DIRECTORY

ADDRESS—Duquesne University,
600 Forbes Avenue, Pittsburgh, Pa 15282
Telephone Call specific number (see following)
for other offices, call (412) 396-6000
When on campus, only the last 4 digits need to be
dialed, with the exception of the Bookstore

ADMISSIONS—Director of Admissions
and International Affairs
Administration Building, First Floor
Telephone (412) 396-6222
(800) 456-0590

ADVISORS
McAnulty College of Liberal Arts
College Hall, Room 212
Telephone (412) 396-6389/5905
School of Leadership and Professional Advancement
Rockwell Hall, Room 210
Telephone (412) 396-6004
AJ Palumbo School of Business Administration,
Rockwell Hall, Room 705
Telephone (412) 396-6277/5702
School of Education,
Canavan Hall, Room 213
Telephone (412) 396-6118
Rangos School of Health Sciences
Health Sciences Bldg., Room 302
Telephone (412) 396-6652
Mary Pappert School of Music, Room 303
Telephone (412) 396-5744
Bayer School of Natural and Environmental Sciences
100 Mellon Hall
Telephone (412) 396-6211
School of Nursing, College Hall, Sixth Floor
Telephone (412) 396-5367/6634
Mylan School of Pharmacy,
Bayer Learning Center, Room 304
Telephone (412) 396-6393

BOOKSTORE—Duquesne Union, Second Floor
Telephone (412) 434-6626

CAMPUSMINISTRY—
Administration Building, First Floor
Telephone (412) 396-6222/5045

CAREER SERVICES CENTER—
Rockwell Hall
Telephone (412) 396-6644
School of Education Career Center
Telephone (412) 396-6644

CASHIER—Payment of Tuition and Fees,
Administration Building, Ground Floor
Telephone (412) 396-6655/6585/6588

COMMUTER AFFAIRS—
117 Duquesne Union
Telephone (412) 396-6660

FINANCIAL AID—Loan, Scholarship,
Student Employment, Applications
Administration Building, Ground Floor
Telephone (412) 396-6667

OFFICE OF FRESHMAN DEVELOPMENT AND
SPECIAL STUDENT SERVICES—
Duquesne Union, Third Floor
Telephone (412) 396-6657

OFFICE OF GREEK LIFE, HONOR SOCIETIES &
PROFESSIONAL ORGANIZATIONS—
Duquesne Union, Third Floor
Telephone (412) 396-6651

GOVERNMENTAL AFFAIRS—
Administration Building, Fifth Floor
Telephone (412) 396-5080

HEALTH SERVICE—
Duquesne Towers, Second Floor
Telephone (412) 396-6631

IDENTIFICATION CARDS—
Duquesne Union, Second Floor
Telephone (412) 396-6191

INFORMATION CENTER—For University Events,
Duquesne Union, Third Floor
Telephone (412) 396-6644

LEARNING SKILLS CENTER—
Administration Building, Ground Floor
Telephone (412) 396-6661

PSYCHOLOGY CLINIC—
Rockwell Hall, Ninth Floor
Telephone (412) 396-6662

PUBLIC SAFETY—
Public Safety Building
Telephone (412) 396-6002
For Emergency, call (412) 396-4747

REGISTRAR—For Transcripts and Records,
Administration Building, Ground Floor
Telephone (412) 396-5623/3623
TRANSCRIPTS
Telephone (412) 396-6212
GENERAL OFFICE
Telephone (412) 396-6212

RESIDENCE LIFE—Assumption Hall, Ground Floor
Telephone (412) 396-6655/5028

SCHOLARSHIP AWARD—
Office of Financial Aid, Administration Building, Ground Floor
Telephone (412) 396-6667

SPiritual DIVISION OF ACADEMIC PROGRAMS—
Administration Building, Ground Floor
Telephone (412) 396-6636

STUDENT ACCOUNTS—
Administration Building, Room 208
Telephone (412) 396-6655/6687/6688

STUDENT HEALTH INSURANCE—
Fisher Hall, Room 202A
Telephone (412) 396-6677

UNIVERSITY COUNSELING CENTER—
308 Administration Building
Telephone (412) 396-6204/6208

DUQUESNE UNIVERSITY
PITTSBURGH, PENNSYLVANIA

Undergraduate Catalog
2003-2004
RIGHT TO AMEND

As the educational process from admission through graduation requires continuing review and appropriate approval by University officials, the provisions of this catalog are to be considered directive in character. The University, therefore, reserves the right to change requirements and regulations contained herein, including fees, tuition, and board and room, and to determine whether an individual has satisfactorily met the requirements for admission or graduation. The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the University. The University reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary.

NOTICE OF NONDISCRIMINATION AND NONHARASSMENT POLICY

Duquesne University, motivated by its Catholic identity, values equality of opportunity, human dignity, racial, cultural and ethnic diversity, both as an educational institution and as an employer. Accordingly, the University prohibits and does not engage in discrimination or harassment on the basis of race, color, gender, national origin, sex, age, disability or status as a veteran or disabled veteran. Further, Duquesne University will continue to take affirmative steps to support and advance these values consistent with the University's mission statement. This policy applies to all educational programs and activities of the University, including, but not limited to, admission, educational policies, scholarship and loan programs and athletic or other University-sponsored programs. This is a commitment by the University in accordance with its religious values and applicable federal, state and local laws and regulations. Nothing herein, however, should be interpreted as a waiver by the University of its own Constitutional and legal rights based upon its religious affiliation. The person responsible for coordinating its efforts under this policy is Dr. Judith Griggs, Affirmative Action Officer, ground floor, Administration Building, University Extension 6661.

SECURITY STATISTICS, POLICIES AND PROCEDURES

In accordance with the College and University Security Information Act (Pennsylvania Act 73 of 1988) and the U.S. Student Right to Know and Security Act (P.L. 101-542), information regarding Duquesne University's crime statistics, security policies and procedures is available in the Administration Office, and daily crime logs are available for review in the Public Safety Department.

Published by Duquesne University, 600 Forbes Avenue, Pittsburgh, PA 15282.
Academic Calendars
Fall 2003 — Summer 2004

FALL SEMESTER – 2003
Classes Begin August 25 (Monday)
Labor Day Holiday September 1 (Monday)
All Saints Day November 1 (Saturday)
Holy Day
Thanksgiving Holiday November 24-29 (Monday-Saturday)
Immaculate Conception December 8 (Monday)
Holy Day (Reading Day)
Monday Class
Schedule Followed December 9 (Tuesday)
Final Exams December 10-16 (Wednesday-Tuesday)
Commencement December 18 (Thursday)

SPRING SEMESTER – 2004
Classes Begin January 12 (Monday)
Martin Luther King Holiday January 19 (Monday)
Spring Break March 8-13 (Monday-Saturday)
Easter Holiday April 8 (Thursday-Monday)
(Offices Closed Thursday, April 8 Friday, April 9)
Monday Class April 27 (Tuesday)
Schedule Followed
Final Exams April 30-May 6 (Friday-Thursday)
Commencement May 8 (Saturday)

SUMMER SEMESTER – 2004
Summer Term Begins May 10 (Monday)
Ascension Holy Day May 20 (Thursday)
Memorial Day Holiday May 31 (Monday)
Independence Day July 5 (Monday) Independence Day Observed Holiday
End of 12 week term July 30 (Friday)
Assumption Holy Day August 15 (Sunday)

Please refer to the current schedule of classes booklet for detailed academic calendar dates and deadlines.

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The provisions of this catalog are to be considered directive in character. The University reserves the right to make any changes that seem necessary or desirable, including fees, tuition and room and board. Faculty listings contained in this catalog are current as of Spring 2003.
Part I: General Information

HISTORY
Duquesne University first opened its doors as the Pittsburgh Catholic College of the Holy Ghost in October 1878 with an enrollment of 40 students and a faculty of seven. From a humble original location on Wylie Avenue in the City's Uptown section to its present beautifully self-contained campus, Duquesne provides a hilltop vista overlooking one of the nation's most attractive cities.

Today Duquesne University is a progressive educational facility which has more than tripled from its early 12.5 acres to its present, self-enclosed 43-acre campus overlooking the city of Pittsburgh. Duquesne was cited by USA Today as having one of the safest urban campuses in the nation.

Several renovations have recently taken place and have added to Duquesne's already-rich physical plant, including a state-of-the-art health sciences facility, three parking garages, a multi-purposed recreation center, a Victorian campus throughway, a theatre/classroom complex, the Arthur J. Rooney Football/Soccer Field in the center of campus, 45 new multimedia classrooms, and a state-of-the-art classroom building.

Recently named one of the top ten national Catholic universities in the United States, Duquesne's academics are recognized both nationally and internationally. As a result of its academic excellence known worldwide, the University has signed agreements with institutions in Belgium, Germany, France, Spain, Ireland, England, China, Japan and Italy as well as the new Commonwealth of Independent States.

Duquesne's recent growth has been tremendous with students in ten schools of study, including the College and Graduate School of Liberal Arts (1878), and the Schools of Law (1911), Business Administration (1913), Pharmacy (1925), Music (1926), Education (1929), Nursing (1937), Health Sciences (1950), School of Natural and Environmental Sciences (1994) and the School of Leadership and Professional Advancement (2001). Duquesne's ten schools offer degree programs on the baccalaureate, professional, master's and doctoral levels.

SUMMARY STATEMENT OF MISSION
AND GOALS
Duquesne University of the Holy Spirit is a Catholic university, founded by members of the Spiritan Congregation, and sustained through a partnership of laity and religious.

The motto of Duquesne University is Spiritus est qui vivificat. "It is the Spirit who gives life." Enriching the life of the mind and the life of the spirit of every member of its community is the mission of Duquesne.

It is Duquesne University's special trust to seek truth and to disseminate knowledge within a moral and spiritual framework in order to prepare leaders distinguished not only by their academic and professional expertise but also by their ethics, and guided by consciences sensitive to the needs of society.

Therefore, Duquesne is a community of students, faculty, administrators, and others who are willing to make these commitments:

- To create undergraduate and graduate education of the highest quality in liberal and professional disciplines.
- To examine the moral and ethical foundations of their thought and action, and to develop their personal values and ethical commitment.
- To participate in an ecumenical dialogue open to all beliefs.
- To extend educational opportunities to those with special financial, educational, and physical needs.
- To promote world community through the development of an international and intercultural vision of the global needs and international responsibilities for peace, justice, and freedom.

Duquesne serves God by serving students—through an academic community dedicated to excellence in liberal and professional education, through profound concern for moral and spiritual values, through the maintenance of an ecumenical atmosphere open to diversity, and through service to the Church, the community, the nation, and the world.

Complemented by a broad spectrum of nonacademic activities and programs, the curriculum at Duquesne University is designed to prepare young men and women who, upon entering their chosen careers, will possess a broad, well-balanced and fully integrated education and perspective of themselves and the world.

POLICY STATEMENT ON INTERNATIONAL EDUCATION
The mission of Duquesne University's founders, the Spiritans (Congregation of the Holy Spirit), has always included service to people outside of the United States. Duquesne University also is committed to providing an educational environment which recognizes cultural and national pluralism.

Duquesne welcomes qualified students throughout the world and encourages its students and faculty to take advantage of opportunities to study and teach abroad.
THE UNIVERSITY SETTING

The University believes that the sharing of various traditions is an invaluable element in the educational process.

In a world that is growing ever smaller, it is imperative that Duquesne reach out to people of different cultures to provide them an educational experience not otherwise available to them. Interaction among international and American faculty and students will help everyone become better citizens of our shared world.

Duquesne University asserts its commitment to develop and to maintain programs, services and practices which promote and respect diverse cultures and backgrounds and which provide educational bridges for people throughout the world.

PHYSICAL FACILITIES

Located adjacent to downtown Pittsburgh, Duquesne University's modern hilltop campus is readily accessible to the business, entertainment and shopping centers of the city, while still offering students the privacy and peace of its own self-enclosed 43-acre site.

Long noted as one of the world's great corporate centers, Pittsburgh combines the features of urban living with many of the charms and personal characteristics of a much smaller town. One of the largest corporate headquarters in the U.S., Pittsburgh was also shown, in a past survey by Rand McNally to be America's most livable city.

Students from Duquesne and the other colleges and universities in the city can choose from a wide range of cultural events and institutions.

The world-renowned Pittsburgh Symphony Orchestra, Pittsburgh Opera, and Pittsburgh Ballet Theatre all perform regularly in the elegant Heinz Hall for the Performing Arts and the Benedum Center. The theatre-goer can choose from productions of the Pittsburgh Public Theatre, local college drama departments and programs, and a wide variety of summer and after-dinner club theatres.

Seasonal events include the Three Rivers and Shadyside arts festivals, and the International Folk Festival, three prestigious events which draw national attention.

Duquesne students can visit such places of interest as the Pittsburgh Zoo, Carnegie Museum of Art and History, Scaife Gallery, the National Aviary, Carnegie Science Center and Buhl Planetarium, Pittsburgh History and Landmarks Museum, Duquesne Incline and Phipps Conservatory.

Directly across the river from campus is Mount Washington, Pittsburgh's highest point, which offers a spectacular view of the city and its surroundings, particularly at night.

Market Square, a redeveloped area in the heart of downtown Pittsburgh, and the Oakland-Shadyside area in the eastern end of the city are two of the major entertainment and nightlife centers.

The success of the various professional and major college sports teams has won for Pittsburgh the title of "City of Champions." The 1971 and 1979 World Champion Pirates play at PNC Park and four-time Super Bowl Champion Steelers play at Heinz Field. The Penguins (Stanley Cup Champions) perform in the nearby Mellon Arena, one of the largest indoor sports arenas in the United States and one of the few retractable domes in the world. The Duquesne Duke basketball teams play their games in the on-campus facility, the A.J. Palumbo Center. Facilities for such participatory sports as tennis, golf, running, hiking, skiing, skating, and many others are available throughout the Pittsburgh area.

Assumption Hall, the oldest residence hall on campus, was dedicated in 1954. A four-story structure with a 254-student capacity, the facility has its own recreation area, and offers both single and double occupancy rooms. The facility includes a front desk area equipped with security cameras and ID card readers and each student room has access to the campus computer mainframe.

The Bayer Learning Center is one of Duquesne's classroom buildings. With its multimedia classrooms/laboratories, it is the most advanced classroom facility in the region complete with satellite downlinks, electronic "white" boards and interactive student response pads. Because of the center, Duquesne now ranks in the top one percent in the nation for educational technology according to New Media Centers, a consortium of firms whose initiative is aimed at helping university campuses harness interactive media.

GENERAL INFORMATION

The Bayer Learning Center houses the Department of Physics for the Bayer School of Natural and Environmental Sciences, Pre-Health Professions and Post-baccalaureate Pre-Medical Programs Office, and the administrative, student services, and faculty offices of the Mylan School of Pharmacy.

Canevin Hall, the oldest classroom building on campus, was built in 1922 and completely renovated in 1968. A four-story building, it houses the School of Education, Reading Clinic and the Guidance and Counseling Clinic.

College Hall, a six-story classroom and office building dedicated in 1970, is the seat of the McMurray College of Business and Graduate School of Liberal Arts, housing the majority of its departments and facilities. The School of Nursing is located on the sixth floor.

Special instructional facilities include a public computer laboratory, communication, mathematics, and social science computer laboratories, nursing computer laboratory, resource center, nursing skills laboratory and lecture halls.

Des Places Language Center of Duquesne University houses the Departments of Modern Languages and Literatures, and English as a Second Language and the production and broadcasting studios of WDUQ-FM, a full member station of National Public Radio (NPR). Named in honor of the founder of the Congregation of the Holy Spirit, the center also features a Multimedia language laboratories, an audio language laboratory, a fully equipped color television studio and seminar rooms.

The Duesque Towers, a 17-story, air-conditioned double-tower residence for 1,176 men and women featuring separate housing wings, was dedicated in 1970. The facility features a full-size indoor swimming pool, an office of Campus Ministry, the Campus Health Services area, a main student lounge and smaller lounges on each floor, telephones in each room, and a resident dining hall. The facility includes a front desk area equipped with security cameras and ID card readers and each student room has access to the campus computer mainframe.

The Duquesne Union is the center of campus life and student activities. Dedicated in 1967, it houses offices of the Student Life Division, International Affairs, Commuter Affairs, and various student organizations. Facilities include meeting rooms, an information center, four dining facilities, an expanded bookstore, ID Center, PNC Bank Branch, Student Telephone Service, art gallery and a recreation center.

Fisher Hall, houses the RSHS Departments of Health Management Systems and Speech-Language Pathology, Speech-Language Pathology Clinic, Exercise Physiology Lab for Athletic Training, Occupational Performance Lab for Occupational Therapy, Psychiatric Assistant Lab, Department of Theology, Human Resource Management, the Division of Public Affairs, computer labs, classrooms, other administrative offices and research laboratories.

The G & G Building houses the Physical Plant Office.

Health Sciences Building, dedicated in 1991, resulted from the renovation of the old Gymnasium. The four-story building is the home of the John G. Rangos, Jr. School of Health Sciences with its departments of athletic training, health management systems, occupational therapy, physical therapy, physician assistant and speech-language pathology.

The building provides faculty and staff offices and teaching and research laboratories. The fourth floor includes the Allegheny General/Duquesne University Sports Medicine Institute, Anatomy Research and Teaching Laboratory and a Multimedia Computer Laboratory. The Sports Medicine Institute treats a varied array of clinical problems of the neuro-muscular-skeletal systems with services provided by physicians, physical therapists, athletic trainers, and occupational therapists.

The Edward J. Hanley Hall, dedicated in 1982, resulted from the renovation and expansion of the old University Library building. The facility houses School of Law faculty and administrative office, research and study rooms, two large amphitheater lecture halls, interview rooms, seminar and classroom areas, and a moot courtroom. The greatly expanded and fully computerized law library is the most accessible one of its kind in the city, with its central location and convenient hours. The law library is open to members of the local bench and bar, as well as law students.

In 2002, the Law School completed substantial renovations and new construction to Hanley Hall. The John E. Murray, Jr. Pavilion and law renovations combined to nearly double Hanley Hall's existing space to approximately 125,000 square feet. The construction added three new classrooms, two new courtrooms, a new computer lab, a new lounge and café, and greatly expanded our library, student study areas, and student organizations space.

Laval House houses the Spartan Vocation Office.

The Gumberg Library, opened in 1978 and rededicated in 1995, is a modern, attractive five-story structure. Architects Gerard-Nagar Associates were cited by the Pittsburgh Chapter of the American
ACCREDITATION AND AFFILIATION

Institute of Architects for their creative design in their renovation and expansion of the original structure constructed in the 1920s.

The Gambler Library holds an extensive collection of books, journals, electronic resources, microprint, and audiovisual resources. Fully networked and automated, the library offers both onsite and remote access to over a hundred online databases and over two thousand electronic journals.

Among the Library's special collections are:

- The Simon Silverman Center Phenomenology Collection — Focusing primarily on the work of German philosopher Edmund Husserl and his predecessors, Kierkegaard and Nietzsche. The various discourses which utilize or offer criticism of the phenomenological approach are represented in the collection.

- Cardinal Wright Collection — Included in this collection is the Cardinal's personal library, with emphasis on deliberations from Vatican Council II and the Synods. His sera, addresses, and papers cover the field of spirituality, including the role of the laity in the Church and relations of Church and State.

- Rabbi Herman Halperin Collection — Rabbi Halperin was the spiritual leader of Pittsburgh's Tree of Life Synagogue from 1922-1973. This collection of more than 2,600 volumes focuses on Judaeo-Christian intellectual and theological relations during the Middle Ages.

- Honorable Michael A. Musmanno Collection — A collection of the personal and personal library of the former State Superior Court judge, U.S. Congressman, Nuremberg War Crimes Judge, and author. Many interesting topics of local, U.S. and international history are represented in this collection, including the abolition of the Coal and Iron Police, interrogations of the close associates of Adolf Hitler, transcripts of the Nuremberg trial that Musmanno presided over, and information on the Sao and Vanzetta trial in which Musmanno was part of the defense team.

In keeping with its mission to support the teaching, learning, and research of Duquesne’s students and faculty, the library offers instruction in a state-of-the-art classroom that is available to students for their personal use whenever there is no class in session. Library faculty collaborate with the Department of Mathematics and Computer Science and the Schools of Music, Education, and Business to teach the one-credit course in computer and information literacy course for freshmen.

The Gambler Library publishes BiblioTech, a print and online newsletter. The Library's Web site is available at http://www.library.duq.edu

McCloskey Field, dedicated in the mid-1970s, and renovated in 1998, is the center for outdoor intramural activity. The lighted field is made up of artificial turf and is surrounded by a four-lane all-weather track used by the University track and field teams. Other athletic facilities include four tennis courts, a six-lane swimming pool and an outdoor basketball/desk hockey court.

The Public Safety Building is headquartered for the University’s Public Safety Office.

Richard King Mellon Hall of Science, an attractive, four-story structure dedicated in 1968, houses the departments of biology, geology, and chemistry. The Department of Biology, with the newest automated scientific equipment, provides students with access to up-to-date technology in their coursework.

The Music School, dedicated in 1967, has 36 new Steinway pianos, five organs, and a substantial inventory of orchestral and band instruments available for student use. Individual and group practice areas are available in the building, along with acoustically equipped classrooms. Performances are given in the PNC Recital Hall that houses a new Steinway model D concert grand piano. The Center for Electronic Media, Duquesne University Recording Complex, Keyboard Lab, and the Music Technology Center feature state-of-the-art facilities for composing, performing, and recording music.

Rockwell Hall, dedicated in 1958, is a 10-story structure which houses the A. J. Palumbo School of Business. This large building is the center of the University's business education program, with state-of-the-art facilities for teaching business-related courses. The building features include up-to-date technology in classrooms and offices.

The facility provides a home for Duquesne University’s basketball and volleyball teams, and serves as the center for intramural and club sports. The field house includes two new Steinway concert grand pianos. The Fender Electronic Studio, Duquesne University Recording Complex, Keyboard Lab, and the Music Technology Center feature state-of-the-art facilities for composing, performing, and recording music.

Rockwell Hall is the residence of the Spiritans who serve the University as administrators and teachers. The grounds of the hall include an attractive mall and groto.

Vickroy Hall, opened for Fall 1997. It is a 238 bed, air-conditioned facility, double rooms, bathroom shared by two rooms (four people). Hallways and lounge areas are carpeted. Study/television lounge on each floor. Laundry room on each floor for washing and drying. Front desk security; security cameras in elevators and all outside doors. Ground floor multi-purpose room for meetings, programs and break room. Each room has individual heating and air-conditioning units. Upper dormitory building Coed by floor.

GENERAL INFORMATION

St. Anne's Living-Learning Center, dedicated in 1964, is a seven-floor coed residence hall which houses 726 freshmen students. The women and men are housed on separate wings of the building, allowing for privacy. The facility includes a front desk area equipped with security cameras and ID card readers, laundry machines, a recreational lounge, a Computer Information Office, computer labs, and vending machines. Each student room has access to the campus computer mainframe.

St. Martin's Living-Learning Center, a 13-floor coed residence hall which houses approximately 540 freshmen students. The women and men are housed on separate floors of the building, allowing for privacy. The facility includes a front desk area equipped with security cameras and ID card readers, laundry machines, computer labs, and vending machines. Each student room has access to the campus computer mainframe.

Timothy Hall, dedicated in 1952, is the residence of the Spiritans who serve the University as administrators and teachers. The grounds of the hall include an attractive mall and groto.

Vickroy Hall, opened for Fall 1997. It is a 238 bed, air-conditioned facility, double rooms, bathroom shared by two rooms (four people). Hallways and lounge areas are carpeted. Study/television lounge on each floor. Laundry room on each floor for washing and drying. Front desk security; security cameras in elevators and all outside doors. Ground floor multi-purpose room for meetings, programs and break room. Each room has individual heating and air-conditioning units. Upper dormitory building Coed by floor.
Rangos School of Health Sciences
Accreditation
The Commission on Accreditation of Allied Health Education Programs (CAAAHEP) in collaboration with the Joint Review Committee on Educational Programs in Athletic Training (JRC-AT)
The Bachelor of Science in Health Management Systems (BSHMS) degree program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAAHEP) in collaboration with the American Health Information Management Association (AHIMA) Council on Accreditation (COA) and the Council on Accreditation and Recognition (CAR) Select graduates will be eligible for the national certification examination to become a Registered Health Information Administrator (R.H.I.A.)
The Accreditation Council for Occupational Therapy Education (ACOTE)
The Commission on Accreditation in Physical Therapy Education (CAPTE)
The Commission on Accreditation of Allied Health Education Programs (CAAAHEP) in collaboration with the Accreditation Review Committee on Education for the Physican Assistant (ARC-PA) Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA)
Membership
Association of Schools of Allied Health Professions
Association of University Programs in Health Administration (AUPHA)

Mary Pappert School of Music
Accreditation
National Association for Music Therapy
National Association of Schools of Music
Pennsylvania Department of Education
Membership
American Music Center
American Association for Music Therapy
Association of Pennsylvania Orchestras
College Music Society
Music Educators National Conference
Music Industry Conference
National Opera Association
Pennsylvania Alliance for Arts Education
Pennsylvania Federation of Music Clubs
Pennsylvania Music Educators Association
Pennsylvania Collegiate Choral Association
Perкусive Arts Society

Bayer School of Natural and Environmental Sciences
Accreditation
American Chemical Society
Membership
Alliance for Environmental Education
Council of Environmental Deans and Directors
National Council for Science and the Environmental Education Council of Environmental Deans and Directors

University Affiliate Program
North American Association for Environmental Education

School of Nursing
Accreditation
National League for Nursing
Pennsylvania State Board of Nursing
Membership
American Association of Colleges of Nursing
Pennsylvania Higher Education Nursing Schools, Inc

Mylan School of Pharmacy
Accreditation
American Council on Pharmaceutical Education
Pennsylvania State Board of Pharmacy
Membership
American Association of Colleges of Pharmacy

School of Leadership and Professional Advancement
Accreditation
American Bar Association — Paralegal Institute
Membership
Alpha Sigma Lambda National Honor Society for Adult Learners
Alliance for Nonprofit Management
American Association for Paralegal Education
BoardSource
Continuing Education Association of Pennsylvania
National Academic Advising Association
North American Association of Summer Sessions
Pennsylvania Association for Nonprofit Organizations
Tropman Institute

SCHOOL OF LEADERSHIP AND PROFESSIONAL ADVANCEMENT
Duquesne University's School of Leadership and Professional Advancement offers a variety of educational opportunities for adults. Courses are conveniently offered in the evenings, on Saturdays and online. Bachelor's degrees, master's degrees and professional certificates are available.
For additional information, please see the School of Leadership and Professional Advancement section of this catalog or call (412) 396-5600

CAPITAL REGION CAMPUS
Duquesne University offers graduate and undergraduate programs in the Harrisburg area. Please call (717) 612-3200 or (888) 508-2525 for more information.

SUMMER SESSIONS
Undergraduate and graduate courses are offered each summer in most areas. They are open to qualified Duquesne students and students from other colleges and universities.

The sessions of varying length begin in May and run through July. For additional information regarding Summer Sessions, or to request a Summer Schedule of Classes, please contact the School of Leadership and Professional Advancement, 216 Rockwell Hall, at (412) 396-5600 or 1-800-283-3853

COMPUTING AND TECHNOLOGY SERVICES (CTS)
CTS provides computing support for students, faculty, and staff. The CTS Help Desk is located on the concourse level of Rockwell Hall. The Help Desk may be reached by phone at x4357 (HELP) from on-campus or at (412) 396-4357 from off-campus. Office hours during the fall and spring are Monday through Thursday 8am-9pm, and Friday 8am-6pm. Hours for summer are Monday through Friday 8am-6pm. For 24-hour support, visit the Help Desk online at http://www.technology.duq.edu/hd

Duquesne's Computer Store, The Campus Computer Connection, is located on the ground floor of the Student Union. The store sells Apple and Dell computers, as well as a wide variety of peripherals and software at discounted prices. Visit the store online at http://www.computerstore.duq.edu or call (412) 396-5645

For information about accessing or connecting to the campus network, visit http://www2.duq.edu/cts/index.cfm?DocumentID=136. Connections are available from all residence hall rooms as well as from off-campus through a variety of Internet Service Providers.

To review the University's technology related policies, visit http://www2.duq.edu/cts/index.cfm?DocumentID=164
Part II: Undergraduate Admissions and Financial Aid

Admissions

OFFICE OF ADMISSIONS
The Office of Admissions is located on the first floor of the Administration Building
Telephone (412) 396-6222
(800) 456-0590 (Outside of 412 Area Code)
Fax (412) 396-5644
Office hours Monday through Friday from 8:30 a.m. to 4:30 p.m. Saturdays by appointment
email admissions@duq.edu

POLICY
It is the policy of Duquesne University to admit applicants who are best qualified to profit from opportunities which the University offers for intellectual, spiritual, and social growth. In general, admission is based upon past academic performance, scholastic ability, and personal characteristics. Information about religious preference, gender, racial characteristics, and ethnic origin is not taken into consideration by the Committee on Admissions.

ADMISSIONS REQUIREMENTS
1. A candidate should have been graduated from an approved secondary school in the upper two-fifths of the class and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school must submit a High School Equivalency Diploma issued by their state department of education, in addition to a high school transcript.
2. High School curriculum must include 16 units distributed as follows: four units in English, eight units in any combination of the area of social studies, language, mathematics, and science, and four elective units for which the secondary school offers credit toward graduation. In specific instances, and at the discretion of the Committee on Admissions, the genuine equivalent of these requirements may be accepted in lieu of the precise requirements specified. (Note: Candidates planning to enroll in pharmacy or pre-health programs, or as science or mathematics majors should have completed a minimum of seven units in mathematics and sciences.)
3. Scores in accordance with the standards adhered to by the University must be presented for the required College Entrance Examination Board Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). (Note: For admission to the School of Music, an audition is also required.)

EARLY DECISION
Students who intend to apply to Duquesne University may consider the Early Decision process. The application deadline for Early Decision is November 1 and the student must submit his/her non-refundable deposit by December 31. Students who are applying to multiple colleges should NOT apply as Early Decision.

EARLY ACTION PROGRAM
The Early Action Program has an application deadline of December 1 and the student has until May 1 to submit his/her non-refundable deposit. The Early Action Program is usually a requirement of majors that have limited spaces. Please see the Application for Admission for specific major requirements.

APPLICATION—NEW FIRST-YEAR STUDENTS
Applications should be addressed to the Director of Admissions, Duquesne University, Pittsburgh, Pennsylvania 15282. An application may be submitted at any time during the candidate’s senior year up to July 1, for the Fall semester.

The application procedure is as follows:
1. Obtain, complete, and file the Application for Admission with the Office of Admissions.
2. Include the $50 non-refundable application fee with the application form. No application will be processed for consideration by the Committee on Admissions unless accompanied by the required fee.
3. Request the secondary school principal or guidance counselor to submit a transcript of the candidate’s academic record. A recommendation is requested.
4. Complete the required SAT or ACT examination during the spring of junior year and/or fall of senior year. It is the personal responsibility of each candidate to have test scores forwarded to the University.
5. An interview is highly recommended for prospective students. Auditions are required for School of Music applicants.
6. Students interested in being considered for University scholarships must submit their complete application by January 10 of their senior year.
7. Early Decision deadline (for students who have Duquesne as their first college choice) is November 1. Notification will be by December 31. If accepted under the Early Decision Plan, commuting students are asked to submit a non-refundable tuition deposit of $200 within two weeks, resident students are asked to submit a $500 non-refundable deposit within two weeks.
8. Notification of decisions for regular admission begins once Early Decision applicants have been notified. If accepted, students are asked to submit a non-refundable tuition deposit of $200 for commuters or $500 for resident students by May 1 of their senior year.

Students applying to programs in Health Sciences please refer to the application and school handbook for application deadlines.

EARLY ADMISSION PROGRAM
Although the University believes that most students profit from four years in the secondary school, the Early Admission Program is open to outstanding students who desire a true academic challenge. This is a plan whereby unusually able and mature candidates who have completed less than four years of a secondary school program may begin their university studies after their junior year, prior to high school graduation. The high school diploma is awarded following successful completion of the freshman year at Duquesne. Applicants for the Early Admission Program must be in the top ten percent of their class with a grade point average of 3.5 or above. A minimum 1,100 SAT score or 26 ACT score is necessary for admission. An essay and an interview are also required. Written approval from the applicant’s high school principal, and/or guidance counselor must be provided outlining the courses needed to receive the high school diploma. Applicants under the age of 18 requesting residence in the University must have parental permission. Students entering the Early Admission Program will be given priority consideration for the Integrated Honors Program.

