)  
Typical one-credit courses will include demonstration and laboratory exercises appropriate for the grade level taught by the participating teachers. The following one-credit courses have been and continue to be offered periodically; new one-credit courses are added regularly:

- CH 561  Teaching Chemistry with Large Scale Models
- CH 565  Teaching Chemistry with Lecture Experiments
- CH 566  Chemistry Laboratory Computer Interfacing
- CH 567  Teaching Resources, Teaching Tips, and Model Building in Chemistry
- CH 568  Management of Academic Chemistry Laboratories
- CH 569  Teaching Solid State Chemistry
- CH 571  Methods and Strategies in High School Chemistry Teaching
- CH 572  Calculator-based Labs for Secondary Science Teachers

**CH 590  Special Topics: Chemistry**  
(1-3 credits)  
Course offered periodically on topics of special interest.

**CE 592  Technology Leadership**  
(3 credits)  
The technology specialist in K-12 education must be a technician, a trainer, advisor, and a manager. The objective of this course is to make future technology specialist aware of the varying roles they will play, the processes associated with those roles, and the skills required to fulfill them.

**CH 600  Project: Chemistry**  
(3 credits)  
The capstone course in the Master of Education in Chemistry Program. The student and the instructor design the project. Prerequisite: Approval of Program Coordinator and MEd Committee.

**ED 420,422,424,426**  
(12 credits)  
**Special Education Student Teaching**  
Full-time (14 weeks) student teaching during an entire semester, in a public or non-public school setting. The student teacher will assume all instructional and non-instructional responsibilities within the field experience site. The experience will be conducted under the direction of a university supervisor and cooperating teacher. The university supervisor will conduct eight on-site visits. On-campus seminars are held once per week. No other courses should be taken during
this semester. Course fee and processing of teaching certification fee are required.

ED 440,442,444,446 (4 courses)  
**Elementary Education Student Teaching**  
(12 credits)  
Full-time (14 weeks) student teaching in a K-6 public or nonpublic school setting. Qualified seniors work with a cooperating teacher under the supervision of University personnel. This experience approximates full-time employment as a teacher. Seminars are held weekly. Enrollment counts as full-time student status. No other courses should be taken during this semester. Course fee and processing of teaching certificate fee are required.  
Prerequisite: ED 435  
(Offered each semester)

ED 501  **Educational Research** (3 credits)  
An introduction to theory and practice of educational research. Students identify the constituents of a research report, compare and critique various research methodologies, interpret and analyze research findings. Students also design a study based on a research question that they develop, which includes a literature review.  
Prerequisite: ED 577

ED 503  **Advanced Topics in Education**  
(3 credits)  
This seminar will focus on one or more current delineated topics of current critical interest to teaching and administrators. The research-to-praxis relationship will be emphasized. Students will engage in evaluation of current research on a selected topic, and synthesize possible solutions to a selected issue.

ED 504  **Philosophy and Ethics in Education**  
(3 credits)  
A systematic study of the way philosophy illumines the goals, processes, and social contexts of education. Examines the nature of various philosophical perspectives (realism, idealism, pragmatism, behaviorism, existentialism, reconstructionism, etc.), and their contributions to the experience of education in America today.

ED 507  **Teaching Diverse Learners**  
(3 credits)  
Students will study the relationship between culture, multicultural education, and effective teaching for all students. This course prepares the educator to create environments in which the affects and impact of institutional racism, classism, sexism, ageism, handicapism, and other societal scourges are minimized.

ED 508  **Law and Media in Education**  
(3 credits)  
A survey of the legal rights and liabilities concerning use of various media in education. Topics covered are the requirements and exemptions under copyright law, intellectual property statutes and practices, ethics, software licensing, and privacy issues. The development of acceptable use policies and consideration of censorship, State Board Regulations, Pennsylvania Department of Education Standards, and Local Board of Education policies are included.

ED 509  **Instructional Media**  
(3 credits)  
A course in the design, production, and proper use of effective instructional media, including projected and non-projected images, audio recording, and still and motion videography. This is a hands-on course requiring the production of multimedia projects and a short video.

ED 517  **Purposeful Learning Through Multiple Intelligences**  
(3 credits)  
Purposeful learning through Multiple Intelligences enables educators to understand the characteristics of each of the intelligences, create diverse strategies for teaching through the intelligences, and develop various entry points for integrating the intelligences into a school-wide program.

ED 518  **Classroom Management**  
(3 credits)  
Various approaches to classroom management to reduce discipline problems by meeting the academic and psychosocial needs of students and teachers.

ED 520  **Multiple Intelligences**  
(1 credit)  
Purposeful learning through multiple intelligences enables educators to understand in depth the characteristics of each of the intelligences, to create diverse strategies for teaching through the intelligences, and to develop various entry points for integrating the intelligences into a school-wide program.
ED 555  Alternative Assessment   (1 credit)
Students examine teacher-made assessments including student responses, objective tests and performance assessment. Performance assessment in K-12 classrooms is a major course focus.

ED 569  Cooperative Learning   (1 credit)
Students learn the concepts that make cooperative learning an effective teaching strategy in special education classroom. Participants will experience many cooperative learning structures that can be incorporated into various subject matter areas.

ED 577  Research Tools   (1 credit)
A course focused on the skills necessary to prepare reports and literature reviews of published educational research. Participants learn to access and prepare reports using APA style and word processing software.

ED 560-589 One-Credit Courses in Education   (1 credit)
Specialized one-credit courses pertinent to a variety of subject matter areas are offered periodically; new one-credit courses are added regularly:

ED 577  Research Tools
ED 579  Enhancing Thinking Skills With Concept Mapping
ED 580  Developing Student Leaders
ED 582  Implementing Standards in the Secondary Science Curriculum

ED 590  Special Topics: Education   (1-3 credits)
Course offered periodically on topics of special interest.

ED 600  Critical Issues and Research Seminar   (3 credits)
A capstone course designed to refine and expand students’ capacity for evaluating and using research to develop practical applications for critical issues related to instruction, assessment and policy development in education. Students are required to identify a problem or issue in education and synthesize information from research to create a practical solution. Prerequisite: ED 501 and 24 credits in student’s program.

EE 500  Best Practices in Education   (3 credits)
This course provides the professional educator with an understanding of research based strategies for assuring equal educational opportunity for all students. Focus is on the instructional environment, strategies and differentiation of instruction, classroom management and assessment and evaluation. The reflective practitioner model is also introduced.

EE 513  Teaching Literacy Standards K-3   (3 credits)
This course provides prospective elementary teachers with the ability to use major theoretical models and current research related to PA Standards in Speaking, Listening, Reading and Writing. Strategies for fostering emergent and developmental literacy using the “balanced reading model,” as well as strategies for assessment of literacy will be emphasized. Use of technology as a tool for meeting and teaching literacy standard to culturally diverse population and special needs students will also be introduced.

EE 514  Teaching Literacy Standards 4-8   (3 credits)
This course provides prospective elementary and middle school teachers with the knowledge and competencies to plan, implement and assess literacy curriculum and learning experiences grounded in the PDE Standards for Speaking, Listening, Reading and Writing. Teachers will understand the use of authentic literature from a variety of genres as the basis for developmental reading/language arts curriculum with particular focus on the use of literature response. Emphasis will be placed on developing reading comprehension, critical thinking, reading in the academic content areas, media and critical literacy. Adaptations and modifications for special needs students and culturally and linguistically divers classroom populations will be studied; as well as strategies for identification and remediation of reading difficulties.

EE 515  Teaching Social Studies Standards   (3 credits)
This provides prospective elementary teachers with the ability to use major theoretical models
and current research related to PA Standards in Citizenship Education and Social Sciences as a foundation for social studies instruction in grades K-6. Strategies for fostering the development of informed, rational, and culturally responsive citizens will be emphasized. Prospective teachers will be introduced to the use of technology as a tool for meeting the citizen education and social sciences standards.

EE 536  Teaching Science and Technology Standards K-6  (3 credits)
Provides prospective teachers with the ability to use major theoretical models and current research related to PA Standards in Science and Technology as foundation for science instruction. Strategies for fostering development of children to learn processes and concepts of science will be emphasized. Prospective teachers will learn to use technology as a tool for meeting science standards.

EE 544  Teaching Mathematics Standards K-6  (3 credits)
This course provides training in the application of current teaching methods to the elementary school mathematics curriculum and standards. Students will learn how mathematics objectives, learning theories, and student evaluation suggest different instructional methodologies. Topics include diagnosis/prescription, classroom organizational strategies, and the use of varied materials to provide successful learning experiences for children. Students will review current research in mathematics education and explore controversial issues in teaching mathematics.

EE 546  Teaching the Arts Standards K-6  (3 credits)
Principles, skills, materials, technology, and methods involved in using the creative arts (visual art, music, movement, drama, and poetry) to help elementary school children learn about and interpret the world around them. Creative arts will be used to develop multiple perspectives on the learning of science, mathematics, social studies, and language arts.

EE 548  Teaching Health, Safety and Physical Education Standards  (3 credits)
This course prepares elementary classroom teachers to integrate opportunities to develop competencies in the Health, Safety and Physical Education Standards into their daily classroom learning experiences. Special emphasis is placed on nutrition and the wellness instruction.

EN 510  Teaching British Literature  (3 credits)
This course explores innovative approaches to teaching the literature of the United Kingdom. Teachers design units that draw upon the arts, use film and drama, develop literary responses, and foster communications skills. Development of the literary tradition through its relationship to the other arts is covered.

EN 515  Teaching Romantic and Post-Romantic British Literature  (3 credits)
A survey that addresses itself to representative works by British Poets, playwrights, and fiction writers of significant accomplishment, covering the period 1750-2000. A typical semester might include works by Keats, Yeats, and Heaney in poetry; Bronte, Woolf, and Rushdie in fiction; Shaw, Beckett, and Stoppard in drama. Emphasis will be placed on the cultural/historical context in which their writers worked or are working. Students typically complete at least one significant writing assignment, take part in individual and group work and enhance communication skills.

EN 520  Teaching Contemporary World Literature  (3 credits)
An introduction to teaching literary works from Western and non-Western societies, with emphasis on evolving national cultures and the “global village”. Works include those featuring adolescent characters and narrators, to understand and appreciate their commonalities and differences from young people in other countries. Visual materials from around the world are included to help understand other cultures.

EN 530  Teaching the American Romantics and Their Predecessors  (3 credits)
An approach to teaching American literature and culture from colonial days through the end of the nineteenth century by exploring works from a
variety of regions, ethnic backgrounds, and belief systems. The contexts of literature, such as Spanish and English exploration, the situations of Native peoples and African slaves, and reform movements are also examined.

**EN 535 Teaching the American Dream**  
(3 credits)  
An approach to American literature through the exploration of many different kinds of writers, genres, and media that have been affected by, and in turn have affected “the American Dream.” The course examines how artistic expression evolved in other media, chiefly architecture, film, painting, and advertising. Emphasis is on the wide variety of voices and visions that enriched our culture in the modern age.

**EN 542 Teaching Africana Literature**  
(3 credits)  
An exploration of the literature of Africa and African America, with special attention to the interactions between people of African and European descent. Includes fiction, poetry and drama since 1900 appropriate for the secondary classroom and will integrate information and ideas from history, culture, geography and sociology, including issues of race, gender, and class.

**EN 550 Teaching Writing**  
(3 credits)  
An exploration of the use of mini-lessons, models, and technology to teach writing in response to literature and in a writing process context. Course topics include writing scenes or role-plays, autobiography, short stories, poetry, and reports, as well as persuasive and analytic pieces. The role of grammar and syntax as a tool in teaching communication skills is also explored.

**EN 555 Teaching Film in the English Classroom**  
(3 credits)  
An exploration of the coordinated use of film and print media in the middle and secondary English classroom. An introduction to the history of film and basic techniques of filmmaking. Print media that have been made into film are read, analyzed, and compared to the cinematic versions.

**EN 560-589 One-credit courses in English Education**  
(1 credit)  
Specialized one-credit courses addressing current issues and developments in the field.

**EN 600* Project: English**  
(3 credits)  
The capstone course in the Master of Education in English Program. The student and the instructor design the project.  
Prerequisite: Approval of Program Coordinator and the M.Ed. Committee.  
*Students must take either EN 600 or ED 600.

**ES 507 Teaching Culturally and Linguistically Diverse Learners**  
(3 credits)  
A study of the knowledge, skills, and strategies that enable teachers to facilitate learning for students from various linguistic and cultural backgrounds. Teaching students in need of learning support are also considered. Topics include language use, literacy and biliteracy issues, inclusion, differentiated learning, curriculum, instruction, and assessments.

**ES 535 Foundations of Second Language Acquisition**  
(3 credits)  
A study in the principles of second language acquisition and its implications for academic success of English language learners. Emphasis is on teaching strategies that foster the development of strong literacy skills through the integration of activities and assessment appropriate to different stages of language acquisition. Students identify resources in the schools and community to assist English language learners in achieving Pennsylvania Academic Standards for Reading, Writing, Speaking and Listening.

**ES 536 Assessing English Language Learners**  
(3 credits)  
This course aligns academic standards with curriculum, instruction, and assessment for English language learners. Discuss related research, develop performance-based instructional activities, and design alternative assessments utilizing a collaborative approach. Make learning strategies explicit for students. Included will be methods for English language development, beginning English learners, listening and speaking.  
Prerequisite: ES 535
ES 537  Collaborative Action Research with English Language Learners  (3 credits)
An introduction to the theory and practice of educational research. Students identify the constituents of a research report, compare and critique research methodologies, and interpret and analyze research findings. Students also design, conduct, and report the results of an action research pilot study in classrooms with English Language Learners.
Prerequisite: ES 535, 536 and ES 595.

ES 540  Linguistics  (3 credits)
An overview of linguistics, including a general knowledge of phonetics/phonology, morphology, syntax, semantics, historical linguistics, applied linguistics, and sociolinguistics. Students are provided with the basic skills and knowledge required for certification by the Commonwealth of Pennsylvania Department of Education as it compares and contrasts the structures of English with other languages.

ES 545  Multicultural Community Development  (3 credits)
An introduction to the knowledge, skills and practical techniques for building cross-cultural communities. The focus is on intercultural awareness issues, collaboration, communications, cultural sensitivity and conflict resolution.

ES 594  Technology and English Language Learners  (3 credits)
An introduction to a variety of computer applications and Internet resources appropriate for use with English language learners. This workshop highlights different strategies with regard to the integration of technology in the classroom. Students examine the use of various Internet sites for research and demonstration purposes as well as WebQuests, and Multimedia using PowerPoint and Hyperstudio.
Prerequisite: ES 535, 536 and 595.

ES 595  Linking Language Acquisition and Content  (3 credits)
A course designed to acquaint students with strategies for developing Cognitive Academic Language Proficiency with English language learners through the content areas. Students adapt instructional materials through questioning techniques, constructing graphic organizers, and modifying content vocabulary. Strategies for assessing content are included.
Prerequisite: ES 535

ES 600  Project: TESOL  (3 credits)
The capstone project in the Master of Education in TESOL Program. The student and the instructor design the project.
Prerequisite: Approval of the Program Coordinator. Students must take ES 600 or ED 600.

LA 525  Teaching Language, Literacy and Literature  (3 credits)
An integrated approach to language arts instruction that emphasizes oral and written communication, the use of word processing technology, and the learning of language and literacy skills through literature. Attention is also given to literary methods of teaching phoneme-grapheme (sound/letter) correspondences.

MA 510  Teaching Calculus: Analysis I*  (3 credits)
A study of the concepts covering the University Entrance Examination Board Advanced Placement AB Calculus. Emphasis is placed on intuitive and rigorous development of the concepts of limit, derivative, integral, their applications, and the use of graphing calculators and computer software to present these topics in the secondary classroom.
Prerequisite: Calculus.