Advanced Credit Honors Initiative (ACHI)
High School Juniors and Seniors who wish to take university courses may do so at Duquesne if they fulfill the following requirements: A student must apply to the Duquesne University Office of Admissions before the application deadline. Students who wish to apply to ACHI must have a GPA of 3.0 or higher. A letter of recommendation from a high school counselor must accompany the completed Duquesne University Application for Admission. Students must also submit an official high school transcript.

Students enrolled in the program receive University credit for courses taken. Courses will be offered at a reduced tuition rate.

Due to limited spaces in certain programs, students must consult with a Duquesne University student advisor upon acceptance into the Advanced Credit Honors Initiative. The advisor will assist students with academic planning.

Further information and tuition rates can be obtained from the Duquesne University Office of Admissions.

Admissions
The International Baccalaureate (I.B.)
Duquesne University awards up to 30 academic credits to students completing the Diploma with a score of 30 or above. The diploma curriculum must include at least three Higher Level subjects. Other students are able to receive a maximum of 30 semester hours for IB Higher Level scores of 5, 6, or 7. IB standard level scores of 3 or above will be accepted in foreign languages for a maximum of eight semester hours per language. No credit will be given for other standard level courses. For a list of credits awarded by discipline, please contact the Office of International Affairs or your academic advisor.

Advanced Placement
Students who have followed the College Entrance Examination Board program in secondary schools and have performed satisfactorily in the advanced placement examinations are eligible for advanced placement at Duquesne University. Credit, as well as placement, for achievement that merits such consideration. Subjects included in the program are: English composition, history (American and European), history of art, modern foreign languages (French, German, Spanish), Latin, mathematics AB, mathematics BC, physics B and C, chemistry, biology and computer science.

Applicants who hope to receive advanced placement credits must request that scores be sent to the University Credit will be given on a minimum advanced placement score determined yearly by the College of Liberal Arts.

College Level Examination Program (CLEP)
A student may acquire credits by achieving a satisfactory score on one or more of the College Level Examinations—Subject and General. Any of these examinations may be taken at Duquesne’s University Counseling Center or at any CLEP Center. Additional information regarding test dates, applications and sample test questions is available from the University Counseling Center, 308 Administration Building, phone (412) 396-6204/6208. Students should double check with the College of Liberal Arts Office or the University Counseling Center to ensure that they are eligible to receive credit for the particular exam(s) they plan to take. (Students must wait six months to retake a test.) The policy is subject to change.

Honors College/Integrated Honors Program
Roberia Arrington, Director
Highly qualified, motivated and committed students are searching for challenge and enrichment in a college education. For these students, the future leaders in every field, Duquesne University offers its Honors College.
Duquesne University’s Honors College provides an intellectual breadth and depth of experience which not only enhances the life of the mind, but also offers practical advantages in our increasingly competitive world. It combines liberal arts with opportunities for professional studies while providing the thinking, writing and speaking skills necessary for continuing success.

The foundation of Duquesne’s Honors College is the Integrated Honors Program, an enhanced track of the nine-course University Core Curriculum. Special honors sections of Core courses feature some of the University’s most distinguished faculty. IHP faculty members are dedicated to good teaching, are well-known scholars in their fields, and possess a breadth of interest beyond their individual specialties. They believe learning is a lifelong adventure.

IHP courses focus on our essential human heritage and on the major ideas and issues forming the background and direction of modern life. They are taught in small class sections, allowing for close interaction between students and teachers and encouraging individual initiative as well as collaborative learning.

Special Benefits
To provide students with additional opportunities to enhance their academic and social experience, the Honors College offers a variety of special benefits, including:

- Special housing arrangements through which Honors College students live together on a selected floor of one of Duquesne’s living-learning centers. This provides an environment conducive to intellectual dialogue and intensive study within a community of like-minded students.
- Honors facilities such as a conference room, lounge, library and computer center, which encourage students to work together on team projects and allow for more focused research and study.
- Early registration dates, ensuring that Honors students have a greater opportunity for placement in vital limited-enrollment courses.
- A mentorship program in which leading members of the faculty provide one-on-one academic and professional guidance.
- Special Honors notation on transcripts.
- Participation in national conferences on undergraduate research and honors education.
- Membership in the Integrated Honors Society, an Honors students’ organization which not only provides a social outlet but also allows students to hone their leadership and teamwork skills by organizing and implementing service projects and academic interest programs.

Honors College Advantages
Participation in an honors program offers a competitive edge in admission to professional and graduate schools and in obtaining assistantships and fellowships. While graduation from an honors program cannot guarantee employment, persons with broadly based liberal arts and sciences backgrounds are often preferred for professional and managerial positions.

APPLICATION—OTHER CATEGORIES
It is the responsibility of persons who apply for entrance study, as international students, readmission students, transfers, or for the Summer Session to arrange to have all supporting credentials on file with the Office of Admissions and the Financial Aid Office by deadline dates.

ADMISSION OF UNDERGRADUATE INTERNATIONAL STUDENTS

Application Criteria
Duquesne University welcomes applications from qualified international students interested in entry as either freshmen or transfer applicants. Eligibility criteria for application as a first-year freshman student include:

- Graduation from a secondary school recognized as an acceptable equivalent to a U.S. high school, and
- A demonstrated record of acceptable academic success.

Eligibility criteria for application as a transfer student include the above criteria for freshman-level applicants plus successful completion of some post-secondary study at a recognized institution of higher education either in the applicant’s home country or in another country, including the U.S. Duquesne University processes requests for transfer credit evaluation according to guidelines established by the academic unit to which an application is submitted.

Application Procedures
Interested applicants should submit the following items:

- Duquesne University Undergraduate Application Form.
- Completed Duquesne University Affidavit of Support Form along with required accompanying financial resource documentation. (NOTE: Limited scholarships are available to undergraduate international students.)
- Original or certified copies of all academic records of secondary and any post-secondary study. Credentials should be submitted in the native language and with certified English translation.
- One letter of recommendation, and
- Application fee in the amount specified on the application form.

Duquesne University is authorized under federal law to enroll non-immigrant foreign nationals. However, no immigration documents can be issued until all application materials, including financial resource documentation, have been received. In order to complete on-campus arrival orientation, language proficiency testing, and registration, accepted international students should plan to arrive approximately one week before classes begin unless informed otherwise. All international students are required to have health insurance per U.S. immigration law and University policy.

English Language Proficiency Requirements
English is the language of instruction at Duquesne University, and a demonstrated language proficiency is required of all international applicants. Since Duquesne University maintains an on-campus Intensive and Semi-Intensive English as a Second Language Program (ESLP), qualified undergraduate applicants may be accepted to academic degree programs conditionally upon completion of English language requirements at Duquesne University.

All accepted international students whose native language is other than English are administered English Language Placement Tests upon arrival. Students who submit scores on the Test of English as a Foreign Language (TOEFL) which are taken within the past year and greater than 575 may be partially waived from English Language Placement Tests. If additional assistance with English language proficiency development is indicated, the student is referred for appropriate ESL coursework on either an intensive or semi-intensive basis.

Up to six units of academic credit, applicable towards elective credit requirements, may be awarded for ESL coursework successfully completed by eligible international students accepted into academic degree programs at Duquesne University.

NOTE: Undergraduate applicants who have completed one year or more of successful post-secondary study in the United States or who submit acceptable scores (taken within the past year) on the Test of English as a Foreign Language (TOEFL) may qualify for conditional waiver directly into full-time academic coursework. Therefore, while TOEFL scores are not required in order to receive an undergraduate admission decision, submission of TOEFL scores is strongly recommended. The Duquesne University TOEFL Institution Code is 2196.

Applicants to English as a Second Language Program
The same application procedures detailed above may also be used by international students interested in applying only for English language study in the Duquesne University English as a Second Language Program (ESLP).

The ESLP is open to qualified international students interested in studying only English on a short-term, non-degree, certificate, or long-term, non-degree, certificate of completion basis. ESL students must comply with INS regulations for full-time student status. A full description of the English as a Second Language Program is found on page 43.

ADMISSION AND FINANCIAL AID

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Additional Information on International Student Applications
Please direct all inquiries and requests for additional information and application materials to:

Director, Office of International Affairs
Duquesne University
601 Duquesne Union
Pittsburgh, Pennsylvania 15252-1660
U.S.A.
Telephone: 412-396-6113
FAX 412-396-5178
E-mail: nui@duq.edu

POST-GRADUATES

Post-Graduates are students who already have a Bachelor’s degree, and desire to take undergraduate courses at Duquesne, but are not interested in pursuing another undergraduate degree.

A Post-Graduate student must submit a Post-Graduate application to the School of Leadership and Professional Advancement if the Bachelor’s degree was received from an institution other than Duquesne. Proof of degree is required either by an official transcript or a certificate of graduation.

RE-ADMISSION

Any student who withdraws from the University must apply for re-admission through the Office of Admissions regardless of the time interval involved since withdrawal. A student who is dismissed for academic reasons must appeal to the Committee on Student Standing of the school to which application for admission or re-admission is being made, once the application has been submitted to the Admissions Office. The school then will be responsible for notifying both the student and the Office of Admissions of any decision concerning acceptance or rejection.

TRANSFER

A student who wishes to transfer from another college or university must have the complete transcripts of high school and college records forwarded to the Office of Admissions and must submit an application for admission. When accepted, the student must supply to the dean of his/her school a description of the courses which appear on the college transcript. The student should contact the Advisement Office of his/her school for placement and curriculum planning following a reasonable period for evaluation of the college transcript.

The College of Liberal Arts, the School of Natural and Environmental Sciences and School of Education award 60 semester hours of credit to accepted...
Admission and Financial Aid

President’s Scholarship 3000 and need* If funds are available, new applicants with minimum 30 credits earned at Duquesne, with 3.0 cumulative GPA and need will be considered.

Scholars/ROTC Assistance toward room and board costs for ROTC Scholars. Renewable with re-application, minimum 3.0 cumulative GPA, on-campus residence and ROTC award.

Duquesne Grant These grant funds are available to students entering the Fall 2000 semester and later They are awarded to students with remaining need after utilizing all aid resources available. Renewable with minimum cumulative GPA of 2.0, and continued need for funds after utilizing other aid sources available.

Auxiliary Grant This grant was initially awarded to students who began prior to the Fall 2000 semester. It is renewable provided the student demonstrates need. The minimum cumulative GPA for renewal is 2.0, effective Fall 2000.

Liz & John E. Murray Jr Scholarship Every 4 years Dr. & Mrs. Murray will fund scholarships to incoming freshman students. Students will receive one-half basic tuition and university fee. Renewable for four years provided student maintains a minimum cumulative GPA of 3.0, continues to demonstrate exceptional need, applies for financial aid and resides on campus.

Federal Supplemental Educational Opportunity Grant (SEOG) Grant funds received through the Federal Government are awarded to undergraduate students with exceptional need Preference to students who receive Federal Pell Grants.

Federal Perkins Loans Recipients are selected in accordance with guidelines published by the Federal Government with award with a needs-based fund. Repayment begins nine months after borrower terminates at least half-time study, and is normally scheduled over a 10-year period at an interest rate of 5% per year.

Federal Nursing & Health Professions Loans Selection and repayment identical to Perkins loan except that only full-time, dependent undergraduate Nursing Students are eligible for the Nursing Loans and only full-time, dependent undergraduate Pharmacy (not Pre-Pharmacy) students are eligible for the Health Professions Loan.

Institutional Loans Limited loan funds are available to full-time undergraduate students Repayment periods and interest rates vary. Funds made available through Alcoa Foundation, Kershens Estate, and Stanley K. Power Trust of the Pittsburgh Foundation are available only to residents of Allegheny County in Pennsylvania. Funds made available through Gulf Oil Corporation are available to final year students.

Student Employment Financial eligibility for the Federal Work-Study Program of part-time employment is determined by the Financial Aid Office based on Federal guidelines. Students who do not qualify for Federal Work-Study employment may be placed in part-time non-clearance positions. The Office of Human Resource Management bears the responsibility for actual placement of all student employees.

Placements are contingent on positions available.

Other Sources of Aid

Federal Pell Grant Program Direct grant assistance through the Federal Government is available to graduates based on an eligibility formula developed each year by Congress. All undergraduates are advised to apply for the Federal Pell Grant Completion of the FAFSA provides application.

State Grants The majority of states that provide grants to students use the FAFSA as the basic application deadline dates for each state appear in the FAFSA information. Pennsylvania’s deadline is May 1.

Loans:

Federal Stafford Loans Requires completion of FAFSA and Stafford Loan Master Promissory Note (MPN). New applications can be requested throughmost banks and lending institutions. Available to students who enroll at least half-time. Interest rates vary Loan limits vary with academic level $2925 for first academic level, $3500 for second academic level, $5500 for third and fourth academic levels (also 5th year Pharmacy). The Federal Stafford Loan is need based. In the event the student does not demonstrate need for all or part of the loan limits above, Unsubsidized Stafford Loans are available. Interest must be paid while in school, but all other conditions are the same as the Federal Stafford Loan.

Additional Federal Unsubsidized Stafford Loans Available to independent students and dependent students whose parent is denied for the Federal PLUS Loan. Can apply for this loan using the Federal Stafford Loan Master Promissory Note (MPN). Interest rates vary Loan limits vary with academic level $4000 for first and second academic levels, $5000 for third and fourth academic levels (also 5th year Pharmacy).

Federal PLUS Loans Available to parents of dependent undergraduate students. Loan applications may be obtained through most banks and lending institutions. Interest rates vary. Maximum is calculated cost of education minus all financial aid.
University Discounts The following discounts are available to students meeting the requirements indicated. Discounts will be at basic tuition rate and may be used toward only one degree or part thereof. No other form of tuition remission or discount can be used simultaneously. Some program restrictions may apply.

Catholic High School Graduates A 25% discount on basic tuition is extended to graduates of Vincenian Academy-Duquesne University. This discount is effective with initial enrollment at Duquesne University immediately in the fall following graduation. This discount applies with the class entering in the Fall of 1998. A 10% discount on basic tuition is extended to graduates of Roman Catholic High Schools in the Dioceses of Pittsburgh and Greensburg who enroll as full-time students in the fall immediately following graduation. Renewal requires continuous full-time enrollment during the academic years following initial enrollment and re-application through the Financial Aid Office.

Clergy/Religious Members of University-recognized Christian and Jewish Religious, who have been ordained or have professed members of a Catholic Clergy/Religious Order may be eligible to receive a 50% discount. Official certification of ordination and documentation of formal theological education is required for first time non-Catholic clergy applicants.

Lay Teachers Current full-time lay teachers or high school administrators required to obtain Administrative I Certification in a Catholic School located in Roman Catholic schools in Pittsburgh, Greensburg, or Altoona-Johnstown Dioceses or lay teachers from other dioceses who have completed a minimum of two years of full-time teaching in a Catholic School may be eligible to receive a 50% discount.

Senior Citizen Men and women who are 60 years of age or older may be eligible to receive a 50% discount.

Lay Ministers Men and women employed as lay ministers within the Roman Catholic Diocese of Pittsburgh as Pastoral Associates, Professional Youth Ministers, Parish Social Ministers, and Campus Ministers may be eligible to receive a 50% discount. Eligibility must be verified by the Institute for Ministers of the Dioceses of Pittsburgh.

Music Ministers Men and women employed as organists or choir directors at recognized religious institutions may be eligible to receive a 50% discount. May not be full-time students and must be enrolled in either the School of Leadership and Professional Advancement (non-degree) or the School of Music. Discount maximum would be 50% of basic tuition.

Other Possibilities In addition to programs outlined above, financial aid may be obtained through private sources. Students should inquire through (1) high school guidance offices, (2) parents' employers or labor unions, (3) fraternal, social, religious or professional organizations, (4) major organizations utilizing the skills of the field for which the student is preparing.

ROTC Scholarships Available to incoming students and currently enrolled students. For additional information and application procedures, contact the Military Science Department at the University of Pittsburgh, (412) 624-6197.

Endowed and Restricted Gift Funds The following awards are administered through the Financial Aid Office and require an aid application and FAFSA form:

1. John E. Aiko Scholarship Based on need and academic achievement.
2. Allegheny Centennial Scholarship Based on need and academic achievement.
4. Betty V. Bauman Scholarship Need based. Upperclass students with minimum 3.0 QPA.
5. Richard and Vernon Berkey Scholarship Based on need and academic achievement.
7. Clifford E. Brown Scholarship Based on need and academic achievement.
8. Byzantine Rite Seminarian Scholarship For Byzantine seminarians.
9. Richard S. Catapano Scholarship Child of judge from Allegheny County or Western Pennsylvania or child of any employee in Court System.
10. Emily Campbell Memorial Scholarship Awarded to freshmen based on need and academic achievement.

Century Club Scholarship Based on need and academic achievement.

Anthony Caputo Scholarship Based on need and academic achievement. Enrollment in A J. Palumbo School of Business.

Chemistry Department Scholarship Based on need and academic achievement.

Computing and Technology Services Scholarship Based on need. Computer Science or Information Technology majors.

Robert J. Coulter Scholarship Based on need. Awarded to freshmen from Clarion High School.

FINANCIAL AID

Other Possibilities In addition to programs outlined above, financial aid may be obtained through private sources. Students should inquire through (1) high school guidance offices, (2) parents' employers or labor unions, (3) fraternal, social, religious or professional organizations, (4) major organizations utilizing the skills of the field for which the student is preparing.

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FINANCIAL AID

The following are awarded by financial aid and outside representatives

Albert and Ambrose Colecchia Scholarship Based on academics. Juniors in the College of Liberal Arts

Bayer School of Natural and Environmental Sciences with specific majors

North and Harry Dally Scholarship Based on need and academics. Residents of Butler County, PA

SGA Scholarships. Based on need and activities. Apply through SGA Office by April 1

Melville A. Dehart Memorial Fund Based on need, academics, and activities

Marie E. Gilliland Scholarship Based on need and academics

USX Good Fellowship Scholarship For children of USX employees with minimum 2.5 GPA

Student Life

Thomas Baiole Scholarship Based on need, academics and service. Sophomores and Juniors in Business

Calliouse Scholarship Based on need and volunteer activities

Clinton Eddie Goodman Memorial Scholarship Based on academics. Pharmacy students who have an interest in a University Athletic Program

Patrick and Mary Hogan Scholarship Need based

Sean M. Hogan, C S Sr Scholarship Need based

Brother Jerry Keating Scholarship Awarded at the discretion of the Executive Vice-President for Student Life

Harry McCloskey Memorial Award Based on academics, character, and volunteer activity

Ann O'Toole Scholarship Awarded at the discretion of the Executive Vice-President for Student Life

E. Thomas Pappert/DaimlerChrysler Minority Dealers Association Scholarship Awarded to minority students who have resided in one of the fifty states and based on financial need

George R. Puskar Scholarship Awarded to disabled students based upon need and academics

Vin Hertz Travel Award Female students selected on the basis of academic achievement and interest in intercultural or international relations

Frank P. DeMarco Scholarship Awarded based on need or emergency situation to those of Italian Heritage Administered jointly by Executive Vice President of Student Life and Director of Financial Aid

Patricia E. Watt and Marian E. Hirst Scholarship Awarded at the discretion of the Executive Vice-President for Student Life

College of Liberal Arts

Carnell Scholarship Based on academics and creative writing

Apply through English Department

Frances Civita Scholarship Based on recommendations of English Department Chair Juniors and Seniors in English

Lynn and Bert Eannotti III Scholarship Based on academic merit

Mary L. Fenner and Charles J. Fenner, C S Sr., Theology Scholarship. Theology students

Hazel and Edward Coletti Sociology Scholarship Based on need and academics. Sociology majors

Integrated Honors Program Scholarship For students enrolled in the Integrated Honors Program, who demonstrate both financial need and academic merit

Paul Kruskop Scholarship Based on need and academics. Communication majors

Magr. Paul L. Mackler Theology Scholarship. Theology students

Ren Joseph A. Launis Scholarship Based on need and academics. Incoming freshmen, non-renewable. Journalism majors

C S. McCarthy Scholarship Need based Juniors and Seniors majoring in journalism

O'Donnell/Beymer Scholarship Awarded to students majoring in English who demonstrate academic merit

William T. Rush Scholarship Through Journalism. Preference to minor in advertising, journalism, public relations or radio/television. Need is not a factor

School of Business Administration

Scholarship application/ information available from the Advisement Office, 706 Rockwell Hall

Accounting Scholarships. Available to juniors and seniors majoring in accounting. Awards are based on need and academics. Apply by October 1. Applications available from Accounting faculty

Alumni Association Scholarship. Awarded annually to qualified Business student(s). Based on financial need and merit

Glen Baxion Scholarship Based on need and academics (3.5 GPA). Available to sophomore, junior or senior Business students

Clifford E. Brown Scholarship Awarded annually to an undergraduate Business student, based on financial need and merit, administered by the Financial Aid Office

Anthony Caputo Scholarship Awarded annually to an undergraduate or graduate Business student, based on financial need and merit. Administered by the Financial Aid Office

Consolidation Coal Company Scholarship for Information Technology. Awarded to a student majoring in Information Technology with 3.0 GPA and senior standing
FINANCIAL AID

Health Management Systems Loans and scholarships for full year students. Information available through Health Management Systems, 919 N. Michigan Avenue, Suite 1400, Chicago, IL 60611-1863 Phone 1-800-433-3243

Occupational Therapy Scholarships for students in professional phase. Applications available through the American Occupational Therapy Foundation, 4720 Montgomery Lane, PO Box 31220, Bethesda, MD 20824-1220

Physical Therapy Financial aid and scholarship information may be obtained from the American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314 Phone (703) 684-2782

Daniel V. Unso Scholarship One final year Physical Therapy student is awarded this scholarship based on academic achievement, service, and leadership. Not renewable

pt Group Scholarship One final year Physical Therapy student is awarded this scholarship based on outstanding clinical performance during clinical education

Physician Assistant Financial aid and scholarships are available through the American Academy of Physician Assistants, the Physician Assistant Foundation Scholarship Program, and the Pennsylvania Society of Physician Assistants. The Department of Physician Assistant will provide information to students

Speech-Language Pathology Financial aid and scholarship information may be obtained by writing to the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852 Phone (301) 897-5700

William and Marie Lowrey Scholarship One is awarded this scholarship based on significant financial need. Not renewable

Dr. Hugo W. Krammer Endowment Scholarship was established in 1994. Awarded annually to a student in the professional phase. Based on need and academics

Student at the University athletic program

School of Music

Alfred A. Delpino Scholarship Based on need and academics

Marie W. and Richard H. Barry Scholarship Recommended by the Dean

FINANCIAL AID

Dorothy M. Froelich Scholarship Students who are studying voice in order to pursue a career in opera

James F. Hunter Memorial Award Based upon musical and scholarly excellence

Ronald Lavelle Memorial Scholarship Trumpet player need based

Robert Muschler Scholarship Need based, academics secondary

Music Therapy Scholarship Music Therapy students

Aune K. Patton and George Locker Scholarship Based upon musical and scholarly excellence

Purcell Tombstone Scholarship Based on talent and promise of Jazz trumpet student

Paul B. Remhold Scholarship Based upon musical and scholarly excellence

Riley Piano Award One award per semester for piano excellence

Louis V. Roscero Scholarship Woodwind major Based on academics

Marty & Eddie Shinny Students studying brass instruments

Josephine Tucci Scholarship for Schools of Pharmacy and Music Awarded to deserving Pharmacy or Music students based on merit This award alternates between the two schools annually

Henrietta Vaynchino Cello Scholarship Cello student, minimum 3.0 QPA

Women's Auxiliary Scholarship Full time student

Other Awards Contact Dean's Office for information — Previous Scholarship, Loyola Christian Benefit Association Award, Music School Scholarships

School of Natural & Environmental Sciences

Bayer Undergraduate Summer Research Fellowships For Bayer School of Natural and Environmental Sciences students

Chemistry Department Scholarship For chemistry majors

Nancy and Norbert Maranowski Endowment Awarded to an undergraduate student in the Bayer School of Natural and Environmental Sciences majoring in one of the natural sciences. Award is based on merit and need. Candidates must have graduated in the top 20% of their graduating class. Renewable if student maintains a GPA of 3.0/4.0 in their major and QPA of 3.0/4.0 overall Preference for graduates of Central Catholic or North Catholic High School

School of Nursing

Richard J. Behan Memorial Scholarship For nursing students based on need and academics

JOHN CLIFTER SIMS LOAN

Revolution loan fund for worthy and qualified Pharmacy students Amounts vary based on need and general ability

Dr. Hugo Scarron 75th Pharmacy Anniversary Endowment Scholarship Awarded to deserving Pharmacy students based on merit and need

School of Pharmacy

Unless otherwise stated, apply through School of Pharmacy

Women of Galen Presented by Women's Auxiliary of Galen Pharmaceutical Society of Pittsburgh to deserving final year Pharmacy students

Samuel W. Curtis Loan To provide assistance for Pharmacy students

Chilton Loan To provide assistance for Pharmacy students

Joel P. Lauthin Scholarship Awarded by the Graduate Chapter of Phi Delta Ch in memory of Joel P. Lauthin. Awarded made to fraternity brothers who have demonstrated academic achievement and active participation in fraternity functions

Manzoni Family Scholarship Endowed fund established in 1994. Awarded annually to a Pharmacy student in the professional phase. Based on need and academics

Clinton Eddy Goodwin Scholarship In memory of Clinton Eddy Goodwin. Candidates must be a declared Pharmacy major, possess a minimum QPA, and have an interest in and demonstrated support of the University athletic program

NCPA Foundation Provides loans to Pharmacy students in the last two and one-half years of professional study for tuition, fees, and books. Apply through School of Pharmacy

Fred Schiller Loan Revolving loan fund for worthy and qualified Pharmacy students Amounts vary based on need and general ability

Dr. Hugo Scarron 75th Pharmacy Anniversary Endowment Scholarship Awarded to deserving Pharmacy students based on merit and need

John Cliffter Sims Loan Revolving loan fund for worthy and qualified Pharmacy students Amounts vary based on need and general ability
Josephine Tacci Scholarship for the Schools of Pharmacy and Music Awarded to deserving Pharmacy or Music students based on merit. This award alternates between the two schools annually.

Oeverbeck/Ansberry Lambda Kappa Sigma Scholarship Endowed fund created by Tau Chapter of LIKS to recognize Hazel Oeverbeck, P'47, and Joan V. Ansberry, P'47. Assistance to student member of Tau Chapter in professional phase of Pharm D program demonstrating need and merit.

Dean’s Endowment Fund for Excellence Contributions by Pharmacy alumni provide scholarship assistance to Pharmacy students with demonstrated need and academic merit.

Pittsburgh Graduate Chapter of Kappa Psi Pharmaceutical Fraternity Maintains a revolving loan fund for members of the undergraduate chapters. Information from School of Pharmacy.

Rite Aid Scholarship Available to students entering the final years of the Pharmacy program. Based on financial need, demonstration of normal progress and good standing in the program.

Tau Alumni Chapter of Lambda Kappa Sigma – Rose Manzione Scholarship In memory of Rose Manzione, P’49. Financial awards for members in the last years of the Pharmacy program based on financial need and participation in the organization.

Dr. B. Olive Cole Graduate Grant Offered by Lambda Kappa Sigma to assist an alumnus member enrolled in program of graduate study and research in pharmaceutical sciences. Application must be received by chairman of the grant committee by November 15. Information from School of Pharmacy.

WONCPA Scholarship. Women’s Organization of National Community Pharmacists Association offers annual scholarships for pharmacy study. The award amount is determined by established need and academic standing of the applicant. Apply directly to WONCPA by June 1.

Donald Bell Scholarship Fund of Eckerd (Thrift) Drug Company Awarded annually to deserving Pharmacy students who are entering the first years of the curriculum. Based on combination of scholarship, need, and demonstrated interest in community pharmacy practice.

Geraldine (Muia) Furgiuele Scholarship In memory of Geraldine (Muia) Furgiuele, P’50. Provides scholarships for needy and deserving female students in the School of Pharmacy.

Rosemarie Bevacqua Scholarship In memory of Rosemarie Bevacqua, P’55. Provides scholarships for needy and deserving Pharmacy students.

School of Pharmacy Alumni Scholarship Funds available, through support of Pharmacy Alumni, for needy and academically deserving Pharmacy students. Apply through the School of Pharmacy Faculty Scholarship Committee, Office of the Dean.

School of Pharmacy Class of 1959 Scholarship Awarded annually to deserving and needy Pharmacy students in the final years of study.

American Pharmaceutical Association Auxiliary Irene Pace Loan Fund available to Pharmacy students in the final years of the Pharmacy degree program.

Cora E. Craven, Norma Wells, Mary Connolly Livingston Educational Grants Grants awarded annually to members in good standing of Lambda Kappa Sigma, enrolled in Doctor of Pharmacy program in the final years of the Pharmacy program. Based on scholarship, need, and demonstrated interest in a career in retail pharmacy practice.

Powser-Schering Scholarship Granted to a student entering the final years of the Pharmacy program. Must have minimum 2.50 GPA in the professional program and demonstrate financial need.

Alfred J. Finnenschlag, Jr. Memorial Scholarship In memory of Alfred J. Finnenschlag, P’82. Annual award to a Pharmacy student in the final years of study. Based on need and service to the Duquesne campus community.

Phar-Mor, Inc. Scholarship Awarded annually to deserving Pharmacy student entering the final years of the Pharmacy program. Based on scholarship, need, and demonstrated interest in a career in retail pharmacy practice.

Don Bell Memorial Scholarship In memory of Don Bell, P’57. Annual award to a Pharmacy student based on scholarship and need.

Wal-Mart Pharmacy Scholarship Awarded annually to an upper-level Pharmacy student. Based on high academic standing, financial need, and expressed interest in community pharmacy practice.

Gene L. Checcone Scholarship In memory of Gene L. Checcone, P’52. Annual award to Pharmacy student in good academic standing with need.

Patrice Lynn Trinnier Scholarship Endowed fund established by Charles J. Trinnier, P’51, family. Annual award to a Pharmacy student in good academic standing with need.

Richard H. and Marie W. Barry Scholarship In memory of Richard H. Barry, P’39. Selection of recipient from members of Barry family will be based on good academic standing and need.

Jack J. Rosenberg Scholarship Endowed fund established by Rosenberg family in memory of Jack J. Rosenberg, P’28. Annual award to a deserving Pharmacy student to assist with tuition expenses.

FINANCIAL AID

Joseph A. Mosso, Sr., P’54, Scholarship Annual award based on need and demonstrated interest and involvement in independent pharmacy practice.

Sonia F DeGryg, P’59, Scholarship Assistance based on merit and need to Pharmacy student in professional phase of Pharm D program.

Norman H. Marcus Scholarship Endowed fund established by Marcus family in memory of Norman Marcus, P’30. Award to Pharmacy student based on merit and need and demonstrated interest in community or long term care practice.

Hugh C. Muldown Scholarship Endowed fund in memory of the founding Dean of the School of Pharmacy and maintained by contributions of Pharmacy alumni.

Gerard F. Wolm Pharmacy Alumni Scholarship Endowed fund established by Pharmacy Alumni Association in memory of Jerry Wolf, P’49. Long time member and officer of the Association and School of Pharmacy instructor. Annual earnings of the endowed fund are designated for, and restricted to, equal distribution among the children of Pharmacy alumni attending Duquesne, without respect to need or school of enrollment.

Edgar N. Dussan, P’54, Scholarship Annual award to a deserving Pharmacy student.

CVS/Pharmacy Scholarship Several awards annually to Pharmacy students who provide evidence of interest in retail community practice, good academic performance, and need. Special consideration will be given to deserving minority Pharmacy students.

John S. Roksky Scholarship Endowed fund to honor John S. Roksky. Awarded annually to needy and worthy Pharmacy students.

Louis C. DiPaolo, P’75, Scholarship Annual award to a needy and worthy Pharmacy student in independent pharmacy practice.

Victor V. Micolucci Scholarship Endowed fund created by Victor V. Micolucci, P’48. Family Annual award to Pharmacy student with demonstrated need and interest in community pharmacy practice.

Samuel Procaccini, P’73, Scholarship Annual award to a deserving Pharmacy student.

Sylvia Bartos Mulvihill, MD, P’57, Scholarship Annual award to a Pharmacy student in the final years of the program. Based on scholarship and need.

Patricia Anne Craven Scholarship In memory of Patricia Anne Craven, P’52. Selection of recipient from members of Craven family will be based on good academic standing and need.

Vincent R. Caneia, Jr. Scholarship Endowed fund established by Caroila family in memory of Vincent Caneia. Awarded to Pharmacy students who exhibit academic excellence, involvement in community and School of Pharmacy activities.

Louie J. DeBoz, Jr., P’68, Scholarship Assistance based on merit and need to Pharmacy student in professional phase of Pharm D program.

Thomas M. Sikora Memorial Scholarship Annual award to a Pharmacy student who demonstrates financial need and merit, with a strong preference given to members of the Kappa Psi Pharmacy fraternity.

Dean and Mrs. Douglas H. Kay Endowed Scholarship Fund Annual award to Pharmacy students who are enrolled in the professional phase of the Doctor of Pharmacy curriculum and demonstrate need and merit.

Hoefnagle, P’66, Endowed Scholarship Annual award to a Pharmacy student who demonstrates need and merit and interest in pursuing a career in institutional pharmacy.

Marc Goldberg, P’66. Scholarship Annual award to a deserving Pharmacy student.

Dr. Robert and Patricia Gossin Minority Pharmacy Scholarship Annual award to a Pharmacy student demonstrating financial need and academic merit, with a strong preference for minority students.

Paul A. Wherry History of Pharmacy Endowed Scholarship Annual award to a deserving Pharmacy student, preferably one who demonstrates an interest in the history of pharmacy.

School of Leadership and Professional Advancement

Isabella A. Mauw Scholarship Students that demonstrate financial need. Strong preference will be given to students with disabilities.

Athletics

Maurice T. Murphy Scholarship For student athletes, based on need and a consideration for academic merit.

Gumberg Library

Gumberg Library Scholarship Students who have worked a minimum of two semesters in the Gumberg Library.
University Relations

Alumni Association Endowed Scholarship Qualified applicants must be children, stepchildren or grandchildren of a Duquesne University graduate and have an overall QPA/GPA of at least 2.00 with a financial aid application on file in the Financial Aid Office. Applications available through the Alumni Office.

Alumni Association Endowed Scholarship for Merit Qualified applicants must be children, stepchildren or grandchildren of a Duquesne University graduate, and must demonstrate scholarly excellence. Applications available through the Alumni Office.

Isadore and Jonell Lenglet Merit Endowed Scholarship Students must demonstrate academic merit.

Special Student Services

George R. Puskar Scholarship Students with demonstrated need and merit, with a preference for students with physical disabilities.

Part III: Registration and Scholastic Policies

REGISTRATION

Students who attend the Fall Semester, which begins in late August, receive academic advisement and register for classes during the preceding months of April, May, June, and July. Spring Semester students register during the Fall Semester in November.

Orientation programs for new students are conducted by the schools in late spring and summer in conjunction with academic advisement and registration.

A comprehensive invoice that confirms the class schedule of courses for which the student is registered, lists fees, tuition, housing charges, deposits, financial aid awards, and balance due is mailed to the student at his or her permanent address a month before classes begin, thus enabling the student or parent to make payment by mail.

Final Registration for students who have neither preregistered for classes nor concluded financial arrangements is held just before the opening of classes.

The financial obligation for class places reserved by a registered student who does not subsequently attend cannot be canceled unless written notification of the decision not to attend is given to the Registrar before the first class day. Notification received on or after the opening day of classes is subject to the official withdrawal policy. Withdrawal from room and board reservation contracts is to be made in accordance with the provisions of the contract. See "Withdrawal and Refund," page 32-33 of this catalog.

OFFICIAL REGISTRATION

Only students who are recognized as officially registered are bona fide students of Duquesne University. Unless students are officially registered, they are not permitted to attend classes, engage in student affairs, or, generally, have access to the buildings and grounds or use of the University's facilities.

Official registration is the recognition given by the University to persons who have met these conditions:

1. Appropriate authority for admittance to study in a school or department has been given by an authorized officer of the University. The admitting authority for undergraduate students resides with the Director of Domestic Admissions and International Affairs.

2. Authorization to continue in the program selected has been given and registration for classes has been accomplished in compliance with all academic requirements and procedures.

3. Arrangements have been made to the satisfaction of the University for payment in full of all financial charges, including fees, tuition, and housing charges, all of which are due and payable in full before the beginning of classes.

CHANGE OF SCHEDULE

Students requiring a change of class schedule, to change class times or to add or to drop a class, are permitted to do so during the periods of Pre-registration, Final Registration, and Late Registration. Change of class schedule is not permitted after the Latest Date for Change of Schedule as announced in the Academic Calendar (published in the Schedule of Classes Booklet).

All schedule changes must be approved by an academic advisor and processed with the Registrar. Schedule change requests processed with the Registrar during Late Registration must also have the signatures of the instructors whose classes are being added or dropped.

Students who process change forms late are not entitled to a refund for the course credits dropped. Courses dropped after the deadline for making schedule changes are classified as course withdrawals. See "Withdrawal from a Course" and "Withdrawal and Termination of Attendance" mentioned elsewhere in this catalog.

Except for changes requested by the dean or advisor, a fee of $5.00 is charged for each change form processed after the close of Pre-registration.

CROSS-REGISTRATION

The purpose of Cross-Registration is to provide opportunities for enriched educational programs by permitting students at any of the ten Pittsburgh Council on Higher Education (PCHE) institutions to take courses at any other PCHE institution. Member institutions of PCHE are:

- Carlow College
- Carnegie Mellon University
- Chatham College
- Community College of Allegheny County
- Duquesne University
- LaRoche College
- Pittsburgh Theological Seminary
- Point Park College
- Robert Morris University
- University of Pittsburgh

The opportunity to Cross-Register is open to each full-time student enrolled in a PCHE college or university.

Each college or university accepts registration from the other institutions, however, first priority in registration is given to students of the host college, and not all departments or schools in all institutions are able.
to participate in this program
In each case of student cross-registration, the approval of the dean or designated individual from the home college or university must be obtained prior to registration.
The student’s advisor or dean is responsible for assuring the student’s eligibility for the course in which s/he intends to enroll.

Full credit and grades will be transferred, the academic regulations of the host institution will prevail.

The academic honesty code and other rules of conduct of the institution providing the instruction apply with respect to its courses and behavior on its campus.
That institution also determines whether its rules have or have not been violated.
The student’s own institution will impose such penalties as it considers proper when violations are reported to it.

Cross registrants do not thereby acquire the status of students in the institutions in which they are receiving instruction (e.g., for purposes of participation in student activities, insurance programs, etc.)

They do receive library privileges at the host institution and may purchase course texts at the host bookstore.

Each qualified student normally may enroll in no more than one course off campus in any one term or semester under this program.

Duquesne University students who are participating in this program are charged tuition and university fees in accordance with the current rates of Duquesne University, however students are responsible for paying any additional course or laboratory fees to the host institution.

This cross registration program does not apply to the Summer Sessions at any of the institutions including the Spring Term at the University of Pittsburgh.
However, taking courses at other institutions during those terms is facilitated by “temporary transfer student” procedures separately agreed to by the PCHE colleges and universities.

Students are encouraged to submit cross registration forms during preregistration in order to provide adequate time to receive proper notification of the approval or disapproval.

Procedures
A Cross-Registration form is obtained either from an Advisor or the Registrar’s Office.
The student then completes the form by indicating which course(s) s/he wishes to enroll in at the host institution.
Copies of the class schedules of all PCHE institutions are maintained in the Registrar’s Office.

The completed Cross-Registration form must be submitted to the student’s advisor for approval. All copies of the form are to be delivered to the Registrar’s Office.

The Registrar of the host institution will notify applicants whether or not the cross-registration has been accepted.

REGISTRATION AND SCHOLASTIC POLICIES

LATE REGISTRATION
Late Registration may be permitted for serious cause with the approval of a student’s dean and with payment of the penalty fee. However, no student may be registered and begin attending classes later than the Latest Date for Registration and Change of Schedule as announced in the Academic Calendar (published in the Schedule of Classes booklet).

RECORDS AND REPORTS
SEMESTER GRADE REPORT
Soon after the close of each semester, a grade report is sent to the permanent address of every student who is free of financial obligation to the University.

TRANSCRIPTS
Each student who is free of financial obligations to the University is sent a summary transcript of his or her complete academic record at the close of each academic year. Students should carefully examine their records for accuracy and immediately report any errors to the Registrar in writing.

To obtain additional copies of academic records, students must write to the Registrar requesting transcripts for themselves or for mailing to other institutions and agencies. All official transcripts issued by the Office of the Registrar may bear the signature of the Registrar and are printed on secured paper. Whenever an official transcript is released directly to the student it will also bear the stamped designation Issued to Student.

No transcript will be issued unless all financial obligations owed by the student to the University have been fulfilled. A fee of $5.00 is charged for the issuance of each transcript and 24-hour processing time is required for pick-up service from the Registrar’s Office.

CONFIDENTIALITY OF STUDENT RECORDS
The University regards the student’s personal information and academic record as a matter of confidence between the student and the University. The contents of either may be revealed only in accordance with the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380, Section 438, as amended).

In order that parents of students may receive from University officials information concerning the academic record of their child, it is required that either the parents must prove the legal dependence of their child upon them according to the dependency test as defined in section 152 of the Internal Revenue Code of 1954, or the student must grant a waiver of rights.

Students wishing to waive the FERPA requirements relating to the release of academic information must complete the waiver obtainable at the office of the academic advisor or the Registrar’s Office.

ACADEMIC POLICIES

POLICIES
ACADEMIC ADVISEMENT
Every student attending the University is assigned an academic advisor. It is the student’s responsibility to know the advisor’s name.

The student must consult with the academic advisor with regard to any questions of an academic nature. No student may register without an academic advisor’s approval.

AUDITING COURSES
Regularly enrolled Duquesne students are permitted to audit courses. In addition, non-degree students from the general community who would like to audit courses for personal enrichment and who are not matriculated nor pursuing a degree program are also eligible to audit.

Regular students should consult the academic advisor for details on auditing. Non-degree students should contact Duquesne’s School of Leadership and Professional Advancement to complete a brief application form. Admission is granted on a space available basis by consulting the Office of the Registrar and the individual schools.

Fees for auditing are uniform for all students.

Registration in a course as an auditor must be declared at registration and is irrevocable after the last date for change of schedule each semester, as indicated in the Academic Calendar (published in the Schedule of Classes booklet). Records will show “Audit” in the grade space on the transcript of a regularly matriculated student. A “Certificate of Attendance” for non-degree students will be awarded by the School of Leadership and Professional Advancement. Audited courses are not eligible to be converted to matriculated credits. Courses audited may not be challenged later or completed via CLEP or other advanced standing tests.

Courses eligible for auditing are determined by the individual colleges and schools of the University. A partial list of school policies follows, but students are advised to consult with the Offices of the Deans for the most current listings.

1) No courses in the School of Law are available for audits.
2) No clinical courses in the School of Nursing and Pharmacy can be audited.
3) The Rangos School of Health Sciences will not allow clinical courses or those courses in the professional phase of the curriculum (the last two years of all RSHS majors) to be audited by non-majors.
4) In the College of Liberal Arts and the School of Natural and Environmental Sciences, courses in humanities and social sciences can be audited, but communications and science laboratory courses may not be audited.

Students receiving credit may attend lectures, complete course readings and, at the discretion of the professor in charge of the course, may participate in classroom discussion and examinations.

CANCELLATION OF COURSES
The University makes every reasonable effort to offer courses as announced in the Schedule of Classes booklet and the summer session tabloid. It reserves the right, however, to make changes or cancel courses in the academic schedule because of insufficient enrollment or for any other equally valid reason.

CLASS ATTENDANCE
Regular class attendance is considered essential for maximum educational advantage and is strongly encouraged. The responsibility for all course material rests wholly with the student. Schools may require attendance at every class.

It is the prerogative of each school to establish policy for attendance at classes, laboratories, tests, examinations, deadlines for reports, and specific school requirements. It is the instructor’s responsibility to make the school’s policy known at the first class session as it pertains to the course and school.

The student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstance is responsible for notifying the office of the appropriate school advisor.

The student must submit work assigned and take the examination in the course at the specified time. If work is not submitted or an examination is not taken at the scheduled time, the policy is to assign a zero for that part of the course. An accumulation of zero grades would result in a final grade of F. If a student has for significant reasons missed a part of the course or an examination, the grade may be submitted as an I. If the temporary I grade is to be replaced by a passing grade, the work must be completed by the time stated in the Academic Calendar (published in the Schedule of Classes booklet). Failure on the part of the student to remove the temporary grade results in conversion of that grade to an F recorded on the transcript.

CLASSIFICATION OF STUDENTS
Freshman: less than 30 credits completed
Sophomore: 30 to 59 credits completed
Junior: 60 to 89 credits completed
Senior: 90 or more credits completed
REGISTRATION AND SCHOLASTIC POLICIES

COURSE EXAMINATIONS
Unit examinations are given on the dates announced by the instructor at the beginning of each semester. Final examinations are given at the end of each semester and summer session. No student is excused from taking the final examination.

CREDIT BY EXAMINATION
Examinations for recognition of proficiency in a subject, or for course credit, as authorized by the College or a particular School of the University, are available to currently enrolled students who have acquired mastery of the knowledge in certain courses. An application fee of $30.00 is charged for each course credit. Application forms may be obtained from the Office of the Registrar.

UNDERGRADUATE GRADING SYSTEM
The following is the officially recognized method of grading course work and rating academic performance of undergraduate students at the University

Grade Description
A Superior
A - Excellent
B+ Good
B Above Average
B - Satisfactory
C+ Average (Minimum general average for graduation)
C Lowest passing scale grade
F Failure (Course must be repeated for credit)

PLUS/MINUS GRADING OPTION
The Plus/Minus Grading System is the official grading system of the University.

Grade Quality Points Per Credit
A 4.0
A- 3.7
B+ 3.3
B 3.0
B- 2.7
C+ 2.3
C 2.0
D 1.0
F 0.0

Grades H, S, U, N, I, and W are independent of the Quality Point System. Courses graded H, S, U, N, I, and W do not earn credit, and if required for graduation, must be repeated and passed.

REPEATING COURSES AND COURSE RETROGRADATION
Students ordinarily are permitted to repeat courses in which D, and F grades were received. The request for permission to repeat a course is to be submitted in letter form to the academic advisor. An authorized request to repeat a course form must be obtained from the advisor before registering in the repeat course. All grades are retained on the permanent academic record. The result of the final attempt in a repeated course is, however, the student's status in the course with regard to attempted credits, earned credits, and the completion of requirements.

RETROGRADATION, a corollary of the repeat credit rule under which a student may earn credit once only for a course, prescribes that a student may not move forward from an advanced course to a lower level course and receive credit for both. Any doubtful situation must be decided by the department chairperson or dean involved.

PASS/FAIL ELECTIVES
One course a semester, elected by a junior or senior and approved by the academic advisor as providing an opportunity to expand and enrich the student's experience, may be taken on a pass/fail (S-U) basis. If passed, the credits will count for graduation, but neither grade nor credits will be calculated in the quality point average. Once a course has been identified as a pass/fail elective, the course must be completed as such, and the grade submitted must be an S or U. No required course may be taken on this elective pass/fail basis.

The decision to elect the pass/fail option must be made no later than the close of the period provided for making schedule changes. An authorized pass/fail election declaration form must be obtained from the advisor.

STUDENT STANDING
Progress toward a degree is measured by the cumulative quality point average. The scholastic records of students who fail to meet the minimum requirements as established by the faculty of each college or school will be submitted to the College or School Committee on Student Standing for review and appropriate action. Normally, academic records will be reviewed annually at the conclusion of each academic year.

All students in the University are academically dismissed if they fail three courses in one semester. Students can be readmitted by the student standing committee of the college or school to which the student is registered if a student transfers to another school within the University, the student can be admitted only by the Dean of that school.

For students who have attempted 15-30 credits, or more than 30 credits in one year, the guidelines are:

Academic Warning: 1.75 to 1.99 QPA (Letter of warning may be sent by appropriate Dean)
Probation: 1.75 to 1.74 QPA (Subject to the jurisdiction of the appropriate Committee on Student Standing or may be required to modify or restrict academic program)
Dismissal: Less than 1.50 QPA (Readmission may be permitted on recommendation of the appropriate Committee on Student Standing)

For the students who have attempted 31-60 credits or who have attempted up to 61 credits within four semesters, these guidelines prevail:

Academic Warning: 1.85 to 1.99 QPA (Letter or warning may be sent by appropriate Dean)
Probation: 1.75 to 1.84 QPA (Subject to the jurisdiction of the appropriate Committee on Student Standing or may be required to modify or restrict academic program)
Dismissal: Less than 1.75 QPA (Readmission may be permitted on recommendation of the appropriate Committee on Student Standing)

STUDENT STANDING
Students who have attempted 61 or more credits and who have a QPA of between 1.65 and 1.99 may continue on probation for one semester. However, students who have earned 90 credits or more are subject to dismissal unless they have a QPA of 2.0 or better. Students who accumulated three F grades in one semester are subject to dismissal. Appeals of academic dismissal must be directed to the appropriate College or School Committee on Student Standing.

Students subject to the jurisdiction of the appropriate Committee on Student Standing in accordance
with the established guidelines who are permitted to re-enroll on a full-time basis but continue participation in noncurricular and extracurricular activities shall be without appeal if they are subsequently dismissed from the University for poor scholarship.

ACADEMIC ADVISEMENT FOR STUDENT ATHLETES

The policy of the Council of Academic Deans on Student Athletes with regard to academic standards reads as follows:

a) To participate in the formal athletic programs at the University, a student must be currently enrolled as a full-time student. Full-time status is defined by University catalog as enrollment of 12 credits minimum per semester. Such a program would allow a student to graduate within five years.

b) A student athlete must be making satisfactory academic progress. This means that a student must have successfully completed 24 credits during the previous academic year. This would allow a student to graduate within five years.

c) A student athlete must maintain a 2.0 cumulative QPA at all times in order to be academically eligible to compete in intercollegiate competition. QPAs for student athletes are calculated at the end of each semester.

ACADEMIC COORDINATOR OF INTERCOLLEGIATE ATHLETICS

The academic progress of student athletes engaged in intercollegiate competition is monitored by the office of the Academic Coordinator of Intercollegiate Athletics. This office also provides other academic support services for student athletes including, but not limited to, study halls, tutorial assistance, academic advisement, registration assistance as well as orientation.

DEAN’S LIST

To achieve distinction of being named to the Dean’s List, a student must have a record for a semester that shows completion of a full-time schedule, a quality point average of at least 3.25, and no grade lower than a C. The full-time schedule must include at least 12 credits exclusive of pass/fail credits.

GRADUATE COURSES FOR UNDERGRADUATE CREDIT

Qualified seniors may be permitted to register in certain graduate courses at the 500 level for undergraduate credit on the recommendation of the advisor and with the approval of the dean of the graduate school involved. All 500 courses are described in the University catalog.

GRADUATION REQUIREMENTS

The candidate for a University degree must be a person of good moral character who has satisfactorily completed all academic requirements for the degree program. In addition, there is the recommendation of the appropriate Academic Dean, filed the Application for the University Degree with the Office of the Registrar on or before the latest date to apply for graduation as announced in the Academic Calendar, and satisfied all financial obligations with the University.

It is the student’s responsibility to determine that courses taken in each semester are sequentially correct and necessary for the degree program.

The student, in consultation with an advisor, must periodically review progress toward graduation, and resolve any question about fulfillment of graduation requirements.

Each school and each department determines requirements for graduation which the student is expected to know as well as the following:

1. The bachelor's degree requires a minimum of 120 semester hours of course credit.

2. All bachelor's degrees require an overall minimum quality point average of 2.0, which is a C grade average in a 4.0 system. Students should further determine the need for minimum QPA requirements in their major, science course, etc.

3. The final year's work (a minimum of 30 semester hours of credit) must be completed in residence at the University.

4. All undergraduates must complete the University Core Curriculum.

5. All undergraduates must complete a minimum of four writing intensive courses at the 200 level and above.

6. Students on academic probation may be candidates for graduation only with permission of the Committee on Student Standing of their school.

The candidate who has satisfied graduation requirements by a Challenge Examination (credit by examination), within the last 30 semester hours of study for the degree, will fulfill the remaining requirement provided a minimum of 30 semester hours of credit has been earned in course work at the University in the final year's study.

WRITING INTENSIVE COURSES

It is universally recognized that the ability to write clearly, correctly, and effectively is an indispensable component of being an educated person. It is, therefore, entirely appropriate that Duquesne includes among its central objectives the development of the abilities to write clearly, correctly, and effectively.

Honors

Degrees are awarded with special mention: cum laude, magna cum laude, or summa cum laude to students who have completed the regular course with unusually high distinction and who have completed a minimum of 60 credits in residence. Honors are based on these standards:

Cum Laude—Quality Point

Average: 3.50 to 3.74

Magna Cum Laude—Quality Point

Average: 3.75 and above

Summa Cum Laude—Upon recommendation of the faculty and a 3.90 QPA, the Magna Cum Laude citation may be raised to Summa Cum Laude.

UNIT OF CREDIT

The unit of credit is the semester hour. One semester hour of credit is granted for the successful completion of one hour of a week of lecture or recitation, or at least two hours of a week of laboratory work for one semester of 15 weeks.

TRANSFER WITHIN THE UNIVERSITY

It would be to the student's advantage to discuss the proposed transfer with an academic advisor of the new school no later than two weeks prior to preregistration. It is the advisor's responsibility to effect the change.

WITHDRAWAL FROM A COURSE

First semester freshmen may withdraw from courses with the approval of an advisor up to the period of final examinations and receive a grade of W by processing the proper form. If a student, other than a first semester freshman, wishes to withdraw from a course, he/she may do so with the approval of an academic advisor and by processing the proper form up to the date announced in the Academic Calendar for withdrawal with a W grade.

If a student wishes to withdraw from a course after the date announced in the Academic Calendar, the student must seek approval of the Committee on Student Standing of the student's School. If approval is granted, the student then initiates the appropriate form through the advisor.

A student who is not granted approval of the request and withdraws from the course unofficially will receive an F grade for the course.

REGISTRATION AND SCHOLASTIC POLICIES

Every graduating student must have completed a minimum of four Writing Intensive courses beyond the two-semester Core writing sequence. At least two of the courses must be taken in the student's major field. The other two courses may be taken in either the major field department or in the student's school or college. Writing Intensive courses are offered in every department at the 200 level and above and emphasize the principles and practices of writing unique to the respective field.

HONORS

Degrees are awarded with special mention: cum laude, magna cum laude, or summa cum laude to students who have completed the regular course with unusually high distinction and who have completed a minimum of 60 credits in residence. Honors are based on these standards:

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A student who is not granted approval of the request and withdraws from the course unoffically will receive an F grade for the course.
# Part IV: Tuition and Fees

## Tuition and Fees

The University reserves the right to change tuition and fee charges if exigencies require such action. The figures shown apply to the 2003-2004 term only, unless otherwise indicated.

### TUITION

#### RATE 1 (Arts, Education, Nursing, Health Sciences Special Status, Health Management Systems, Spiritan Division)

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>University Services Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
<td>$17,837</td>
<td>1,588</td>
<td>$19,425</td>
</tr>
<tr>
<td>Per-credit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate Tuition</td>
<td>580.00</td>
<td>62.00</td>
<td>642.00</td>
</tr>
<tr>
<td>University Services Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>642.00</td>
<td>62.00</td>
<td>688.00</td>
</tr>
</tbody>
</table>

#### RATE 2 (Natural and Environmental Sciences, Pre-Pharmacy, M.S. Forensic Sciences)

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>University Services Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
<td>$18,546</td>
<td>1,588</td>
<td>$20,134</td>
</tr>
<tr>
<td>Per-credit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate Tuition</td>
<td>617.00</td>
<td>62.00</td>
<td>679.00</td>
</tr>
<tr>
<td>University Services Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>679.00</td>
<td>62.00</td>
<td>741.00</td>
</tr>
</tbody>
</table>

#### RATE 3 (Health Sciences excluding Health Sciences Special Status and Health Management Systems)

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>University Services Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
<td>$20,685</td>
<td>1,588</td>
<td>$22,273</td>
</tr>
<tr>
<td>Per-credit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate Tuition</td>
<td>617.00</td>
<td>62.00</td>
<td>679.00</td>
</tr>
<tr>
<td>University Services Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>679.00</td>
<td>62.00</td>
<td>741.00</td>
</tr>
</tbody>
</table>

#### RATE 4 (Music)

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>University Services Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
<td>$22,093</td>
<td>1,588</td>
<td>$23,681</td>
</tr>
<tr>
<td>Per-credit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate Tuition</td>
<td>580.00</td>
<td>62.00</td>
<td>642.00</td>
</tr>
<tr>
<td>University Services Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>642.00</td>
<td>62.00</td>
<td>688.00</td>
</tr>
</tbody>
</table>

### FEES

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application (non-refundable)</td>
<td>$50.00</td>
</tr>
<tr>
<td>Matriculation Deposit (non-refundable)</td>
<td>200.00</td>
</tr>
<tr>
<td>Residence Hall Pre-Payment (non-refundable)</td>
<td>300.00</td>
</tr>
<tr>
<td>Change of Schedule</td>
<td>5.00</td>
</tr>
<tr>
<td>Credit by Examination</td>
<td>30.00</td>
</tr>
<tr>
<td>Orientation (New Students)</td>
<td>135.00</td>
</tr>
<tr>
<td>Late Registration</td>
<td>25.00</td>
</tr>
<tr>
<td>Removal of I Grade</td>
<td>5.00</td>
</tr>
<tr>
<td>Registration Correction Fee</td>
<td>15.00</td>
</tr>
<tr>
<td>Continuing Registration Fee</td>
<td>100.00</td>
</tr>
<tr>
<td>*Undergraduate Pharmacy Student Activities (for Third, Fourth, Fifth, and Sixth Year Students)</td>
<td>50.00</td>
</tr>
<tr>
<td>*University Services Fee</td>
<td>$62.00 per credit</td>
</tr>
</tbody>
</table>

*Charged on each semester registration

### TESTING FEES

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Placement Testing (ESL)</td>
<td>$50.00</td>
</tr>
<tr>
<td>*English Language Placement Testing (ESL) is a one-time fee</td>
<td></td>
</tr>
</tbody>
</table>

### SUMMER TUITION

Summer tuition is calculated on a per credit basis. See page 30 for the rate that applies to the school in which you are enrolled.

### AUDITING A COURSE

The cost for auditing a course is the same as the per credit cost of a course.
WITHDRAWAL AND TERMINATION OF ATTENDANCE

Upon officially withdrawing from the University, a student receives remission of part of the tuition charged for the semester or session in accordance with the Tuition Remission Schedule. The amount of the remission is added to payments, and a refund is made upon request where a credit balance is created on the student’s total account.

The Effective Date of Withdrawal for determining the percent of remission is that on which the appropriate Academic Dean was notified by letter of the student’s decision to terminate attendance and requested official withdrawal. It is also the recorded date of the student’s separation from the University and regarded as the last day of attendance. A student is considered enrolled and “in attendance” until he or she acts to terminate attendance in conformity with this policy even though absences from classes were observed and recorded before the Effective Date of Withdrawal.

When a student’s attendance is involuntarily terminated in a semester because of personal disability arising from injury or illness, any remission of tuition beyond the limits prescribed by the withdrawal refund policy is subject first to the approval of the Academic Dean, then the Provost, and finally, the Executive Vice President for Management and Business.

TUITION REMISSION SCHEDULE

This schedule applies to tuition only, it does not apply to other charges, such as the University Fee, course fee, and laboratory fees, nor to the reduction of credits resulting from course withdrawals made after the Change of Schedule period.

<table>
<thead>
<tr>
<th>With the Semester</th>
<th>Percent of Remission</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Week</td>
<td>80</td>
</tr>
<tr>
<td>Second Week</td>
<td>80</td>
</tr>
<tr>
<td>Third Week</td>
<td>40</td>
</tr>
<tr>
<td>Fourth Week</td>
<td>20</td>
</tr>
<tr>
<td>After Fourth Week</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Within the Summer Session Based on a Six-Week Session Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Week</td>
</tr>
<tr>
<td>Second Week</td>
</tr>
<tr>
<td>After Second Week</td>
</tr>
</tbody>
</table>

ROOM AND BOARD

The request for on-campus residence is made on the same form used for application for admission to the University. After the student has completed the admission procedure and has paid the matriculation deposit, the residency request is referred automatically to the Director of Residence Life. The request is processed and necessary application forms are forwarded to the student.

The University requires that a prepayment of $300, which is applicable to the following semester’s room and board account, accompany all applications for room reservations or renewals. This prepayment is non-refundable.

TUITION AND FEES

Reservations are made on an annual basis—August to May. Rooms may be occupied no earlier than the first day of orientation for all freshmen and new transfer students.

Room assignments are made on a first-come, first-serve basis. Therefore, it is extremely important for the student to return his/her housing application immediately upon receipt of it. Overcrowded conditions have occurred in the past and students have been temporarily assigned three to a room or in lounges. Therefore, students returning their applications after all rooms have been assigned will be housed in temporary housing, placed on a waiting list, or not assigned a space in the residence area.

All students occupying rooms in the University residence halls are required to take a University Meal Plan. The Primary Plan billed to all students is a 14-meal per week plan. The Primary Plan is a $125 flexible spending account which can be used at Rockwell Expressway, Options, Off-Ramp, and the in-room pizza delivery program. Two additional plans are offered: 19 Meals per week, with $55.00 flexible spending and 10 Meals per week, with $215.00 flexible spending.

The University reserves the right to modify these charges if exigencies require such action.

Regular Session - Room and Board (14 meals a week)

| single for each semester | $4,729.00 |
| double for each semester | $7,341.00 |
| Summer Sessions - Room and Board (Summer '03 rates) |
| Single per day            | $289.00   |
| Double per day            | $578.00   |

ROOM AND BOARD-WITHDRAWAL AND REFUND

The Office of Residence Life Housing Agreement must be signed by the student and the University. The student is obligated to pay to the University the full room and board fees for the entire Academic Year. There will be no exceptions to this obligation except as follows:

a) If the student decides not to live in the Living-Learning Centers and so notifies the Assistant Director of Residence Life, the University will refund to the student an amount equal to seventy-five percent (75%) of the board fees, provided, however, that no board fee will be refunded if the notice is received after the middle of the semester.

b) Prior to the end of the Fall semester, students will be permitted to cancel their room reservation for the Spring semester by completing a Spring Release Form. This Spring Release Form cancellation will result in a $500.00 penalty. Spring Release Forms available in Assumption Hall must be completed prior to the end of the Fall semester.

c) If the student notifies the Assistant Director of Residence Life after classes begin that the student has decided to move out of the Living-Learning Centers or ceases to be a student of the University, the obligation to pay the room fees shall continue for the remainder of the Academic Term and the University will refund to the student an amount equal to twenty-five percent (25%) of the board fees provided, however, that no board fee will be refunded if the notice is received after the middle of the semester.

d) After the Change of Schedule, the student is considered enrolled and “in attendance”.

TUITION AND FEES

Tuition and fees for 2003 are for Summer session only. A $20.00 service charge will be assessed on render fees. It is the policy of the University to charge bad checks. It is the policy of the University to charge bad checks.

FINANCIAL MATTERS

All charges for tuition, fees, room and board, less financial assistance authorized and other charges less financial aid authorized and other charges less financial aid authorized and other charges.

BILLING PROBLEMS

Take the billing statement to the office indicated for an explanation or correction concerning these billing matters.

PRE-REGISTRATION

Students with a balance due the University for the current semester or prior terms are not permitted to pre-register for the next semester.

BAD CHECKS

It is the policy of the University to charge bad checks.

STUDENT FINANCING PROGRAM

(All prior balances must be paid in full before the student is eligible for this plan.) Duquesne University students desiring payment of their tuition and other charges for the semester by installment, contact in person the Student Finance Section at Final Registration. The Student Financing program provides financing for up to 90% of the current semester charges less financial aid authorized and other payments, to be repaid to the University in two equal installments. Interest is charged at the rate of 1/2% of each month. A delinquency charge on each monthly installment in default for a period of ten days or more will be charged an amount equal to 5% of such installment or $5.00, whichever is less, except that a minimum charge of $1.00 may be made.

CASHING CHECKS

A student may cash a check up to a maximum of $50 at the Cashier’s Office on the Ground Floor of the Administration Building between 9:00 AM and 4:00 PM, Monday through Friday, except during registration, with a validated ID Card for the current semester.

For additional information, contact TMS at 1-800-722-4867.