MA 515  Teaching Calculus: Analysis II  (3 credits)
A continuation of Analysis I, covering the CEEB Advanced Placement BC Calculus curriculum. Topics will include polar coordinates, advanced integration techniques and applications, and infinite series convergence. The use of graphing calculators and computer software to teach these topics will be emphasized.
Prerequisite: MA 510

MA 520  Discrete Mathematics in the Secondary Curriculum*  (3 credits)
Topics in discrete mathematics recommended by the NCTM for inclusion in the secondary
Graduate Programs in Education

mathematics curriculum, such as graph theory, sequences, recurrence relations, algorithms, enumeration, and finite probability. Approaches to incorporating these topics into new and existing courses, as well as effective strategies for conveying these ideas in the classroom.

**MA 525 Geometry for Mathematics Teachers** *(3 credits)*
A study of elementary Euclidean Geometry from an advanced standpoint. An introduction to non-Euclidean geometries and computer applications to the study of Euclidean geometry are included.

**MA 530 Probability and Statistics for Mathematics Teachers** *(3 credits)*
Basic probability and statistics including independence and conditional probability, probability functions, normal curves, measures of central tendency and variability, correlation, binomial distribution, expected value, sampling and hypothesis testing, and confidence intervals. Calculator and computer applications to the study of probability and statistics are included.

**MA 540 Using Calculators and Manipulatives in Mathematics Classes** *(3 credits)*
The use of calculators and manipulatives as teaching tools in all facets of elementary mathematics instruction. The study of National Council of Teachers of Mathematics (NCTM) standards and the use of other technology are included.

**MA 560-589 One-credit courses in Mathematics** *(1 credit)*
Specialized one-credit courses on the teaching of mathematics, addressing current issues and developments in the field. New One-credit courses are added regularly:
- MA 560 Teaching Secondary Mathematics with Technology
- MA 561 Teaching Probability and Statistics in Secondary School
- MA 569 Descriptive Statistics
- MA 571 A Problem-Solving Approach for Teaching Secondary Mathematics

**MA 572 Implementing NCTM Standards in the Middle School**

**MA 574 Using Spreadsheets to Enhance Middle School Mathematics (including Algebra)**

**MA 575 Implementing the NCTM Standards in the High School**

**MA 576 Using the Graphing Calculator for Curriculum Development in Algebra and Trigonometry**

**MA 578 Fractals for the Classroom**

**MA 579 Using DERIVE in Secondary Mathematics**

**MA 584 Exploring the New NCTM Principles and Standards**

**MA 590 Special Topics: Mathematics** *(1-3 credits)*
Offered periodically on topics of special interest.

**MA 600* Project: Mathematics** *(3 credits)*
The capstone project in the Master of Education in Mathematics Program. The student and the instructor design the project.
Prerequisite: Approval of Program Coordinator.
* Students must take either MA 600 or ED 600.

**SC 530 Teaching Elementary Science** *(3 credits)*
A survey of content and methodology in the natural and physical sciences. Students investigate selected topics in astronomy, chemistry, life science, environmental science, and physics through a hands-on, minds-on approach. Activities include classroom experiments and a field trip experience.

**SE 502 Learning and Behavior Challenges** *(3 credits)*
Students will examine and analyze theories and practice in psychoeducational diagnosis and remediation of children’s learning disabilities. The areas of perception, cognition, language, and motivation will be explored in relation to school subject matter and classroom performance.

**SE 504 Moderate and Severe Disabilities** *(3 credits)*
Explores the principles about teaching students
with severe disabilities, including inclusive schools, school teaming, functional instruction, and individualized programs. Students examine the importance of students’ membership, belonging, and skill development within a community of learners to achieve fullest potential.

SE 508  **Collaboration and Consultation**  (3 credits)
Examination of issues relevant to collaboration within inclusive school settings. Students will study the benefits related to building collaborative relationships with families, professionals, and other school personnel. This course will regard consultation, collaboration, and teamwork as the key elements in effective education environments for the 21st century.

SE 510  **Special Education Law**  (3 credits)
Law, rules, regulations, and critical issues facing special education personnel and students. Topics include teaching methods, student placements, and laws that affect teachers with special needs students in their classrooms and transition from school to work.

SE 512  **Integration of Technology in Special Education Classrooms**  (3 credits)
An examination of how technology can be used to enhance the special education curriculum. Topics include the use of the computer as a learning tool and the role of the teacher in conceptualizing the use of the computer and other technology to further instructional and curricular objectives.

SE 514  **Instructional Adaptations and Modifications**  (3 credits)
Emphasizes inclusive teaching with a wealth of ideas and lesson plans for teaching in K-12 classrooms. Students will gain knowledge and skills in using these teaching strategies across the content areas and creating environments where instruction is truly individualized to meet the needs of all students who face challenges that might affect their learning.

SE 518  **Positive Behavior Management**  (3 credits)
Students will examine and analyze school-based interventions in the context of multiple levels of positive behavior support. Emphasis will be placed on interventions that reduce the number of students with more significant and complex behavior problems.

SE 520  **Special Education Transition**  (1 credit)
Participants will explore the theories, legislation, and practices used to facilitate the transition of students with disabilities from school to work. The course will focus on all aspects of an individual’s life, including career, recreation, leisure, social, and residential. Current practices within the area of transition will be presented as the basis for classroom/school applications.

SE 590  **Autistic Spectrum Disorders in the General Education Setting**  (1 credit)
An introduction to Asperger’s Syndrome, an autistic spectrum disorder which is often characterized by severe communicative deficits. Such subjects include a lack of use and reciprocity of non-verbal communications, impaired two-way interactions and inability to understand the rules of social behavior. This course will provide helpful tips, resources and strategies for classroom teachers.

SE 598  **Special Education Internship**  (3 credits)
Students will teach one full day, per week, during an entire semester, in a special education classroom. The intern will complete all requirements outlined in the Special Education Internship manual. The experience will be conducted under the direction of a university supervisor and cooperating teacher. The university supervisor will conduct on-site observations.

SE 599  **Independent Study/Research**  (1-3 credits)
This course will allow students to pursue individual areas of interest while working jointly with a faculty member. Subject to availability and approval of both program director and faculty member. A prospectus of the proposed independent research must be approved at least one month prior to registration for the Independent Study. (Must have completed 24 or more credits.)
SS 535  Teaching Elementary Social Studies  
(3 credits)  
An approach to social studies instruction that emphasizes technology integration, the use of literature, diversity, and the National Council for the Social Studies Standards. Classroom observations are required.

*Required course
MASTER OF SCIENCE IN INFORMATION SYSTEMS

Dr. Julius G. Bede, Director
610-282-1100, ext. 1280
E-mail: bede@desales.edu

Information Technology professionals must understand a wide variety of technologies, institutional goals, and philosophies.
The Master of Science in Information Systems (MSIS) program has been designed on the premise that its students and graduates will be involved either in direct or in business information technology related functions. The program recognizes the fact that the IS professional must understand a wide variety of technologies, institutional goals, and philosophies, all of which are in a state of flux. The IS professional must not only understand the basic principles of technology but at the same time must appreciate the fact that the role of technology is to serve the organization and the society in which the organization exists. A mastery of the English language, the capability to analyze and synthesize, and the willingness to work in a group environment should also be part of the IS professional's background.

**Objectives**

The objectives of the MSIS program are

- to provide an integrated view of information technologies,
- to enhance existing knowledge and experience the student already possesses in one or more IT areas,
- to help students to acquire in-depth knowledge in one or more specific information technology subjects,
- to offer graduate level educational opportunities for professionals involved directly or indirectly in information systems functions,
- to help local organizations in their effort to adopt new technologies by providing access to efficient and inexpensive educational facilities, and
- to develop awareness of the impact of information technologies on individuals, as well as on the contemporary society.

**Admission Requirements**

Requirements for admission to the MSIS program are:

1. A baccalaureate degree from an accredited college or university
2. An undergraduate GPA of at least 3.0.
3. Background or interest in Information Technology
4. Evidence of potential for successful graduate work. Such evidence may consist of a letter summarizing career interest, professional experience, accomplishments, and goals.

The Admission and Academic Policies Committee may admit an applicant whose undergraduate GPA is less than 3.0. Such applicant needs to complete foundation courses and may be required to take and obtain acceptable score on either the Graduate Record Examination (GRE) or on the Graduate Management Admission Test (GMAT).

Additional remedial course work may be required from applicants who have background deficiencies, but otherwise show promise to undertake graduate studies.

**Academic Schedule**

The Academic Year of the MSIS program consists of four sessions:

- Winter (12 weeks)  early January - late March
- Spring (12 weeks)  early April - mid June
- Summer (6 weeks)  early July - mid August
- Fall (12 weeks)  late August - mid Nov.

In the 12-week sessions, each course meets once a week on a weekday evening from 6:00 - 9:30 pm, or on Saturday morning from 9:00am - 12:30pm.

In the 6 week summer session, each course meets twice a week on weekdays from 6:00-9:30 pm.

**Student Status**

For the purpose of defining student status, the calendar year (January 1 – December 31) is divided into two terms: from January 1 to June 30, and from July 1 to December 31.

A full time student is one who carries at least nine (9) credits in a given term.

A half time student is one who carries at least six (6) credits in a given term.

A less than half time student is one who carries less than six (6) credits in a given term.
International Student Status
In addition to the criteria described in the Academic Regulations section, an international student (F-1 visa) needs to
- maintain full time student status,
- carry at least one classroom based course in each session, and
- take no more than one distance-education course in each session.

Student Categories
Depending on their status, students are assigned to one of the following categories:

Provisional Student Category
After receiving all necessary documentation and satisfying all admission related criteria, the MSIS Admissions and Academic Policies Committee may admit the candidate as “Provisional Student”.

Regular Student Category
Upon satisfactorily completing the foundation courses, the student’s status will be changed to “Regular Student”.

Special Student Category
A qualified applicant may be permitted to enroll in courses without completing all admission requirements as a “Special Student”. The special student status does not necessarily guarantee official admission to the program.

Auditing Student Category
The Program Director may permit qualified applicants to audit elected courses. Such applicants must submit the MSIS application form, and must pay the non-refundable application fee and the full tuition.

Application Procedure
Application forms may be obtained from the Program Director. Interested students are encouraged to discuss their background with the Program Director prior to submitting their application for admission.

Application for admission will be considered after the student has submitted:
1. A completed application form.
2. A resume.
3. Three letters of recommendation.
4. Official transcripts of all undergraduate and graduate work.
5. GRE (Graduate Record Examination) or GMAT (Graduate Management Admissions Test) scores if applicable.
6. A non-refundable application fee.

When these materials are received, the applicant may be interviewed by a member of the IS Admissions and Academic Policies Committee. During the interview the points discussed include
- factors in the applicant's background to justify the desire to pursue the MSIS degree,
- aptitude for graduate study,
- commitment to the ideals associated with the IS profession, and
- plans for completion of the program.

All admissions and admission related matters must be approved by the IS Admissions and Academic Policies Committee. Applicants will be notified at the earliest possible date about their admissions status.

Transfer Policy
Regular students may transfer six graduate credits to the Program. Transfer credits must have been obtained at an accredited institution, must be compatible with the program and the student’s interest, and must be approved by the Program Director. The Dean of Graduate Education must approve additional transfer credits upon the recommendation of the Program Director and the Admissions and Academic Policies Committee.

Registration
Registration for a session normally takes place during the month prior to the first class meeting. The advisor of the student must approve registration. The University reserves the right to cancel a course for which there is insufficient registration.

Tuition and Fees
Tuition per credit hour $495
Application Fee 35
Graduation Fee 105
Returned Check Fee 30

Refund Amount
Withdrawal after 1\textsuperscript{st} class: 80% of tuition refunded
Withdrawal after 2\textsuperscript{nd} class: 65% of tuition refunded
Withdrawal after 3\textsuperscript{rd} class: 50% of tuition refunded
Withdrawal after 4\textsuperscript{th} class: 25% of tuition refunded
Withdrawal after 5\textsuperscript{th} class: no refund

Graduation Requirements
The Master of Science degree will be awarded to candidates who have satisfied the following requirements

\begin{itemize}
  \item The completion of a minimum of 45 credits of course work with a GPA of at least 3.0. An appropriate thesis may be used to satisfy a maximum of 6 credits.
  \item The passing of a comprehensive examination, which is administered by a committee. The examination may be taken after the student has completed the Specialty Course requirements.
\end{itemize}

Professional Experience
Participation in a curricular training program through a local cooperative institution may be required if the candidate lacks professional experience.

PROGRAM OF STUDY
The Program of Study consists of the following components:

\begin{itemize}
  \item Foundation Courses 15 credits
  \item Specialty Courses 15 credits
  \item Electives 12 credits
  \item Capstone 3 credits
  \item Total 45 credits
\end{itemize}

Foundation Courses
The purpose of the Foundation Course requirement is to build the student’s analytical capabilities as well as to introduce advanced technical and societal concepts.

All candidates are required to complete the 15 credit foundation requirement. The MSIS Admissions and Academic Policies Committee may waive a certain foundation course for the student who can demonstrate recent (not more than five years old) equivalent course work and experience in the subject matter by taking an examination. No more than 3 foundation courses may be waived.

IT 501 Computer Architecture
IT 502 Discrete Structures
IT 507 Object Oriented Programming
IT 511 Data Management
IT 546 Ethical and Social Issues

Specialty Courses
The Specialty Course requirement provides opportunity for learning advanced technological and business application concepts. All candidates are required to complete 15 credits toward satisfying the specialty requirement.

Depending upon their interest students may complete the specialty requirement in some area such as web development, communications, or system development. The specific option is jointly designed by the student and his/her academic advisor.

Elective Courses
The 12 credit Elective Course requirement is designed to further enhance the career goal or the interest of the candidate.