Tuition and fees for the Summer Session should make reservations with the Assistant Director of Residence Life three weeks prior to the opening date of your residence. A non-refundable deposit of $20 must accompany each application. After occupancy, the deposit is applied toward the room and board expenses. This deposit is not refunded if the room is not occupied. Rates shown are for 2003 summer session only.

FINANCIAL MATTERS

All charges for tuition, fees, room and board, less financial assistance authorized and other charges less financial aid authorized and other charges.

BILLING PROBLEMS

Take the billing statement to the office indicated for an explanation or correction concerning these billing matters.

PRE-REGISTRATION

Students with a balance due the University for the current semester or prior terms are not permitted to pre-register for the next semester.
A DIVISION OF STUDENT LIFE

MISSION

The mission of the Division of Student Life is to establish and maintain a total living, learning and developmental environment that will enhance students’ growth for the individual self-actualization and positive involvement in the world community.

PHILOSOPHY

Consistent with the educational philosophy of the University and the above-stated mission, the Student Life Division provides the student with opportunities to participate in a variety of experiences with fellow students, faculty members and administrators. The Student Life Staff encourages students to initiate new programs, implement change and participate in the essential processes of University governance on many levels.

ORGANIZATION

The Executive Vice President for Student Life coordinates the Departments of Athletics, Career Services, Commuter Affairs, Financial Aid, Freshman Development and Special Student Services, Greek Life, Honor Societies & Professional Organizations, Health Services, Judicial Affairs, Multicultural Affairs, Residence Life, Special Projects, Student Activities, the University Counseling Center, and the Duquesne Union. Several of these departments are briefly described below. Additional information may be obtained directly from each department through the Student Handbook and Code of Student Rights, Responsibilities, and Conduct.

ATHLETICS

The Duquesne University Department of Athletics sponsors 20 NCAA Division I sports including baseball, men’s and women’s basketball, men’s crew, men’s and women’s cross country, football (Division I-AA), men’s golf, women’s lacrosse, rifle (co-ed), men’s and women’s soccer, men’s and women’s swimming and diving, men’s and women’s tennis, women’s indoor and outdoor track, women’s volleyball, and wrestling. In addition, cheerleading, men’s crew, hockey, and men’s indoor and outdoor track are offered as club sports. Duquesne University believes in and promotes the concept of student athlete, evidenced by an Academic Support staff within the Department of Athletics. Athletic grants-in-aid are available in all varsity sports, with the exception of football.

In addition, the Department of Intramurals and Recreation offers all students the use of a weight room, cardiovascular room, racquetball courts, and various aerobics classes. Other activities in which students can participate include tennis, flag football, street hockey, basketball, softball, and soccer. Just to name a few.

OFFICE OF COMMUTER AFFAIRS

Whether living with relatives or commuting from their own apartment, the Office of Commuter Affairs offers valuable services and programs for commuter students. Assistance is available in many areas, including:

Parking and Transportation: The Office of Commuter Affairs can assist students with University parking information and in forming carpools. PAT bus schedules are available. Bus passes are sold in the Information Center of the Union.

Off-Campus Housing Information: Up-to-date listings are maintained of rooms, apartments, houses and “roommate needed” situations. Area maps and apartment directories are also available.

Commuter Message Center: If someone needs to get a message to a student who is not on campus, they may call (412) 396-6660. The message is posted outside the Office for the student to pick up.

Adult Learner Services: Services are provided for adult learners including newsletters and faculty programming.

Commuter Assistant Program: This program is a support network of upperclassmen students who serve as advisers and provide resources for new commuters. C.A.S. plan activities, provide information and supply encouragement.

Other Services Include: Commuter Update; distribution of Student Directory and Student Handbook to commuter students. The Office is located in the Duquesne Union, Room 117. Office hours are extended during the Fall and Spring semesters when the Office is open Monday through Thursday, 8:30 a.m. - 5:30 p.m. and Friday until 4:30 p.m. Further information call (412) 396-6660.

OFFICE OF STUDENT ACTIVITIES

The Office of Student Activities coordinates the programs, services and facilities of the Duquesne Union, provides programming and administrative support for all recognized student organizations, publishes the Activities Calendars, and coordinates the Duquesne University Volunteers (D.U.V.), the University’s volunteer program. The staff of this office provides services and amenities required to meet the daily needs of campus life, provides advice and assistance in which the student may request and arranges all scheduling of events in the Duquesne Union. The Duquesne Union, provides leadership training for student organization leaders and promotes and presents a series of cultural, educational, social and recreational programs in support of the mission and goals of the University.

The Duquesne Program Council is the student organization of the Duquesne Union which involves students in the process of planning and implementing various programs. The Duquesne University Volunteers is the organization which promotes all volunteer activities of Duquesne students.

OFFICE OF JUDICIAL AFFAIRS

The Office of Judicial Affairs assists students in the rights and freedom of all students while insuring that such rights and freedoms are exercised within the context of students’ responsibilities to the University community.

OFFICE OF RESIDENCE LIFE

The Office of Residence Life is committed to creating an environment in each of the five (5) Living Learning Centers that will foster the personal and academic growth of the resident student. To this end, the professional and resident assistant staff will provide the means to foster such development.

All freshmen students and sophomores with a QPA of below 2.5, except those residing with their parents or relatives, are required to live in one of Duquesne’s Living Learning Centers. All students living on-campus are further required to take a University meal plan. Housing Agreement terms are effective for the entire academic year, with room and board rates being determined on an annual basis.

Additional information regarding programs, policies and regulations for the Living Learning Centers is included in the Residence Life Handbook. The Office of Residence Life is committed to creating an environment in each of the five (5) Living Learning Centers that will foster the personal and academic growth of the resident student. To this end, the professional and resident assistant staff will provide the means to foster such development.

Please contact the Office of Freshman Development and Special Student Services at (412) 396-6657 or (412) 396-6658 for any additional information.

SERVICES FOR STUDENTS WITH DISABILITIES-SPECIAL STUDENT SERVICES

Duquesne University considers the needs of students with learning or psychological disabilities who desire special student services. Students with learning or psychological disabilities who desire special student services must present evaluations (psychological and/or neurological) that are at least three years old to the Office of Special Student Services. Students with other disabilities must submit written documentation of their disability from their physician. Documentation guidelines for all disabilities have been established by the office and are available upon request. Services can be arranged through the office on an individual basis providing the student has documentation of his/her disability.

Please contact the Office of Freshman Development and Special Student Services in Room 509 Duquesne Union or call (412) 396-6657 or (412) 396-6658 for any additional information. (Please see a more detailed description of the office in the Student Life section of the Handbook.)

OFFICE OF GREEK LIFE, HONOR SOCIETIES & PROFESSIONAL ORGANIZATIONS

The Office of Greek Life, Honor Societies, & Professional Organizations promotes student development in all phases of campus life, provides leadership training for student organizations, and seeks to involve the Greek organizations in the campus events. The Office is responsible for the organization of the Duquesne University Student Organization Program, which involves students in all aspects of planning and implementing various programs. The Office of Greek Life, Honor Societies, & Professional Organizations promotes student development in all phases of campus life, provides leadership training for student organizations, and seeks to involve the Greek organizations in the campus events. The Office is responsible for the organization of the Duquesne University Student Organization Program, which involves students in all aspects of planning and implementing various programs.

OFFICE OF FRESHMAN DEVELOPMENT AND SPECIAL STUDENT SERVICES

The Office of Freshman Development and Special Student Services serves to implement and support programs which integrate and enhance the academic, personal and social dimensions of freshmen at Duquesne University. To accomplish this, the Office of Freshman Development and Special Student Services, implements the Freshman Mentor Program and Big Brother, Big Sister Programs, assists freshmen with finding tutors when necessary, maintains a network of freshmen grades, prepares and edits the Freshman Newsletter, develops freshman leadership through the Freshman Class Advisory Committee, advises the freshman honor society, Phi Eta Sigma, and interacts with the Office of Commuter Affairs, Intramurals, and Residence Life in developing programs for freshmen.

Please contact the Office of Freshman Development and Special Student Services at (412) 396-6657 or (412) 396-6658 for any additional information.

B. PROGRAMS

COMPREHENSIVE STUDENT ADMISSION

Students pursuing undergraduate studies are assigned to a student advisor who will work with them throughout their undergraduate career at the University. The advisor is responsible for the student's academic program and personal development. This advisor will be assigned at the time of admission and will continue to work with the student until graduation. The advisor will be available to answer questions, provide guidance, and give advice on academic matters. The advisor will also assist the student in selecting courses, registering for classes, and obtaining information about resources on campus.

All students are required to meet with their advisor at least twice per semester to discuss their academic progress and future plans. This meeting will include a review of the student's academic record, a discussion of course selection and scheduling, and an evaluation of the student's academic goals and aspirations. The advisor will also provide guidance on how to make the most of their undergraduate experience at the University.

Please contact the Office of Freshman Development and Special Student Services at (412) 396-6657 or (412) 396-6658 for any additional information.

STUDENT LIFE, PROGRAMS, SERVICES, AND ORGANIZATIONS
CAREER SERVICES CENTER

Students and graduates of Duquesne University have a variety of resources available to them through the Career Services Center. These resources include career planning, job search techniques, interview and on-campus interview opportunities, and other services. The center is located in Room 308 of the Administration Building, and students can call (412) 396-6204 for more information.

HEALTH SERVICE

The Health Service provides comprehensive health care to students. The staff consists of nurses, nurses assistants, and registered nurses. The service is located on the second floor, Towers Living Learning, and is open from 8:00 AM to 4:00 PM, Monday through Friday.

The Retention Office is designed to help students who are at risk of dropping out. The office works closely with faculty and staff to identify students who may be struggling and provides support services to help them succeed. Students can contact the Retention Office at (412) 396-6661.

UNIVERSITY COUNSELING CENTER

The University Counseling Center is located on the second floor, Towers Living Learning, and is open from 8:00 AM to 4:00 PM, Monday through Friday. The center provides confidential and professional counseling services to students.

The Learning Skills Center is an ancillary academic service designed to identify commuter concerns and to provide developmental programs for the University’s large commuter population. The center is located in Room 308 of the Administration Building.

The CIA supports the University’s strong commitment to diversity and inclusion. The CIA promotes and supports events, programs, and activities which foster deeper communication, awareness and understanding among U.S. and international students at Duquesne, and providing ongoing direct service and appropriate referral services to international students and scholars on campus in a personalized and professional manner.

The OIA provides advice and support to international students and scholars on campus. Please contact the OIA at (412) 396-6661 for more information.

THE SPIRITAN DIVISION OF ACADEMIC PROGRAMS

Established in 1997, the mission of the Spiritan Division of Academic Programs is to provide a comprehensive network of services to help Division students develop the skills and academic success they need to be successful and earn a college degree.

Students are transitioned into the life of a socially matured and academically successful college student. Through a series of special programs, classes, workshops, and other experiences, they are encouraged to utilize the many collections for research or special interest.

The University Archives is located on the first floor of the Gumbe Library. Please call (412) 396-6232 for more information.

C. OTHER DEVELOPMENTAL SERVICES

OFFICE OF INTERNATIONAL AFFAIRS

The Office of International Affairs (OIA) provides services to international students and scholars pursuing undergraduate and graduate degree programs at the University. The OIA specializes in international student and scholar services, including immigration, fellowship, and visa support. The OIA is located in a pleasant, private setting on the 9th floor of Rockwell Hall.

High confidentiality standards are practiced. The OIA supports the University’s strong commitment to international education as a valued component of the overall mission of the institution.

MICHAELO P. WEBER LEARNING SKILLS CENTER

The Learning Skills Center is an ancillary academic service whose primary charge is the intellectual development and academic success of students. Services are provided in coordination with academic offices of the University.

As part of its academic assistance efforts, the Learning Skills Center delivers diagnostic and prescriptive services. Individualized developmental programs in reading, writing, mathematics, and science are offered to students who seek to upgrade their academic skills and advance their intellectual growth.

A free tutorial service provides both college and public school students with competent tutors in numerous subject areas. In addition, a comprehensive study skills program is available to enhance learning capabilities as well as to assist students experiencing academic difficulties.

Phone (412) 396-6661

THE PSYCHOLOGY CLINIC

The Psychology Clinic offers brief counseling and longer-term psychotherapy to Duquesne’s students and staff as well as to the general public. Doctoral students in clinical psychology provide all services under supervision of licensed clinical faculty.

Students pay $10 per session, and others pay similarly low fees according to income. The Clinic is located in a pleasant, private setting on the 9th floor of Rockwell Hall.

High confidentiality standards are practiced. The Clinic is open Monday through Friday, 8:00 AM to 4:00 PM, and evening hours are available. Please call (412) 396-6562 for an initial interview.

D. STUDENT GOVERNANCE

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association is designed to provide a forum for the expression of student views and interests, to maintain academic freedom and student rights, and to provide effective representation in the policy making and operations of the University. Two major functions of the SGA are to serve as student representatives on crucial University committees and to recognize and fund student organizations.

COMMUTER COUNCIL

Commute Council is a student-run governing body designed to identify commuter concerns and to provide educational, social, and service-oriented programs for the University’s commuter population.
RESIDENCE HALL ASSOCIATION
The Residence Hall Association supports Living Learning Center activities and is involved with the Office of Residence Life in developing and implementing Living Learning Center policies and procedures. All residents are automatically members of Residence Hall Association and are encouraged to attend meetings, functions, etc. sponsored by the group. It is the aim of the Residence Hall Association to serve as a link between the resident students and the administration. Aside from the council activities, representatives of the Residence Hall Association serve on university committees.

INTERFRATERNITY ASSOCIATION
The purpose of the Interfraternity Association is to develop, maintain, and support fraternity life and interfraternity relations at a high level of accomplishment. The Interfraternity Association is led by the Interfraternity Council (IFC) which serves as the governing and regulatory body for its 10 member national and local general fraternities. The IFC works to promote superior scholarship, leadership development, community service, social and moral development, and life-long friendships. It represents the men's fraternities to the administration, faculty, alumni, and student body. The IFC works with the university administration to assist in regulating the Men's Greek Activities including Rush, New Associate Member Education, Philanthropic and service events, alumni relations, Carnival, Greek Week, the Council Intramural Sports League, and positive social events. The council also serves as a forum for the airing of constructive proposals for the improvement of the fraternity system.

PANHELLENIC ASSOCIATION
The purpose of the Panhellenic Association is to develop, maintain, and support sorority life and inter-sorority relations at a high level of accomplishment. The Panhellenic Association is governed by the Panhellenic Council (PHC) which serves as a governing and regulatory body for its 9 member national and local general sororities. The PHC works to promote superior scholarship, leadership development, community service, social and moral development, and life-long friendships. It represents the women's sororities to the administration, faculty, alumnae and student body. The Panhellenic Council works with the university administration to assist in regulating the Women's Greek Activities including Rush, New Associate Member Education, Philanthropic and service events, alumnae relations, Carnival, Greek Week, and other positive social events. The council also serves as a forum for the airing of constructive proposals for the improvement of the sorority system.

E STUDENT ORGANIZATIONS

STUDENT ORGANIZATIONS

GENERAL
There are more than 120 student organizations at Duquesne. Some serve the needs of specific interest groups, others relate directly to major areas of study, and some honor academic achievement. Many are formed to meet social, service or religious needs and interests. The Office of Student Activities provides administrative and programming support for all recognized student organizations. Any student group wishing to apply for official University recognition must initiate this process through the Office of Student Activities. Recognized organizations must also annually update their registration.

HONOR SOCIETIES
These societies have as their primary purpose recognition of academic excellence and leadership achievement. There are normally cumulative grade point and leadership requirements for membership in these groups.

PROFESSIONAL AND DEPARTMENTAL ORGANIZATIONS
These professional organizations exist to provide opportunities for career development and the exchange of ideas pertinent to students' academic pursuits. With this purpose in mind, these organizations sponsor numerous programs including debates, symposiums and lectures.

DUQUESNE PROGRAM COUNCIL
The Duquesne Program Council (DPC) is the major student programming organization of the University. It provides social, recreational, educational and cultural activities for the entire University. The DPC, directed by students, is comprised of several committees which present such events as concerts, dances, art exhibits, lectures, films and ski trips. Membership is open to all students.

DUQUESNE UNIVERSITY VOLUNTEERS
The Duquesne University Volunteers is the University's volunteer program which coordinates and monitors the volunteer activities of all individual students and all student organizations. Student volunteers provide a high standard of service to the campus and local community while, at the same time, they are fulfilling the University's Mission Statement which seeks to instill "a spirit of service" in all students.

FRATERNITIES AND SORORITIES
Fraternities and Sororities are organizations composed of college men and women who have joined together to foster and promote life-long friendships, moral, ethical, and leadership development, character building, and service to others. These organizations are local, national, and international in scope. They sponsor and promote academic, service, athletic, and social events under the auspices of life-long Brotherhood and Sisterhood.

PERFORMANCE GROUPS
TAMBURITZANS
Based on the exciting traditions of Eastern Europe and neighboring cultures, the Duquesne University Tamburitzans show is a colorful extravaganza of dance, song, and music. Tamburitzans, now in its 50th season, is open to all students.

TAKING VITAL PARTS IN UNIVERSITY LIFE

STUDENT LIFE, PROGRAMS, SERVICES, AND ORGANIZATIONS

university-based performing ensemble in the United States, the Tamburitzans is named after the traditional instrument prevalent in many of the cultures which the group artistically represents. Established in 1937, the ensemble's mission is to preserve and perpetuate the cultural heritages of Eastern Europe and its neighbors through performance, while awarding scholarships to talented and deserving performers. The group travels extensively throughout the USA during its August-to-June touring season, presenting an average of 80 shows. Vacancies are filled through an annual audition process. Experience in folk art performance is helpful, but not required, performers with ballet, tap, jazz, band, orchestra, chorus, or musical theatre experience may have the skills required to qualify for a substantial scholarship award and position with this unique, award-winning ensemble. Ideally, auditionees should be made in the fall prior to general auditions, which are held in February at the Tamburitzans Administration Building, 1801 Boulevard of the Allies.

Contact the Tamburitzans for further information. Phone (412) 396-5185, fax (412) 396-5583 tamburitzans@duq.edu www.tamburitzans.duq.edu

THEATRE
The Red Masquers provide an extracurricular outlet for students who wish to participate in theatre. The organization's aim is to provide the University and its students with the educational and cultural benefits that a year-round theatre program can afford. Any Duquesne student is eligible for membership.

MEDIA ORGANIZATIONS

WIDR
WIDR is the Duquesne Student Radio. It broadcasts approximately nineteen hours per day, seven days per week during the Fall and Spring Semesters.

PUBLICATIONS

The Student Handbook contains information about the University which concerns the students. The Student Code, which is a part of The Student Handbook, is the definitive statement of standards, policies and procedures regarding students' rights and responsibilities, campus organizations, student governance, student records, student conduct and the University Judicial System. The Student Handbook is available online under Student Life Publications.

The Duquesne Duke, the University newspaper, is written and edited by students. It is printed on Thursdays during the academic year with the exception of examination periods and holidays. Membership is open to all students. The Duquesne Magazine is a literary publication which affords students the opportunity to submit writing, artwork, and photographs. It is published once a year.

Part VI:

WDUQ Radio

WDUQ 90.5 FM is Duquesne University’s public radio station, featuring in-depth NPR news and jazz. The station employs a full-time professional staff, supported by university students (in volunteer and paid positions), interns and community volunteers.

WDUQ is a full member station of National Public Radio (NPR) and an affiliate of Public Radio International (PRI). WDUQ contributes programming and news reports to these national networks, and produces nationally distributed music and information programs heard throughout the United States. The station also presents live coverage of special events and sponsors local and regional events that promote cultural and community involvement.

WDUQ reaches more than 150,000 listeners each week throughout southwestern Pennsylvania, and parts of Ohio, West Virginia and Maryland. WDUQ is the oldest public broadcasting station in Pittsburgh, on the air since 1949.

WDUQ's offices and studios are in the Des Places Language Center of Duquesne University on the Duquesne campus.
Part VII: Campus Ministry

Campus Ministry is committed to fostering the religious life and growth of all Duquesne students. Its policies and programs are oriented to furthering that growth at the personal as well as the community level. Eucharistic liturgies are celebrated daily, and the Sacrament of Reconciliation is scheduled regularly and by appointment. For all students, faculty and staff, whatever their faith, the Campus Ministers are available to help with spiritual direction, counseling, advice, or sympathetic listening. All in strict confidence. The Campus Ministry provides a listing of services of nearby worship sites, and referrals can be made to introduce the students to the religious leaders of their various faith traditions in the area. The University Chapel is open each day for private prayer and quiet meditation. It is available too, to groups for specific services of a religious nature. Prayer rooms are available in Towers and St. Ann Living/Learning Centers. In addition, there is a Muslim prayer space above the Chapel.

The Campus Ministry sees itself at the service of all in an open, unstructured, trusting relationship, and invites the participation of the entire Duquesne community in religious, social, and community activities. All are invited to stop in to offer suggestions for programs or services, or just to get acquainted with the Staff. The Campus Ministers are available at any of the following Campus Ministry locations: 102 Administration Building, the Brother Campus Ministry Center in Duquesne Towers, the Student Union and the Living/Learning Centers of St. Ann, Assumption and St. Martin.

Part VIII: University Programs and Courses

THE UNIVERSITY CORE CURRICULUM

STATEMENT OF PURPOSE

The core curriculum is a cluster of courses within Duquesne's general curriculum that focus on values central to liberal education and to the mission of the University. The purpose of the Core is threefold: Core courses encourage students to develop a universality of vision, they assist students in building a foundation for professional studies, and they encourage students to cultivate the habit of life-long learning.

Duquesne's Core courses emphasize critical thinking and effective communication. Making informed judgments and speaking and writing clearly and persuasively are the marks of an educated person. Students practice these skills not only in specific courses but also across the entire curriculum.

Duquesne's Core courses integrate fundamental themes of enduring importance: the history and cultural heritage of the West, the diversity and richness of all human cultures, the structures by which societies organize themselves, the role of science in the modern world, the relation of the arts to human experience, the process of defining personal identity and personal values. The questions which are generated through the exploration of these themes are enshrined by a tradition of philosophical and theological inquiry.

CORE COURSES

There are seven courses and two course-areas in the University Core, totaling 27 credits.

101 Thinking and Writing Across the Curriculum 3 cr
Practice in analysis and expression in many disciplines.

102 Imaginative Literature and Critical Writing 3 cr
A college-level introduction to imaginative literature and to critical techniques for interpreting imaginative literature. Thinking and Writing Across the Curriculum is a prerequisite.

121 Problem Solving with Creative Mathematics 3 cr
An exploration of mathematics as a science and an art with an emphasis on problem solving. Students may also satisfy this requirement with one of the basic Calculus courses (111 or 115). Fundamentals of Statistics 125 or Biostatistics 225.

132 Basic Philosophical Questions 3 cr
Philosophy, "the love of wisdom," is a discipline for discussing basic questions about ourselves and our world. Students read selected works by major figures throughout the history of philosophy, they are encouraged to think critically and to formulate their own answers to perennial philosophical questions.

141 Social, Political and Economic Systems 3 cr
The disciplines of Economics, Political Science, and Sociology collaborate to explore questions about equality and inequality in various societies. The course specifically addresses economic, political, and legal issues as they relate to gender, age, race, and ethnicity.

150 Shaping of the Ancient World 3 cr
The role played by Athens in the Golden Age (6th century BC) is viewed with special attention to the arts, legal, and literary masterpieces inspired by the victories and defeats experienced by Athens in that century. Examples of Greek philosophy, poetry, and tragedy will show ancient answers to questions about life, death, power, and man's place in the universe.

151 Shaping of the Modern World 3 cr
An understanding of change through time is essential to the comprehension of the world in which we live. This course integrates the 20th Century experience of the United States with that of Europe, Asia, Latin America, and Africa as it examines the forces which have produced the great changes of our century.

161 Arts and the Human Experience 3 cr
The visual and musical arts are explored in light of major styles, artists, and monuments in the arts and as components of a broader historical and cultural experience. The course draws upon the rich resources of the Pittsburgh community, such as the Carnegie, the Pittsburgh Symphony, the Pittsburgh Ballet, and the Pittsburgh Opera.

Core Science 3 cr
Students may choose one of the courses described below (171, 172, 173, 174, or 175). Each course presents a body of fundamental knowledge to provide the student with an awareness and understanding of the discipline. Students may also satisfy the Core Science requirement by one of the following courses: Biology 121 or 122, General Chemistry 121 or 122, General Physics 201 or 202.

171 Biology
Evolution, inheritance, and the interrelation of energy, life, and the physical environment provide the unifying themes of this course. Each of these is examined...
172 Chemistry
The fundamental concepts of structure, bonding, properties and chemical reactivity are presented through lecture and classroom experimentation. The chemical dimensions of selected social issues of current importance in the areas of environmental chemistry, energy technology, and food production are examined.

173 Physics
Through lecture and classroom demonstration, students investigate the fundamental notions of mechanics, motion, inertia, force, momentum, and energy. Emphasis is placed on the great Newtonian synthesis of the 17th century. With this foundation, students are prepared to move on to topics chosen from among the following: properties of matter, heat and thermodynamics, electricity and magnetism, light and modern physics. This course introduces students to the analytical processes of the scientific method and also helps them recognize applications to the physics involved in everyday life.

174 Earth Science
Introduction to Earth Science for non-science majors. Survey of the Earth in relation to its physical composition, structure, history, atmosphere and oceans. Also included is how each of these impacts humans and how humans have an influence on the processes of the Earth, its oceans, and its atmosphere.

175 Evolution of Modern Science
This course outlines the history of science from Aristotle to the present. The course will focus on the modern history of four scientific disciplines: physics, chemistry, geology, and biology, and will include computer-based online laboratory exercises to demonstrate the classical experiments that have led to our modern understanding of science. In addition to the material on science, the development of mathematics, as it has influenced the development of science, will be presented in six areas: arithmetic, Euclidean geometry, formal logic, algebra, numerical analysis, and calculus. The course will use a World Wide Web resources. No pre-requisites of science or mathematics are required.

Core Theology 3 cr
The Core Theology courses expose students to the major religious traditions of humankind. The courses examine the moral, intellectual, and cultural dimensions of these traditions. This requirement may be fulfilled by any one of the following courses: 182, 183, 184, 185, 186, 187.

182 Human Morality
An introduction to the central issues of moral theology (religious ethics), including methodological and practical concerns, with a focus on the Christian tradition but some attention to other approaches.

183 Judaism, Christianity, and Islam
A study of the beliefs and practices of these three monotheistic religions: the distinct character of each, the varieties within each religion, and the continuities and the differences among all three.

184 Introduction to the Bible
An examination of the historical, literary, and theological aspects of a select number of key biblical texts and a discussion of their contemporary relevance.

185 Religions East and West
A study of some of the world’s great religions representative of humanity’s religious experience, including: Hindu traditions, Buddhist traditions, Chinese traditions, and the Islamic path.

186 Roman Catholic Heritage
An introduction to the fundamental beliefs of Roman Catholicism and their expression in literature and the visual arts, from the Origins of Christianity to the Contemporary Era.

187 Christian Understanding of the Human Person
An investigation into the question of “What does it mean to be human?” according to Judeo-Christian teaching, including the relationship of the human person to others, the world, and the Divine as the basis for humaneness.

Note: In general, students will complete the Core requirements according to guidelines established by their respective schools and in consultation with their academic advisors.

PRE-HEALTH PROFESSIONS PROGRAM
The Pre-Health Professions Program is a University-wide program for students pursuing a career in medicine, dentistry, veterinary medicine, optometry, podiatry, or chiropractic. The program provides guidance to students in acquiring the requisite experiences and academic background for applying to health professional schools. Students in the program meet regularly with a pre-health advisor to evaluate the student’s academic progress and receive professional guidance in gaining volunteer and community service, clinical, internship and research experience.

The core courses are as follows:

- English 2 semesters
- Chemistry with laboratory 2 semesters
- Organic Chemistry with laboratory 2 semesters
- Biology with laboratory 2 semesters
- Physics with laboratory 2 semesters
- Mathematics 2 semesters

ENGLISH AS A SECOND LANGUAGE (ESL) PROGRAM
The ESL Program (ESLP) serves students accepted to degree programs or to a non-degree program of ESL study only. The ESLP offers intensive (20 hours per week) or semi-intensive (4 to 16 hours per week) programs at basic, intermediate and advanced levels. Placement tests are administered to all students (who may also earn a Certificate of Program Completion).

Qualified students may combine courses in academic degree majors with ESL study. Undergraduate degree program students earn academic credit for each program level successfully completed. The ESLP offers classes in Fall (late August to December), Spring (January to April) and Summer sessions (May to early August).

COURSE PROFILES
Level and course assignments are determined by placement tests or successful completion of Duquesne courses at prior levels.

Basic-level Courses 0-2 cr Hrs / Week
120/142 Basic ESL Grammar A/B 4
119/121 Basic ESL Speaking A/B 4
122/127 Basic ESL Reading A/B 4
123/128 Basic ESL Writing A/B 4
118/124 Basic ESL Notetaking A/B 4

Up to 20 hours of basic English for non-native speakers.

Intermediate-level Courses 0-2 Cr Hrs / Week
125 Intermediate ESL Grammar 4
126 Intermediate ESL Speaking 4
129 Intermediate ESL Notetaking 4
140 Intermediate ESL Reading 4
141 Intermediate ESL Writing 4

Up to 20 hours of intermediate English for non-native speakers.

Advanced & Special Purpose Courses 0-2 cr Hrs / Week
130 Advanced ESL Grammar 4
131 Advanced ESL Speaking 4
132 Advanced ESL Reading-A 4
133 Advanced ESL Writing 4
134 Advanced Notetaking 4
Up to 20 hours of advanced English for non-native speakers

Special Purpose Courses Var Hrs /Week
135 Special Topics - ITA Seminar 0-3 cr
A multi-skills course for international teaching assistants

143 ESL Graduate Research Paper
A course in writing academic English for graduate students

144 Advanced ESL Reading-B
Advanced English reading for non-native speakers preparing for CORE 101 Thinking and Writing

145 ESL Computer Skills
Computer literacy for beginners

146 TOEFL Preparation
Strategies and practice for the TOEFL

147 ESL Term Paper
Advanced English research writing for non-native speakers preparing for CORE 101 Thinking and Writing

148 ESL Academic Discourse
A multi-skills course in discourse analysis for graduate students

CORE 101 Thinking and Writing 3 cr
The University-wide CORE 101 composition course in an ESL context

CORE 102 Imaginative Literature and Critical Thinking 3 cr
The University-wide CORE 102 literature course in an ESL context

MASTERS DEGREE OF FORENSIC SCIENCE & LAW PROGRAM

The Masters in Forensic Sciences and Law Program is designed to provide the education and training for students who are planning a career as a scientist, consultant or administrator in the forensic sciences. This exciting five-year Program of vigorous study is open to graduating high school seniors who have demonstrated an interest in the sciences and their application in the context of criminal or civil law. The Program is unique in that the Faculty includes professors from the Natural Sciences, Forensic Sciences, and the Law School. It is a multi-disciplinary program of study that explores the promise of what science brings to our pursuit of the truth. The Program en- genders in its students, an appreciation of the need to expand understanding of forensic science through the integration of the skills of the scientist and those who would apply the sciences in judicial proceedings. The role of the forensic scientist is clear. This professional must be highly skilled in applying the principles and techniques of the physical and natural sciences to the analysis of many types of evidence. It is also essential that this individual understands the legal framework in which the sciences are being utilized. The five year curriculum features basics sciences in the first two years with a Forensic course in the second semester of the freshman year. In the third year the science courses are designed to introduce forensic based studies. The fourth year of the curriculum continues forensic science courses with the addition of pertinent law classes. The fifth year includes classes concentrating on various disciplines within the Forensic Sciences. Practicums and a variety of internships will be available to students in the fourth and fifth years of study.

The Masters in Forensic Science and Law Program is closely associated with the Cyril H. Wecht Institute of Forensic Science and The Law. The Institute is housed at the Duquesne University School of Law and has its Advisory Board internationally renowned academicians, scientists and professionals. Serving on the board with Dr. Cyril Wecht are Dr. Henry Lee, Dr. Michael Baden, Dr. Michael Webster, Dr. Victor Weisb, Attorneys John Crochan, F. Lee Bailey, Harry Liman, Barry C. Scheck, James E. Starrs among others.

For more information, please call the Admissions Office at 1-800-456-0590.
Requirements

Liberal Arts electives
- History/Economics 3 cr
- Language proficiency at the 102 level

Bachelor of Science

Bachelor of Arts or B.S. degree are required to complete a University Core Curriculum, consisting of 27 credits, for graduation.

In addition to the University Core, students in the College are required to fulfill the following area requirements for graduation.

Bachelor of Arts
- Modern or Classical Language proficiency at the 102 level
- Math/Science (mathematics, computer science, biology, chemistry, physics) 3 cr
- Political Science/Sociology/Psychology (two disciplines must be represented) 6 cr
- History/Literature 6 cr
- Philosophy/Theology 6 cr
- Communication 3 cr

Bachelor of Science
- Modern or Classical Language proficiency at the 102 level
- Literature 3 cr
- Political Science/Psychology/Sociology 3 cr
- Oral Communication 3 cr
- Philosophy 3 cr

Liberal Arts electives
- (art history, classics, communication, economics, English, foreign language, history, philosophy, political science, psychology, sociology, theology) 12 cr

Courses taken in major or minor programs may also be used to satisfy the College General Requirements.

COLLEGE ACADEMIC POLICIES

Effective Catalog

The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the College. The McAnulty College and Graduate School of Liberal Arts reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled, students should consult with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective programs.

Academic Load

While a 12-credit schedule in a regular semester is considered full-time study, students may normally carry five courses (15-17 credits) in one semester. Students on academic probation may not take more than 15 credits.

Academic credits for non-native speakers of English enrolled in degree programs are determined in accordance with the University's English Language Proficiency Requirements in consultation with Duquesne University English as a Second Language Program advisement.

Residence Requirement

The last 30 credits must be taken in residence at the University.

Limits on Inter-School Electives

Except for those students who choose to complete an inter-school program or joint degree program, a maximum of 12 credits in courses outside of the College of Liberal Arts may be applied to the B.A. or B.S. degree.

Major/Minor in Same Department

A student may not major and minor in the same department, with the exception of language majors, who may minor in a second language, and majors in computer science or mathematics, who may major or minor in the companion discipline.

Sequential Courses

Sequential courses must be taken in proper sequence. Credit will not be given for a prerequisite course if courses for which it is prerequisite already have been taken.

Transfer Credits from Junior or Community Colleges

A maximum of 60 academically acceptable credits from accredited junior or community colleges may be transferred. If a student has attended one or more colleges preceding a community or junior college, the total number of academically acceptable credit is still limited to 60.

Temporary Transfers

No course taken by a student in the College as a Temporary Transfer at another institution may count toward a College degree unless approved by the Dean.

CLEP and Advanced Placement

See page 9

THE McANULTY COLLEGE OF LIBERAL ARTS

University-Level Courses Taken While in High School

University-level courses taken by entering freshmen students while in high school will be evaluated for credit if the following criteria have been met:

- The courses are recorded on an official transcript from an accredited institution of higher learning.
- The grades are C or better.

The student has completed one semester at Duquesne with a C+ average, or better.

SPECIAL PROGRAMS

MINOR IN WOMEN'S AND GENDER STUDIES

The Women’s and Gender Studies minor is an interdisciplinary program that is under the direction of the Department of Feminist Studies.

The program is open to all students who wish to complete a minor in women’s and gender studies.

CERTIFICATE IN BUSINESS

This program enables students to preserve the benefits of a liberal education while also acquiring business skills.

The program consists of 4 prerequisite courses (12-14 credits) in the College of Liberal Arts and 8 courses (24 credits) in the School of Business Administration.

Further information may be obtained from the Advisement Office in the College of Liberal Arts or the School of Business Administration office.

OTHER CERTIFICATE PROGRAMS

Certificate programs are also available in Computer Science (Department of Mathematics and Computer Science), Corporate Communication and Professional Communication Skills (Department of Communication), and Gerontology (Department of Sociology).

Several of these are offered in conjunction with the School of Leadership and Professional Advancement.

Further information may be obtained from appropriate department or from the SLPA Office.

PRE-LAW

Students who intend to prepare for a career in law may select any subject area for the undergraduate major. In consultation with the Pre-Law advisor, the student will be expected to meet degree requirements in the major department, as well as admission requirements of the law school of their choice.

BACHELOR OF ARTS — LIBERAL ARTS

This program is designed for those students who prefer to choose a formal major or minor offered in a traditional discipline. All requirements other than the major and minor must be completed.

Students must select one area of concentration: Humanities, Social Sciences, or Business. A concentration requires a minimum of 30 credit hours and a maximum of 39 credit hours.

Further information is available in the Dean’s Office.

DUAL DEGREE PROGRAMS

Dual degree programs are available with the School of Education (Classics, Communication, English, and Mathematics) and the A. J. Palumbo School of Business Administration. Students complete the University Core, as well as the general requirements of each school. For specific information, students should consult with their academic advisor.

JOINT B.A./M.B.A. PROGRAM

The College of Liberal Arts and the Graduate School of Business Administration offer a joint program that allows students in the College of Liberal Arts to earn a Bachelor of Arts Degree (B.A.) and a Master of Business Administration (M.B.A.) in five years. For more information, students should consult with their academic advisor.

B.A./M.A. IN SOCIAL AND PUBLIC POLICY

Open to all majors who wish to complete a graduate degree in Social and Public Policy. Information is available from academic advisors and the Director of the Graduate Center for Social and Public Policy.

BACHELOR/PROFESSIONAL SCHOOL

A student who has completed 90 credits with a 3.5 overall average and satisfied all undergraduate curriculum requirements may apply for the bachelor’s degree after the successful completion of the first year of professional work in an accredited medical or law school. Further information is available from the Dean’s Office.

SECOND BACHELOR'S DEGREE

A student who has received a bachelor’s degree may become eligible for a second bachelor’s degree by earning an additional 30 semester hours in residence in the College of Liberal Arts and by meeting all departmental and College requirements if not already satisfied. The additional 30 credits must be completed at the University and may not be taken through cross-registration. Further information is available from the Dean’s Office.
Course Descriptions

ART HISTORY

Director
Madeline C. Archer, Ph D

Survey and period courses in the history of art are offered by the Art History program of the History Department to introduce the concepts of art history to those who wish to extend their visual perceptual awareness and to understand the role of the visual arts in culture. Qualified students may take additional upper division art history courses offered at member colleges of the Pittsburgh Council on Higher Education. In addition to personal enrichment and heightened awareness of man’s will to create visual forms, the study of art history can lead to careers in teaching, publishing, museology, historic preservation, urban redeveloping, appraising, and consulting.

REQUIREMENTS FOR THE MAJOR

30 credits, including History 113, 114, Art History 111 and 112, and a Senior Directed Readings course. Of the fifteen remaining credits, at least nine must be taken in Art History courses above the 100 level.

REQUIREMENTS FOR THE MINOR

The minor consists of 15 credits, none of which must be above the 100 level.

111 History of Art
Ancient to Medieval World 3 cr
A chronologically oriented, detailed presentation of the history of Western art. This survey deals with Near Eastern, Greek, Roman, Early Christian and Medieval art (Can be elected to fulfill the history/literature requirement.)

112 History of Art
Renaissance to Modern World 3 cr
A continuation of 111 Surveys Renaissance, Baroque and Modern art in Western Europe. (Can be elected to fulfill the history/literature requirement.)

175 Introduction to Asian Art 3 cr
A survey of the art and archaeology of China, Japan, Korea and India with an emphasis on the art's historical and social context.

210 American Art 3 cr
An overview of American architecture, painting, sculpture and decorative arts.

220 History of Photography 3 cr
A survey of photographic developments from the early 19th Century to the present. Emphasis is upon the United States and upon the interaction of and confrontation between artists and photographers.

312 Late Medieval Art 3 cr
Western European Art from the 11th to the 14th Century. Focus is upon the development of stone vaulting systems, monumental architectural sculpture, stained glass, fresco and panel painting, and illuminated manuscripts in England, France, Italy and Germany.

321 15th Century Renaissance Art 3 cr
An investigation of the Renaissance spirit of the 15th century. Concentration is upon attitudes of man, nature, and social structure, and to materials, techniques, pictorial representation and iconography.

331 Art of the Nineteenth Century 3 cr
An assessment of the major movements of the 19th century in Europe and America, with special emphasis on the social, political and economic aspects that determined Modernism in Europe from 1789 to 1890.

332 Art of the Twentieth Century 3 cr
Examination of the major American and European artists and movements of the early 20th century. Beginning with the work of Cézanne and his impact upon the formation of Cubism and Futurism, the contradictions and parallels in the various avant-garde practices from 1905-1945 are assessed and evaluated.

370, 371, 372, 373, 375 Special Studies in Art History 3 cr
An occasional course in this series is offered when special interests of students and faculty can be served. Courses offered include The Image of Women in Art, Picasso, Impressionism, Egyptian Art, and Post Impressionism.

374 Michelangelo
His Art and His World 3 cr
This course examines the genius of Michelangelo in the context of the artistic and cultural forces which combined to create the Renaissance.

376 Contemporary Art 3 cr
A study of the neo-avant-garde from 1945 to the present in the major European art centers and in America. The reception of the various modernist movements of contemporary art are examined in the context of social and cultural changes in the 20th century.

398 Art and Society 3 cr
This course explores the ways that social and political conditions and demands affect artists' aesthetic choices. Although many of the examples discussed in class are drawn from the visual arts, other art forms such as literature, drama, music and dance are included as appropriate. The class will examine thematic topics through history such as art and social protest, art in the service of governments, and commercial art. It also looks at issues of controversy in contemporary art worlds.

431 Direct Readings 1-3 cr
Permission of Department.

441 American Painting and Sculpture 3 cr

442 American Architecture 3 cr
Construction, style, building types, and concepts of city planning in American architecture from the 17th century to the present. The social and political forces affecting style are emphasized. The course also includes an introduction to the theory and practice of historic preservation.

443 American Decorative Arts 3 cr
Decorative arts from the Pilgrims to the Bauhaus are examined in context historical, formal, technological, and cultural Field trips to Carnegie Institute and other area collections are scheduled.

478 Internship 3 cr
Practical experience in art related areas introduces the student to the many opportunities in the art field. Prerequisite: Permission of the Art History faculty and completion of 15 Art History credits.

DEPARTMENT OF CLASSICS

Chair
Lawrence E. Gachas, Ph D

The study of Classics is a unique discipline. It is not the study of language or literature alone. It is rather the investigation of one of the world's unexpired civilizations, the Graeco-Roman world. As such, it offers the student insight into the broadest aspects of human existence set in perspective distant enough from one's own to expand significantly the understanding and appreciation of humanity's aspirations, failures, and occasional triumphs.

REQUIREMENTS FOR THE MAJORS

The Department offers four major programs: Classical Latin, Classical Greek, Classical Languages (knowledge in both Latin and Greek required), and Classical Civilization (no knowledge of Greek/Latin required). Credits applied to any major must be at the 200 level or above.

1) The Classical Latin major requires at least eighteen credits in Latin as well as six credits in ancient archaeology, ancient history, or ancient literature courses in English.

2) The Classical Greek major requires at least eighteen credits in Greek as well as six credits in ancient archaeology, ancient history, or ancient literature courses in English.

3) The Classical Languages major requires at least twenty-four credits in Latin and Greek in addition to six credits of ancient archaeology, ancient history, or ancient literature courses in English. The Survey of Sanskrit Literature 211-212 may be substituted for the credits of either Latin or Greek.

4) The Classical Civilization major is an individually designed program of twenty-four credits of ancient literature, history, art, and archaeology. Students majoring in Classical Civilization create programs with the close advice and approval of the Classics Department to fit their backgrounds, interests, and career objectives. Majors should formulate programs with balanced history and literature components. They are strongly encouraged to fulfill the College language requirement in either Latin or Greek. All courses in Greek or Latin at the 200 level or above apply to the Classical Civilization Major.

REQUIREMENTS FOR THE MINORS

A minor is a minimum of 12 credits above the 100 level. The Department offers a minor in Latin, a minor in Greek, and a minor in Classical Civilization with concentration in Greek Civilization, Roman Civilization, Archaeology, Ancient History, and Ancient Art and Literature with approval of the Department and advisors.

ORIGINAL LANGUAGE COURSES

101, 102 Basic Latin I and II 4 cr each
The fundamentals of Latin grammar and syntax with exercises in translation.

103, 104 Basic Greek I and II 4 cr each
The fundamentals of Greek grammar and syntax with exercises in translation.

111, 112 Basic Sanskrit 3 cr each
The fundamentals of Sanskrit grammar and syntax with exercises in translation.

201, 202 Introduction to Latin Readings I and II 3 cr each
Selections of major Latin author(s).
**CLASSICS COURSES IN ENGLISH**

(NO GREEK OR LATIN REQUIRED)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>121 General Etymology 3 cr  A study of Greek and Latin roots to facilitate the comprehension of English</td>
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<tr>
<td>122 Etymology of Scientific Terms 3 cr  Introduction to Greek and Latin elements of scientific terminology</td>
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<tr>
<td>123 Classical Mythology 3 cr  The major myths of Greece and Rome with attention to contemporary interpretations and the influence on art and literature</td>
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<tr>
<td>230 Ancient Theatre 3 cr  An examination of the origins and development of ancient tragedy and comedy</td>
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<tr>
<td>231 Ancient Epic 3 cr  A study of ancient epic literature with particular attention to the techniques of oral and literary composition</td>
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<tr>
<td>223 Contemporary Literature and Classics 3 cr  An investigation of the influence of ancient myth on 20th century French, German, Italian, English, and American literature</td>
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<tr>
<td>222 Ancient Satire 3 cr  Investigation of the satirical element with reference to the writings of Lucian, Lucretius, Horace, Persius, Martial, and Juvenal</td>
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<tr>
<td>242 Ancient Law 3 cr  A survey including the contributions of the Greeks and the Romans to the development of law</td>
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<tr>
<td>244 History of Ancient Medicine 3 cr  Examination of the most significant medical theories and practices in the period from the Egyptian temple physicians to the doctors of the Roman Empire Special attention will be given to Hippocrates and Galen</td>
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<tr>
<td>245 Greek History 3 cr  Greek history and culture from earliest times up to the death of Alexander of Macedon</td>
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<tr>
<td>246 Hellenistic History 3 cr  Mediterranean history from the death of Alexander until the accession of Octavian and the establishment of the Roman Principate</td>
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**DEPARTMENT OF COMMUNICATION & RHETORICAL STUDIES**

Chapperson
Ronald C. Arnett, Ph.D.

**DEFINITION OF THE DISCIPLINE**

Communication is both an ancient and extraordinarily contemporary discipline—from its origins in classical Greek culture to what has been called the “Communication Century.” It is a practical liberal art for leadership in professions and communities.

Communication in written and oral form helps us know, establish, and clarify belief, and act upon the environment to bring about change or to reinforce stability in communication contexts ranging across interpersonal, organizational, intercultural, advanced technological and media environments. The comprehensive nature of our communication program introduces the student to corporate communication (profit and not-for-profit), media, journalism, public relations, advertising, marketing, and management career options.

The MARC Center for Excellence, located on the third floor of the McAnulty College and Graduate School of Liberal Arts, serves as the focal point for departmental activities. The departmental resources include classroom space for courses dealing with rhetorical and public communication issues, three writing/word processing computer laboratories and teleconferencing equipment. Additionally, the Des Places Language Center houses an instructional laboratory, a television production studio, the studios of public radio station WDUQ, and a Debate/Civic Argumentation Center.

**DEPARTMENT OBJECTIVES**

**Majors** Our department is unique, a leader in a national trend toward comprehensive communication departments. All areas of communication are represented within one department. Communication ethics is the departmental keynote. The Department of Communication & Rhetorical Studies fosters an educational environment that invites innovation, diversity, resilience and moral values in a changing world.

The Department of Communication & Rhetorical Studies consists of five different academic majors with areas of emphasis or concentration: (1) Major in Communication Studies with emphases in Corporate Communication/Intercultural Public Relations, Information Management in Organizations, Integrated Marketing Communication, Management Communication, Media Organizations, Rhetoric and Argumentation, and a Self-Designed Program; (2) Major in Media Communication with concentrations in Corporate Media Design, Media Management, Media Marketing, Media Writing and Production, Rhetoric of Mass Media, and a Self-Designed Program; (3) Major in Journalism with emphases in Advertising, Broadcast Journalism, News Production and...
Management, Online Journalism, Print Journalism, and Public Relations. This comprehensive communication department provides students with a wide array of course options taught by dedicated teachers/scholars.

Practical Experience

An important characteristic of the Duquesne communication program is the quality of internship opportunities. Nearly all jobs require experience. We have more than 250 internship sponsors in the Pittsburgh area alone. We also place students in internships from New York to Los Angeles. We employ our own internship director, reflecting our commitment to internship experience and introduction to professional challenges.

In addition to a comprehensive curriculum and extensive internship program, we have significant on-campus organizations, such as a student newspaper and radio station that provide excellent opportunities for learning, including production experiences for the University television station and our public radio station (WDUQ).

REQUIREMENTS FOR THE MAJOR

A minimum of 30 credits in Communication is required. (To encourage a broad liberal education, the maximum allowable credits in the department is 45.) Students design, in consultation with their advisors, a Plan of Study that is coherent and balanced. "Balance" is achieved by taking a range of courses representing different perspectives, levels, and types in order to facilitate this goal, five core courses are required of all majors.

COMM 201  Human Communication & Society 5 credits
COMM 210  Mass Communication & Society 3 credits
COMM 301W  History of Communication 4 credits
COMM 407  Intercultural Communication 3 credits
COMM 494W  Communication Ethics 3 credits

SPECIFIC REQUIREMENTS BY DEGREE

I Major in Communication Studies

A Five core courses 15 hours
B Communication Studies Requirements 6 hours
1) 103 Introduction to Interpersonal Communication OR 454W Interpersonal Communication
2) One of the following courses 3 hours
102 Public Speaking
304W Persuasion
333 Advertising & PR Campaigns

II Major in Media Communication

A Five core courses 15 hours
B Media Communication Requirements 3 hours
111 Introduction to Media Arts
C Specialization dependent on advisement 12 hours
Corporate Media Design
Media Management
Media Marketing
Media Writing and Production
Rhetoric of Mass Media
Self-Designed Program

We also offer a program that allows you to earn both a Bachelor's and Master's degree in five years. See the Director of Undergraduate Studies.

III Major in Journalism

A Five core courses 15 hours
B Journalism Requirements 9 hours
271W News Writing and Reporting I (with 177 Language for Journalists)
371W News Writing and Reporting II
375W Editing for Print
C Specialization dependent on advisement 6 hours
Advertising
Broadcast Journalism
News Production and Management
Online Journalism
Print Journalism
Public Relations

Requirements for the Minor in Communication Studies, Media Communication or Journalism

Required 18 hours minimum
COMM 494W Communication Ethics (3 hours)
Two of the following courses (6 hours)
COMM 201  Human Communication & Society 3 credits
COMM 210  Mass Communication & Society 3 credits
COMM 301W  History of Communication 3 credits
COMM 407  Intercultural Communication 3 credits
Minor Concentration (9 hours)
Communication Studies
Media Communication
Journalism

COURSE DESCRIPTIONS

The (30/24) Double Major Options

Students can double major in Communication & Rhetorical Studies and English. The first selected major requires 30 credits and the second 24 credits.

UNDERGRADUATE CURRICULUM

101 Scientific Presentation & Writing 3 credits
This course will allow students to sharpen their presentational skills through instruction in the art of rhetoric as applied to science. Speaking, writing, and multimedia skills will be taught through several projects designed to cultivate greater eloquence for communicating scientific ideas.

102 Public Speaking 3 credits
Develops communicative skills necessary to analyze verbal discourse and to perform effectively in public speaking situations that confront the educated person.

103 Introduction to Interpersonal Communication 3 credits
Familiarizes students with equipment applications and technology, and provides basic hands-on experience in media production.

111 Introduction to Media Arts 3 credits
Introduces students to the use of photography as a medium of communication. Teaches the fundamental aspects of play production, directing, and printing.

177 Language for Journalists 0 credits
Teaches the basic rules of English grammar and provides an understanding of the language used in journalism.

182 Photomedia & Digital Imaging (majors only) 3 credits
Introduces students to the use of photography as a medium of communication. Teaches the fundamentals of camera work, light, filters, film development, and printing.

190 Introduction to Theater Arts 3 credits
Dramatic criticism and theater history are combined with the pragmatic considerations of play production and performance.

201 Human Communication and Society (Core Requirement) 3 credits
Examines how people influence, and are influenced by, institutions, groups, and other individuals.

202 Business & Professional Communication 3 credits
Focuses on one-to-one, group, and individual communication in business, government, industrial, and non-profit or service organizations.

203W Communication and Professional Civility 3 credits
Develops communication skills in group and organizational relationships.

204 Professional Communication in Integrated Marketing 3 credits
This course integrates writing, basic oral communication skills, and presentation technology skills within a professional communication context. Professional assignments in case studies guide instruction.

210 Mass Communication and Society (Core Requirement) 3 credits
Explores the social impact of mass communication through considerations of the (1) functions and uses of all forms of mass communication, (2) socio-political and cultural context of media institutions, delivery systems, technology and diffusion, (3) influence of media content on social constructions of reality, and (4) major theories and research through which we attempt to understand this impact.

214 Introduction to Debate 3 credits
Outlines how to develop an argument in opposition to a given position.

215W Media Design and Scriptwriting 3 credits
Introduces the theory, process, and techniques of designing and writing for corporate media, employee communication, training, and marketing promotion.

240 Video Production Studio 3 credits
Introduces fundamentals of "live" television studio production techniques, coupling basic technical and aesthetic considerations.

251 News Analysis 3 credits
Investigates current issues and the world's trouble spots considering histories, economies, ethnic differences and enmities, religious differences, and political systems.
DEPARTMENT OF COMMUNICATION

COURSE DESCRIPTIONS

271W News Writing & Reporting I 3 cr
Teaches the fundamentals of news reporting and writing, including instruction on how to conduct interviews, discover and organize material, and meet deadlines

301W History of Communication (Core Requirement) 3 cr
Surveys the ancient traditions of rhetoric and public communication through the use of mediated and mass delivery systems

304W Persuasion 3 cr
Examines theory and practice of the influence of beliefs, attitudes, and behaviors

332 Technical & Integrated Marketing Communication 3 cr
This course examines the use of basic technology in integrated marketing communication. Microsoft Office Suite guides application and marketing projects

353W News Writing & Reporting II 3 cr
Teaches advanced writing of news stories, such as business, government, and court stories, and introduces students to in-depth, analytical coverage of public issues. Prerequisite COMM 271W

371W News Writing & Reporting III 3 cr
Focuses on American literary journalism and the many writers who traverse fiction and lyrical journalism. Looks at writers from other countries

375W Editing for Print 3 cr
Teaches editing and presentation of the written word for the print news media (including electronic editions) in a lecture-lab course. Pre-requisites COMM 271W and 371W

401W Arguementation and Debate 3 cr
Applies the principles and methods of critical deliberation to a significant contemporary social issue. Emphasizes advocating, defending, and refuting a proposition of policy

404 Intercultural Communication Perspectives 3 cr
This course will provide a foundation for your understanding of and improvement in intercultural communication

405 Multimedia Advertising & Public Relations 3 cr
Introduces students to the use of the World Wide Web in advertising and PR strategies and teaches the techniques for the development of commercial advertising sites and public relations vehicles

407 Intercultural Communication (Core Requirement) 3 cr
Intercultural communication exposes the student to the importance of communication among and between politically, culturally, and ethnically diverse people as a bridge to understanding in an increasingly multicultural world

409 International Communication 3 cr
An overview and analysis of international communication systems and processes, both human and mediated. Particular emphasis on communication within and between nation states. Class may require an international travel experience at an additional cost. Instructor permission required

411W Rhetorical Criticism 3 cr
Examines critical methods and approaches to the study and analysis of rhetorical acts, movements, and speeches

412 Literary Journalism 3 cr
Focuses on American literary journalism and the many writers who traverse fiction and lyrical journalism. Looks at writers from other countries

413 Electronic Communication in Organizations 3 cr
Provides an opportunity for research, discussion, and debate on the application of electronic communication technologies in business and industry

414 Rhetoric, Religion, and Society 3 cr
Introduces how the rhetoric of religious symbols influences and enriches our daily living

416 World Wide Web Publishing 3 cr
Familiarizes students with digital on-line publication applications and technology, and provides basic hands-on experience in HTML markup language, audio and video formats for the WWW, digitalizing images from various sources and basic web server production

417 Multinational Communication 3 cr
Focuses on the similarities and differences in the way people from different nations think, act and negotiate

418W Conflict Management in Organizations 3 cr
Examines the role of communication in managing and regulating interpersonal and organizational conflict

419 Mass Communication & Everyday Life 3 cr
Examines theories and research in the field of mass media (notably television) and society

421 Communication and Gender 3 cr
Examines research of differences in men's and women's communication styles in a variety of contexts, including personal, social, and work relationships

422 Evidence 3 cr
Teaches students exposition, discussion, persuasion, and argumentation to support assertions with evidence and defend judgments with probable cause in the many aspects of public communication

427 Communication Management 3 cr
Examines the role of communication in management

428 Visual Communication 3 cr
Introduces students to the theories of visual perception, graphic communication and their practical application to the production of visual communication

429 Advertising Production 3 cr
Focuses on applying theories of sales and marketing to print media and electronically delivered media

430 Public Relations Practices 3 cr
Provides students with the opportunity to develop writing skills for various public relations audiences, including the media

431 Computer Graphic Design 3 cr
Uses computer-based desktop-publishing software to create various forms of visual communication while weaving the theories of page design, color and iconic symbolism into overall class understanding

432 Media Production & Graphic Design 3 cr
Examines the print communication of business, industry, professional, and non-profit organizations. Teaches the writing, designing, and editing of brochures, newsletters, annual reports, and other internal and external publications

433 Advertising Practices 3 cr
Teaches copy writing and design of a marketing plan for consumer advertising

434 Media and Sports 3 cr
Studies and analyzes the relationship between sports and media entities and industries

435 Media Sports Relations 3 cr
Examines and applies public relations, publicity, media coordination, and event organization and management skills necessary for success in the sports industry

436 Integrated Marketing Communication 3 cr
Covers the principles and practices of marketing communication. Emphasizes promotion area of the marketing mix including advertising, sales promotion, public relations, and personal selling

437 Media Sales 3 cr
Explains the multifaceted dimension of sales within contemporary business environments with special emphasis on the tools for media sales
440 Communication Ethics and Technology 3 cr
Examines the implications of technology for communication ethics. Technology's impact on interpersonal, organizational, and public communication is addressed.

454W Interpersonal Communication 3 cr
Examines communication between individuals in the context of a variety of human relationships.

455 Small Group & Team Communication 3 cr
Examines communication processes in small groups. Includes discussion of group formation, structure, decision-making, errors in decision-making, interaction models, conflict, and methods of doing research in and about small groups.

456W Organizational Communication 3 cr
Investigates the scope and function of the communication process in organizations in order to provide students with an understanding of the concepts and theories.

457 Communication, Science, and Revolution 3 cr
Examines how communicative beliefs built upon assumptions common to science and revolution influenced the "modern" world's understanding of communication.

458 Communication & Popular Culture 3 cr
Examines how the triumph of beliefs dominated by "imagination" over beliefs dominated by "science" has changed our understanding of communication. Covers the rhetorical-communication theories of the Sophists, Plato, Aristotle, Bacon, Ramus, Burke, Perelman, Ong, and Hudson.

459 Philosophy of Communication 3 cr
Explores the assumptions and presuppositions about communication found in philosophical studies of communication. Addresses such topics as meaning, truth, interpretation, representation, and speech arts.

461 Rhetorical Theory 3 cr
Provides a theoretical introduction to classical and modern rhetorical principles. Student papers focus on theoretical summaries of rhetorical scholarship.

467 Advanced Writing for Radio & Television 3 cr
Teaches news writing for radio and television in a lecture-laboratory course.

471 Citizen Journalism Reporting 3 cr
Teaches interpretive reporting of urban affairs in a lecture-laboratory course.

472 Writing Editorials, Critiques & Reviews 3 cr
Examines the basic principles of reviewing art forms and writing thoughtful, informative editorials on local, national, and world affairs.

473 Feature Writing 3 cr
Teaches feature article writing for the general and specialized print publication. Includes writing for internal and external corporate publications as well as query writing and marketing for the free lance writer and feature writing for the print news reporter.

474 International Mass Communication 3 cr
Studies world news systems and analyzes their roles as instruments of world understanding.

475 Communication Research Methods 3 cr
Provides training in gathering and analyzing data relevant to communication phenomena.

476W Media Law and Regulation 3 cr
Examines the legal rights, privileges, ethics and responsibilities of the mass media electronic and print.

480 Practicum in Journalism 1-3 cr
Conducts formal critiques of the Duquesne Duke and other college media. Designed for all persons working for a college newspaper.

481 Practicum in Debate/Civic Argumentation 1-3 cr
 Uses meeting times for critiques of practice performances, sharing of evidence, construction and analysis of arguments and interpretations. Designed for all persons on the University Debate Team.

482 Practicum in College Radio 1-3 cr
Conducts formal critiques of WDRS and related college media. Designed for all persons working for a college radio station.

484 Health Communication 3 cr
Examines communication theory and research as it relates to the health care context.

490 Special Topics--Communication 3 cr
Check semester class offerings for special classes offered.

491 Media Information & Technology 3 cr
Examines societal impact and the political economy of information and technological diffusion.

492 Seminar Current Issues in Communication 3 cr
Discusses professional problems and advancements in the field of Communication.

494W Communication Ethics (Core requirement) 3 cr
Explores theoretical and practical issues in the explanation of ethical options and decisions in relational, organizational, and media contexts.

496 Directed Readings 1-6 cr
Offers the opportunity for students and faculty to conduct in-depth study of a topic not covered, or covered only briefly, in other departmental courses.

497 Special Projects 1-6 cr
Offers the opportunity for students to prepare print or electronic products (e.g., brochures, slides shows, video programs, etc.) commissioned by University or community organizations.

498 Internship 1-6 cr
Provides a supervised observation/experience program of study (assignment and performance) in areas such as media, marketing, editorial, human resources, and public relations. Most placements are in the Pittsburgh/Western Pennsylvania area.

499 Directed Studies 1-6 cr
Offers the opportunity for students and faculty to conduct in-depth study of a topic not covered, or covered only briefly, in other departmental courses.

COMPUTER SCIENCE
See Department of Mathematics and Computer Science.

ECONOMICS
Economics studies how people make choices when faced with scarcity and how societies distribute scarce resources such as land, labor, raw materials and machinery to produce goods and services. Economics provides a logical way of looking at problems and is applicable to a wide variety of topics from making business decisions to understanding challenging issues facing society.

The economics major concentrates on building economic models to make predictions about the changing environment. Business economists provide critical insight and in-depth expertise to help people understand the economics of their field and make the best decisions possible.

As a discipline, economics prepares students for many professional careers since it can be applied to a wide range of real-world problems. The flexibility of this preparation can make the student more adaptable to changing opportunities after graduation and provides excellent preparation for graduate studies in a variety of disciplines.

Students in the economics major choose to follow either the Public Policy or Business Economics track.

Public Policy: Local, state, and federal government agencies employ 40 percent of non-academic economists. These economists are involved with assessing the economic health of the US or other economies and estimating the economic impact of changes in public policy. The Public Policy Track prepares students to take on these roles at any level of government or for policy research work in the private sector. The track also provides excellent preparation for graduate studies in public policy, public health, public administration, law, and a variety of other fields.

Business Economics: The primary role of the business economist is to help firms understand and adapt to the changing economic environment. Business economists analyze the market environment, forecast future economic conditions, provide critical insights and information in planning and budgeting decisions, and apply economic concepts to solve specific problems in the firm, such as pricing, production, and input utilization. The courses in the Business Economics Track prepare students to take on these roles in the private sector, nonprofit organizations, and consulting firms. The track would also provide excellent preparation for graduate school in business (MBA) or other areas.

The program culminates in the Economics Senior Seminar, through which each student completes an independent research paper under the direction of a faculty member.

The required coursework in these programs exceeds the minimum requirements for employment as a bachelor's degree economist with the US Federal government.

REQUIREMENTS FOR A MAJOR
The BA in economics requires a minimum of 33 credit hours in economics. A grade of C or better must be achieved in all economics courses.