Capstone Courses
The Capstone Course requirement is a demonstration of the student’s ability to do comprehensive and independent work by selecting and completing a project or design. Alternatively, the student may elect to do an independent thesis on some contemporary research topic. Such thesis may cover 3 or 6 credit hours. In the latter case the number of electives will be reduced to 3 courses.
## MSIS CALENDAR

### Fall Session 2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>August 22</td>
<td>Sunday</td>
<td>Opening Mass of the Holy Spirit</td>
</tr>
<tr>
<td>August 30</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 13</td>
<td>Monday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>October 8</td>
<td>Friday</td>
<td>Last day for submitting applications for Winter Graduation</td>
</tr>
<tr>
<td>October 11</td>
<td>Monday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
</tr>
<tr>
<td>November 22</td>
<td>Monday</td>
<td>Last day of Fall Session</td>
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### Winter Session 2005

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<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>January 3</td>
<td>Monday</td>
<td>Classes begin</td>
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<tr>
<td>January 15</td>
<td>Saturday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>January 23</td>
<td>Sunday</td>
<td>Celebration of Excellence in Graduate and ACCESS Programs (Winter Graduation)</td>
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<tr>
<td>February 2</td>
<td>Wednesday</td>
<td>Patron's Day Celebration</td>
</tr>
<tr>
<td>February 14</td>
<td>Monday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
</tr>
<tr>
<td>February 25</td>
<td>Friday</td>
<td>Last day for submitting application for May Graduation</td>
</tr>
<tr>
<td>March 26</td>
<td>Saturday</td>
<td>Last day of Winter Session</td>
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### Spring Session 2005

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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>April 4</td>
<td>Monday</td>
<td>Classes begin</td>
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<tr>
<td>April 16</td>
<td>Saturday</td>
<td>Last day to add or drop a course</td>
</tr>
<tr>
<td>May 6</td>
<td>Friday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
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<tr>
<td>May 20</td>
<td>Friday</td>
<td>PM Baccalaureate</td>
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<tr>
<td>May 21</td>
<td>Saturday</td>
<td>AM Commencement</td>
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<tr>
<td>May 30</td>
<td>Monday</td>
<td>Memorial Day holiday</td>
</tr>
<tr>
<td>June 27</td>
<td>Monday</td>
<td>Last day of Spring Session</td>
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### Summer Session 2005

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<th>Date</th>
<th>Day</th>
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<tbody>
<tr>
<td>July 5</td>
<td>Tuesday</td>
<td>Classes begin</td>
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<tr>
<td>July 13</td>
<td>Wednesday</td>
<td>Last day to add or drop a course</td>
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<tr>
<td>July 25</td>
<td>Monday</td>
<td>Last day for withdrawal from courses with W, WP, or WF</td>
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<tr>
<td>August 15</td>
<td>Monday</td>
<td>Last day of Summer Session</td>
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<tr>
<td>COURSE DESCRIPTIONS</td>
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| **IT 501  Computer Architecture** (3 credits)  
An overview of computer systems organization, logic, microarchitecture, macroarchitecture, data flow, operating systems, and assembly languages. Hardware and system software concepts will be discussed as they relate to systems analysis, systems design, and the development of application software.  
Prerequisite: College Algebra. |
| **IT 502  Discrete Structures** (3 credits)  
Concepts of discrete mathematics and algorithmic design, and analysis of algorithms. Basic data structures. Introduction to graph theory.  
Prerequisite: IT 507 recommended. |
| **IT 504  Application Development** (3 credits)  
The organization, structure, and logic of application programs. Graphics programming, GUI, events and exceptions. Using a Java platform is emphasized.  
Prerequisite: IT 507 or instructor's permission. |
| **IT 505  Object Oriented Languages** (3 credits)  
Object oriented program design and programming. Participants will develop moderate sized C++ programs in a Unix environment.  
Prerequisite: IT 507, or equivalent competency. |
| **IT 506  Business Computing** (3 credits)  
The use of information technology in the solution of business problems. Through the application of an integrated platform results instead of features are emphasized. The course is designed for professionals who need exposure and understanding in the use of technology. |
| **IT 507  Object Oriented Programming** (3 credits)  
An introduction to object oriented programming theories and techniques using a high level language (C++).  
Prerequisite: Instructor's permission. |
| **IT 511  Data Management** (3 credits)  
The role of data management systems in information systems design. Database design techniques. Relational database design. Relational query language programming. An introduction to database administration.  
Prerequisite: IT 502 or equivalent. |
| **IT 512  Data Base Systems** (3 credits)  
Examination of large-scale database management systems. Tools for performance evaluation, reorganization, query, and monitoring. Currency, recovery, security, and integrity.  
Prerequisite: IT 511. |
| **IT 513  Data Warehousing** (3 credits)  
The course explores the scope, requirements, architecture, design, tools, and implementation of data warehousing technologies. |
| **IT 525  IT Security** (3 credits)  
Principles of computer systems and network security. Passive and active threats, authentication, encryption, digital signatures, biometrics, firewalls, virus preventions, operating systems principles, and other contemporary issues are discussed. The course covers the basic goals of preserving the integrity of access and data, and preventing unauthorized access to information.  
Prerequisite: IT 507 or equivalent. |
| **IT 526  Data Communications** (3 credits)  
An introduction to basic communication theory. The role of communication hardware components. Analog and digital transmission procedures. Common carrier services. An introduction to communication protocols.  
Prerequisite: Instructor's permission. |
| **IT 527  Communication Networks** (3 credits)  
Examination of telecommunication architecture, software, access methods, and protocols. Analysis, control, and management of telecommunication networks. Local Area Network topologies. Economy considerations in network solutions. Specific emphasis is on emerging high-speed technologies.  
Prerequisite: IT 526. |
| **IT 528  Wireless Technologies** (3 credits)  
Introduction to the fundamental technologies of wireless networks and applications.  
Prerequisite: IT 527 or Instructor’s permission. |
IT 531  Information Systems Planning  (3 credits)
Operational, contingency, disaster, and facility planning of information systems. Strategic systems evaluation and planning. The role of CIO. Information center concepts.
Prerequisite: Instructor's permission.

IT 532  Systems Analysis  (3 credits)
Addresses fundamental concepts of requirements specification, requirements analysis, and the early stages of systems design. Topics include systems, events, objects, classes, inheritance, associations, and models. Requirements specification covers use cases, usage scenarios, interaction diagrams, and models. Requirements analysis includes event stimuli, business rules, event responses, system context models, domain object models, and object state transition diagrams. Early system design includes mapping essential events into practical events and mapping domain object models into design object models.
Prerequisite: IT 507 and IT 511, or instructor’s permission.

IT 533  Software Architecture  (3 credits)
Essentials of systems architecture. Systems evaluation, implementation, testing, tools, economics, and quality considerations are discussed.
Prerequisite: Instructor’s permission.

IT 536  Software Engineering  (3 credits)
A review of software engineering concepts, configuration control, reverse engineering, and maintenance issues. Total software development environment. Software engineering tools.
Prerequisite: Instructor's permission.

IT 538  IT Project Management  (3 credits)
Introduction to the principles and tools to control cost and schedule of IT Project.

IT 541  Decision Support Systems  (3 credits)
Decision systems model formulation, design, construction, and validation. Topics include Monte Carlo techniques, simulation languages, random numbers, and verifications. The concepts of building models of complex systems operating under uncertainty.
Prerequisite: Instructor's permission.

IT 544  E-Society  (3 credits)
The issues of modern technology based society and organizations.
Prerequisite: Instructor's permission.

IT 546  Ethical and Social Issues of Information Technology  (3 credits)
A study of ethics, values, technology, and business. The economic and social effects of technology. Conflict and crime in the technological society.
Prerequisite: None.

IT 547  Information Technology Auditing  (3 credits)
An introduction to the controls and security of Information Systems.
Prerequisite: Instructor's permission.

IT 548  Legal Aspects of IS  (3 credits)
An inspection of the legal environment and issues affecting IS.
Prerequisite: Instructor's permission.

IT 551  Information Systems Projects  (3 credits)
The practical application of IS theory with attention to current IS research and development. Participants will complete a major project of their area of interest.
Prerequisite: Advisor's permission.

IT 561  Special Topics in Information Systems  (3 credits)
Course participants’ research and discuss current topics and trends in information technology.
Prerequisite: Instructor's permission.

IT 565  Electronic Commerce  (3 credits)
The buying and selling of information, products, and services electronically. The conduct of internal corporate business using network resources.
Prerequisite: None.

IT 566  Web Engineering I  (3 credits)
This course covers the architecture and development of web pages. Dynamic HTML, XML, Cascading Style Sheet, Java Script, CGI Pearl, servlets will be discussed.
Prerequisite: IT 504, IT 570
**IT 567  Web Engineering II**  (3 credits)
The continuation of web application engineering. The course will cover the issues involving the server and the data base side of the web.
Prerequisite: IT 566.

**IT 570  Web Design**  (3 credits)
The course is an introduction to web design and design technologies. Topics include planning, content, and structure of web pages. Markup languages such as HTML, Javascript, and XML will be covered. Elements of graphics and multimedia will also be included.

**IT 571  PDA Development**  (3 credits)
Development, design, and programming of mobile devices, commonly referred to as PDA-s, in a Palm OS environment. Emphasis is on user interface development and the tools used in such development.
Prerequisite: IT 507 or equivalent.

**IT 572  Advanced PDA Development**  (3 credits)
The continuation of IT 571 PDA development course. The class will explore Palm OS conduit development including the uploading and downloading data between PDA and PC or between PDA and a variety of wireless devices.
Prerequisite: IT 571

**IT 580  Introduction to Healthcare Information Technologies**  (3 credits)
The concept of IT as an enabler to support administrative and clinical processes are defined and assessed. Selection, implementation and evaluation of key IT solutions are described. Current issues, future uses, and trends in biotechnology, genomics, medical informatics and clinical information systems are reviewed and discussed.

**IT 599  Master Thesis**  (3 to 6 Credits)
Prerequisite: Advisor's permission.
GRADUATE PROGRAMS IN NURSING

Dr. Carol Gullo Mest, Director
610.282.1100, ext. 1394
E-mail: carol.mest@desales.edu

The programs prepare nurses to function as collaborative colleagues in health care planning, in policy decision making, and in implementing and directing care.
The Graduate Programs in Nursing are designed to prepare participants for advanced practice in nursing. Advanced practice nursing, as an art and science, is based on scientific inquiry and established principles of Christian beliefs. The curricula are rooted in the tenets of Salesian Christian Humanism in which persons are viewed holistically; subsequent nursing activities aim to foster each person’s full physical, intellectual, moral, social, aesthetic, and spiritual-religious development. Students implement the concepts of health promotion, restoration, and palliation at an advanced level.

The Department of Nursing and Health offers the following programs:

- Master of Science in Nursing (MSN) accredited by the National League for Nursing (NLN) Accrediting Commission (NLNAC) in one of the following options:
  - Adult Advanced Practice Nurse Specialist (AAPN)
  - Family Nurse Practitioner (FNP)
- MSN/MBA with concentration in Health Administration
- Post MSN Program leading to a Family Nurse Practitioner Certificate (FNPC)
- Post-certificate MSN completion program for Certified Nurse Midwives and Certified Registered Nurse Practitioners
- RN-MSN Program

Verification of accreditation status may be obtained from:

NLNAC
61 Broadway, 33rd Floor
New York, New York 10006
1.800.669.1656, ext. 153

Objectives

The objectives of the Programs include preparing professional nurses as collaborative colleagues in delivering, planning, policy making, and directing of health care. Students will gain an advanced core of knowledge in the areas of primary, secondary, and tertiary care, as well as in health care administration.

Specific objectives of graduate study in nursing are delineated. At the completion of the MSN Program, graduates will

- exemplify Christian Humanism through valuing and facilitating full human development via partnerships with individuals, families, communities, and populations,
- integrate the use of technology and information systems in the delivery of health services,
- adapt the delivery and management of health services for diverse populations,
- participate in the development of new knowledge in nursing and health services through education, practice and research,
- propose alternative resolutions to ethical dilemmas arising from personal and/or organizational conflict,
- formulate communication strategies to meet the unique needs of individuals, families, communities, and populations,
- provide leadership in formulating clinical, administrative, or policy decisions to promote health,
- synthesize seminal theoretical concepts and research into the administration of human services,
- apply advanced concepts of leadership and advocacy to influence policymakers, health systems, and consumers in order to effect positive changes in health services, and
Graduate Programs in Nursing

- Promulgate optimal health outcomes through collaboration with health care providers, consumers, and other systems.

Upon successful completion of the Program of Study, students are eligible to become certified in their specialty area through examinations offered by the American Nurses Credentialing Center and/or the American Academy of Nurse Practitioners.

Admission Requirements, MSN Programs

Requirements for admission to the MSN Program are:

1. A Bachelor of Science in Nursing (BSN degree from a NLN accredited college or university).
2. A cumulative undergraduate GPA of at least 3.0 (“B”) is ordinarily required.
3. Successful performance on either the Miller Analogies Test (MAT) or Graduate Record Examination (GRE) within the past five years.
4. An active registered nurse license in the Commonwealth of Pennsylvania.
5. A minimum of one-year experience as a practicing nurse within the past five years.
6. Evidence of having completed a basic physical assessment course or its equivalent.
7. Evidence of having completed a basic statistics course within the past seven years with a minimum grade of “C”. The statistics course should be equivalent to MA111 Probability and Statistics, offered by the University. This course is described in the University's Undergraduate Catalog.
8. Evidence of basic computer literacy including word-processing, database software, and use of the Internet.

Admission Requirements, Family Nurse Practitioner Certificate (FNPC)

Requirements for admission to FNPC consist of:

1. Meeting all admission requirements to the MSN Program.
2. Official documentation of the completion of a MSN or its equivalent from a NLN accredited institution.
3. Minimum of one-year experience as a practicing licensed registered nurse within the past two years.

Graduate courses taken at other institutions may be applied toward satisfying the FNPC program requirements. These courses may include

- Pathophysiology
- Nursing Theories
- Research
- Christian Ethics in Health Care
- Epidemiology and Biostatistics

All other program requirements must be met through course work taken at the University.

Admission Requirements – Post-certificate MSN completion program for Certified Nurse Midwives and Certified Registered Nurse Practitioners

Requirements for admission to the MSN Completion Program consist of:

1. Meeting all admission requirements to the MSN Program.
2. Submitting official documentation of a national Midwife or Nurse Practitioner certificate.

Up to 26 graduate credits may be transferred to the MSN completion Program.

Admission Requirements, RN-MSN Program

Requirements for admission to the RN-MSN Program consist of:

1. Fulfilling all of the requirements for admissions to the BSN Program (see Undergraduate Catalog).
2. A cumulative GPA of at least 3.0 (“B”) in all prior post-high school coursework.
3. An active registered nurse licensed in the Commonwealth of Pennsylvania.
4. A minimum of one-year experience as a practicing nurse within the past five years.
5. Successful performance on either the Miller Analogies Test (MAT) or Graduate
6. Evidence of having completed a basic statistics course with a minimum grade of “C”. The statistics course should be equivalent to MA111, Probability and Statistics, offered by the University and is described in the Undergraduate Catalog.

7. Evidence of basic computer literacy including word processing, database software, and use of the Internet.

8. Interview with at least one Department of Nursing faculty member.

**Admission Requirements, MSN/MBA Program**

Admission requirements to the MSN/MBA program consist of:

1. Meeting the admissions requirements to the MSN Program.
2. Meeting the admissions requirements to the MBA Program.
3. Completing the necessary forms for application to the MSN Program, and forwarding all materials to the Department of Nursing and Health.

**Application Procedure**

Application packets can be obtained from the Department of Nursing and Health. A complete application consists of:

1. An application form accompanied by a non-refundable application fee.
2. An essay describing the applicant’s professional and personal goals, including how the applicant plans to meet those goals through graduate study.
3. Official transcripts from all undergraduate and graduate schools attended.
4. Official copy of the results of the Miller Analogies Test (MAT) or Graduate Record Examination (GRE) taken within the past five years.

Exceptional students may request a waiver of the GRE/MAT application requirement. Students will be considered for the waiver if they demonstrate

- an undergraduate GPA of 3.3 or higher,
- “highly recommended” ratings from at least two out of three references, and
- a well-written essay delineating their goals for graduate education.

The request must be put in writing to the MSN Program Director; approval or denial of the waiver will be determined by the Admissions and Academic Standards Committee.

5. Three letters of reference. One letter must be from the applicant’s present employer. Other letters should be from persons who have known the applicant in a professional capacity and can attest to the applicant’s scholastic aptitude and clinical practice.

Select applicants will have an interview with a member of the Graduate Nursing faculty. The Admissions and Academic Standards Committee will review all applications.

Application deadlines are:

- AAPN Dec. 15
- FNP Mar. 15
- MSN/MBA Apr. 15

Students are admitted to the various programs as a cohort once per year.

Individuals who are undecided about seeking admission are permitted to enroll in one graduate level core course without completing all requirements. All admission requirements must be completed before enrollment in subsequent courses. All written exception requests submitted to the Director of the Nursing Programs will be considered by the Admissions and Academic Standards Committee.

**Re-Application Procedures**

A student whose application is not approved by the Academic Standards Committee may reapply
to the MSN Program in the next application cycle. A new application packet must be submitted as outlined in the "Application Procedure". It is the applicant's responsibility to include additional elements that may strengthen his/her portfolio. An applicant may elect to take an MSN core course with Special Student status, in order to demonstrate ability to perform graduate level work. Successful completion of the course does not guarantee future admission to the MSN Program.

**Student Categories**

Applicants are admitted to the MSN Program in one of the following categories:

- **Full Acceptance**
  The student has satisfactorily met all admission and application requirements.

- **Provisional Acceptance**
  The student may need to fulfill either a single admission requirement or additional requirements set forth by the Admissions and Academic Standards Committee. The student will be eligible for Full Acceptance when all requirements have been met.

- **Special Student**
  The student has not formally applied to the MSN Program, and is normally permitted to take one graduate level course as a Special Student. The completion of this course does not imply or guarantee acceptance into the MSN Program.

Students accepted into the MSN Program must complete Criminal and Child Abuse clearance; forms are available in the Department of Nursing and Health. Students are responsible for the payment of fees associated with processing of these forms.

**General Progression Policies**

These policies are applicable to all students admitted to and enrolled in graduate courses, effective August 2000.

- **Academic Standing**
  Students must attain a minimum of “C+” in all MSN core and MBA foundation courses. These courses include NU 501, NU 503, NU 601, FD 505, and IT 506.

  Students must attain a minimum grade of "B" in all clinical, specialty, and advanced core courses. These courses include NU 505, NU 602, NU 604, NU 605, NU 624, HC 506, HC 507, NU 700, NU 701, NU 702, NU 704, NU 706, NU 707, NU 708, NU 709 and NU 710.

  Students in the MSN/MBA Program must attain a minimum grade of “B” in the MBA Core and Health Care Systems Management courses. Grades less than "B" are recorded as a failure ("F").

  Students who do not attain the minimum course grade must repeat the course. If failed for a second time, the student will be dismissed from the program.

  Only one course may be repeated due to failure based on the above criteria; failure of a second course will result in dismissal from the program.

  Students whose GPA falls below 3.0, will be placed on academic probation (see the Graduate Catalog for probation policies). A student may be placed on academic probation only once. Academic probation for a second time results in dismissal from the program.

  Students must pass both the theory and clinical portions in order to pass the course. Failure in either the clinical or theory component results in a failure for the entire course.

- **Health Requirements**
  No student may enter the clinical area unless his/her health documentation is complete and on file in the Department of Nursing and Health. Students may not attend any lecture/seminar associated with the clinical course until the health requirements are complete.

- **Leave of Absence**
  Students who have matriculated into the MSN Program may request a leave of absence (LOA) for personal, financial, family, or other reasons. A LOA may be granted only once throughout the Program, and may not exceed 12 months.
Students requesting a LOA must put their request in writing to the Director of the MSN Programs. The request must include the student's plan for completion of the MSN after the LOA. LOA requests are considered jointly among the Director of the MSN Program, the Department Chairperson, and the student's advisor.

Students who do not register for a course by the LOA end date will be considered withdrawn from the Program and must reapply for admission.

**Grading Policies**

The following grading scale is used in all MSN courses:

- A: 94 - 100
- A-: 90 – 93.99
- B+: 87 – 89.99
- B: 83 – 86.99
- B-: 80 – 82.99
- C+: 77 – 79.99
- C: 73 – 76.99
- C-: 70 – 72.99
- D+: 67 – 69.99
- D: 64 – 66.99
- F: < 63.99

**Academic Schedule**

The Graduate Programs are designed for nurses wishing to engage in either part-time or full-time study. Courses are offered in the Fall and Spring semesters and the Winter and Summer sessions. Scheduling of courses is planned to meet the needs of nurses who are employed full-time. Most courses are held during the evening, with some core courses offered on Saturday mornings on a rotating basis. Courses meet during the Fall and Spring semesters typically one evening per week from 4:30 to 7:30, or Saturday morning from 8:30 to 12:30. The six-week Summer session classes meet twice per week from 4:30 to 7:30. Other courses in the Winter and Summer sessions are offered in a workshop format, over two, three, or four week time periods.

The Department of Nursing and Health reserves the right to cancel courses for insufficient enrollment. A minimum number of registrants are generally five students.

**Student Status**

For the purpose of defining the student status, the calendar year (January 1 – December 31) is divided into a fall semester, a spring semester, and a summer semester.

A full time student is one who carries at least nine (9) credits in each of the fall or spring semesters. Taking courses in the summer semester is optional.

A half time student is one who carries at least six (6) credits in each of the fall or spring semesters. Taking courses in the summer semester is optional.

A less than half time student is one who carries less than six (6) credits in a given semester.

**International Student Status**

In addition to the criteria described in the Academic Regulations section, an international student (F-1 visa) needs to do the following:

- maintain full time student status,
- carry at least one classroom based course in each semester, and
- take no more than one distance-education course in each semester.

**Registration and Advising Policies**

Students should meet with their academic advisor immediately upon acceptance into the MSN Program. The purpose of this meeting is to jointly develop a Curriculum Plan to guide the student’s progress through the Program. The Curriculum Plan includes anticipated dates for taking the required courses and for graduating. Students may not register for a course until the curriculum plan is in place. The original Curriculum Plan may be amended, depending upon course availability; however, there is no guarantee that changes will meet the student's timeline for Program completion.

Registration materials are available in the Department of Nursing and Health. Registration may be completed one month prior to the first day of class. Courses are to be approved by the student’s academic advisor.
Graduate Programs in Nursing

The University reserves the right to limit enrollment or cancel a class if enrollment is not sufficient.

Tuition and Fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition per credit hour</td>
<td>$495</td>
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<tr>
<td>Application Fee</td>
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<tr>
<td>Readmission Fee</td>
<td>35</td>
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<tr>
<td>Certificate Fee</td>
<td>30</td>
</tr>
<tr>
<td>Graduation Fee</td>
<td>105</td>
</tr>
<tr>
<td>Returned Check Fee</td>
<td>30</td>
</tr>
<tr>
<td>Laboratory fee*</td>
<td>200</td>
</tr>
</tbody>
</table>

*Laboratory fees are due on registration for NU 624, NU 700, NU 706, NU 707, NU 708, NU 709, and NU 710.

Refund Amount

Withdrawal in 1st or 2nd week: 80% of tuition refunded
Withdrawal in 3rd or 4th week: 50% of tuition refunded
Withdrawal in 5th or 6th week: 25% of tuition refunded
Withdrawal after 6th week: no refund

Transfer Policy

In general a maximum of six credits (2 courses) can be transferred into the Program. All requests for transfer of credits must be made through the student's advisor and approved by the Program Director. Official course transcripts must accompany the transfer request. In addition, a course description and syllabus may be required. Transfer of credits is allowed only for courses in which the student attained a grade of “B” or better.

Matriculation

After completion of twelve graduate credits with a minimum GPA of 3.0, the MSN student is eligible to apply for matriculation and be granted candidacy status. A written application accompanied by a transcript of the courses completed is to be submitted to the Program Director.

Clinical Requirements

The following documentation of reasonably good health and disease prophylaxis is to be submitted to the Department of Nursing and Health at least one month prior to registering for clinical courses:

1. Complete physical examination, including specified laboratory results (form provided by the Department of Nursing and Health).
2. Current CPR certification.
3. Hepatitis B Vaccination (series of three injections).
4. Health and Immunization Status form documenting immunization dates for poliomyelitis, measles, mumps, rubella, tetanus, and diphtheria.
5. Varicella titer if unable to provide documentation of having had the disease.
6. Rubella, and/or measles titer if unable to provide documentation of immunization.
7. Resolved financial obligations to the University.
8. Payment of the Graduation Fee.

The above documentation must be up to date at all times throughout the completion of the Program. It is the student’s responsibility to submit updated forms and certifications as renewals are received. Students may not participate in a clinical course if the above documentation is incomplete. The cost of examinations and other requirements is the responsibility of the student.

Graduation Requirements

The Master of Science in Nursing Degree is awarded to candidates who have satisfied the following requirements:

1. Completion of the approved course of graduate study.
2. A GPA of at least 3.0 for all course work related to the degree.
3. Demonstration of grades at the level of “B” or better in all clinical and specialty courses.
4. No more than two grades at the "B-" level or below.
5. Submission of all preceptor, site, and self-evaluation forms.
6. Resolution of all Incomplete grades.
7. Resolved financial obligations to the College.
8. Payment of the Graduation Fee.

PROGRAM OF STUDY
The Program of Study reflects the philosophy of the Department of Nursing and Health. The objectives of the programs emanate from the statements of belief concerning being human in contemporary society, the relationship of the nurse to the patient, and the responsibilities of the nurse in delivering health care today and in the future.

Program Structure
The Program of Study leading to the MSN degree consists of the following components
- Core Courses
- Advanced Core Course
- Specialty Courses
  - AAPN
  - FNP
  - MSN/MBA
- Clinical Courses
  - AAPN
  - FNP
  - MSN/MBA
- Electives

Core Courses
Completion is required of all students seeking the MSN and MSN/MBA degrees. The courses should be taken prior to or concurrent with the Advanced Core Courses, and prior to the Specialty and Clinical courses.

NU 501 Proseminar 3 credits
NU 503 Nursing Theory and Models 3 credits
NU 601 Christian Ethics in Health Care 3 credits

Advanced Core Courses
Completion of the Advanced Core Courses is required of all AAPN, FNP, and FNPC students. These courses should be completed prior to the Specialty and Clinical courses.

NU 505 Epidemiology and Biostatistics 3 credits
NU 700 Advanced Health and Physical Assessment 4 credits
NU 701 Pathophysiology 3 credits
NU 702 Advanced Pharmacology 4 credits
NU 704 Advanced Practice Role Seminar 3 credits

Specialty and Clinical Courses, Adult Advanced Practice Nurse Specialist Program
AAPN Specialty courses are specific to the development of expertise in caring for adults on the individual or community level.

NU 604 Teaching and Case Management Role of the APN 3 credits
NU 605 Scientific Basis for Health Promotion 3 credits
HC 506 Community Assessments and Health Planning 3 credits
HC 507 Health Policy 3 credits
NU 707 Adult Health Promotion I 5 credits
NU 709 Adult Health Promotion II 5 credits

Specialty and Clinical Courses, Family Nurse Practitioner Program

NU 602 Family Dynamics in Diverse Populations 3 credits
NU 706 Advanced Families Nursing I 6 credits
NU 708 Advanced Family Nursing II 6 credits
NU 710 Advanced Family Nursing III 6 credits

Specialty and Clinical Courses - MSN/MBA
Courses toward the joint MSN/MBA degree are offered through both the Department of Nursing and Health and the Master of Business Administration (MBA) Program.

MBA Foundation Courses
FD 505 Foundations in Business 3 credits

MBA Core Courses
CR 501 Financial and Managerial Accounting 3 credits
CR 504 Marketing Management 3 credits
CR 505 Organization Management 3 credits
Graduate Programs in Nursing

CR 506  Financial Management  3 credits  
CR 507  Executive Skill Development  3 credits  
IT 506  Business Computing  3 credits  

MBA Health Care Systems Management Courses

HC 503  Legal Aspects of Health System Management  3 credits  
HC 504  Quality Management for Health Care Systems  3 credits  
HC 505  Principles and Strategies for Managed Care  3 credits  
HC 506  Community Health Assessment and Planning  3 credits  
HC 507  Contemporary Issues in Health Care Policy  3 credits  
HC 508  Management of Information and Communication Technologies in Health Care Systems  3 credits  

Specialty and Clinical Courses

NU 624  Nursing Administration Internship  7 credits  
HC 600  Capstone Course in Health Systems Management  3 credits  

Program Requirements, Adult Advanced Practice Nurse Specialist Program

MSN Core Courses  9 credits  
Advanced Core Courses  17 credits  
AAPN Specialty and Clinical Courses  22 credits  
Total  48 credits  

Program Requirements, Family Nurse Practitioner Program

MSN Core Courses  9 credits  
Advanced Core Courses  17 credits  
FNP Specialty and Clinical Courses  21 credits  
Total  47 credits  

Program Requirements, MSN/MBA

MSN Core Courses  9 credits  
MBA Foundations Courses  3 credits  
MBA Courses  18 credits  
Health Care Support Courses  18 credits  
MSN Specialty and Practicum  10 credits  
Total  58 credits  

Program Requirements, Post-MSN Family Nurse Practitioner Certificate

Depending upon the number of courses transferred in, the student may complete the FNPC in one year. Students must satisfy credit and course requirements for the FNP Program of study via graduate courses either transferred in or taken at the University.

Program Requirements, MSN Completion Program for Certificate Registered Nurse Practitioners and Certified Nurse Midwives Program

The curriculum of the MSN Completion Program recognizes the expertise of the practicing certificate-prepared clinician, which is built upon a strong foundation of clinical theory. The post-certificate MSN student may transfer up to the equivalent of 26 credits. The equivalency is calculated from didactic and clinical requirements of the original certificate program. Equivalency is determined on a case-by-case basis, culled from educational experiences in the certificate program only. Continuing education in other forms will not be considered for equivalency credit (e.g. continuing education units or CEUs).

All post-certificate MSN students must take the following seven courses (22 credits)

NU 501  Proseminar  3 credits  
NU 503  Nursing Theories and Models  3 credits  
NU 505  Epidemiology and Biostatistics  3 credits  
NU 601  Christian Ethics in Health Care  3 credits  
NU 701  Pathophysiology  3 credits  
NU 702  Advanced Pharmacology  4 credits  

One course from the following list of MSN electives (3 credits)

NU 602  Family Dynamics in Diverse Populations  3 credits  
NU 704  Advanced Practice Role Seminar  3 credits  
HC 503  Legal Aspects of Health System Management  3 credits
HC 507  Contemporary Issues in Health Care
Policy  3 credits

Depending upon certificate preparation courses and clinical experience, students may be required to take NU 700 Advanced Health and Physical Assessment (4 credits).

If the student’s equivalency from the original certificate program, combined with the coursework described above, does not equal 47 credits, additional courses will be required in order to meet the minimum number of credits for graduation. These courses would be considered electives, and would be assigned by the MSN Program Director.

The post-certificate MSN can be completed in either one-year of full time or two years of part time study. Completion of the program results in the conferral of a Generic MSN.

RN-MSN

Academically qualified students may be eligible to matriculate directly into one of the MSN programs through either the Nurse Scholars’ Program or through the RN-MSN Completion Program. The Nurse Scholars’ Program is highly accelerated in which five graduate level courses are applied to both the BSN and MSN degrees. These participating students must fulfill all requirements for the BSN degree prior to obtaining graduate student status.

The RN-MSN Program is built upon the framework of the Pennsylvania Articulation Model, and incorporates the acceleration of degree candidacy via substitution of elective course with graduate core course.