Economics Core: ECON 201, 202, 223, 301, 332, 381, 384, and 480

Economics Track: Public Policy (ECON 451, 452, 300+ elective) or Business Economics (ECON 461, 462, 300+ elective)

Extra-departmental requirements: computer programming (select 3 credits from COSC 101, 150, 160 or QMIS 182) and statistics (select 3-6 credits from MATH 125, 225, 301/302, or QMIS 281/284)

REQUIREMENTS FOR A MINOR
The minor requires 15 credit hours in economics, including ECON 201, 202, and 301 plus an additional 6 credits in ECON at the 300-level or above. (Students are advised to take pairs such as ECON 381 and 384 if...
interested in quantitative methods, ECON 451 and 452 if interested in policy analyses, or ECON 461 and 462 if interested in business applications)  

OMICRON DELTA EPSILON  

Students completing at least 12 credit hours in economics with at least a 3.0 average in economics courses and a 3.0 average overall may be invited to join Omicron Delta Epsilon, the International Honor Society in Economics. Students do not have to be economics majors.

DEPARTMENT OF ENGLISH

Interim Chairperson  
Wallace S. Watson, Ph.D.

The Department of English offers a wide range of courses in English and American literature, writing, linguistics, and literary theory. Although courses are taught from a variety of critical perspectives, the faculty are committed to imparting to every student a clear sense that no literary work exists in a historical vacuum. Every work of the creative imagination is a product of its own time that also stands in some meaningful relation to what has preceded it, in its turn becomes a part of the historical matrix out of which succeeding generations of artists bring forth new works. Literary study is the intensive study of texts in their manifold relations as aesthetic objects, as social documents, as chapters in the history of an idea or a people, as occasions for meditation or revolution.

Students of English not only learn literature, through the opportunities for analysis, discussion, and written composition, they also develop clancy of thought, precision of expression, and informed critical judgment.

English majors choose a concentration in either Literary Studies or Writing. Each concentration requires a core of four courses which insure that all majors are grounded in a historical approach to literature, and are prepared to situate the study of literature in an ethical framework. For courses beyond the core, majors plan a coherent course of study in conjunction with a faculty mentor.

The department also offers major and minor programs in Theater Arts. These programs include the study of dramatic literature as well as experience in acting, directing, and technical aspects of theatrical production.

Cooperative Programs

The Department of English and the Department of Communication & Rhetorical Studies make it possible for students to complete a double major emphasizing language and interpretation. Under this program students meet all requirements (30 credits) for a major in one of these disciplines, and complete a major in the other with only 24 additional credits.

The Departments of English, Classics, and Modern Languages and Literatures offer a major in World Literatures.

The Department of English and the School of Education offer a course of study leading to two degrees, a B.A. in English and a B.S. in Education, and initial certification in English, in a total of 129 credits.

Prerequisites - For all 200-level courses, students must have completed Core 101, Thinking and Writing Across the Curriculum (or its equivalent), Core 102, Imaginative Literature and Critical Writing (or its equivalent), may be taken concurrently by permission of the Chair. For all 400-level courses, students must have taken Core 101 and 102 and at least one English course at the 200-level. Individual courses numbered above 200 may require specific prerequisites. For more information, consult the Department.

Requirements for the English Major

MAJOR IN LITERARY STUDIES OR WRITING  

Required: 30 credits

All Majors

Core requirement - 12 credits

ENGL 300 Ethical and Critical Issues in Literary Study  
Survey courses: 9 credits, Three courses chosen from English 261-264

Concentration in Literary Studies - 18 credits in addition to Core requirements

One 400-level course (English 402-457)  
One 400-level Literature Across Boundaries course (English 458-468)

No more than two courses below the 260 level may be counted toward the required 30 credits.

Concentration in Writing - 18 credits in addition to Core requirements

Three writing courses at the 300 or 400 level  
One 400-level literature course  
No more than two courses below the 260 level may be counted toward the required 30 credits.

Requirements for the Minor in English

The English minor consists of at least 18 credit hours in English, including:

- ENGL 300 Ethical & Critical Issues in Literary Study
- At least one of the following English core curriculum courses: ENGL 261W, 262W, 263W, 264W
- At least one 400-level literature course (ENGL 401-468)
- Enough elective English courses to accrue the necessary 18 credits.

THE MCLANULTY COLLEGE OF LIBERAL ARTS

MAJOR IN THEATER ARTS

Required: 30 credits

The major in Theater Arts is being revised. The required 30 credits are offered by the Department of English, with practicum and internship credit for work with The Pittsburgh Irish and Classical Theatre Company and with other approved theatre groups. For details, consult the Department.

Requirements for the Minor in Theater Arts

Required: 18 hours

Required courses: 9 credits approved by the Director of Theater Arts.

Elective courses: 9 hours

Selected from courses in the Theater and Literature areas in consultation with an advisor, with at least one course chosen from each area.

UNDERGRADUATE CURRICULUM

NOTE: For technical reasons related to changes in the English curriculum, some of the following courses may be offered with different course numbers than those listed. The course content will not be affected.

201W Introduction to the Short Story 3 cr

Introduction to the varieties of short fiction, emphasizing critical analysis and writing.

202W Introduction to the Novel 3 cr

Introduction to various types of novels, emphasizing critical analysis and writing.

203W Introduction to Poetry 3 cr

Critical analysis of British and American traditional and experimental poetry.

204W Introduction to Drama 3 cr

A historical survey of dramatic forms from the classic to the modern.

205W Survey, Literature of Western World I 3 cr

A historical survey of western literature through the Renaissance.

206W Survey, Literature of Western World II 3 cr

Historical survey of western literature since the Renaissance.

207W Readings in Non-Western World Literature 3 cr

Representative Asian and African literature, studied in translation.

210 Introduction to Film 3 cr

A basic introduction to the technology and art of the motion picture.

211W Science Fiction 3 cr

Study of the thematic and formal concerns of science fiction, giving due attention to the impact of science and technology on culture, and to science fiction as a continuation of traditions of allegory and romance.

212 Science Fiction & Film 3 cr

Study of science fiction in literature and on film.

213W Women Novelists 3 cr

Introductory study of British and American women novelists from several historical periods.

214W Literature of Crime & Detection 3 cr

The literature of crime and detection, historical and contemporary.

215 American West, Text & Film 3 cr

Writers of the American West as represented in fiction and film.

216W Survey of British Literature I 3 cr

Representative works of British literature in their literary and historical contexts, medieval to eighteenth century.

217W Survey of British Literature II 3 cr

Representative works of British literature in their literary and historical contexts, late eighteenth century to contemporary.

219W Survey of American Literature I 3 cr

Representative selections from American authors treated in their literary and historical contexts, colonial to Civil War period.

219W Survey of American Literature II 3 cr

Representative selections from American authors treated in their literary and historical contexts, Civil War period to contemporary.

300 Ethical & Critical Issues in Literary Study 3 cr

Introduction to the major approaches to literary study and to ethical issues raised by literature and criticism.

305W Catholic Voices in Literature 3 cr

Significant literary works that engage problems specific to Catholic identity, or that explore Catholic perspectives.

310W Expository Writing 3 cr

Builds upon writing skills learned in Core 101/102, emphasizing organization, development, clarity, and precision. Admission by instructor’s permission only.

311 Poetry Writing Workshop 3 cr

A writing workshop in which students share their work with each other and a poet-instructor.
312 Fiction Writing 3 cr
Fiction writing workshop concentrating on short fiction or a part of a longer work

313W Writing for Business and Industry 3 cr
Introduction to the forms and conventions of many types of business-oriented documents

314W Professional and Technical Writing 3 cr
Introduction to precise technical writing through individual and group projects

315 Playwriting Workshop 3 cr
A workshop in playwriting, concentrating on producing actable scripts

351W Western American Literature 3 cr
The many interests and varied literary forms of one of the most vital regional literatures of the United States

352W Freedom & Necessity in Literature 3 cr
The philosophical problem of the freedom of the will as it has been treated in literature from the Greeks to the present day

353W Literature & Film of World War I 3 cr
Literary, cinematic, and other cultural reactions to the Great War, concentrating on British and American works

360W The Bible as Literature 3 cr
Literary aspects of selected books of the Bible

387 The Novel and Film 3 cr
Comparative study of novels and films, highlighting the differences between visual and verbal representation

388 International Film 3 cr
Study of the techniques and concerns of films from around the world

400 Special Studies
Catholicism and Literature 3 cr
Topics of particular concern to Catholicism, chosen from various areas of literature

401W Advanced Writing 3 cr
Further development of exposition in longer forms

402 Medieval English Drama 3 cr
Introduction to the forms and conventions of medieval drama

403 Chaucer 3 cr
Detailed study of selected works by Chaucer, read in Middle English

404 Arthurian Literature 3 cr
Literature of King Arthur, from its historical and mythological origins, with emphasis on a particular theme: Merlin, Holy Grail, etc

408 Special Studies Medieval Literature 3 cr
Topics chosen to reflect current interests of faculty and students

409 Spenser 3 cr
Reading Spenser's Faerie Queene, emphasizing medieval and renaissance conventions of allegorical poetry

410 English Renaissance Drama 3 cr
The drama of Shakespeare's contemporaries

411 Shakespeare I Comedies and Romances 3 cr
Selected comedies and romances

412 Shakespeare Tragedies and Histories 3 cr
Selected histories and tragedies

413 Shakespeare Text and Film 3 cr
Parallel study of selected plays and filmed versions of them

414 Sixteenth Century British Literature 3 cr
Non-dramatic sixteenth century literature including Sidney, Spenser, and Shakespeare

415 Seventeenth Century English Literature 3 cr
Seventeenth century poetry and prose, with special emphasis on the poetry of John Donne and George Herbert

416 Milton 3 cr
The major works of John Milton, including Comus, Paradise Lost, and Samson Agonistes

419 Special Studies
Renaissance & the 17th Century 3 cr
Topics chosen to reflect current interests of faculty and students

421 English Literature 1660-1700 3 cr
Restoration literature: the satire, criticism and drama of John Dryden and his contemporaries

422 English Literature 1700-1750 3 cr
Literature of the great age of English classicism: Addison, Pope, Swift and their contemporaries

423 English Literature 1750-1800 3 cr
Samuel Johnson and his circle, the development of the novel, the retreat from neo-classicism

424 Eighteenth Century English Drama 3 cr
Drama of the Restoration and Eighteenth Century

425 Eighteenth Century English Novel 3 cr
The first great age of the English novel

426 Eighteenth Century English Women Writers 3 cr
Women novelists from the eighteenth and early nineteenth centuries

430 Special Studies Restoration and Eighteenth Century Literature 3 cr
Topics chosen to reflect current interests of faculty and students

431 British Romanticism 3 cr
The aesthetic, moral, and literary aspects of English romanticism focusing on Wordsworth, Coleridge, Byron, Shelley, and Keats

432 Victorian Literature 3 cr
The poetry of Tennyson, Browning, and Arnold and the prose of Arnold, Carlyle, and Ruskin

433 Victorian Novel 3 cr
Novels of the period of Dickens, Thackeray, and Trollope

437 Special Studies
Nineteenth Century Literature 3 cr
Topics chosen to reflect current interests of faculty and students

438 Colonial American Literature 3 cr
A cultural/historical approach to the theological, political, and aesthetic developments in 17th and 18th century America

439 American Literature of the National Period 3 cr
Post-revolutionary literature focusing on Irving, Brown, Cooper, Stowe, Twain, Child, and Sedgwick

440 American Romanticism 3 cr
The Romantic/transcendental movement, emphasizing Emerson, Thoreau, Poe, Hawthorne, Melville, and Whitman

443 Nineteenth Century American Women Writers 3 cr
Readings in both well known and less often studied American women writers

446 American Realism and Naturalism 3 cr
Post-Civil War fiction of Twain, Howells, James, Chopin, Wharton, Crane, and Norris

447 Special Studies American Literature 3 cr
Topics chosen to reflect current interests of faculty and students

448 The Irish Renaissance 3 cr
The resurgence of Irish culture in the late nineteenth and early twentieth century as manifested in literature and drama of the period

449 American Literature 1800-1945 3 cr
Tradition and innovation in the works of such writers as Conrad, Yeats, Eliot, Rhys, Woolf, and Joyce

450 English Literature Since 1945 3 cr
Literary innovations reflecting the century's cultural and philosophical shifts

451 Contemporary Drama 3 cr
A study of selected plays emphasizing the specifically modern aspects of twentieth century theater

452 20th Century American Poetry 3 cr
Works of selected poets

454 Contemporary American Fiction 3 cr
The varieties of American fiction since mid-century, emphasizing new developments in narrative form

455 20th Century American Poetry 3 cr
Poetry, fiction, non-fiction in such diverse literary trends as modernism, the Harlem Renaissance, the Southern Renaissance, and regional writing

457 Special Studies
Twentieth Century Literature 3 cr
Topics chosen to reflect current interests of faculty and students

458 American Modernism and the Visual Arts 3 cr
Parallel development of the modernist movement in literature, and visual arts, including painting, photography, and theatrical design

459 Southern Literature 3 cr
Literature of the American South considered as a cultural phenomenon with a distinctive character

466 Special Studies
Literature Across Boundaries 3 cr
Varying topics reflecting the current interests of faculty and students, in courses that transcended the boundaries of a single culture, language, or discipline

475 Special Studies Writing 3 cr
Topics chosen to meet the needs of advanced students in the writing concentration, or students in other majors who require advanced instruction
476 History of the English Language 3 cr
Linguistic analysis with primary emphasis on the history of the structure of English. ENGL 477 Introduction to Linguistics is recommended preparation for this course.

477 Introduction to Linguistics 3 cr
Basic principles and methods of modern linguistics, emphasizing phrase-structure grammar and its practical application to teaching.

478 Applied Linguistics 3 cr
Application of linguistic theory to literary analysis and the teaching of writing.

479 Modern English Grammar 3 cr
Phrase-structure (generative-transformational) grammar and its application to writing.

480 Advanced English Grammar 3 cr
Further study of phrase-structure grammar and its applications.

482 Special Studies in Linguistics 3 cr
Topics chosen to reflect current interests of faculty and students.

483 Theater, Values and Society 3 cr
This course examines the complex and interesting relations between drama and social values, through the study of theatrical history and of plays from several cultures and periods.

490 Studies in World Literature 3 cr
499 Directed Studies 1-3 cr
Offers the opportunity for students and faculty to conduct in-depth study of a topic not covered, or covered only briefly, in other departmental courses. Admission by permission only.

THEATER ARTS

THTR 101 Acting Workshop 3 cr
A practical introduction to the art of the theater with an emphasis on acting, especially for those new to the stage.

THTR 201 Acting I 3 cr
A study of the basic principles, theories, and techniques of acting, including various problems confronted by the actor in the creation and interpretation of a role.

THTR 301 Acting II 3 cr
An advanced course dealing with the principles and techniques of various acting styles with major concentration on the oral communication of a dramatic role. Prerequisite: THTR 201.

THTR 351 The American Theater 3 cr
Survey of the major American theatrical movements and dramatic literature from the Colonial period to the present. Playwrights, designers, and theatrical companies are studied as reflections of American culture.

THTR 390 Theater Practicum 1-3 cr
Experience in various aspects of theatrical production in approved stage companies. Admission by permission only.

THTR 401 Directing Workshop 3 cr
Studies principles, theories, and practices involved in the staging of a play for performance, emphasizing problems of staging and interpretation confronting the director.

THTR 497 Technical Theater Practicum 1-3 cr
Students learn about the technical side of mounting a play by working with the Pittsburgh Irish & Classical Theatre Company in the areas of costume, set, properties, lighting, sound, etc. Admission by permission only.

THE McANULTY COLLEGE OF LIBERAL ARTS

THTR 499 Performance Practicum 1-3 cr
Students work with a professional production either as a member of the cast (if PICT casts the student based on the student's audition) or as a member of the stage management team, as assigned by PICT in accord with the particular needs of the production(s) that occur during the time of the practicum. Admission by permission only.

DEPARTMENT OF HISTORY

Chairperson
Jean E. Hunter, Ph.D.

History is the keeper of the memory of the human race. Just as no individual can function effectively by living only in the present, no society can survive and flourish if it does not know from whence it came. As the American philosopher George Santayana so succinctly remarked, “Those who do not remember the past are condemned to repeat it.”

The study of history enriches all who undertake it. It sits at the center of the liberal arts, concerned with all of the areas of human endeavor — politics, economics, social arrangements, psychology, thought, religion. More than any other discipline, history requires the integration of knowledge, it requires that those who study it think critically and write astutely about the world, both past and present.

The mission of Duquesne University’s Department of History is to provide students with the valuable insights that the study of the past offers. The department offers a wide variety of courses in American, European, Latin American, Middle Eastern and Asian history. We cover all eras, from the ancient world to modern era. We encourage our students to range broadly over the vast expanse of the past as well as to pursue their own particular interests.

REQUIREMENTS FOR THE MAJOR

A minimum of thirty credits must be taken. All majors are required to take Writing History (311) between their third and fifth semesters. The following requirements must also be met: a) six credits at the 100-level including either HIST 103 or HIST 113; b) six credits in Latin American, Asian, or Middle Eastern history; c) six credits at the 400-level. Majors must complete their 100-level requirements and have enrolled in Writing History before enrolling in 400-level courses. Three credits of Art History can count toward the History major. Students can fulfill three credits of their non-U.S., non-European requirements by taking a non-western Art History class.

No more than twelve transfer credits in History can be applied to the major requirement.

REQUIREMENTS FOR THE MINOR

A student minoring in History is required to take fifteen credits, including six at the 100-level and none at the 200, 300, and 400 levels. They are required to take one course in Asian, Latin American or Middle Eastern history. No more than six history credits transferred from another institution can count towards the history minor.

Fulfilling the University Core

History majors should be aware that by enrolling in HIST 104 (U.S. History since 1877) and HIST 114 (Western Civilization II), they can be exempted from the required core course, Shaping of the Modern World.

The Undergraduate Professional Track

The History Department provides opportunities for its undergraduate majors to explore the field of public history and to undertake internships at local historical institutions. Students who are admitted to the "Professional Track" program choose to take either Museum Studies (3 cr) in the spring semester of their junior year or Archival Studies (3 cr) in the fall semester of their senior year. Upon the successful completion of the course, they will become eligible for a three-credit internship related to their course work. The department will make every effort to place the student in an internship, depending on the availability of an appropriate placement. The six credits in the professional sequence will not count towards the required 30 credits in History.

Students apply for this program during the fall semester of their junior year. They must meet the following requirements:

1. A 3.0 overall GPA
2. A 3.3 GPA in their History courses
3. The completion of 15 credits in History by the end of the fall semester of their junior year, including U.S. History I & II (103 & 104) and Writing History (311)
4. Letters of recommendation from two History professors

Honors in History

Students who are planning to pursue a graduate degree in History should apply for the department’s Honor Seminar in the fall of their senior year. This course is offered every spring. Students receiving Honors in History must meet the following criteria:

1. A 3.2 overall GPA
2. A 3.5 GPA in History courses
DEPARTMENT OF HISTORY

The completion of HISTY 311 with a grade of B+ or better

Two letters of recommendation from History professors attesting to the student’s ability to do advanced research and writing

The completion of the Senior Honors Seminar with a grade of B or better

Pre-law Track

The department offers a series of law-related courses and recommends that majors who plan to apply to law school select one or more of these classes

History of Constitutional Law

History of American Law in Socio-Historical Perspective

Constitutional History of the United States

American Law in Socio-Historical Perspective

Joint Degree Program

Bachelor of Arts in History/BS in Education

As the content demands for aspiring secondary teachers increase, one way for a student to prepare better for a career in education is to get both a BA in History and a BS in Secondary Education. The department has put together a program, in conjunction with the School of Education, which will allow students to receive both degrees. The credits for the joint program will total 128 to 136 credit hours, depending on the number of credits required to complete the College’s language requirement. Students should be able to complete the program within four years by taking an occasional overload or enrolling in summer classes.

103 History of the United States to 1877

The creation and development of American society, ideals, and institutions from colonial settlements to 1877

104 History of the United States since 1877

The historical development of American institutions, ideals, and society since 1877

113 Western Civilization I

An introductory survey of the origins and characteristics of European civilization, emphasizing the personalities, events, and institutions that have shaped the West through the 17th century

114 Western Civilization II

An introductory survey of the origins and characteristics of European civilization, emphasizing the personalities, events, and institutions that have shaped the West from the 17th century

230 Ancient Theatre

An examination of the origins and development of ancient tragedy and comedy

242 Ancient Law

A survey including the contributions of the Greeks and of the Romans to the development of law

244 History of Ancient Medicine

Examination of the most significant medical theories and practices in the period from the Egyptian temple physicians to the doctors of the Roman Empire. Special attention will be given to Hippocrates and Galen.

245 Greek History

Greek history and culture from earliest times up to the death of Alexander of Macedon.

246 Hellenistic History

Mediterranean history from the death of Alexander until the accession of Octavian and the establishment of the Roman Principate.

247 History of the Roman Principate

The consolidation of the Roman imperial structure from Augustus to the death of Commodus.

248 History of the Late Roman Empire

Roman history from the accession of Severus to the death of Justinian.

249 Egyptian Civilization

A survey of Egyptian history and culture from the pre-dynastic period to the establishment of Roman rule in Egypt. Special attention will be given to the artistic, literary, and religious achievements of Egypt.

254 The History of the Modern Middle East

A study of the modern Near East with concentration upon the conflict between imperialism and nationalism, traditionalism and western influences in the area.

255 Asia in the Age of Imperialism

From the 17th century through the early 20th century, Asian societies faced the challenge of European incursions into the region. This course will examine how the Asian peoples confronted the western challenge and the impact that this early globalization had on their politics, economies, and societies.

256 Asia in the 20th Century

The 20th century saw Asian societies move from colonial or semi-colonial dependence to independence. This course will trace this development and will examine the various paths that the emerging nations of Asia took as they sought to establish themselves. The impact of the world wars, the Cold War, and the emerging global economy will be central to the course.

257 Russia Before Communism

Development of society and state in Russia from their origins to the Bolshevik Revolution of 1917.

258 Russia in the Twentieth Century

Development of society and state in Russia in the 1900s, focusing on the Communist takeover of Russia, the impact of more than seventy years of Communist rule, and the collapse of Communism and its aftermath.

261 Eastern Europe From Nationalism Through Communism

This course covers the fascinating modern history of the lands situated between Germany and Russia focusing on diverse ethnic groups such as Poles, Croats, Slovaks, Serbs, Slovenes, Ukrainians, and Hungarians. The major themes include struggles for national independence, the impact of Soviet control after World War II, and the reassessment of national sovereignty after the end of the Cold War.

270 Latin America from Conquest to Independence

A survey of Latin America, beginning with the pre-Columbian Maya, Inca, and Aztec civilizations and their conquest by Spain, and proceeding through the development of colonial Spanish and Portuguese societies and the growing tensions that led to the struggle for independence.

271 Modern Latin America

A survey of Latin America since the 1820s that emphasizes the social, economic, and political development of Argentina, Chile, Brazil, Mexico, Cuba, Puerto Rico, Central America, and the Caribbean. Some of the themes emphasized will be Latin American economic underdevelopment, military rule, revolution, the struggle for democracy, and Liberation Theology.

275 Central America & the Caribbean in the 20th Century

A survey of the history of Puerto Rico, Cuba, Haiti, the Dominican Republic, Grenada, Nicaragua, Panama, El Salvador, Guatemala, and Honduras since 1898. Emphasis will be on U.S. military and economic intervention, the growth of nationalism, peasant and guerilla movements, revolution, the threat and appeal of communism, and increasing political stability.

277 History of Mexico

A survey of 1,100 years of Mexican history beginning with the ancient Toltec, Mayan and Aztec civilizations and proceeding through colonial Mexican history under Spanish rule. Emphasis is on Mexico since independence and will cover the loss of Texas, the U.S. - Mexican War, the Porfirato, the 1910 Mexican Revolution, the PRI's seventy years of one-party rule, the transition to democracy, corruption, migration to the United States, NAFTA, and Narco traffic.

280 African American History

An examination of the experience of Africans in the United States since their arrival in 1619 through the centuries of slavery, trials of the post Civil War era, their experience of continued discrimination in the 20th century, the impact of the Civil Rights movement, and their continuing struggle to attain true equality in America.

291W Writing History

A seminar course that focuses on the skills necessary to the practice of history. Students will work on increasing their proficiency in analyzing and interpreting both primary and secondary sources, developing their research skills, and improving their writing.

315 Archaeological History of the Ancient Greek World

A survey of the archaeology of Greece from pre-history to the Roman period.

316 Archaeological History of Athens

An investigation into the topography and monuments of Athens and Attica, from the pre-historic to the Roman period.

317 Archaeological History of the Ancient Roman World

A survey of the archaeology of Italy from pre-history to the middle fourth century A.D.

318 Archaeological History of Rome

An investigation of the topography and monuments of Rome from pre-history through Constantine.

319 Archaeological History Seminar

Possible topics include the Bronze Age Aegean, the development of Vase Paintings, the Etruscans, etc.

320 Colonial America

This course focuses on the exploration and settlement of British North America from the 16th century to 1763. It examines the dynamics of Native America, European, and African relationships as well as the development of colonial cultures, societies, and politics.

321 American Revolution

An exploration of what caused American colonists to erupt in rebellion against Britain, escalate the rebellion into a revolution, and wage a war for independence. Besides examining social and military issues,
this course surveys the political ideologies espoused by the revolutionaries from 1763 to the ratification of the Constitution in 1788 and the addition of the Bill of Rights in 1791

329 Pennsylvania and the American Nation 3 cr
A history of Pennsylvania's society and politics from the experience of its native American peoples and European settlement under the seige of William Penn and its role in the French and Indian War and American Revolution to its rapid industrial development in the 19th century and its modern-day urban growth

340 Historical Evolution of Western Law 3 cr
Primary emphasis will be placed on the rise of customary law, from its roots in ancient times until the modern era

341 American Law Socio-Historic Perspective 3 cr
Law shapes the social order and social order and social order shapes the law This course will discuss the legal principles that the first Americans brought from England and discover how the American experience has shaped the nation's legal system

342 War in the Pre-Modern Era 3 cr
This course examines how and why warfare affected western societies It will look at the traditional components of military history but will also examine the wider issues concerning the way warfare has influenced politics, social arrangements, economics, and technology

346 World War II 3 cr
World War II was, simply put, "the largest single event in human history" This course will examine its causes, course, consequences While the military aspects of the conflict will be discussed in detail, the human factors, political realities and social effects will also be covered

347 War in Modern Society 3 cr
A study and analysis of the phenomenon of war in the world stage during and after World War I. This course will discuss the role that the country has played in international relations during the course of the 20th century and will also examine the domestic implications of the United States' rise to world dominance

355 Civil War and Reconstruction 3 cr
An intensive study of the American experience from the roots of the sectional conflict in the expansion of the United States through the struggle over slavery, the War itself, and the controversies over the restoration of the Union

360 Constitutional History of the United States 3 cr
An analysis of the Supreme Court and constitutional development, stressing the major controversies in the field

369 The Modern Mind 3 cr
The major ideological tendencies of modern European thought and their connection to society and politics, and to the major philosophic and scientific currents of the 19th and 20th centuries

372 The Holocaust in Modern History 3 cr
This course deals with one of the most significant and controversial events of the 20th century - the Nazi effort to totally annihilate Europe's Jews That one of the most advanced nations embarked on the horrific policy of genocide gives the event a special place in modern history and raises a number of fundamental questions about the very nature of modern civilization

375 History of Inner Asia 3 cr
The history of Inner Asia from Genghis Khan's Mongol Empire to Mikhail Gorbachev's Soviet Empire to the current emergence of independent states

379 Revolution in Modern Latin America 3 cr
The course begins with an analysis of different revolutionary theories, followed by an in-depth examination of the Mexican, Bolivian, Cuban, Chilean, and Nicaraguan revolutions of the 20th century. Unsuccessful guerrilla movements in Guatemala and Colombia as well as successful, peaceful social movements pertaining to women's rights will also be examined

386 The American South 3 cr
This course examines a distinctive region and its cultures These, in turn, illuminate the construction of, and conflicts within, American civilization

387 Native American History Contact, Conquest, and Colonization 3 cr
This course focuses on Native American societies and the nature of their contact and conflicts with European settler societies from the 1490s to the 1880s

388 United States 1945 to the Present 3 cr
A discussion of selected contemporary issues, foreign and domestic, which illustrate the identity crisis in the U.S.

DEPARTMENT OF HISTORY

390 20th Century Political Leadership 3 cr
The 20th century saw a remarkable number of great leaders, both the good and the evil, in all parts of the world. This course will examine such world altering figures as Hitler and Stalin, Roosevelt and Churchill, Mao and Gandhi, all of whom left their mark on our world.

391 The U.S., 1917 to 1945 3 cr
This course studies the changes in American society from World War I to the end of World War II Both domestic developments and foreign affairs will be covered As the topic demands, events and circumstances outside the US will be treated Domestically, the social, political, and economic changes that occurred during these years will be discussed in detail

392 Germany, Kaiser to Hitler 3 cr
The history of Germany from the collapse of the empire to the destruction of the Third Reich Emphasizing political, social, and economic aspects of the German Experience

394 Historical Geography 3 cr
A survey of the physical world which is the basis for a human civilization, past, present, and future. What are the possibilities and limitations of different places for human development? How successful or unsuccessful were human settlements? Emphasizes also on geography as an intellectual discipline and cultural phenomenon

395 Pittsburgh-American City 3 cr
The rise of urban America, addressing such topics as city growth and change, industrialization, immigration, and renewal in the latter half of the twentieth century

PLEASE NOTE Courses at the 400 level are open to upper-level undergraduate enrollment. They require, at the very least, that students have first taken appropriate 100 level courses

401 Medieval Europe 3 cr
An exploration of the elements which, taken together, comprise the culture of the Middle Ages Beginning with the crises that accompanied the fall of the Roman Empire in the west, the course will examine the attempts to reassert order, the role of the Church, and its conflicts with secular authority The cultural and social achievements of the era will be discussed

415 Early Modern Europe 3 cr
The transformative movements that molded western civilization - the Renaissance and the Reformation - will be the subjects of this course. Particular attention will be paid to the changing understanding of human beings and their relationship to this world and their God. The social and political impact of these movements will be studied

417 Reason and Revolution 3 cr
An examination of the history of Europe between 1648 and 1815, this course will concentrate on the rise of absolutism as personified by Louis XIV, the intellectual developments of the Enlightenment, the social and economic changes that underlay and undercut the ancient regime, and the great catalysis of the French Revolution that ushered in the modern world

419 19th Century Europe 3 cr
An examination of the European experience between 1815 to 1914, with emphasis on political, social, and cultural trends

421 Europe in the Era of Fascism 3 cr
An examination of the impact of World War I on European society, the rise of fascist movements and the paralysis of democracy, the nature of the fascist regimes, and the impact of fascism on European diplomacy

422 20th Century Europe 3 cr
A study of the European experience between 1914 and the present, centering on such topics as the great wars, fascism, and contemporary trends in both eastern and western Europe

433 American Women in History 3 cr
An investigation of the historical experiences of American women beginning with the European heritage and continuing with the special conditions in the country that led to the rise of the world's first women's movement. Concluding with the changes that women have faced in the industrial and post-industrial world of the twentieth century

445 Imperial Russia 3 cr
An investigation of the political, social, and intellectual evolution of the Russian Empire in the 18th and 19th centuries

446 Rise and Fall of Soviet Union 3 cr
An investigation of the political, social, and intellectual evolution of the Soviet Union since the Bolshevik Revolution of 1917

450 Cold War 3 cr
An analysis of the diplomatic and political struggle between the United States and the Soviet Union in the aftermath of the Second World War and the ideological conflict between free enterprise and communism around the world
451 Christianity & Islam Clash of Empires 3 cr
For over a thousand years, these two great monotheistic religions have challenged each other throughout the globe. This course examines, in particular, the clash between Christianity and Islam in Europe and the Near East.

460 New American Immigration 3 cr
An examination of the dynamics of immigration to the United States with emphasis on the arrival of immigrants from southern and eastern Europe as the twentieth century began.

470 American Urbanization in Historical Perspective 3 cr
This course examines the development of the American city with special focus upon changes in land-use patterns, social class arrangements, political organizations, mobility and migration, ecological patterns, industrial and commercial developments, transformation of the built environment, and the creation of a national urban policy.

472 U S Labor and Capital 3 cr
An analysis of the forces which have shaped American industrialization, focusing on the impact of unionization and the development of big business on the everyday lives of Americans from pre-industrial craftsmen to industrial workers.

475 U S Intellectual & Cultural History 3 cr
A survey of major movements in thought and culture including religion, science, the arts, and philosophy, including moral, political, and economic thought.

476 Individualism in American History 3 cr
A study of American individualism as demonstrated in the writings of politicians, novelists, political theorists, and others who have dealt with this important aspect of American culture.