The RN-MSN program of study will be individually designed for each student, depending upon the number and type of courses transferred in. Students must complete the following undergraduate courses prior to taking graduate level core courses:

MA 111 (or its equivalent) pre-requisite for NU 501, NU 503 and NU 505.
NU 215 (or its equivalent) pre-requisite for NU 501 and NU 503.
NU 320 (or its equivalent) pre-requisite for NU 700

Students in the RN-MSN Program must adhere to all policies stated for the MSN Program. These policies include progression, curriculum planning, and graduation policies.
### MSN CALENDAR

#### Fall Semester 2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 22</td>
<td>Sunday</td>
<td>Opening Mass of the Holy Spirit</td>
</tr>
<tr>
<td>August 24</td>
<td>Tuesday</td>
<td>Registration</td>
</tr>
<tr>
<td>August 25</td>
<td>Wednesday</td>
<td>First day of class</td>
</tr>
<tr>
<td>September 1</td>
<td>Wednesday</td>
<td>Last day to make up incompletes of previous semester</td>
</tr>
<tr>
<td>September 2</td>
<td>Thursday</td>
<td>Last day for dropping or adding courses</td>
</tr>
<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day holiday</td>
</tr>
<tr>
<td>October 1</td>
<td>Friday</td>
<td>MSN 20th Anniversary Celebration</td>
</tr>
<tr>
<td>October 11 &amp; 12</td>
<td>Mon. &amp; Tues.</td>
<td>Pacer Weekend</td>
</tr>
<tr>
<td>October 13</td>
<td>Wednesday</td>
<td>Deadline for submitting application for winter graduation</td>
</tr>
<tr>
<td>October 27</td>
<td>Wednesday</td>
<td>Last day for withdrawal from courses with W, WP, WF</td>
</tr>
<tr>
<td>November 8</td>
<td>Monday</td>
<td>Pre-registration (deposit required for spring semester)</td>
</tr>
<tr>
<td>November 24</td>
<td>Wednesday</td>
<td>Thanksgiving holiday begins after last class</td>
</tr>
<tr>
<td>December 10</td>
<td>Friday</td>
<td>Last day of class</td>
</tr>
<tr>
<td>December 13</td>
<td>Monday</td>
<td>Semester exams begin</td>
</tr>
<tr>
<td>December 18</td>
<td>Saturday</td>
<td>Last day of semester</td>
</tr>
<tr>
<td>December 20</td>
<td>Monday</td>
<td>All grades due by 2:00pm</td>
</tr>
</tbody>
</table>

#### Spring Semester 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 17</td>
<td>Monday</td>
<td>Registration</td>
</tr>
<tr>
<td>January 18</td>
<td>Tuesday</td>
<td>First day of class</td>
</tr>
<tr>
<td>January 23</td>
<td>Sunday</td>
<td>Celebration of Excellence in Graduate and ACCESS Programs</td>
</tr>
<tr>
<td>January 26</td>
<td>Wednesday</td>
<td>Last day for dropping or adding courses</td>
</tr>
<tr>
<td>February 2</td>
<td>Wednesday</td>
<td>Patron's Day Celebration</td>
</tr>
<tr>
<td>March 1</td>
<td>Tuesday</td>
<td>Deadline for submitting application for May Graduation</td>
</tr>
<tr>
<td>March 7-11</td>
<td>Mon. – Fri.</td>
<td>Spring break</td>
</tr>
<tr>
<td>March 17</td>
<td>Thursday</td>
<td>Last day for withdrawal from courses with W, WP, WF</td>
</tr>
<tr>
<td>March 25-28</td>
<td>Fri. – Mon.</td>
<td>Easter Vacation</td>
</tr>
<tr>
<td>April 4</td>
<td>Monday</td>
<td>Last day to make up incompletes from previous semester</td>
</tr>
<tr>
<td>April 14</td>
<td>Thursday</td>
<td>Pre-registration (deposit required for the fall semester)</td>
</tr>
<tr>
<td>May 6</td>
<td>Friday</td>
<td>Last day of class</td>
</tr>
<tr>
<td>May 9</td>
<td>Monday</td>
<td>Semester exams begin</td>
</tr>
<tr>
<td>May 14</td>
<td>Saturday</td>
<td>Last day of the semester</td>
</tr>
<tr>
<td>May 16</td>
<td>Monday</td>
<td>All grades due by noon</td>
</tr>
<tr>
<td>May 20</td>
<td>Friday</td>
<td>PM Baccalaureate</td>
</tr>
<tr>
<td>May 21</td>
<td>Saturday</td>
<td>AM Commencement</td>
</tr>
</tbody>
</table>

#### Summer Semester 2005

(Schedule will be posted)
COURSE DESCRIPTIONS

NU 501  Proseminar  (3 credits)
This course assists the student in developing the skills necessary for scientific inquiry. It develops the student’s knowledge base to encourage logical exploration of phenomena central to the profession of nursing. Offered in the Summer.
Prerequisite: None.

NU 503  Nursing Theory and Models  (3 credits)
The evaluation of theoretical and conceptual models of nursing. The historical development of nursing theories is discussed, and a comparison to theories from other disciplines is explored. Special emphasis is on the identification of the student's awareness of theory as a base for nursing practice, and the relationship of theory to research. Offered in the Fall
Prerequisite: None.

NU 505  Epidemiology and Biostatistics  (3 credits)
This course provides students the background to understand, integrate, and evaluate principles of epidemiology. New ways of thinking about health and disease, and fostering a questioning attitude toward published information are two specific aims of this course. Offered in the Summer.
Prerequisite: Undergraduate statistics course equivalent to MA 111

NU 601  Christian Ethics in Health Care  (3 credits)
The impact of Christian social principles relative to current health care including political awareness of health issues. Offered in the Spring.
Prerequisite: None.

NU 602  Family Dynamics in Diverse Populations  (3 credits)
This course analyzes the concepts of Family Theory within the context of the diverse populations served in primary care. Focus populations include the homeless, immigrants, urban populations, and various family composites. The cultural interface between primary care providers and diverse populations is analyzed. Offered in the Spring.
Prerequisites: NU 501, NU 503.

NU 604  Teaching and Case Management Role of the APN  (3 credits)
Designed for students preparing for clinical specialization as an adult advanced practice nurse. Building on knowledge acquired through MSN core courses, focus is on advanced practice role development as case manager and client/staff educator. Students will analyze and apply models of case management and health education to develop collaborative strategies that promote healthier outcomes for individuals and groups. Offered every other Fall.
Prerequisite: NU 501

NU 605  Scientific Basis for Health Promotion  (3 credits)
The foundation of advanced practice nursing lies in the provision of care based on sound scientific principles. Students will analyze models for health behavior and health promotion within the context of acute and chronic health conditions facing individuals, families, and communities. Offered every other Spring.
Prerequisite: None.

NU 624  Nursing Administration Internship  (7 credits)
The application of advanced principles and theories of nursing and business administration in a health care setting. Students will perform 450 hours of a concentrated internship with an executive in the health care arena. In addition, students will meet for an integrating seminar for a total of 15 hours per semester. A laboratory fee is required. Offered every other Fall.
Prerequisites: All MSN and MBA core courses.

NU 700  Advanced Health & Physical Assessment  (4 credits)
This lecture-seminar/laboratory course builds on the student’s knowledge of health assessment. It prepares advanced practice nurses for performing the history and physical components of a comprehensive advanced health assessment. This course requires three hours of theory and five hours of clinical laboratory per week. A laboratory fee is required. Offered in the Fall.
Prerequisite: None.
## Graduate Programs in Nursing

### NU 701 Pathophysiology (3 credits)
Course is designed to establish the relationship between physiological and pathophysiological principles, and the clinical practice of the advanced practice nurse. Students will be able to recognize alterations in client health status, interpret data gained from client history, physical assessment and diagnostic studies, and arrive at a conclusion to direct further intervention. Offered in the Fall.
Prerequisite: None.

### NU 702 Advanced Pharmacology (4 credits)
This course builds on students’ knowledge of pharmacology to prepare the advanced practice nurse to manage pharmacologic therapy for individuals and families. Emphasis is on the role responsibilities of the advanced practice nurse. Offered in the Spring.
Prerequisite: NU 701.

### NU 704 Advanced Practice Role Seminar (3 credits)
Using a seminar format, students will explore the unique and common roles of Advanced Practice Nurses. Included in this exploration is an understanding of the history of advanced practice nursing, as well as an analysis of contemporary advanced practice issues. Students will analyze the advanced practice role in economic, social and professional contexts. Offered in the summer.
Prerequisites: NU 501, NU 503, NU 505.

### NU 706 Advanced Family Practice I (6 credits)
The first of a three course sequence, this course is designed to provide the theoretical basis and the practical experience for diagnosing and managing common and acute health conditions of the child, adolescent, and adult. Emphasis on compiling and analyzing data, developing and implementing a plan in conjunction with the individual and the family, and evaluating both patient/family response to the care and the effectiveness of the plan. The course requires 16 hours per week in a precepted clinical environment as well as 3 hours per week of lecture/seminar. A laboratory fee is required. Offered in the Spring.
Prerequisite: NU 704.

### NU 707 Adult Health Promotion I (5 credits)
This course is a combination of seminar (30 hours) and practicum (225 hours). Seminar discussion will focus on the students in the practicum experience. Students will implement the roles of the Advanced Practice Nurse in a health organization under a preceptor model. Laboratory fee required. Offered every other Fall.
Prerequisites: All core and advanced core courses.

### NU 708 Advanced Family Practice II (6 credits)
The second in the three-course sequence designed to provide the student with a theoretical basis and practical foundation for advanced nursing practice. The focus is on the diagnosis and management of chronic health conditions of adults and chronic health problems of children. Emphasis is on compiling and analyzing data, developing and implementing a plan in conjunction with the individual, the family, and other providers, and evaluating both patient and family response to the care and effectiveness of the plan. The course requires 16 hours per week in a precepted clinical environment as well as 3 hours per week of lecture/seminar. A laboratory fee is required. Offered in the Spring.
Prerequisite: NU 706.

### NU 709 Adult Health Promotion II (5 credits)
This course is a combination of seminar (15 hours) and practicum (300 hours). Seminar discussion will focus on the experience of students in the practicum. Students will implement the role of the Advanced Practice Nurse in a health organization under a preceptor model. A laboratory fee is required. Offered every other Spring.
Prerequisite: NU 707.

### NU 710 Advanced Family Practice III (6 credits)
The third of a three-course sequence designed to provide the student with the theoretical foundation and practical basis for advanced nursing practice. The emphasis is on individual and family health promotion, health maintenance, and illness prevention as well as on teaching, counseling, and providing anticipatory guidance. Using current research data, students assess patients from infancy through older adults, identify populations
at risk, assess health care needs, and determine appropriate interventions. This course requires 16 hours per week in a precepted clinical environment as well as 3 hours per week of lecture/seminar. A laboratory fee is required. Offered in the Summer.

Prerequisites: NU 708.

FD, HC, IT, and CR courses are described under MBA and MSIS.
MASTER OF SCIENCE IN PHYSICIAN ASSISTANT STUDIES

Christine H. Bruce, Director
610.282.1100, ext. 1474
E-mail: Christine.Bruce@desales.edu

The MSPAS Program educates professionals to function as members of the physician led health care team and as patient advocates.
The Physician Assistant Program offers a Master of Science in Physician Assistant Studies (MSPAS) major. Full accreditation has been granted by the Accreditation Review Commission on Education for The Physician Assistant, Inc. (ARC-PA)

The Program has been designed to develop generalists with emphasis in primary care medicine. Students gain strong fundamental knowledge of medicine together with varied experience, which prepare them for their roles as professional physician assistants.

Learning involves case based profiles with outcome based educational objectives.

- Pharmacology is taught from the perspective of the prescriber.
- Pathophysiology shows the relationship of disease to concepts covered in Clinical Medicine.
- History and Physical Examination courses develop familiarity with obtaining pertinent and concise examinations as they relate to disease entities. Students gain practical knowledge by performing clinical procedures and by ordering and interpreting diagnostic images and electrocardiograms. Hands-on procedures such as suturing and insertion of nasogastric tubes, casting foley catheters, and intravenous devices are stressed.
- Research techniques as they relate to medical topics are taught for efficiency in accessing pertinent medical information along with reading/understanding medical literature.
- Clinical cases incorporating medical, surgical, and ethically based issues are presented by the students in the final year of the Program.

The Program is consistent with the Christian humanistic philosophy of the University. Graduates of the Program will function as members of the health care team and as patient advocates.

The Physician Assistant Program consists of two phases

- The pre-professional phase, described in the Undergraduate Catalog, is three years (six semesters).
- The professional phase is twenty-four months (six semesters) with the first year emphasizing academic medicine and the second year emphasizing clinical training.

The first two semesters consists of the required undergraduate/graduate courses. The successful completion of these two semesters satisfies the requirements for the candidates of the Bachelor of Science in Medical Studies Degree. All graduate students who have entered the Program with a baccalaureate degree must successfully complete this sequence.

The final four semesters comprise of graduate level education, which requires the completion of 18 credits for the first semester and 15 credits for each of the last three semesters.
Objectives
The MSPAS Program is designed to graduate physician assistants who dedicate themselves to the patient as an individual. Students will further the vision of Christian humanism and the Salesian tradition by

- focusing on preventive health care,
- promoting good health care,
- emphasizing holistic patient evaluations, i.e., considering the context of family, local community, and society in general,
- promoting life-long learning, and
- supporting cultural diversity.

The Program provides academic and clinical expertise that prepares the physician assistant for certification and success in his/her professional role as an extender to the practicing physician, especially the primary care physician. The specific objectives of the program are to

- emphasize primary care practice,
- impart the base of biomedical and clinical knowledge and technical skills at a level that is required for students to become competent PAs,
- provide an ample experiential foundation that prepares students to perform the tasks, functions, and duties of a physician assistant in diverse practice settings,
- mold students as professionals, instilling an appropriate professional demeanor, sensibility and understanding of the nature and impact of mental and physical disease in patients,
- enable students to respond appropriately to patient problems in both ambulatory and hospital settings,
- cultivate the fundamental ethical and moral attitudes, principles, and behaviors that are essential to acquiring and sustaining the confidence of colleagues, other health care professionals, and patients, and to earn the support of the community,
- broaden the base and depth of biomedical, scientific, and clinical knowledge and skills by providing a foundation conducive to competent scholarly inquiry and analysis, and
- provide an advanced educational tract that will encourage the retention of experienced PA practitioners within the profession.

Functions and Tasks
The technical standards of the PA Program are based on the functions and tasks that may be performed by a physician assistant. These are as follows:

- Evaluation:
  Initially approaching a patient to elicit a detailed and accurate history, perform an appropriate physical examination; delineate problems, and record and present data.

- Monitoring:
  Assisting the physician in conducting rounds, developing and implementing patient management plans, recording progress notes, and assisting in the provision of continuity of care.

- Diagnostics:
  Performing and/or interpreting, at least to the point of recognizing deviations from the norm, common laboratory, radiologic electrocardiographic, and other routine diagnostic procedures used to identify pathophysiologic processes.

- Therapeutics:
  Performing routine procedures such as injections, immunizations, suturing, and wound care. Managing simple conditions produced by infections or trauma. Assisting in the management of more complex illness and injury, which may include assisting surgeons in the conduct of operations. Taking initiative in performing evaluation and therapeutic procedures in response to life-threatening situations.

- Counseling:
  Instructing and counseling patients regarding compliance with prescribed therapeutic regimens, normal growth and development, family planning, emotional problems of daily living, and health maintenance.

- Referral:
  Facilitating the referral of patients to the community’s health and social service agencies when appropriate.
Admission Requirements

From the Pre-Professional Phase

Enrollment in the pre-professional program guarantees admission into the professional phase of the program if the following criteria are met:

1. Successful completion of the pre-professional phase with a cumulative 3.0 overall GPA and 3.0 required science cumulative GPA from the courses in the pre-professional phase of the PA Program. Students who enter the program in the undergraduate division are evaluated every single semester in the pre-professional phase. They need to achieve a 3.0 single semester GPA and 3.0 required science GPA in every semester. The first occurrence in which they do not meet the requirements of semester GPA 3.0 or required science GPA of 3.0, the student will be placed on PA Program academic probation. Failing to meet these requirements will result in academic dismissal from the PA Program. Such student may continue to attend the University provided they meet the academic standards. They may reapply to the PA Program after meeting the program requirements (at least a 3.0 overall GPA and 3.0 overall required science GPA). Reacceptance, however, is not guaranteed.

2. Completion of all prerequisite science courses with a grade of "C" or better.

3. Completion of at least 250 hours of health care experience (paid or volunteer). This experience provides students with an awareness of the intricacies of medical-care delivery as it exists today and provides information that enables them to realistically commit themselves to a profession that helps the sick and injured.

From outside the University

Selection for a place in the professional phase of the Program is very competitive. In order to be considered for admission in the next academic year, an applicant's file must ordinarily be completed no later than January 15th. Admission is based on academic achievement, high quality performance in science and/or health-care related courses, demonstrated motivation and professional potential, and strong interpersonal skills.

Advanced placement in the professional phase is not possible. There is no credit for experiential learning.

NOTE: All Applicants must apply and submit required forms and documentation via CASPA (Centralized Application Service for Physician Assistants: www.caspaonline.org). In order to qualify for admission into the professional phase of the program, students should have:

1. Received a baccalaureate degree from an accredited US institution. An applicant who possesses a degree from an accredited institution outside of the US may also be considered for admission. Students must have their transcript verified and translated by an approved organization (such as World Education Council) and should meet all other requirements including those described in the International Student section.

2. Completed all required classes prior to matriculation in the program. Students may apply before the completion of these courses but should inform the University as to when and where the needed course(s) will be taken. Such candidates may gain conditional acceptance.

3. Ordinarily achieved a GPA of at least 3.0 in all courses and a GPA of at least 3.0 in science courses required.

4. Taken and submitted the test scores from the Graduate Record Examination (GRE). Scores should be received by January 15.

5. Submitted three letters of reference on prescribed forms from CASPA.

6. Achieved TOEFL scores of at least 600 for non-native speakers of English.

7. Completed a minimum of 500 hours of health care experience (paid or volunteer). The experience should be completed within the United States due to the wide variety of health care delivery systems around the world. The 500 hour requirement must be completed prior to matriculation into the Program and does not need to be completed by the time of the application.
8. Submitted all transcripts of studies completed outside of the United States by January 15. These transcripts must have been evaluated by an accredited credentialing agency.

9. Attended a personal interview (by invitation only) to ascertain the applicant's awareness of the physician assistant role, willingness to work under the supervision of a physician, motivation for pursuing a PA career, interpersonal and oral communication skills, compassion, problem-solving abilities, and dedication to serving the underserved.

10. Submitted to CASPA (Centralized Application Service for Physician Assistants) a completed application and official transcripts from all colleges attended.

**Prerequisite Requirements**

Prerequisite requirements for students with Bachelor Degree:

1. Completion of the University’s general education requirements or equivalents.
   - EN 103 Communications and Thought I 3 credits
   - EN 104 Communications and Thought II 3 credits

2. Completion of basic science requirements:
   - BI 151 Introductory Biology I 4 credits
   - BI 154 Microbiology 4 credits
   - BI 355 Human Structure and Function I 4 credits
   - BI 356 Human Structure and Function II 4 credits
   - CH 101 Chemical Principles 4 credits
   - CH 102 General Chemistry 4 credits

3. PS 109 Introduction to Psychology 3 credits

4. MA 111 Probability and Statistics 3 credits

5. Recommended Courses
   - BI 255 Molecular Cell Biology I 4 credits
   - CS 105 Introduction to Computer Systems 3 credits
   - PS 240 Human Development 3 credits

**Application Procedure**

Application forms may be requested from [www.caspaonline.org](http://www.caspaonline.org) (Centralized Application Service for Physician Assistants) or by calling CASPA at 240.497.1895.

Selected applicants may be interviewed by a member of the faculty. Applicants living at a distance may be interviewed via telephone or two way radio or in person if alumni are located in their geographical area.

Following the interview candidates are evaluated by the Admission Committee to assess their acceptability to the Program. Applicants will be notified by telephone and by postal mail about the status of their acceptance. Admitted candidates ordinarily have two weeks to respond to the offer of acceptance.

**Student Status**

For the purpose of defining the students status, the calendar year (January 1 – December 31) is divided into a fall semester (late August – late December), a spring semester (early January – early May), and a summer semester (mid May – late August).

A full time student is one who carries at least nine (9) credits in each of the semesters.

A half time student is one who carries at least six (6) credits in a given semester.

A less than half time student is one who carries less than six (6) credits in a given semester.

**International Students**

An international student (F-1 visa) needs to
- maintain full student status, and
- take at least one classroom based (non-distance learning) course in each semester.

**Academic Standing**

Students are required to maintain a semester GPA of at least 3.0 having no grade lower than “C” during the. The first instance failing to reach the above requirement, the student will be placed on PA Program Academic Probation. These students will be notified of their probationary status. The second occurrence during the professional phase will result in PA Program Academic Dismissal. Students under academic discipline are permitted an appeal in
writing to the Medical Director of the Program who serves as Chair of the PA Academic Appeals Committee.

Students who fail to achieve a “C” (C- is not acceptable) in any course during the professional phase are required to repeat the course. It is the responsibility of the student to petition for permission to repeat the course. If the failure occurred during the didactic year, the student may be allowed to repeat the course during the clinical year or the student may required to repeat the course following completion of the Program. In the latter case graduation will be delayed. All additional costs are the responsibility of the student.

As part of the training students are given the opportunity for clinical practice. Participants in clinical practice must act professionally at all times maintaining patient and practice confidentiality. Breeches of professional conduct may result in dismissal from the Program and/or University. Preceptors involved in the training are to be viewed as adjunct faculty and will therefore have a role in determining the professional behavior of the students.

Details about Academic standing can be found in the in-house publications available at the Program Office.

Work Policy
Students enrolled in the MSPAS Program are not prohibited, but discouraged from working due to the intense and vigorous nature of the program.

Graduation Requirements
To qualify for graduation with the Master of Science in Physician Assistant Studies (MSPAS) degree, students must

- successfully complete the Senior Summative Experience upon completion of the clinical year.

Senior Summative Experience
Consistent with Accreditation Review Commission for Physician Assistant (ARC-PA) Standards, the University provides a summative experience following completion of the Program. The successful completion of the one week long summative experience is a graduation requirement. This experience includes a 200-question written comprehensive examination which must be completed with at least a 70% result on the first attempt.

The written examination is not remediable. Other testing stations determined by the Program allow remediation.

Costs
Costs are determined on a yearly basis by the University’s Board of Trustees. Students are notified of the yearly costs in writing.

Tuition and Fees
The MSPAS tuition is based on full-time studies.

| Tuition per semester, pre-professional | $9500 |
| Tuition per semester, professional    | 7350  |
| Professional Fee                     | 400   |
| Graduation Fee                       | 105   |
| Returned Check Fee                   | 30    |

Cost details available through the PA Program office. Financial assistance is available for the first two semesters, which are considered fifth year undergraduate courses.

Refund Amount
Courses:
Withdrawal in 1st or 2nd week: 80% of tuition refunded
Withdrawal in 3rd or 4th week: 50% of tuition refunded
Withdrawal in 5th or 6th week: 25% of tuition refunded
Withdrawal after 6th week: no refund
## MSPAS CALENDAR

### Fall Semester 2004

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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>August 22 &amp; 23</td>
<td>Sunday, Monday</td>
<td>Freshman Orientation</td>
</tr>
<tr>
<td>August 22</td>
<td>Sunday</td>
<td>Opening Mass of the Holy Spirit</td>
</tr>
<tr>
<td>August 24</td>
<td>Tuesday</td>
<td>Incoming P1 Orientation</td>
</tr>
<tr>
<td>August 25</td>
<td>Wednesday</td>
<td>First day of class</td>
</tr>
<tr>
<td>Aug. 30 – Sept. 3</td>
<td>Monday – Friday</td>
<td>Transition Week</td>
</tr>
<tr>
<td>September 1</td>
<td>Wednesday</td>
<td>Last day to make up incompletes of previous semester</td>
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<tr>
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<td>Last day for dropping and adding courses (day and ACCESS)</td>
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<tr>
<td>September 6</td>
<td>Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 7</td>
<td>Tuesday</td>
<td>Start of Clinical Year</td>
</tr>
<tr>
<td>September 27</td>
<td>Monday</td>
<td>Last day for credit/audit and pass/fail option change</td>
</tr>
<tr>
<td>October 11 &amp; 12</td>
<td>Monday, Tuesday</td>
<td>Pacer Weekend</td>
</tr>
<tr>
<td>October 13</td>
<td>Wednesday</td>
<td>Mid-terms Deadline for submitting application for winter graduation</td>
</tr>
<tr>
<td>October 15</td>
<td>Friday</td>
<td>Mid-term grades due by noon</td>
</tr>
<tr>
<td>October 25 – 29</td>
<td>Monday thru Friday</td>
<td>Consultation with advisors</td>
</tr>
<tr>
<td>October 27</td>
<td>Wednesday</td>
<td>Last day for withdrawal from courses with W, WP, WF</td>
</tr>
<tr>
<td>Nov. 1, 3, 5, 8</td>
<td>Monday, Wednesday, Friday, Monday</td>
<td>Preregistration (deposit required for spring semester)</td>
</tr>
<tr>
<td>November 24</td>
<td>Wednesday</td>
<td>Thanksgiving holiday begins after last class</td>
</tr>
<tr>
<td>November 28</td>
<td>Sunday</td>
<td>Residence halls open at 2:00 p.m.</td>
</tr>
<tr>
<td>November 29</td>
<td>Monday</td>
<td>Deadline to submit Double Major, Change a Minor, Completion of Minor forms to Registrar for Winter graduation</td>
</tr>
<tr>
<td>December 10</td>
<td>Friday</td>
<td>Last day of class</td>
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<td>December 13</td>
<td>Monday</td>
<td>Semester exams begin</td>
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<tr>
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<td>Saturday</td>
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### Spring Semester 2005

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<tr>
<td>February 2</td>
<td>Wednesday</td>
<td>Patron’s Day Celebration</td>
</tr>
<tr>
<td>February 21</td>
<td>Monday</td>
<td>Last day for credit/audit and pass/fail option changes</td>
</tr>
<tr>
<td>March 1</td>
<td>Tuesday</td>
<td>Mid-term Deadline for submitting application for May graduation</td>
</tr>
<tr>
<td>March 3</td>
<td>Thursday</td>
<td>Mid-term grades due by noon</td>
</tr>
<tr>
<td>March 7 – 11</td>
<td>Monday - Friday</td>
<td>Spring break</td>
</tr>
<tr>
<td>March 13</td>
<td>Sunday</td>
<td>Residence halls open at 2:00 p.m.</td>
</tr>
<tr>
<td>March 17</td>
<td>Tuesday</td>
<td>Last day for withdrawal from courses with W, WP, WF</td>
</tr>
<tr>
<td>March 24</td>
<td>Thursday</td>
<td>Classes will follow M class schedule</td>
</tr>
<tr>
<td>Date(s)</td>
<td>Days</td>
<td>Event Description</td>
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<tr>
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<tr>
<td>March 25-28</td>
<td>Friday – Monday</td>
<td>Easter Vacation</td>
</tr>
<tr>
<td>March 28</td>
<td>Monday</td>
<td>Residence halls open at 2:00pm</td>
</tr>
<tr>
<td>April</td>
<td>Monday</td>
<td>Last day to make up incompletes of previous semester</td>
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<tr>
<td></td>
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<td>Deadline to submit Double Major, Change of Major, Completion of</td>
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<td>Minor forms to Registrar for May graduation</td>
</tr>
<tr>
<td>April 4 – 7</td>
<td>Monday - Thursday</td>
<td>Consultation with advisors</td>
</tr>
<tr>
<td>April 11, 13, 14</td>
<td>Monday, Wednesday, Thursday</td>
<td>Preregistration (deposit required for the fall semester)</td>
</tr>
<tr>
<td>April 24</td>
<td>Sunday</td>
<td>Academic Excellence Celebration</td>
</tr>
<tr>
<td>May 6</td>
<td>Friday</td>
<td>Last day of class</td>
</tr>
<tr>
<td>May 9</td>
<td>Monday</td>
<td>Semester exams begin</td>
</tr>
<tr>
<td>May 14</td>
<td>Saturday</td>
<td>Last day of semester</td>
</tr>
<tr>
<td>May 16</td>
<td>Monday</td>
<td>All grades due by noon</td>
</tr>
<tr>
<td>May 20</td>
<td>Friday</td>
<td>PM Baccalaureate</td>
</tr>
<tr>
<td>May 21</td>
<td>Saturday</td>
<td>AM Commencement</td>
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<tr>
<td></td>
<td></td>
<td><strong>Summer Semester 2005</strong></td>
</tr>
<tr>
<td>May 16</td>
<td>Monday</td>
<td>Start of SU05 Semester</td>
</tr>
<tr>
<td>May 30- June 4</td>
<td>Monday-Saturday</td>
<td>Memorial Day Holiday; AAPA National Conference in Orlando, FL (students have an option to attend the National Conference)</td>
</tr>
<tr>
<td>July 1-July 4</td>
<td>Friday-Monday</td>
<td>Independence Day Holiday</td>
</tr>
<tr>
<td>August 12</td>
<td>Friday</td>
<td>Last Day of Classes</td>
</tr>
<tr>
<td>August 15-19</td>
<td>Monday-Friday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>August 22-26</td>
<td>Monday-Friday</td>
<td>Semester Break</td>
</tr>
<tr>
<td>August 23</td>
<td>Tuesday</td>
<td>Incoming P1 Orientation</td>
</tr>
<tr>
<td>August 29 - September 2</td>
<td>Monday-Friday</td>
<td>Transition Week</td>
</tr>
<tr>
<td>September 5</td>
<td>Monday</td>
<td>Labor Day</td>
</tr>
<tr>
<td>September 6</td>
<td>Tuesday</td>
<td>Start of Clinical Year – rest of Calendar to be determined.</td>
</tr>
</tbody>
</table>
**Clinical Rotation Schedule**

**PA Board Review Course – September 11 and September 12, 2004**
8:00 am-5:00 pm both dates
Location: To be announced
Registration Required

<table>
<thead>
<tr>
<th>Rotation #</th>
<th>Rotation Dates</th>
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</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>August 30, 2004 - September 3, 2004</td>
</tr>
<tr>
<td>(Transition Week)</td>
<td>September 7, 2004 - October 7, 2004</td>
</tr>
<tr>
<td>Rotation #1</td>
<td>October 11, 2004 - November 11, 2004</td>
</tr>
<tr>
<td>Rotation #2</td>
<td>November 15, 2004 - December 15, 2004</td>
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<tr>
<td>Rotation #3</td>
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</tbody>
</table>

**Break – December 17, 2004 – January 2, 2005**

| Rotation #4   | January 3, 2005 - February 3, 2005              |
| Rotation #5   | February 7, 2005 - March 10, 2005               |
| Rotation #6   | March 14, 2005 - April 14, 2005                 |

**Spring Break – April 18, 2005 – April 22, 2005**

| Rotation #7   | April 25, 2005 - May 26, 2005                    |

**AAPA Conference May 30, 2005 – June 3, 2005**

| Rotation #8   | June 6, 2005 - July 7, 2005                      |
| Rotation #9   | July 11, 2005 - August 9, 2005                   |

**Senior Summative Experience August 15 – August 19, 2005**

**Graduation – August 20, 2005**

*Scheduled Senior Day*

| Rotation #1 | Friday, October 8, 2004 |
| Rotation #2 | Friday, November 12, 2004 |
| Rotation #3 | Thursday, December 16, 2004 |
| Rotation #4 | Friday, February 4, 2005 |
| Rotation #5 | Friday, March 11, 2005 |
| Rotation #6 | Friday, April 15, 2005 |
| Rotation #7 | Friday, May 27, 2005 |
| Rotation #8 | Friday, July 8, 2005 |
| Rotation #9 | Wednesday, August 10, 2005 |

*Senior Day:* All PA students return to main campus to take end-of-rotation examinations and perform case presentations/physical examinations.
PROGRAM OF STUDY

Professional Phase

This phase is designed to deliver the essential academic and clinical education necessary to prepare students for their professional roles as extenders of the primary care physician and to satisfy the eligibility requirements to sit for the PA certification examination. The phase is divided into six didactic semesters and six clinical semesters:

Didactic Year

Fall

PA 501 Clinical Anatomy & Physiology
PA 502 History and Physical Examination I
PA 504 Clinical Medicine I
PA 510 Pharmacology I
PA 515 Pathophysiology I
PA 619 Preventive Medicine and Health Promotion

Spring

PA 503 History and Physical Examination II
PA 505 Clinical Medicine II
PA 508 Physician Assistant History and Role/Introduction to Medical Literature
PA 511 Pharmacology II
PA 513 Diagnostic Methods I
PA 516 Pathophysiology II
PA 575 Ethics of Health Care

A Bachelor of Science in Medical Studies is awarded to fourth-year students after the successful completion of two semesters of the professional phase listed above.