477 Nature & the American Experience 3 cr
Is nature to be tamed or protected? How have Americans responded to the incredible and at first untamed natural bounty that greeted them? What impact have these natural surroundings had on the development of the American character? These are some of the issues dealt with in this course.

478 American Family History 3 cr
An examination of American social history from the perspective of the American family, this course will begin with the patriarchal colonial family, examine the changes in family structure that accompanied democratization and commercialization, investigate the impact of industrialization, and conclude by seeking to understand today's family structures.

INTERNATIONAL RELATIONS

479 Diplomatic History of the United States 3 cr
This course explores various topics in and interpretations of the history of American foreign policy and relations. It focuses on the nation's rise to world power and the internal and external conflicts that resulted.

482 Inter-American Relations 3 cr
An examination of U S-Latin American relations since the mid-19th century. Topics covered will include Manifest Destiny and the U S-Mexican War, the Spanish-Cuban-American War of 1898, the construction of the Panama Canal, U S economic and military penetration of the Caribbean and Central America, the Good Neighbor policy, the CIA-backed coup in Guatemala, the Bay of Pigs invasion, the Cuban Missile Crisis, the U S invasion of the Dominican Republic, the Contra War in Nicaragua, NAFTA, Latin American migration to the U S, and Narco traffic.

483 Special Topics in East Asian History 3 cr
The subject matter of this course will vary but will emphasize the social, political, diplomatic and intellectual history of East Asia, with special attention to China and Japan.

485 Contemporary Latin America 3 cr
A study of the major trends and developments in Latin America since 1910.

491 Senior Honors Seminar 3 cr
Students pursue primary-source research on a topic of their choice under close faculty direction in a seminar format.

499 Directed Reading
Selected Historical Topics 3 cr
With permission from the department and close consultation with a faculty member, students can undertake an in-depth exploration of a topic of their choice.

Coordinator
Carla E. Lucente, Ph D

The International Relations major educates students in the historical, political, and cultural forces that shape the interactions between states, international organizations, multi-national corporations, and other international entities. In recent decades, the forces of globalization have increased awareness of the interdependent and inter-related nature of modern society.

Students majoring in International Relations have a variety of career paths open to them. Majors are prepared to work in a governmental, social, or business environment within an international context. Training in advanced language skills, combined with historical and political knowledge of specific regions of the world, will make international relations majors very competitive in the job market.

The College strongly encourages International Relations majors to spend a semester abroad in an accredited program approved by the International Relations committee. This will insure the most effective and rewarding educational experience for the students.

Majors have the opportunity to choose elective course work from one of the five areas of concentration:

- Europe
- Russia
- Latin America
- United States and the World
- Global Issues

When combined with an appropriate semester abroad, these concentrations provide students with an advanced understanding and specialization in a particular area or field.

REQUIREMENTS

Courses for the International Relations major are drawn principally from the departments of History, Modern Languages and Literatures, and Political Science. Thirty-three credits are required for the major. Students who plan to double-major in International Relations and History or Modern Languages and Literatures or Political Science must complete their elective credits for the International Relations major outside of their second major.

RELEVANT COURSES FOR THE INTERNATIONAL RELATIONS MAJOR

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<tr>
<th>Course</th>
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<tr>
<td>MLGFR 419W</td>
<td>International Economics</td>
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<td>MLGFR 419W</td>
<td>Modern Middle East</td>
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<td>MLGFR 308W</td>
<td>Russia in the 20th Century</td>
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<td>MLGIT 419W</td>
<td>Eastern Europe</td>
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<td>MLGIT 399W</td>
<td>Modern Latin America</td>
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<td>MLGIT 400W</td>
<td>Caribbean in the 20th Century</td>
</tr>
<tr>
<td>MLGIT 419W</td>
<td>War in Modern Society</td>
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<tr>
<td>MLGIT 310W</td>
<td>Historical Geography</td>
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<tr>
<td>MLGIT 311W</td>
<td>Europe in the Era of Fascism</td>
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<td>MLGIT 399W</td>
<td>Twentieth Century Europe</td>
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<td>MLGIT 400W</td>
<td>Soviet Russia</td>
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<td>MLGIT 419W</td>
<td>Global Socioeconomic Development</td>
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<td>MLGIT 419W</td>
<td>The Cold War</td>
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<tr>
<td>MLGIT 419W</td>
<td>Diplomatic History of the United States</td>
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</tbody>
</table>

Coordinate: Carla E. Lucente, Ph D
The major objectives of the mathematics program are...

The Department offers bachelor degree programs in...

Educated person in support of other disciplines...

Creative solutions in addition to comprehensive problems...

Courses in the curriculum give students an opportunity...

Mathematics is available to students pursuing a B...

Chairperson

Thomas A. Keagy, PhD

AND

POLSC 255

United States and the World

POLSC 450

The Cold War

HIST 479

Diplomatic History of the United States

POLSC 255

American Foreign Policy

POLSC 422

American Defense Policy

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Theory of Comparative Government

Human Rights Politics and Policy

Ethnicity Identity and Conflict

Modern Latin America

Caribbean in the 20th Century

Latin American Culture and Society

Russia

Russia in the 20th Century

Soviet Russia

Government and Politics of Russia and the Independent States

Political Economy of Russia and the Independent States

United States and the World

The Cold War

Diplomatic History of the United States

American Foreign Policy

American Defense Policy

The major objectives of the mathematics program are to provide knowledge of the theoretical basis of the field, appreciation for the intrinsic beauty of the discipline, skill in interpreting the concepts underlying quantitative procedures, and ability to apply modern mathematical techniques and tools to practical problems. Courses in the curriculum give students an opportunity to develop the basis for critical and logical analysis of problems and to design and implement creative solutions. In addition to comprehensive programs leading to a major or minor in mathematics, offerings are designed to serve the liberal education program in support of other disciplines.

REQUIREMENTS FOR A MAJOR

The student may choose to pursue a major in mathematics with a program leading to a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.) degree. The B.A. program, which requires a minimum of 33 semester hours of mathematics, offers a great deal of flexibility for persons interested in combining the major program with a strong minor or double major in another discipline. The B.S. program, which requires a minimum of 39 semester hours of mathematics, is recommended for students interested in scientific applications or further study in mathematics on the graduate level. Requirements are as follows:

Mathematics Core (B.A. and B.S.)

115 Calculus I 4 cr

The same topics as 111 except trigonometric functions are included. Credit is not allowed for both 111 and 115 or for both 114 and 115

116 Calculus II 4 cr

Applications of the definite integral, parametric equations, polar coordinates, sequences, and series

125 Fundamentals of Statistics 3 cr

Exploratory data analysis and statistical inference including graphical summaries of data, sampling distributions, confidence intervals, and hypothesis testing. Credit not allowed for both 125 and 225

135 Discrete Mathematics 3 cr

Sets, functions, relations, partial order, methods of propositional logic, introduction to predicate logic, counting, recursion relations, asymptotic analysis, proof, including induction, introduction to probability, graphs

215 Calculus I 4 cr

Calculus of functions of several variables and vector valued functions. Line and surface integrals

225 Introduction to Biostatistics 3 cr

Descriptive statistics, sampling distributions, confidence intervals, hypothesis testing, non-parametric methods, chi-square tests, regression and correlation methods, and analysis of variance. Credit is not allowed for both 125 and 225. Prerequisite: Evidence of college level algebra skills

301 Introduction to Probability and Statistics I 3 cr

Univariate and multivariate probability distributions of discrete and continuous random variables, mathematical expectation, limit theorems. Prerequisite: 116

302W Introduction to Probability and Statistics II 3 cr

A continuation of 301 including probability and sampling distributions of random variables, confidence intervals, and hypothesis testing. Prerequisite: 301

308 Numerical Analysis 3 cr

Linear systems, interpolation, functional approximation, numeric differentiation and integration, and solutions to non-linear equations. May be counted as either mathematics or computer science, but not both. Prerequisites: 116 and Computer Programming 150 or 160

311 Number Theory 3 cr

Divisibility, congruences, quadratic residues, diophantine equations, and arithmetic functions. Prerequisites: 135 and 215

315 Linear Algebra and Differential Equations 4 cr

Systems of linear equations, vectors and matrices, determinants, vector spaces, linear transformations, eigenvalues, and eigenvectors, first order equations, linear equations, differential operators, Laplace transforms, power series techniques

320 Topics in Mathematics 3 cr

Elementary mathematics applied to models in the natural or environmental sciences. Cannot be counted toward a major in mathematics. Prerequisite: 115

325W Applied Statistics with Regression 3 cr

One-way, two-way analysis of variance, Latin squares, methods of multiple comparisons, analysis of covariance, balanced and unbalanced designs, linear and multiple regression. Prerequisite: 225, or 301, or permission of instructor

330W Fundamentals of Geometry 3 cr

Euclidean and non-Euclidean geometry from both the synthetic and metric axiomatic approach. Prerequisites: 135 and 215

340 Problem Solving Seminar 1 cr

Solution and discussion of problems from the Putnam Examination and other sources. Prerequisite: Completion of or concurrent enrollment in Math 215 or permission of the instructor

402W Abstract Algebra I 3 cr

An introduction to algebraic structures: rings, ideals, integral domains, fields, and groups, as well as homomorphisms and isomorphisms. Prerequisites: 135, 215, and 315

403W Topology 3 cr

Topological spaces, homeomorphisms, connectedness, compactness, regular and normal spaces, metric spaces, convergence, and separation axioms. Prerequisites: 402W or 415W

412W Abstract Algebra II 3 cr

A deeper examination of the algebraic structures studied in 402W, including quotient groups and rings, extension fields, and other selected topics. Prerequisite: 402W

415W Advanced Calculus I 3 cr

Functions, sequences and series, limits, continuity and uniform continuity, derivatives. Prerequisites: 135, 215, and 315

416W Advanced Calculus II 3 cr

A continuation of 415W including integration theory
and advanced topics in analysis Prerequisite 415W

420 Introduction to Complex Variables 3 cr
The complex number plane, analytic functions, integration of complex functions, sequences and series, and conformal mappings Prerequisite 415W

425W Experimental Design 3 cr
Factorial designs, fixed and random effects models, nested and nested-factorial designs, split-plot designs, response surface designs Prerequisite 325W or permission of instructor

491-99 Selected Topics in Mathematics 1-3 cr

COMPUTER SCIENCE PROGRAM

The major objectives of the computer science program are to provide the student with a knowledge of the theoretical basis of computing, an appreciation for the relationship between the various components of the field, skills in applying the subject to practical problems, and an ability to adapt to new technologies and advancements. Courses in the curriculum give the student appropriate tools to identify problems best solved by means of a computer and to design and implement effective, economical, and creative solutions for them. Typically, students gain practical exposure to a number of programming languages including Assembly, C++, Java, Lisp, and Prolog, and operating systems including Unix, Linux, and Windows. Offerings provide opportunities for students seeking courses supporting other disciplines as well as comprehensive programs leading to a major or a minor in computer science.

REQUIREMENTS FOR A MINOR
A minimum of 15 credits in computer science and 3 credits in Discrete Mathematics is required for a minor. All programs must include Computer Science 150 or 160, 215, and five additional hours numbered 300 and above with at least 3 credits at the 300 level or above.

COMPUTER SCIENCE COURSES

100 Elements of Computer Science 2 cr
A survey of topics necessary for basic computer literacy. Includes laboratory exercises. Credit not given to computer science majors or minors.

101 Basic Programming 3 cr
Microcomputer programming in Visual Basic. Algorithm development and data representation. Credit not given to computer science majors or minors.

103 JavaScript Programming 3 cr
Programming constructs and heuristics using JavaScript, including object-based programming, objects, properties, events, methods, variables, constants, functions, and structured constructs. Emphasis is on using JavaScript for web interactivity and forms processing. Prerequisites COSC 130 or QSMIS 183 or MM226.

130 Fundamentals of the Internet 3 cr
Technical concepts of electronic mail, web browsing concepts and advanced features, HTML and web page design, technical concepts of the internet, advanced internet technologies, concepts and issues in electronic publishing, ethics and security issues. Prerequisite COSC 030 or equivalent.

150 Computer Programming C++ 3 cr
Object-oriented programming, objects and classes, data abstraction, functions, loops, selections, control structures, arrays, searching, and sorting.

160 Scientific Programming C++ 3 cr
Object-oriented programming, objects and classes, data abstraction, functions, loops, selections, control structures, arrays, searching, and sorting in an environment with scientific and mathematical applications.

215 Java with Data Structures 3 cr
An introduction to Java with Classes and data abstraction, queues, linked lists, recursion, stacks, trees, string processing, searching and sorting, and hashing. Prerequisite 150/160 and MATH 135 (may be taken concurrently).

220 Computer Organization and Assembly Language 3 cr
Basic structure of computer hardware and software, data representation, addresses and instructions, control structures, device drivers, files, and macros. Prerequisite 150/160.

300 Advanced Data Structures 3 cr
Data organization, connections between the design of algorithms and the efficient implementation and manipulation of data structures. Abstract data types, trees, B-trees, and graphs. Prerequisite 215.

305 Digital Logic 3 cr
Boolean algebra and logic gates, combinational logic, decoders, encoders, multiplexers, registers, counters, memory units, flip-flops, algoristic state machines, and digital integrated circuits. Prerequisite 220.

308 Numerical Analysis 3 cr
Identical to MATH 308. Credit only given for COSC 308 or MATH 308. Prerequisites 150/160 & MATH 116.

311 System Programming and Design 3 cr
Interaction between software and hardware components in an integrated system, program translation issues, assemblers, linkers, loaders, and compilers. Prerequisite 220.

325W Operating Systems and Computer Architecture 3 cr
Organization of operating systems and basic computer architecture. Implementing multiprogramming, memory management, communicating with input/output devices, concurrency, synchronization, file systems and scheduling the processor. Prerequisite 220.

350W Computers and Humanity 3 cr
An exploration of the impact of computers on present and future society including sociological and philosophical issues in computer science. Prerequisite One course in computer science on the 200 level.

401 Database Management Systems 3 cr
The use, design, and implementation of database management systems. Topics include data models, current DBMS implementations, and data description, manipulation, and query languages. Prerequisite 300.

410 Artificial Intelligence 3 cr
Knowledge representation and natural language processing, search strategies, design and applications of heuristics, expert systems, and applications. Prerequisite 300.

418 Formal Languages and Automata 3 cr
Formal languages and their relation to automata. The Chomsky language hierarchy, recognition of languages by automata, Turing machines, decidability, and computability. Prerequisite 300.

425 Computer Graphics 3 cr
Geometric generation of two- and three-dimensional graphics. Scan conversion, geometric transformation, clipping, interaction, curves and surfaces, and animation. Prerequisite 300.

430 Web-based Systems 3 cr
HTTP/HTML, client server scripting, active server/CGI technology, data store access/modification, cascading style sheets, and accessing the browser document object model. Prerequisite 215 and 300.

435 Theory of Programming Languages 3 cr
Syntactic and semantic issues in program language definition and implementation. Static vs dynamic properties, parameter passing, recursion, and language comparions. Prerequisite 300.

445W Systems Analysis and Software Design 3 cr
Methods and tools for the constructing and modular design of large systems, organization and techniques of team programming, design evaluation and validation. Prerequisite 300.

450 Computer Networks 3 cr
Network technologies, protocols, and management. Programming networked applications. The effects of the Internet and World Wide Web on computing and society. Prerequisite 300.

460 Computer Security 3 cr
Network, database, and Web security, threat models, elementary and advanced cryptography, protocol analy-
s, covert channels, access control and trust issues, legal and ethical issues in security Prerequisite 215

480W Senior Project 1-3 cr
An individual or group project involving a significant programming component, documentation, and written report on a topic of current interest in computer science Prerequisite: Senior status and 300

491-499 Selected Topics in Computer Science 1-3 cr
Topics selected in consultation with the advisor Prerequisite: Consent of the department chairperson

DEPARTMENT OF MODERN LANGUAGES AND LITERATURES
Chairperson Carla E Lucente, Ph D

The Department of Modern Languages and Literatures offers courses in Chinese, French, German, Italian, Japanese, and Spanish. The four language skills (reading, writing, speaking, and oral comprehension), are emphasized at all levels. Fluency in the active use of the language is emphasized. Courses beyond conversation and composition stress literary studies in which the student is systematically introduced to the literature and culture of the groups whose language he/she is studying. Courses are also offered in linguistics, language for business, language for medicine, and language for musicians. A certificate in International Business, as well as internships here and abroad, is available. All courses at the 300 and 400 levels are conducted in the target language. Prior to enrollment in their first language courses, all students are required to take the language placement test. It is recommended that students who must fulfill language requirements begin these courses in their freshman year.

Majors and minors are urged to spend a summer, a semester, or a year abroad. Further information may be obtained in the Department office. It is also recommended that majors in the Department include a course in the culture of the country of the language in which they specialize as well as one course in another literature other than their major.

A maximum of 12 transfer credits will be accepted toward the major.

The student possessing a knowledge of foreign languages will find career opportunities in a number of fields such as education, government employment, foreign service, social work, business and industry, tourism, and international law.

The Department coordinates with:
- The Department of Classics and English for a degree in World Literatures
- The Department of History and Political Science for a degree in International Relations

Study Abroad
Students are highly encouraged to study abroad in an accredited program with the approval of the department.

The oldest study abroad program on campus is the DU/Villa Nazareth Program in Rome (founded in 1985). This is a university-wide program. Students may participate in this program for a year, a semester, or a summer. The program only accepts students based on academic record, recommendations, high moral standards, and the successful completion of an academic year at Duquesne. There is no need to know Italian, but students should be highly motivated to study and learn the Italian language and culture.

REQUIREMENTS FOR THE MAJOR
The Department offers major programs in Spanish and Modern Languages. In addition, it offers a minor in Chinese and Japanese.

Elementary and intermediate courses must be taken in sequence. Credit toward the major or minor will not be given for 101, 102, and 202 or its equivalents.

Proficiency at the 202 level or its equivalent is the prerequisite to all courses numbered 301 and above.

The major programs consist of courses at the 300-level and above:
- (1) Spanish - 27 credits at the 300 and 400 levels
- (2) Modern Languages - 24 credits at the 300 and 400 levels in one language, 12 credits at the 300 and 400 levels in a second language, and 12 credits at any level in a third language.

REQUIREMENTS FOR THE MINOR
The minor program consists of a minimum of 12 semester hours at the 300-level and above. As for the certificates, inquire at the Department office.

Dual Degrees

B A / M Ed — After a completion of this five-year program, the student will receive a Bachelor of Arts in Spanish and Master's in Education
B A / B S in Education — This four-year program offers students a Bachelor of Arts in Spanish and Bachelor of Science in Education
B A / B S in International Business — After completion of this four-year program, students will receive a Bachelor of Arts in Spanish and Bachelor of Science in International Business. Students will obtain 114 credits (18 credits per semester) including internships in the United States and abroad

490 Independent Field Study (All Languages) Var cr
Under the supervision and guidance of the instructor in foreign countries and the permission of the Department chairperson

THE MCMANUS COLLEGE OF LIBERAL ARTS

THE MCMANUS COLLEGE OF LIBERAL ARTS

495 Professional Language Internship 3 cr
A paid or unpaid internship consisting of 100-120 hours of supervised work with permission of the Department chairperson

French

101 Elementary French I 4 cr
Fundamentals of oral and written French Weekly lab attendance

102 Elementary French II 4 cr
Fundamentals of oral and written French Weekly lab attendance Prerequisite French 101 or its equivalent

115 French for Musicians 2 cr

202 Intermediate French II 4 cr
Emphasis on the written and oral aspects of the language Weekly lab attendance Prerequisite French 102 or its equivalent

301 French Conversation and Composition I 3 cr
Prerequisite 202

302 French Conversation and Composition II 3 cr
Prerequisite 301

306 Intensive French Conversation and Composition 6 cr
The equivalent of 301 and 302 fulfill the prerequisite for all courses above this level Prerequisite French 202

302 or 306 is the prerequisite for all courses above this level

321 Phonetics 3 cr
Mechanics of phonation with comparative English-French application to phonemic analysis of French

325 Realism and Naturalism 3 cr
Theories of the two movements in the latter part of the 19th Century

326 Existentialism 3 cr
Analysis and discussion of selected literary and philosophical works

329 17th Century French Literature 3 cr
Emphasis on 17th Century French prose and poetry Will also include a play of Corneille, Racine, and Moliere

331 18th Century French Literature 3 cr
An overview of the Siècle des lumières

419 The European Union 3 cr

430 The European Integration Process 3 cr

430 The European Integration Process 3 cr

101 Elementary German I 4 cr
Fundamentals of oral and written German Weekly lab attendance

102 Elementary German II 4 cr
Fundamentals of oral and written German Weekly lab attendance Prerequisite German 101

115 German for Musicians 2 cr

202 Intermediate German II 4 cr
An emphasis on the oral and written aspects of the language Prerequisite German 102

360 French for Business 3 cr
Spoken and written language of business French letter writing, import, export, and commercial transactions

400 W The European Union 3 cr

460 French Culture and Civilization 3 cr
The major cultural and socio-political movements of France through its literary works

462 From the Chanson de Roland through 18th Century 3 cr
Literary Survey I

463 19th Century Modern Period 3 cr
Literary Survey II

464 17th Century French Theatre 3 cr
An overview of the théâtre de le grand siècle Emphasis on Corneille, Moliere, and Racine

465 19th Century Modern Period 3 cr
Beginning with the influence of the Revolution on French literature, through the literary movements of the Century

471 20th Century French Theatre 3 cr
From Jules Romains to Ionesco and the Theatre of the Absurd

475 East and West in Film and Print 3 cr

480 Directed Readings 1-6 cr
Readings of literary texts under close faculty supervision, for majors only and only written permission of the Department chairperson

493 The Theatre of the Absurd 3 cr

499 German

101 Elementary German I 4 cr
Fundamentals of oral and written German Weekly lab attendance

102 Elementary German II 4 cr
Fundamentals of oral and written German Weekly lab attendance Prerequisite German 101

115 German for Musicians 2 cr

202 Intermediate German II 4 cr
An emphasis on the oral and written aspects of the language Prerequisite German 102

305 Intensive German Conversation and Composition 6 cr
The equivalent of 301 and 302 fulfill the prerequisite for all courses above this level Prerequisite German 202

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321 Phonetics 3 cr
Mechanics of phonation with comparative English-French application to phonemic analysis of French

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Analysis and discussion of selected literary and philosophical works

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Emphasis on 17th Century French prose and poetry Will also include a play of Corneille, Racine, and Moliere

331 18th Century French Literature 3 cr
An overview of the Siècle des lumières
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>301</td>
<td>German Conversation and Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>302</td>
<td>German Conversation and Composition II</td>
<td>3 cr</td>
</tr>
<tr>
<td>306</td>
<td>Intensive German Conversation and Composition II</td>
<td>6 cr</td>
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<tr>
<td>310W</td>
<td>German for Lawyers</td>
<td>2 cr</td>
</tr>
<tr>
<td>315</td>
<td>Italian Conversation and Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>321</td>
<td>Introduction to Italian Literature</td>
<td>3 cr</td>
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<tr>
<td>324</td>
<td>Introduction to Italian Society</td>
<td>3 cr</td>
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<tr>
<td>326</td>
<td>Italian Culture and Civilization</td>
<td>3 cr</td>
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<tr>
<td>327</td>
<td>Japanese Culture and Civilization</td>
<td>3 cr</td>
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<td>328</td>
<td>Spanish Culture and Civilization</td>
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<td>329</td>
<td>Revolt and Change Spanish-American Literature</td>
<td>3 cr</td>
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<td>330</td>
<td>Theatre of the Golden Age</td>
<td>3 cr</td>
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<td>331</td>
<td>Literature of the Siglo de Oro</td>
<td>3 cr</td>
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<td>332</td>
<td>Medieval Spanish Theatre</td>
<td>3 cr</td>
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<td>333</td>
<td>Don Juan as a World Literary Figure</td>
<td>3 cr</td>
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<td>334</td>
<td>The Generation of 98</td>
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<td>335</td>
<td>The Quixote</td>
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<td>336</td>
<td>Avant-Garde Spanish-American Theatre</td>
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<td>337</td>
<td>The European Union</td>
<td>3 cr</td>
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<td>338</td>
<td>Trends in Latin American Literature</td>
<td>3 cr</td>
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<td>339</td>
<td>Spanish Literature</td>
<td>3 cr</td>
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<td>340</td>
<td>Contemporary Spanish-American Fiction</td>
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<td>341</td>
<td>Modern Tradition Post Modern Turn</td>
<td>3 cr</td>
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<tr>
<td>342</td>
<td>The Nineteenth Century Novel</td>
<td>3 cr</td>
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<td>343</td>
<td>Spanish Literature since the Civil War</td>
<td>3 cr</td>
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<td>344</td>
<td>Medieval Spanish Literature</td>
<td>3 cr</td>
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<td>345</td>
<td>Quixote</td>
<td>3 cr</td>
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<td>346</td>
<td>Historical perspective</td>
<td>3 cr</td>
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<td>347</td>
<td>Literature of Spanish Romanticism</td>
<td>3 cr</td>
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<td>348</td>
<td>Literature of Spanish Literature</td>
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<td>349</td>
<td>The Age of Enlightenment</td>
<td>3 cr</td>
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<td>350</td>
<td>Advanced Spanish Grammar</td>
<td>3 cr</td>
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<tr>
<td>351</td>
<td>Women's Voices in Hispanic Literature</td>
<td>3 cr</td>
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<td><strong>Prerequisites:</strong></td>
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<td></td>
<td>German 202 or equivalent</td>
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<tr>
<td></td>
<td>Spanish 102 or equivalent</td>
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</table>

**Notes:**
- 302 or 306 are prerequisites for all courses above this level.
- 302 or 306 is a prerequisite for all courses above this level.
469 Readings in Medieval Literature 3 cr
Spanish literature from its oral tradition, the evolution of the Spanish language, from "jarchas" through La Celestina

471 Latin American-U S Literature 3 cr

480 Directed Readings 1-6 cr
Reading of literary texts under close faculty supervision for majors only with written permission of the Department chairperson

Additional courses are offered as need and interest arise

MULTIMEDIA ARTS PROGRAM

Director
John C. Shepherd, Ph D

The Multimedia Arts program at Duquesne University educates students about responsibility and respect for themselves and their clients. Students will learn about the uses of multimedia and will be able to design and implement multimedia titles for distribution via any medium including, CD-ROM, DVD, and the World Wide Web.

Today's world is truly multimedia, daily we all encounter CD-ROM, the World Wide Web, WEB-TV, DVD and more. Development of titles for such diverse avenues of distribution requires graphic, audio, video, computer, and programming skills. The Multimedia Arts program at Duquesne University attempts to blend the technology with the creative, the skills with the theories, and attempts to foster appreciation and understanding of the roles and responsibilities of the technical and creative members of multimedia development teams through project proposals, development and implementation.

A 4-1 program is available to multimedia majors that allows students to earn the B.A. degree in Multimedia Arts and the M.S. degree in Multimedia Technology in five years.

REQUIREMENTS FOR THE MAJOR

Required 24 credits plus FINAR 245 and COSC 103

MM 210 Principles of Multimedia Design 3 cr
An overview of the forces that influence the design of multimedia titles or web sites. Ital introductory course explores cultural diversity and accessibility issues and the impact of interface design, color, typography upon these designs. Presentation software such as PowerPoint will be used to integrate principles and theories.

MM 212 Ethical and Legal Issues in Multimedia 3 cr
Traditional concepts of law and ethics can easily be adapted to accommodate the multimedia environment. This course will examine these concepts, and, through substantial discussion, assimilate them to the industry of Multimedia. In addition, students will discuss recent court cases that have helped shape the legal forum around this industry in the areas of contract, property, torts, and jurisdiction.

MM 213 Introduction to Multimedia 3 cr
Emphasis is on the uses of technology within multimedia, the process of developing interactive multimedia projects, and an overview of the multimedia field. Students will study multimedia computer selection, scanning for multimedia, sound digitization, the process of digitizing and editing video, and an introduction to animation. The integration of course materials is through the use of multimedia presentation packages, such as Director.

MM 226 Designing for the World Wide Web 3 cr
This course will introduce students to the technical and creative aspects of web page design. Students will study the best ways to add multimedia content including graphics, text, animation, video and interactive content to web sites. After a sound foundation in HTML, students will use software such as Dreamweaver to add advanced features to their web sites. The framework for the course is a life-cycle model for web development (Co-requisite MM 213 or instructor permission)

MM 324 Principles of Audio and Video 3 cr
An integrative course, MM 324 blends the principles and applications of MIDI and digital sound with digital video. Students apply their audio principles as they digitally edit video clips.

FINAR 245 Computer Graphic Design 3 cr
Using graphics software such as Adobe Illustrator and Photoshop, students will be exposed to current design aesthetics and historical design criteria. Work ranges from creative typography and free-hand drawing to digitally composed pieces, fusions of graphics and text, industrial graphic design, and advertising.

COSC 103 JavaScript Programming 3 cr
Students use JavaScript as a basis for understanding object-oriented programming. Course topics include script programming, including objects, properties, methods, and events. The language is used to create interactive Web pages, animate objects and edit Web-based forms.

MULTIMEDIA ARTS TRACK COURSES

There are currently three tracks: Internet, Digital Media, and Design. Some of the following courses fall into more than one track. To complete a track, students must take at least 3 courses (9 credits).

THE McANULTY COLLEGE OF LIBERAL ARTS

DIGITAL MEDIA TRACK

MM 224 Sound Design 3 cr
This course will explore the digital side of audio, sound file management, and recording techniques for video and audio based presentations.

MM 250 3D Modeling Principles 3 cr
This course introduces the creation of three-dimensional objects and specific modeling techniques.

MM 326 Multimedia Programming 3 cr
Students combine text, graphics, sound, animation and video as they build interactive multimedia titles. Using packages such as Macromedia Director.

MM 338 Digital Videography 3 cr
Students will discuss theories behind video production, lighting, cameras, lenses, film genres, video capture software and hardware.

MM 412 Multimedia Authoring for Computer Based Training 3 cr
Students complement their cross-platform authoring skills.

MM 430 Web Animation 3 cr
Students will use powerful software packages to create small, vector-based animations that run within Web browsers.

MM 438 Animation 3 cr
Understanding the principles behind anatomy, inverse kinematics, and motion. Students will make two and three-dimensional models come to life.

COUPLED COURSES REQUIRED FOR THE MINOR

Required 18 credits

MM 210 Principles of Multimedia Design 3 cr
An overview of the forces that influence the design of multimedia titles or web sites. Ital introductory course explores cultural diversity and accessibility issues and the impact of interface design, color, typography upon these designs. Presentation software such as PowerPoint will be used to integrate principles and theories.

MM 213 Introduction to Multimedia 3 cr
Emphasis is on the uses of technology within multimedia, the process of developing interactive multimedia projects, and an overview of the multimedia field. Students will study multimedia computer selection, scanning for multimedia, sound digitization, the process of digitizing and editing video, and an introduction to animation. The integration of course materials is through the use of multimedia presentation packages, such as Director.

MM 226 Designing for the World Wide Web 3 cr
This course will introduce students to the technical and creative aspects of web page design. Students will study the best ways to add multimedia content including graphics, text, animation, video and interactive content to web sites. After a sound foundation in HTML, students will use software such as Dreamweaver to add advanced features to their web sites. The framework for the course is a life-cycle model for web development (Co-requisite MM 213 or instructor permission)

MM 324 Principles of Audio and Video 3 cr
An integrative course, MM 324 blends the principles and applications of MIDI and digital sound with digital video. Students apply their audio principles as they digitally edit video clips.

FINAR 245 Computer Graphic Design 3 cr
Using graphics software such as Adobe Illustrator and Photoshop, students will be exposed to current design aesthetics and historical design criteria. Work ranges from creative typography and free-hand drawing to digitally composed pieces, fusions of graphics and text, industrial graphic design, and advertising.

COSC 103 JavaScript Programming 3 cr
Students use JavaScript as a basis for understanding object-oriented programming. Course topics include script programming, including objects, properties, methods, and events. The language is used to create interactive Web pages, animate objects and edit Web-based forms.

MULTIMEDIA ARTS TRACK COURSES

There are currently three tracks: Internet, Digital Media, and Design. Some of the following courses fall into more than one track. To complete a track, students must take at least 3 courses (9 credits).

THE McANULTY COLLEGE OF LIBERAL ARTS

DIGITAL MEDIA TRACK

MM 224 Sound Design 3 cr
This course will explore the digital side of audio, sound file management, and recording techniques for video and audio based presentations.