Summer

PA 517 Research Seminar
PA 606 Clinical Medicine III
PA 607 Behavioral Aspects of Medicine
PA 612 Pharmacology III
PA 614 Diagnostic Methods II
PA 617 Pathophysiology III
PA 618 Clinical Skills Development
PA 620 Advanced Cardiac Life Support
PA 621 Clinical Case Presentations

Clinical Year

Mandatory Rotations

Students must satisfactorily complete the following rotations:

PA 630 Emergency Medicine 5 weeks
PA 631 Family Medicine I 5 weeks
PA 632 Family Medicine II 5 weeks
PA 633 Internal Medicine 5 weeks
PA 634 Obstetrics and Gynecology 5 weeks
PA 635 Pediatrics 5 weeks
PA 636 Psychiatry 5 weeks
PA 637 General Surgery 5 weeks

Elective Rotations

Students must select and complete satisfactorily one of the following rotations:

PA 638 Cardiothoracic Surgery 5 weeks
PA 639 Orthopedic Surgery 5 weeks
PA 640 Otolaryngology 5 weeks
PA 641 Plastic Surgery 5 weeks
PA 642 Family Medicine III 5 weeks
PA 643 Emergency Medicine II 5 weeks
PA 644 Urgent Care 5 weeks
PA 645 Pediatric Cardiology 5 weeks
PA 646 Endocrin 5 weeks
PA 647 Neurology 5 weeks
PA 648 Neurosurgery 5 weeks
PA 649 Cardiology 5 weeks
PA 650 Internal Medicine II 5 weeks
PA 651 Trauma 5 weeks
PA 652 Psychiatry II 5 weeks
PA 653 Allergy & Asthma 5 weeks
PA 654 Infectious Disease 5 weeks
PA 655 Geriatrics 5 weeks
PA 656 General Surgery II 5 weeks
PA 657 Pediatrics II 5 weeks
PA 658 Dermatology 5 weeks
PA 659 Geriatric Behavioral Medicine 5 weeks
PA 660 OB/GYN II 5 weeks
PA 662 Transplant Surgery 5 weeks
PA 663 Pediatric Surgery 5 weeks
PA 664 Pain Management 5 weeks
PA 665 Oncology 5 weeks
PA 666 Urology 5 weeks
PA 667 Vascular Surgery 5 weeks
PA 668 Pulmonary Medicine 5 weeks
PA 669 Tropical Medicine 5 weeks
PA 670 Neonatology 5 weeks
PA 671 Psychiatry 5 weeks
PA 672 Pediatric Oncology/Hematology 5 weeks
PA 673 Clinical Trial Research 5 weeks
PA 676 Nephrology 5 weeks

Graduate Catalog 2004-2005
COURSE DESCRIPTIONS

PA 501 Clinical Anatomy & Physiology (4 credits)
Basic knowledge of anatomy necessary for clinical practice with emphasis on surface anatomy and surface markings. The practical application of anatomical facts to clinical medicine are covered by using case studies. Clinical problems requiring anatomical knowledge for their solution are presented during each conference session. Lectures and laboratories emphasize the human body and its relationship to structure and function. Computerized dissection using ADAM and cadaver are used in laboratory sessions. Lecture 3 hours, cases 2 hours, and laboratory 2 hours. Offered every fall. Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 502 History and Physical Examination I (3 credits)
Methods of interviewing patients for: 1. elicitation and proper recording of a complete and accurate medical history, 2. a systematic physical examination, and 3. an organization of the results for oral and written presentation. Lecture 3 hours, laboratory 3 hours. Offered every fall. Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 503 History and Physical Examination II (3 credits)
A continuation of PA 502. Students learn to integrate the results of history, physical, and laboratory findings to arrive at an accurate evaluation of the patient so that a supervising physician can determine the next appropriate diagnostic or therapeutic step. Lecture 3 hours, laboratory 3 hours. Offered every spring. Prerequisite: PA 502.

PA 504 Clinical Medicine I (6 credits)
This course is the cornerstone of all the medically relevant courses. Various disease processes will be described, along with the incidence, prevalence, presentation, treatment plans, and expected outcomes. This course is organized into 4 blocks covering: 1. gastroenterology, 2. pulmonology, 3. hematology, and 4. cardiology. Offered every fall. Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 505 Clinical Medicine II (6 credits)
A continuation of PA 504. Organized into the following 9 blocks: 1. oncology, 2. pulmonology, 3. nephrology, 4. rheumatology, and 5. endocrinology. Offered every spring. Prerequisite: PA 504.

PA 508 Physician Assistant History and Role/Introduction to Medical Literature (1 credit)
The roots, history, and future of the physician assistant profession. Where and how to locate medical literature. Utilization of computer search techniques. The structure and critical reading of a medical research paper. Offered every spring. Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 510 Pharmacology I (2 credits)
Basic principles of drug action, their dynamics and kinetics, toxicities, and therapeutic uses. Students study the commonly used drugs affecting the autonomic nervous system, central nervous system, cardiovascular and renal systems, and gastrointestinal and genitourinary systems. Offered every fall. Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 511 Pharmacology II (2 credits)
A continuation of PA 510. Students discuss chemotherapy of microbial organisms. Dose responses, side effects, and adverse reactions are emphasized. Offered every spring. Prerequisite: PA 510.

PA 513 Diagnostic Methods (1 credit)
Common chemical procedures employed in evaluating disease processes. Students develop proficiency in analyzing CBC (complete blood count), urinalysis, gram stains, and cultures. Students develop skills in interpreting clinical laboratory values in relation to disease, therapy, and prognosis. Topics include hematology, immunohematology, clinical microbiology, serology, clinical chemistry, and urinalysis. Offered every spring. Prerequisite: Professional Phase I student in didactic phase of the Program.
PA 515  Pathophysiology I  (2 credits)
A systems approach to basic concepts of disease processes prior to analyzing common alterations to body systems. Concepts are reviewed for the understanding that disease processes represent a disruption in homeostasis and a breakdown of normal integration of structure and function. Offered every fall.
Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 517  Research Seminar  (1 credit)
Clinical research topics and methods. Students will discuss clinical and biological research, and present a case study found within the medical literature. Offered every summer.
Prerequisite: Professional Phase I student in the didactic phase of the Program.

PA 575  Ethics of Health Care (Values Seminar)  (3 credits)
Issues of medical ethics. Students study and debate both sides of ethical issues such as patient rights, the role of PAs and other medical personnel, differing values between patients and PAs, and experimentation. Offered every spring.
Prerequisite: Professional Phase I student in didactic phase of the Program or by instructor’s approval.

PA 606  Clinical Medicine III  (6 credits)
A continuation of PA 505 and PA 506, organized into 5 blocks covering: 1. neurology, 2. surgery, 3. endocrinology, 4. urology, and 5. emergency medicine. Offered every summer.
Prerequisites: PA 505 and PA 506.

PA 607  Behavioral Aspects of Medicine  (3 credits)
Counseling and psychosocial issues. The skills, knowledge, and sensitivity needed to communicate and intervene effectively in a variety of psychosocial situations are presented. The ability to recognize and treat patients with a variety of psychological conditions. Offered every summer.
Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 612  Pharmacology III  (2 credits)
A continuation of PA 510 and PA 511. Students discuss medication and treatment modalities for a variety of medical and psychological illnesses. Dose responses, side effects, and adverse reactions are emphasized. Offered every summer.
Prerequisites: PA 510 and PA 511.

PA 614  Diagnostic Methods II  (1 credit)
Radiographic and electrocardiographic procedures that are used to diagnose common pathologies, confirm diagnoses, and screen for the presence of disease in the pre-clinical stages. Offered every summer.

Radiology - An overview of anatomical structures and techniques employed in radiography. Additional emphasis is placed on interpretation of the radiographs.

EKG Interpretation - A study of the heart conduction system and the procedure for analyzing the EKG configuration. Students examine principles of electrophysiology and its application to electrocardiographic tracings and electrocardiography. Topics include recognizing arrhythmias, rate and axis determination, conduction abnormalities, and changes seen in myocardial infarction and ischemia.
Prerequisite: PA 513.

PA 616  Pathophysiology II  (2 credits)
A continuation of PA 515. The clinical applications of pathophysiology are reviewed. Offered every summer.
Prerequisite: PA 515.

PA 618  Clinical Skills Development  (1 credit)
Skill development in performing routine therapeutic procedures and competence in managing therapeutic intervention. Areas of skill development include injections, suturing and wound care, applications of external supports or immobilization devices, and venipuncture and intravenous procedures. Offered every summer.
Prerequisite: Professional Phase I student in didactic phase of the Program.

PA 619  Preventive Medicine and Health Promotion  (1 credit)
Discusses lifestyle modifications to improve health. Considers how early medical intervention can affect the disease processes, and gives promotion. Topics will include amendable risk-factor modification, dietary modifications, disease
prevention, and role of exercise in decreasing the incidence of disease. The Physician Assistant’s role in promoting wellness is explored. Offered every fall.
Prerequisite: Professional Phase I student in the didactic phase of the Program.

**PA 620 Advanced Cardiac Life Support**  (1 credit)
Current methods and practices in advanced emergency intervention. Topics include rapid patient assessment, CPR, intubation techniques, EKG interpretation, intravenous medication administration, and defibrillation protocols. Offered every summer.
Prerequisite: Professional Phase I student in didactic phase of the Program.

**PA 621 Clinical Case Presentations**  (1 credit)
Student management of routine and complex actual case presentations. Students logically assess the patient presentation case and learn to systematically arrive at a differential diagnosis and treatment plan. The presented cases detail a variety of diseases in a variety of possible environments. Students also research and present one clinically-relevant case. Offered every summer.
Prerequisite: Professional Phase I student in didactic phase of the Program.

**PA 630 Emergency Medicine**  (5 credits)
Problems encountered in an emergency room. The student takes medical histories and performs physical examinations on acute as well as nonemergent patients and presents these to the medical director. This rotation involves students in all aspects of the practice of medicine and surgery in an emergency department environment. Students receive close supervision, have constant interaction with the attending staff, and are involved in every aspect of patient management.
Prerequisite: Fifth year student in clinical phase of the Program.

**PA 631 Family Medicine I**  (5 credits)
Conducted in family practice or general medicine offices or clinics where students are responsible for patients of all ages, from initial visit through possible hospitalization and follow-up. Health prevention and maintenance as well as patient education are practiced. This rotation integrates patient data collection with basic medical facts in a variety of clinical situations. Emphasis is on psychosocial aspects of patient care and on continuity of care in the ambulatory setting. The goal is to ensure that students are exposed to common disorders encountered in family practice.
Prerequisite: Fifth year student in clinical phase of the Program.

**PA 632 Family Medicine II**  (5 credits)
Further experience in general medicine. To emphasize the program's commitment to primary care, students must enroll in this second five-week rotation in family practice.
Prerequisite: PA 631.

**PA 633 Internal Medicine**  (5 credits)
During this clinical experience, students apply basic medical information to common medical problems and situations in inpatient and outpatient settings. Students participate in daily rounds and the management of patient problems.

**PA 634 Obstetrics and Gynecology**  (5 credits)
Pre- and postnatal care, monitoring a woman in labor, assisting in delivery, and developing the skill necessary to deliver a baby in an emergency situation. Students have the opportunity to take obstetrical and gynecological histories and to perform obstetrical and gynecological examinations. Students are exposed to a variety of gynecological problems and learn to provide counseling on family planning.
Prerequisite: Fifth year student in clinical phase of the Program.

**PA 635 Pediatrics**  (5 credits)
Problems of newborns and of children through adolescence. Students learn to diagnose and treat common pediatric diseases and become skilled in third-party histories and pediatric physical examinations. Well-baby care, immunizations, nutrition, management of the battered child, and preventive techniques are an integral part of this rotation. The rotation emphasizes normal and abnormal growth and development along with assessment, communication, and physical examination skills in the diagnosis and treatment of pediatric situations. Students develop familiarity with outpatient pediatric problems.
Prerequisite: Fifth year student in clinical phase of the Program.
PA 636 Psychiatry (5 credits)
Acquaintance with manifestations of various forms of psychopathology. Emphasis is placed on doing a complete psychiatric examination and the management of psychosocial problems. This clinical experience integrates previous learning and actual clinical practice, while working on hospital wards and outpatient clinics. It emphasizes the behavioral and psychosocial aspects of common medical problems. Prerequisite: Fifth year student in clinical phase of the Program.

PA 637 General Surgery (5 credits)
Surgical patient-care responsibilities under the supervision of a surgical resident or staff surgeon. Students assist in the initial assessment of the surgical patient. Students are involved in preoperative management, including patient education and procedures necessary to prepare the patient for surgery. Students assist surgeons in the operating room, when appropriate, and have the opportunity to become familiar with operating room procedures and equipment. Students are also involved in postoperative evaluation and management of the patient and are given the opportunity to attend surgical grand rounds and other surgically oriented educational meetings. Prerequisite: Fifth year student in clinical phase of the Program.

PA 638 Cardiothoracic Surgery (5 credits)
Students become familiar with evaluating and treating patients with advanced heart disease. They learn to apply surgical modalities in the cardiac care patient. Students assist during open-heart surgery and in the harvesting of veins used during this procedure. They become familiar with managing heart patients postoperatively. Prerequisite: Fifth year student in the clinical phase of the Program.

PA 639 Orthopedic Surgery (5 credits)
Students learn to perform a relevant orthopedic physical examination. They are exposed to the mechanism of injury of a patient’s joints and the treatment modalities used in the rehabilitation process. Students are also exposed to arthritic diseases and their treatments, including placement of total joint prosthesis. In addition, students learn various orthopedic procedures such as the application of casts and splints. Students assist the orthopedic surgeon in the operating room and gain experience in following patients postoperatively. Prerequisite: Fifth year student in the clinical phase of the Program.

PA 640 Otolaryngology (5 credits)
Students are exposed to the presentation and treatment of common ear, nose, and throat disease processes. They learn which modalities are most useful for the successful resolution of a variety of diseases. Students learn appropriate examination techniques and examining patients encompassing a wide variety of ages. They also assist the ENT surgeon on a variety of procedures such as tonsillectomies, myringotomies and insertion of ventilation tubes, thyroid surgeries, and neck explorations. Prerequisite: Fifth year student in the clinical phase of the Program.

PA 641 Plastic Surgery (5 credits)
Students learn to evaluate wounds that do not heal. Students are exposed to skin graft procedures, flap techniques, reconstructive surgery, management of leg ulcers, and aesthetic surgical procedures. They will assist the plastic surgeon on a variety of procedures and gain experience in care of the surgical patient.

PA 642 Family Medicine III (5 credits)
Students further their family medicine clinical experience. This rotation emphasizes the ability to apply medical information to complex medical problems and situations with patients in hospital and/or ambulatory care settings.

PA 643 Emergency Medicine II (5 credits)
Students further develop their diagnostic and clinical skills in the emergency medicine department environment. The student refines skills in medical interviews, performance of physical examinations, and the management of the acutely ill, as well as the nonemergent illnesses/injuries. Students continue to receive maximum physician supervision and maintain constant interaction with the attending physician and staff. Prerequisite: Fifth year student in the professional clinical phase of the PA program.
PA 644  Urgent Care Ambulatory Medicine (5 credits)
The student will apply medical information to diagnose and treat common illnesses and injuries with patients in an urgent care ambulatory medicine environment.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 645  Pediatric Cardiology (5 credits)
The care of the pediatric patients with cardiovascular disease. Emphasis will be placed on history, physical examination, diagnostic testing, and management of pediatric patients with cardiovascular disease. The student will refine their knowledge of normal and abnormal pediatric cardiology development patterns.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 646  Endocrinology (5 credits)
Students continue to develop their knowledge in the care of patients with endocrinology-based disorders. Emphasis will be placed on applying specific medical knowledge, history taking skills, physical examinations, and special testing to identify common endocrine disorders.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 647  Neurology (5 credits)
Students become familiar with the disease processes that commonly present for evaluation in neurology medicine. Emphasis is placed on history, physical examination, diagnostic testing, and management of patients with neurological diseases.

PA 648  Neurosurgery (5 credits)
Students further their knowledge and abilities to diagnose and assist in the treatment of neurosurgical patients. Students will expand their knowledge and understanding in the specialty of neurosurgery. Students observe and assist with neurosurgical procedures.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 649  Cardiology (5 credits)
Students will become familiar with the care of patients and cardiovascular diseases in the inpatient and outpatient setting. Students learn to recognize normal and abnormal cardiac pathology. Students will expand skills in history taking, physical examination, and assessment of the patient with cardiovascular disease.

PA 650  Internal Medicine II (5 credits)
Students further their study of science and abilities in internal medicine. This clinical learning emphasizes the ability to apply medical information to complex medical problems and situations in inpatient and outpatient settings. Accentuation is in the inpatient setting.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 651  Trauma Medicine (5 credits)
The focus of this clinical learning is to enhance skills in rapid assessment and stabilization of the trauma patient. Students gain knowledge and judgment skills in the appropriate progression from stabilization to second and third level diagnostic studies in these unique patients.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 652  Psychiatry II (5 credits)
Acquaintance with manifestations of various forms of psychopathology. Emphasis is placed on doing a complete psychiatric exam and the management of psychosocial problems. This clinical experience integrates previous learning and actual clinical practicing while working on hospital wards and outpatient clinics. It emphasizes the behavioral and psychosocial aspects of common medical problems.
Prerequisite: Fifth year student in clinical phase of the PA program.

PA 653  Allergy & Asthma (3 credits)
Students further their clinical medicine learning with emphasis on all aspects of the diagnosis and treatment of the allergy and asthma patient.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 654  Infectious Disease (3 credits)
Students further their clinical medicine learning experience emphasizing the ability to apply diagnostic information to complex medical conditions and situations in the inpatient and outpatient settings.
PA 655 Geriatrics (5 credits)
This course reinforces the basics of internal medicine with emphasis on geriatric medicine. It will concentrate on demographics, the aging process, nutrition, pharmacotherapeutics, and illnesses as these processes undergo change in an elderly population. The students will participate in assessment and treatment in both ambulatory and inpatient settings.
Prerequisite: Fifth year student in clinical phase of the PA program.

PA 656 General Surgery II (3 credits)
Students further their clinical medicine learning experience emphasizing the various aspects of surgical care with emphasis on pre-, intra-, and postoperative care of the surgical patient.

PA 657 Pediatrics II (3 credits)
Students further their clinical medicine learning experience applying diagnostic information to complex medical conditions and situations in the inpatient and outpatient settings with particular emphasis on the pediatric population.

PA 658 Dermatology (5 credits)
Students further their ambulatory medicine clinical trainings. This clinical learning emphasizes the familiarity with different diagnosis of skin disorders and expanding expertise in procedures in the office setting.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 659 Geriatric Behavioral Medicine (5 credits)
The course will develop skills in the care of the geriatric psychiatric population. It will expose the student to psychosocial problems specific to this population and the community resources available. This clinical experience enables the students to see patients on an inpatient and outpatient basis.
Prerequisite: Fifth year student in clinical phase of the PA program.

PA 660 Obstetrics and Gynecology II (5 credits)
Pre- and postnatal care, monitoring a woman in labor, assisting in delivery, and developing the skill necessary to deliver a baby in an emergency situation. Students have the opportunity to take obstetrical and gynecological histories and to perform obstetrical and gynecological examinations. Students will also be exposed to a variety of gynecological problems and will learn to provide counseling on family planning.
Prerequisite: Fifth year student in clinical phase of the PA program.

PA 662 Transplant Surgery (5 credits)
Students will be exposed to the care of the transplant patient in the inpatient and outpatient setting (pediatric and adult). The student will become familiar with the various conditions that warrant transplant surgery. The student will observe and assist at organ retrieval, inpatient transplant surgical procedures, and follow-up care at the outpatient clinics. This rotation will also prepare the student to teach the patient about surgical conditions and the operative experience.
Prerequisite: Fifth year student in clinical phase of the PA program.

PA 663 Pediatric Surgery (5 credits)
Students become familiar with the pediatric surgical patient on both inpatient and outpatient basis. Students will be involved in the assessment, preoperative, surgical, and postoperative care of common pediatric surgical conditions. This elective will enable students interested in surgery to further develop their surgical skills.
Prerequisite: Fifth year student in the clinical phase of the PA program.

PA 664 Pain Management (5 credits)
Student will be able to develop and understand appropriate therapies in the treatment of pain. Understanding pain pathways and associated anatomical findings are essential in pain management. Students will be exposed to both inpatient and outpatient evaluations and treatment. They will also learn operative procedures that are specific to pain management.
Prerequisite: Fifth year student in clinical phase of PA program.

PA 665 Oncology (5 credits)
This rotation will expose the student to the inpatient and outpatient care of the Oncology patient. The student will become familiar with a wide variety of problems specific to patients with cancer.
Prerequisite: Fifth year student in clinical phase of the PA program.

PA 666 Urology (5 credits)
This course will enable the student to become familiar with a wide variety of problems specific to urology. The student will become familiar with diagnostic techniques and procedures on both inpatient and outpatient basis. It will also enable the students to refine surgical skills by assisting in the operating room.
Prerequisite: Fifth year student in the professional clinical phase of the PA program.

PA 667 Vascular Surgery (5 credits)
This rotation will expose the student to the care of the surgical patient (pediatric through adult) in the inpatient and outpatient setting. The student will become familiar with a wide variety of common surgical conditions encountered in the primary care environment. By observing and assisting at inpatient and outpatient surgical procedures the student gains experience necessary to evaluate and make appropriate referrals. This rotation will also prepare the student to teach the patient about his surgical condition, and the operative experience.

PA 668 Pulmonary Medicine (5 credits)
This rotation will build on the Family Practice and Internal Medicine clinical rotations. The role of the pulmonary medicine consultant, primarily in the in-patient setting will be stressed. The student will refine his or her skills in the assessment and management of acute and chronic respiratory diseases. Appropriate physical assessment and interpretation of diagnostic studies associated with common pulmonary diseases will be explained.

PA 669 Tropical Medicine (5 credits)
Students are exposed to tropical diseases endemic to the area in which they are practicing. Methods of diagnosing and treating will need to be adapted to the tropical environment.
Prerequisite: Fifth year student in the clinical phase of the PA program.

PA 670 Neonatology (5 credits)
Students will become familiar with the care of the neonate. Emphasis will be placed on medical problems, developmental patterns, and care of the neonate in an inpatient setting.

PA 671 Physiatry
The rotation will expose the student to all aspects of physical medicine and rehabilitation. The student will further develop skills necessary to perform a clinical evaluation specific to a patient attempting to restore function. The student will also become familiar with diagnostic studies and treatment options more specific to physiatry.

PA 672 Pediatric Oncology/Hematology (5 credits)
This rotation will expose the student to the inpatient and outpatient care of the Oncology patient. The student will become familiar with a wide variety of problems specific to patients with cancer such as the diagnostic criteria for the common area of metastatic disease and recommended treatments of each. The student will also become familiar with treatment modalities such as chemotherapy and radiation therapies.

PA 673 Clinical Trial Research (5 credits)
The student will observe and assist at inpatient, outpatient, and technical research trial procedures thus giving them the experience necessary to evaluate and make appropriate referrals for participation in clinical trials and facilitate and manage the trials themselves. This rotation will also prepare the student to teach the patient about his or her clinical research involvement.

PA 676 Nephrology (5 credits)
This rotation will expose the student to the care of the patient in need of specialized nephrology and/or hypertensive evaluation and treatment in both the inpatient and outpatient settings. The student will become familiar with a wide variety of medical problems likely to be encountered in a subspecialty based nephrology/hypertension.
GRADUATE PROGRAMS IN COUNSELING PSYCHOLOGY
AND HUMAN SERVICES
(CHESTNUT HILL COLLEGE PROGRAM)

Dr. David Arena, Program Director
610.282.0397 ext. 1484
E-mail: Chestnut.hill.psych@desales.edu

All programs described in this section are administered by Chestnut Hill College. Information about academic regulations, administrative procedures, fees, and other issues can be obtained from the Chestnut Hill College Graduate Division Catalog, through the office of the Program coordinator or via the Chestnut Hill College web site at www.chc.edu/graduate/.
The Graduate Division of Chestnut Hill College, through the Department of Professional Psychology, offers both the Master of Science (M.S.) and the Master of Arts (M.A.) degrees in Counseling Psychology and Human Service. These degrees may be earned in one of four areas of specializations: Child and Adolescent Therapy, Addictions Counseling, Marriage and Family Therapy, and Trauma. Students may elect to specialize in one of these areas or may choose the Generalist track allowing them to distribute their electives among all four areas. Those who fulfill the requirement for a specialization will receive a certificate of specialization in addition to their degree. The Master of Arts (M.A.) degree will be awarded to those students who complete a thesis in accordance with the standards set by the Department.

The Department also offers Post Master’s Certificates of Advanced Study in each of the four specialization areas. Applicants for a Certificate of Advanced Study must have completed a Master’s degree in counseling or a related discipline.

Objectives
Chestnut Hill College, through the Department of Professional Psychology, seeks to prepare students pursuing Master’s degrees in Counseling Psychology and Human Services to become competent and ethical professionals. In accordance with this goal, students are

. acquainted with the body of theoretical and empirical knowledge relevant to their course of study;
. provided with training in the skills needed for professional practice; and
. prepared for ongoing graduate study in a Doctoral program.

Professional Standards
The Department of Professional Psychology has the responsibility to assure that its graduates are adequately prepared for professional practice. The student is required not only to demonstrate competence in the areas of academic study and clinical training, but also to demonstrate familiarity with the ethics of professional practice and to behave in an ethical and professional manner at all times. Behavior in violation of ethical or professional standards of conduct constitutes grounds for immediate dismissal from the program.

ACADEMIC REQUIREMENTS

Master of Science
All students must complete 48 graduate credits. Of these 48 credits, 24 credits come from the core curriculum (8 courses) and 6 credits come from the field placement (one course in each of two semesters). Students without an undergraduate degree in psychology are also required to take a prerequisite course entitled Introduction to Graduate Counseling Psychology. This course earns three graduate credits, which are not applicable toward the degree requirements.

Students may specialize in one of four areas or take a generalist curriculum. The 18 remaining credits are distributed in the following manner

. Addictions Counseling Specialization: 4 specialization courses and 2 elective courses.
. Child and Adolescent Therapy Specialization: 4 specialization courses and 2 elective courses.
. Marriage and Family Therapy Specialization: 6 specialization courses.
. Trauma Studies:
  General focus: 4 specialization courses and 2 elective courses.
  Addictions focus: 6 specialization courses.
  Child and Adolescent focus: 6 specialization courses.
. Generalist Curriculum: 6 courses selected from among all specialization and elective courses.

Master of Arts
Students pursuing the Master of Arts degree must meet all the requirements set for the Master of Science degree as well as a course in statistical
Graduate Programs in Psychology

applications and 2 thesis courses. Master of Arts students may choose a specialization, but they will be required to take more than 48 credits. The required courses for Master of Arts students, therefore, are (1) the core curriculum of 24 credits (8 courses); (2) the field placement (6 credits); and (3) one of the following options

- **Addictions Counseling Specialization:**
  Statistical Applications, 2 thesis courses, 4 specialization courses.
  Total Credits: 51

- **Child and Adolescent Therapy Specialization:**
  Statistical Applications, 2 thesis courses, 4 specialization courses.
  Total Credits: 51

- **Marriage and Family Therapy Specialization:**
  Statistical Applications, 2 thesis courses, 6 specialization courses.
  Total Credits: 57

- **Trauma Studies - General:**
  Statistical Applications, 2 thesis courses, 4 specialization courses.
  Total Credits 51

- **Generalist Curriculum:**
  Statistical Applications, 2 thesis courses, 3 additional specialization or elective courses.
  Total Credits: 48

**CURRICULUM**

**Prerequisite** (for students without an undergraduate degree in psychology):

GRCP 499: Introduction to Graduate Counseling Psychology

**CORE COURSES**

These courses are required for all students:

- **GRCP 500:** Theories of Counseling (prerequisite: GRCP 499 for students without an undergraduate degree in psychology)
- **GRCP 502:** Psychopathology I: General Principles (prerequisite: GRCP 500 or may be taken concurrently with GRCP 500)
- **GRCP 504:** Psychopathology II: Diagnostics (prerequisite GRCP 502)
- **GRCP 506:** Counseling Techniques I (prerequisites GRCP 502)
- **GRCP 508:** Counseling Techniques II (prerequisites GRCP 504 and 506)
- **GRCP 510:** Research Design and Methodology
- **GRCP 512:** Legal and Ethical Issues
- **GRCP 514:** Development Across the Lifespan: Individual & Family

**SPECIALIZATION COURSES**

**Marriage and Family Therapy** (6 courses required)

- **GRCP 608:** Marriage and Family Therapy
- **GRCP 612:** Advanced Theories of Marriage and Family Therapy (prerequisite GRCP 608)
- **GRCP 614:** Marriage and Family Therapy Techniques (prerequisites GRCP 608 and 612)
- **GRCP 616:** Advanced Marriage and Family Therapy Techniques (prerequisites GRCP 608, 612, and 614)
- **GRCP 618:** Human Sexuality and Marriage
- **GRCP 604:** A Systemic Approach to the Problems of Adolescents
  or
  **GRCP 638:** Systemic Treatment of Addiction

**Child and Adolescent Therapy** (4 courses required)

- **GRCP 602:** Play Therapy (prerequisite: GRCP 500: GRCP 524 recommended)
- **GRCP 604:** A Systemic Approach to the Problems of Adolescents
- **GRCP 608:** Marriage and Family Therapy
- **GRCP 615:** Special Topics (Title of course will be included on Transcript)

**Addictions Counseling** (4 courses required)

- **GRCP 630:** Foundations of Addictive Behaviors (required)
- **GRCP 632:** Counseling Approaches to Substance Abuse (required)
(prerequisite 630 or permission of Department Chair)
GRCP 634: Spirituality of the Twelve Steps
GRCP 636: Special Topics (Title of course will be included on Transcript)
GRCP: 638 Systemic Treatment of Addiction

**Trauma Studies - General** (6 courses required)
GRCP 622: Introduction to the Assessment and Treatment of Psychological Trauma
GRCP 624: Treatment of Complex Chronic Trauma Responses (prerequisite: GRCP 622)
GRCP 626: Acute Incident Responding: Trauma
GRCP 628: Working Effectively in Trauma-Intensive Communities (prerequisite: GRCP 622)

Two electives

**Generalist Curriculum**

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**ELECTIVES**

Students in the Child and Adolescent Therapy and Addictions Counseling Specialization areas must choose two electives (6 credits) to fulfill credit requirements. Thesis Seminar(s) are applicable as electives for students pursuing the Master of Arts degree.

**PRACTICA**

GRCP 700-710: Supervised Practica
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A Business Advisory Council composed of twelve local business and community leaders meet quarterly and render practical, professional advise and suggestions aimed at establishing a norm of "continuous improvement" in the MBA Program. The Council membership is currently being reconstructed.

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   B.A., Moravian College
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<table>
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<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Lois M. Gadek (1969)</td>
<td>Associate Professor of English</td>
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</tr>
<tr>
<td>Annmarie Houck (1994)</td>
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<tr>
<td>Gregory L. Jeffries (2002)</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Brian M. Kane (1992)</td>
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</tr>
<tr>
<td>Peter Leonard, OSFS (1990)</td>
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<tr>
<td>Joe Lewis (1997)</td>
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<tr>
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</tr>
<tr>
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</tr>
</tbody>
</table>
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TRAVEL DIRECTIONS

Main Campus

The Main Campus is located on Station Avenue in Center Valley, PA, one mile east of Route 309. At the intersection of Route 309 and Route 378 take Route 378 North. Turn right on Landis Mill Road and drive to the stop sign. Turn left on Station Avenue.

Campus Map
Easton Campus

From the South: Take I-78 East to 33 North. Get off at the William Penn Highway exit. Turn left at the light. Make the first left onto Emrick Blvd. DeSales University is located in the first building on the right, in the Penn Corporate Center.

From the North: Take 22 East to 33 South. Get off at the William Penn Highway exit. Turn right at the light. Make the first left onto Emrick Blvd. DeSales University is located in the first building on the right, in the Penn Corporate Center.

Lansdale Campus

The Lansdale Campus is located on West Main Street across from the railroad station.
Delaware Valley