MM 250 3D Modeling Principles 3 cr
This course introduces the creation of three-dimensional objects and specific modeling techniques.

MM 326 Multimedia Programming 3 cr
Students combine text, graphics, sound, animation and video as they build interactive multimedia titles. Using packages such as Macromedia Director.

MM 338 Digital Videography 3 cr
Students will discuss theories behind video production, lighting, cameras, lenses, film genres, video capture software and hardware.

MM 412 Multimedia Authoring for Computer Based Training 3 cr
Students complement their cross-platform authoring skills.

MM 430 Web Animation 3 cr
Students will use powerful software packages to create small, vector-based animations that run within Web browsers.

MM 438 Animation 3 cr
Understanding the principles behind anatomy, inverse kinematics, and motion. Students will make two and three-dimensional models come to life.

COUPLED COURSES REQUIRED FOR THE MINOR

Required 18 credits

MM 210 Principles of Multimedia Design 3 cr
An overview of the forces that influence the design of multimedia titles or web sites. Ital introductory course explores cultural diversity and accessibility issues and the impact of interface design, color, typography upon these designs. Presentation software such as PowerPoint will be used to integrate principles and theories.

MM 213 Introduction to Multimedia 3 cr
Emphasis is on the uses of technology within multimedia, the process of developing interactive multimedia projects, and an overview of the multimedia field. Students will study multimedia computer selection, scanning for multimedia, sound digitization, the process of digitizing and editing video, and an introduction to animation. The integration of course materials is through the use of multimedia presentation packages, such as Director.
REQUIREMENTS FOR THE MINOR

A total of 15 credits
no more than 6 credits at the 100-level,
at least 6 credits at the 300-400-level

INTRODUCTORY COURSES

CORE 132 Basic Philosophical Questions 3 cr
Philosophy, "the love of wisdom," is a discipline for
discussing basic questions about ourselves and our
world. Students read selected works by major figures
throughout the history of philosophy, they are encour-
aged to think critically and to formulate their own
answers to perennial philosophical questions. This
course is required for all students in the university. It
counts as the first course for the major and minor in
philosophy.

105 Ethics 3 cr
The course provides an introduction to important ethical
theories, past and present, and some of their applica-
tions to concrete issues.

106 Introduction to Logic 3 cr
This course includes an analysis of valid reasoning,
logical fallacies, types of definitions, arguments in
ordinary discourse, and the formal logic of inferences

107 Medical Ethics 3 cr
Ethical questions that arise in medical care and re-
search are examined. Possible topics: doctor/patient
relation, informed consent, and euthanasia

108 Business Ethics 3 cr
Ethical questions which relate to business are
examined, in theory and in practice

109 Contemporary Moral Problems 3 cr
This course concentrates on concrete case studies from
various fields. Prerequisite: PHIL 105 Ethics

BASIC COURSES are useful electives for general undergraduates. Prerequisite at least one 100-level course in philosophy

200 Introduction to Phenomenology 3 cr
The phenomenological method originated by Husserl
will be explored. Possible topics may include inten-
tionality, signs, and meaning

204 Philosophy and Literary Theory 3 cr
This course explores philosophical themes in selected
works of literature and studies the relation between
recent continental philosophy and theories of
literature and of literary criticism

206 Philosophy & Film 3 cr
This course examines the art of cinema from a philo-
sophical perspective

DEPARTMENT OF PHILOSOPHY

Chairperson
Wilhelm S. Wurzer, Ph D

Philosophy is at the heart of a liberal education, philo-
sophical reflection encourages human beings to seek
the truth and to examine the moral foundations of their
thought and action. The general program in phy-
losophy introduces students to philosophical thinking,
both past and present, and provides a discipline for
asking the basic questions of human life. Courses en-
courage concentration on original major texts from
Plato, through the medieval and modern periods of
philosophy, up to the present. Contemporary contin-
tental philosophy is a specialty.

Philosophy fosters the ability to read with under-
standing, to think logically, to argue rationally, and to
evaluate positions critically. Majors have distin-
guished themselves in careers in medicine, politics,
journalism, law, business and education.

The department offers an Honors Program for out-
standing undergraduate majors with an overall GPA
of 3.3 and a 3.5 in Philosophy. Students must be rec-
ommended to the program by two faculty in the de-
partment. The program requires successful comple-
tion of two graduate courses in Philosophy. Students
must also complete an acceptable Honors Thesis, for
which 3 credits will be given

REQUIREMENTS FOR THE MAJOR

A total of 30 credits
at least 24 credits above the 100-level,
at least 9 credits from courses 300-305,
at least 6 credits at the 400-level
DEPARTMENT OF POLITICAL SCIENCE

305 Contemporary Philosophy 3 cr
This course concentrates on philosophy from 1900 to the present and covers the methods of selected 20th-century movements, such as phenomenology, hermeneutics and deconstruction

311 Aesthetics and Philosophy of Art 3 cr
This course explores a branch of philosophy concerned with questions of art and beauty, art theory and art criticism, aesthetic judgment and the sublime. Selected readings are from the writings of Plato, Plotinus, Kant, Hegel, Nietzsche, Heidegger, and Adorno.

ADVANCED COURSES are designed for majors, minors, and other serious students of philosophy. Pre-requisites: at least one 100, 200, or 300-level course and two 300-level courses or instructor’s permission. Many 400-level courses are also 500-level graduate courses. A list of specific courses taught is available each semester at preregistration. The following are a small sample from courses taught recently.

404 Plato’s Republic 3 cr
This course concentrates on Plato’s text, with a consideration of various interpretations.

415 Elements of Thomistic Thought 3 cr
An introduction to the philosophical thought of St. Thomas Aquinas through his own writings, especially those on the relation between faith and reason, the existence and attributes of God, knowledge, and language. Students will learn how to interpret his works in light of their sources, historical context, and literary forms.

420 Saint Augustine 3 cr
The early dialogues and the Confessions will be discussed. Possible topics: skepticism, truth, free will, the existence of God, faith and reason, the soul, memory, and time.

422 Saint Thomas Aquinas Treatise on Man 3 cr
Original texts will be read and discussed in light of Aquinas’ psychology, epistemology, and theory of appetitio, and will cover topics such as love, will, affectivity, and emotion.

423 Aristotle Philosophy of Action 3 cr
This course emphasizes an analysis of Aristotle’s various discussions of the essence of human life, and natural and political welfare, and the nature of the world.

424 Adorno’s Aesthetic Theory 3 cr
This course explores in great detail one of the most dynamic and influential thinkers in philosophy of art and art theory, Adorno’s Aesthetic Theory.

DEPARTMENT OF POLITICAL SCIENCE

434 Senior Honors Seminar - Hermetics 3 cr
This course focuses on one of the most outstanding exponents of hermeneutics and a master of hermeneutic praxis, Hans-Georg Gadamer, and his text “Truth and Method.” We will study theories of interpretation with regard to ancient, medieval, and modern texts, as well as the function of understanding and the role of language in communication.

463 Problems in Ethics 3 cr
This course consists of a discussion of selected issues in ethics.

469 Honors Research 3 cr
Designed for students in the Honors program in philosophy. Consists of directed readings, periodic reports, and work on Honors thesis.

498 Philosophy of God 3 cr
This course introduces students to selected traditional and contemporary texts and basic themes in types of religious experience, such as Babylonian, Greek, and Judaeo-Christian. It delineates such questions as: What is the Holy? What is the status of arguments for the existence of God? Why is there human suffering? If God is good and all-powerful?

THE McANULTY COLLEGE OF LIBERAL ARTS

Students transferring to Duquesne from another College or University may receive a maximum of 12 transfer credits applied to their major requirements.

REQUIREMENTS FOR THE MINOR

Fifteen credits are required, no more than three of which can be at the 100 level. A maximum of six transfer credits can be applied to the minor.

105 American National Government 3 cr
This survey course is designed to provide students with a foundation for understanding and critically assessing American political processes, institutions, and public policies.

110 Current Problems in International Politics 3 cr
A survey of issues that states currently face in world politics.

115 Human Being and Citizen 3 cr
An introduction to problems of politics through study of literature and film.

120 Introduction to Political Economy 3 cr
An introduction to how government decisions about trade, investment, and market developments impact people domestically and worldwide. Special attention is given to the problems experienced by poorer countries and responsibilities of developed nations.

203 The American Congress 3 cr
An investigation of the operation of the Congress within the U.S. system of Government.

208 Comparative Political Systems Advanced Industrial States 3 cr
An introduction to government, politics, culture, and economic policy in Europe and Japan.

209 Comparative Political Systems Developing States 3 cr
An introduction to government, politics, culture, and economic policy in the developing world.

220 The Politics of Public Finance 3 cr
This course is an introduction to the politics of the budgeting and appropriating process and the role of various actors, institutional structures, and policy products in these areas, considered at the federal, state, and local levels of political economy.

235 Mass Media and Politics 3 cr
Studying the role the media play in politics and the impact of the media on politics.

245 International Relations 3 cr
A study of politics between states including sovereignty, balance of power, war, and economics.

255 American Foreign Policy 3 cr
A study of American foreign policy since World War II.

276 Elections, Campaigns, and Voting Behavior 3 cr
Examinations the characteristics of political beliefs and participation.

290 American Political Thought 3 cr
Examination of diverse perspectives on American political thinking.

292 Public Policy 3 cr
A study of how and why governments respond to problems.

294 The American Presidency 3 cr
Studies the Presidency and the role it plays at the center of the federal system.

295 War and Peace in the Nuclear Age 3 cr
An examination of the interaction between politics and the use of force in the nuclear age.

317, 318 Western Political Thought I and II 3 cr each
A study of the ideas that constitute our western heritage of reflection on perennial political issues. 317 considers theorists from the classical period to the early 19th century, 318 considers theorists from the late 18th to the late 19th centuries.

321 Government and Politics of Eastern Europe 3 cr
An examination of the political and cultural challenges in democratization and market economy transition.

322 Government and Politics of Russia and the Independent States 3 cr
An examination of the political and cultural challenges in democratization and market economy transition.

323 Constitutional Law - Federalism 3 cr
A study of constitutional interpretation as it relates to federalism and the separation of powers.

324 Constitutional Law Civil Liberties 3 cr
A survey of problems and cases in civil liberties and civil rights, e.g., freedom of speech, freedom of religion, privacy, and equal protection. Students read and brief court decisions.
DEPARTMENT OF POLITICAL SCIENCE

325 Constitutional Law/Criminal Law 3 cr
This course will consider cases in criminal rights, and major aspects of criminal procedure. Students read and brief court decisions.

329 Political Economy of Russia and the Independent States 3 cr
A study of the way in which economic and political forces interact in the restructuring of a nation, with special attention given to trade issues, commercial ventures, banking reform, and environmental questions.

351 United Nations I 2 cr
Examines the processes and policies of the United Nations. Participation in local and national model United Nations conferences required. Permission of instructor required.

352 United Nations II 2 cr
Examines the processes and policies of the United Nations. Participation in local and national model United Nations conferences required. Permission of instructor required.

380 Controversies in Public Policy 3 cr
Analysis of the sources of conflict in contemporary public policy making.

385 International Law and Organization 3 cr
Examines the historical development and present role played by international law and organizations.

390 Asian Politics 3 cr
Examines key issues in Asian politics including democratization and the state, the role of religion, caste, ethnic, and gender, and problems of population, poverty, and development. Countries considered include China, Japan, Korea, India, Malaysia, and Singapore.

395 Global Energy Policy 3 cr
The impact oil and natural resource issues have on decision making by governments and international organizations. Global market impacts and the activities of multinational cartels are also studied.

400 Theory of Comparative Government 3 cr
Examines current theories of power, the state, social movements, and democracy. Focuses primarily on countries other than the United States.

410 Human Rights Politics and Policy 3 cr
Explores the international human rights regime including philosophical sources, legal instruments, governmental and non-state actors, and impacts on the international system.

DEPARTMENT OF PSYCHOLOGY

Chairperson
Russell Walsh, Ph.D.

INSTRUCTION

103 Introduction to Psychology (Prerequisite to all courses) 3 cr
Introduction to fundamental concepts and methods of psychology, examined from both traditional and phenomenological perspectives. Prerequisite for all other departmental courses.

220 Systematic Psychology 3 cr
For majors only. Traditional approaches (behavioristic, physiological, psychoanalytic) to sensation, perception, learning, and motivation. Required for majors.

223 Introduction to Existent Phenomenological Psychology 3 cr
Introduction to a human-science alternative to psychology as a natural science. Prerequisite for 326 and 410. Required for majors. Writing-intensive course.

225 Developmental Psychology I (Infancy and Childhood) 3 cr
Growth and development of the child, with emphasis on personality development.

226 Developmental Psychology II (Adolescence and Maturity) 3 cr
Development from adolescence through adult stages, to coping with death.

328 Psychology of Personality 3 cr
Critical examination of major theories of personality, required for majors and minors. Writing-intensive course.

340 Social Psychology 3 cr
Foundations of social processes, attitudes, values and roles, public opinion, propaganda, and communication, personal participation in society.

350 Psychology & Religion: The Judeo-Christian Tradition 3 cr
The aim of this course is to familiarize the student with psychological perspectives on religion, and religious perspectives on the various mental health professions.

352 Abnormal Psychology 3 cr
Examination of theories and data on disordered human existence.

361 Psychology of Identity and Fulfillment 3 cr
The ways in which identity is lived individually and collectively. Designed to be personally relevant to the life of the student. Open to juniors and seniors only.

370 Psychology of Aesthetic Experience 3 cr
Theorectical and empirical explorations of aesthetic experience.
490 Special Topic 3 cr
A visiting professor presents his/her specialty, or a regular faculty member presents highly specialized studies or an experimental course Repeatable Prerequisites vary with instructor Permission of department head for non-majors

DEPARTMENT OF SOCIOLOGY
Charpersen
Douglas Harper, Ph D

Sociology offers students a greater understanding of the social structures and processes that underlie our daily lives, and an awareness of the possibilities of social-scientific research for increasing our understanding of society.

Duquesne's program in sociology provides a strong academic foundation. Our core curriculum teaches social theory and research methods, which provide the basic knowledge necessary for graduate study or employment in the social sciences. Our elective courses offer knowledge relevant to specific areas of students' interests.

For students who wish to specialize early in their careers, we offer academic concentrations in Social Justice & Policy and Criminal Justice. Our concentration in Social Justice & Policy prepares students for graduate programs in social science and for research in government agencies, private research firms, the non-profit sector and other applied research areas. The Criminal Justice concentration provides substantive background for work or further education in the criminal justice field.

For students who wish to move quickly and efficiently into graduate study, we offer five-year programs in Social Justice and Social Science. Duquesne's program in sociology provides a strong academic foundation. Our core curriculum teaches social theory and research methods, which provide the basic knowledge necessary for graduate study or employment in the social sciences. Our elective courses offer knowledge relevant to specific areas of students' interests.

426 History of Psychology 3 cr
Overview of figures and issues in the history of psychology, from precursors to present. Prerequisite 223 Permission of department head for non-majors

450 Contemporary Issues in Clinical Psychology 3 cr
A human-science examination of the approach, methods, data, and current issues of clinical psychology. Permission of department head for non-majors

453 Psychology of Gender 3 cr
This course explores men's and women's existence as gendered beings. The theoretical as well asexistential dimensions of gender are thematized, and the biological, social, and personal contexts will be discussed

457 Independent Studies 3 cr
A tutorial course for an exceptional student who wishes to pursue a particular study with a faculty member. For majors only, usually those intending graduate study, advance coursework completed. Permission of faculty member and department head required

**REQUIREMENTS FOR THE MAJOR**

A minimum of thirty-four semester hours is required for the major. These must include

- 101 Survey of Sociology
- 200W Classical Sociological Theory
- 201 Sociological Methods I
- 202 Sociological Methods II
- 202L Sociological Methods II Lab
- 300W History of Social Thought OR 301W Contemporary Sociological Theory
- 455W OR 456W Senior Seminar

**Criminal Justice**

This program provides the student with the opportunity to develop knowledge and skills in preparation for advanced study or career pursuits in areas including probation, parole, law enforcement, investigation, corrections and research.

**Required courses**

- 101 Survey of Sociology
- 103 Introduction to Criminal Justice
- 200W Classical Sociological Theory
- 201 Sociological Methods I
- 202 Sociological Methods II
- 202L Sociological Methods II Lab
- 300W History of Social Thought OR 301W Contemporary Sociological Theory
- 456W Senior Seminar Criminal Justice

Nine of the remaining twelve credits must be selected from any courses in the concentration (course numbers are listed below).

**Courses included in the Criminal Justice concentration are**

- 103 Introduction to Criminal Justice
- 105 Introduction to Peace and Justice
- 211 Social Deviance
- 212 Drugs and Society
- 213 Criminology
- 216 Delinquency and Society
- 218 Treatment and Community Corrections
- 264 Police and Society
- 310 The Law and the Juvenile Offender
- 311 The Law and the Adult Offender
- 314 The American Judicial System
- 321 White Collar and Corporate Crime
- 369 Race, Gender and Crime
- 409/509 Correctional Policy and Practice
- 454 Selected Readings

We recommend that at least six credits be selected from courses at the 300 level or above. Three credits must be selected from other Departmental offerings.

**REQUIREMENTS FOR THE MINOR**

To earn a sociology minor you must enroll in a minimum of fifteen semester hours. You must include 101 Survey of Sociology. You should design your minor in consultation with a sociology professor.

**THE GERONTOLOGY CERTIFICATE**

The Department offers an eighteen credit program leading to a Certificate in Gerontology for all majors and minors, as well as students and para-professionals outside the Department and the University. Students from outside the University who register for the Certificate do so through the School of Leadership and Professional Advancement.

To earn the Certificate of Gerontology, the student must complete 101 Survey of Sociology, and five of the following courses:

- 203 Sociology of Aging
- 206 Social Problems and Social Policy
- 207 Sociology of Health and Illness
- 208 Racial and Ethnic Groups
THE website at www.sociology.duq.edu

Department office or

...and procedures may be secured from the Sociology

...Interested students are required to apply be-

...major. The amount of the award varies

...awards a merit scholarship up to an outstand-

...At the end of each academic year, the Sociology De-

...complete the application form obtained in the Sociol-

...through the year to enhance the culture of our

...Duquesne University. The Club meets regularly

...eligible students

...Holm of Alpha Kappa Delta, International Hon-

...as an academic discipline. Required for all Sociol-

...institutions which are the subject matter of sociology

...minimum of twelve credits in sociology

...101 Criminology

...An introduction to the criminal justice system, includ-

...The student must be in a sociology course

...The student must be at least a junior with a min-

...225 Health, Illness and Social Policy

...A study of sociological explanations of criminal

...212 Drugs and Society

...The study of how conceptions of masculinity and fem-

...209 Racial and Ethnic Groups

...The study of stability and change in statuses and roles

...208 Family Systems

...A study of the forms and consequences of social

...206 Deviance

...An examination of the socialization process throu-

...205 The Law and The Adult Offender

...A survey of those aspects of the legal system that re-

...204 Police and Society

...The study of crime and the administration of jus-

...203 The Law and The Juvenile Offender

...The legal procedure from arrest through sentencing

...202 Drug Use as a Socially Constructed Deviant Activity

...Drug use as a socially constructed deviant activity.

...201 Social Deviance

...The study of the forms and consequences of social

...密切关注

...214 Helping Processes

...An analysis of the helping relationship, both for the

...213 Counseling

...A study of the forms and consequences of social

...211 Social Deviance

...An introduction to Social Thought, which explores

...210 Sociology of Sex and Gender

...The study of the roles performed and problems faced

...209 Social Policy

...The study of social policy and its interaction with

...208 Race and Ethnic Groups

...A comprehensive review of roles performed and prob-

...207 Conflict

...The study of how social groups interact and change

...206 Social Problems and Social Policy

...A study of problems in society and the role of social

...205 Social Policy

...The study of social policy and its interaction with

...204 Social Problems

...An introduction to social problems and their solu-

...203 Social Policy

...The study of social policy and its interaction with

...202 Social Policy

...The study of social policy and its interaction with

...201 Social Policy

...The study of social policy and its interaction with

...200 Social Policy

...The study of social policy and its interaction with

...199 Social Policy

...The study of social policy and its interaction with

...198 Social Policy

...The study of social policy and its interaction with

...197 Social Policy

...The study of social policy and its interaction with
321 White Collar Crime 3 cr
The study of the character, causes, and consequences of white collar crime in the United States. Prerequisite 103

369 Race, Gender and Crime 3 cr
This course examines how different races, genders, and social classes experience crime, both as offenders and victims. Prerequisite 103

NOTE: SEVERAL OF THE FOLLOWING COURSES ARE CROSS-LISTED WITH THE GRADUATE CENTER FOR SOCIAL AND PUBLIC POLICY

404/504 Social Ecology and Political Culture 3 cr
This is a socio-political analysis of urban culture including demographic diversity and trends, and socialization. Historical and contemporary explanations of the urban and suburban environments provide an understanding of today's metropolis as the fabric for human groups to live and survive. Prerequisites 101 and senior standing

405 Sociology of Education 3 cr
A sociological study of the educational institution in a variety of societies and cultures with a focus on childhood socialization and educational structures serving both adolescent and adult education. Prerequisite 101 or permission of the instructor

408/508 Population 3 cr
This course examines inter-relationships among population processes and social, economic, and political patterns of development. Specific emphasis is placed on the demographic contexts and consequences for policies in developing and developed societies. Prerequisites 101 and senior standing

409/509 Correctional Policy and Practice 3 cr
In this course we examine the methods and motives of punishing criminals. In addition, we investigate the history of correctional policy and practice. Prerequisites 103 and senior standing

415/515 Health, Illness and Social Policy 3 cr
This course considers the major health and illness issues apparent in both regional and national areas. An opportunity to study the nature of and developments in social policy with special reference to HIV, smoking and illness, and national health insurance. National and international data set analysis is possible. Prerequisites 101 and senior standing

416/516 Minorities and Public Policy 3 cr
The historical evolution of American public policy toward minorities. This includes the legal/constitutional changes, migratory patterns, social institutions and political mobilization. Contemporary problems and issues are evaluated within this context. Prerequisites 101 and senior standing

421/521 Criminal Justice Policy 3 cr each
An examination of policies related to the criminal justice system. Analysis and evaluation of existing and proposed policies, including special topics such as capital punishment and rehabilitation are the focus of the course. Prerequisite 103 and senior standing

440/540 Family and Policy 3 cr
A survey of the wide range of policy analyses and proposals from various perspectives concerning the modern family. Critical evaluation of these policies is based on an examination of the theoretical and conceptual foundations, the empirical bases, and the consequences that flow from the policies. Prerequisites 101 and senior standing

450/550 Fieldwork I, II
(six credits for 450, six credits for 451)
Internship in a number of different settings. Two hundred twenty-five hours in placement are required for six credits. Prerequisite: Majors must have completed twenty-one credits in the Major. Required of students in the Social Policy Concentration. Please note: Our supervised internships do not count toward the 34 credits required for the major, except in the Social Policy Concentration.

454 Selected Readings 1-3 cr
Independent supervised reading. Prerequisite: twenty-seven completed credits in the major. SENIORS AND MAJORS ONLY

455W Senior Seminar — Sociology 3 cr
A seminar designed to serve as a capstone to the student's academic career. Prerequisite: twenty-one completed credits in the major. Required of Sociology Majors who graduate without a concentration, and for all students who choose our Social Policy Concentration. SENIORS AND MAJORS ONLY

456W Senior Seminar — Criminal Justice 3 cr
A seminar designed to serve as a capstone to the student's academic career. Prerequisite: twenty-one completed credits in the major. Required of Sociology Majors with a Criminal Justice concentration. SENIORS AND MAJORS ONLY

498 Special Topics 3 cr
These courses cover new and noteworthy topics of sociological interest. Prerequisite 101

THE MCAUNULTY COLLEGE OF LIBERAL ARTS

STUDIO ART

Director
Madeline C. Archer, Ph.D

A B.A. in Studio Art is offered as a component of a liberal arts degree

REQUIREMENTS FOR THE MAJOR

Ten courses in Studio Art, including FINAR 101, 103, 120, and 130. In addition, four courses in Art History including ARTH 111, 112, and 393

REQUIREMENTS FOR THE MINOR

Five courses in Studio Art, including FINAR 101 and 103

101 Design 1 3 cr
Design I is a foundation course that prepares students for more advanced work in art. It introduces the basic visual elements, principles of composition, and introductory design theory. Most of the work is two dimensional, and in black and white

103 Drawing 3 cr
An introductory course that exposes students to a systematic study of formal elements, visual perception, and drawing techniques and media. Problems lead students from simple forms and concepts to more complicated ones, culminating in drawing the human form.

105 Design 2 3 cr
Design II is an introduction to conceptual design, new media and contemporary art. Prerequisite: Design I

107 Drawing 3 cr
An introductory survey of the principles and techniques of traditional and non-traditional drawing. Prerequisite: Design I

111 Color Theory and Design 3 cr
An introduction to color theory, applied to the study of design. Prerequisite: Design I

130 Painting 1 3 cr
This is a foundation course that employs the acrylic medium. Students execute a series of projects that explore and develop design and compositional issues, color theory, expressive issues, and conceptual development. Prerequisite 101 or 103

136 Intaglio Printmaking 3 cr
An introduction to intaglio printmaking, which is an ancient and versatile means of making permanent images. Prerequisite: 130

137 Lithography 3 cr
This course will focus on the study of lithography, a graphic medium used to produce printed images. Prerequisite: 130

140 Advanced Design 3 cr
This course builds on the principles introduced in Design I, with additional work and study in three-dimensional design and color theory. Students are encouraged to move away from preconceived notions about art, and to develop critical thinking skills in their discussion and analysis of compositions. An introduction to graphic art principles is included

150 Painting 2 3 cr
This is a foundation course that employs the acrylic medium. Students execute a series of projects that explore and develop design and compositional issues, color theory, expressive issues, and conceptual development. Prerequisite 101 or 103

155W Senior Seminar — Painting 3 cr
A seminar designed to serve as a capstone to the student's academic career. Prerequisite: twenty-one completed credits in the major. Required of Painting Majors with a Criminal Justice concentration. SENIORS AND MAJORS ONLY

160 Advanced Painting 3 cr
A further development of the skills and theory introduced in FINAR 130. The acrylic medium is used. Prerequisites 101 or 103 and 130

203 Figure Drawing 3 cr
This course provides students with the opportunity for intensive study of the human figure through various drawing techniques. Prerequisite 102

235 Introduction to Computer Art 3 cr
Students will be engaged in experience through digital media and immersed in computer-mediated artistic activity. Through practice and application, computer tools will become effective vehicles for expressing conceptual ideas. The development theory regarding computer generated art and design will be studied, and students will be encouraged to analyze their own content, decisions, and techniques. Prerequisite 101 or 103

245 Computer Graphic Design 3 cr
Using graphic software such as Adobe Illustrator and Photoshop, students will be exposed to current design aesthetics and historical design criteria. Work ranges from creative typography and free-hand drawing to digitally composed pieces, fusions of graphics and text, industrial graphic design, and advertising. Prerequisites 103 and 235

315 Relief Printmaking 3 cr
This course enables students to explore printmaking media such as woodcut and linocut. Prerequisite 101 or 103

316 Intaglio Printmaking 3 cr
Intaglio media such as etching, aquatint, and engraving are introduced in this course. Prerequisite 101 or 103

317 Letterpress 3 cr
The planographic medium of letterpress is explored in this printmaking course. Prerequisite 101 or 103

320 Watercolor Painting 3 cr
Both optical and conceptual compositions are developed in this course using the watercolor technique. Prerequisites 103 and 130

330 Oil Painting 3 cr
Still life, figure painting, illustration and abstract problems are explored using the oil medium. Prerequisites 101 or 103 and 130

335 Advanced Computer Art 3 cr
The focus of this course is on conceptual projects and refining and applying skills acquired in FINAR 235. Work includes high resolution production and color printing, and the use of interactive media and video to create digital narrative pieces. Prerequisite 235

350 Illustration Methods and Techniques 3 cr
This course explores the integration of drawing, painting, design, and concept, expressed in illustrative compositions. Students study the history, problems, and processes of illustration and engage in a series of projects which introduce them to the variety of visual problems and possibilities in illustration practices. Prerequisites 101, 103 (120 and 203 recommended)
DEPARTMENT OF THEOLOGY

360 Sculpture I 3 cr
This course explores sculptural elements through various materials and techniques with the goal of increasing the student’s spatial conceptual abilities. Prerequisites 101 and 120

365 Advanced Sculpture 3 cr
A continuation of the principles introduced in FINAR 360, using more permanent materials and more complex forms and projects. Prerequisites 101, 120 and 360

375 Computer Assisted Illustration 3 cr
Computer technology and software are explored as aids to solving problems in illustration. Prerequisites 101, 103, 203, 330

385 Photography 3 cr
Photographic techniques and equipment are introduced in this course. Students will explore compositional and conceptual issues while executing photographic assignments, and will study the history of the medium for analytical and comparative purposes. Prerequisite 101

415 Natural History Illustration 3 cr
Prerequisites 103, 130, 350 (245 and 320 recommended)

416 Medical and Scientific Illustration 3 cr
Prerequisites 103, 203, 235, 350 and 375

425 Advanced Computer Imaging 3 cr
Prerequisites 101, 103, 235, 350

435 Advanced Computer Graphics 3 cr
Prerequisites 101, 120, 235 and 245

445 Introduction to Multimedia 3 cr
Through the use of multimedia, students will study and practice the integration of visual, audio and text sources that culminate in animated and interactive pieces. Both commercial and purely artistic problems will be explored. Prerequisites 101, 120, 235 and 245

475, 476, 477, 478 Special Topics in Computer Assisted Design and Imaging 3 cr each
Prerequisite: As indicated for special topic. Permission of Department required

405 Independent Study 3 cr
Permission of Department required. Minimum of 18 credits of Studio Art must have been completed

410 Studio Art Internship 1-3 cr
Permission of Department required. Minimum of 18 credits of Studio Art must have been completed

DEPARTMENT OF THEOLOGY

Chairperson
James P. Hanigan, Ph.D.

Duquesne’s Department of Theology offers a program which undertakes an academic study of religion and experience. The Department emphasizes Catholic Theology in dialogue with other Christian traditions, non-Christian traditions and Judaism.

REQUIREMENTS FOR THE MAJOR

The major program consists of a minimum of 27 credits taken at the 200-level and above, chosen with the mentor’s approval. These credits will include 2 courses in Biblical Studies, 3 in Religious and Theological Studies, 2 in Ethical Studies, 2 elective course from any of the above areas and the seminar course (number 498). A minimum of 12 credits, including the Seminar, must be done in the Department.

REQUIREMENTS FOR THE MINOR

A minor consists of 12 credits taken at the 200-level and above. Students should consult the undergraduate mentor of the Theology Department for the design of the minor.

COURSE INFORMATION

The Department has organized its courses into three divisions: Biblical Studies, Religious and Theological Studies, Ethical Studies.

The numbering of the courses indicates the level of the approach:

200 These courses introduce students to particular areas or questions in theology.

300 These courses explore subject matter in greater depth and specificity than do courses at the 200 level.

400 In these courses, selected topics are dealt with at a more advanced level, independent research is required.

BIBLICAL STUDIES

213 The Old Testament 3 cr
A presentation of the Old Testament writings in the context of their culture, literary modes, theologies, and themes.

214 The New Testament 3 cr
A presentation of the books of the New Testament, including their literary makeup, historical origins and theological content.

311 The Torah 3 cr
A study of the first five books of the Bible in the light of their historical, literary and theological features.

313 Archaeology and the Bible 3 cr
An illumination through archaeology of the historical setting, the cultural background, and the events described in the Bible.

315 Prophetic Literature of The Old Testament 3 cr
A study of classical Israelite propheticism which was characterized by sharp protest against social abuses, and by an urgent call to return to the roots of the Israelite faith.

316 The Pauline Literature 3 cr
A critical study of the letters traditionally attributed to Paul (including Hebrews).

317 The Wisdom Literature of The Old Testament 3 cr
A study of Proverbs, Ecclesiastes, Job and other wisdom writings which treat both the practical search for happiness and the more speculative quest for meaning in life.

321 The Gospel Literature 3 cr
A critical study of the four Gospels in the light of contemporary scholarship.

324 The Johannine Literature 3 cr

329 Special Topics in Biblical Studies 3 cr
An opportunity to pursue a particular interest of professor and students.

490 Field Experience in Biblical Archaeology 3 cr
Six weeks of supervised participation in an archaeological excavation in the Ancient Near East. Offered every two or three years, approval of participants by core staff required.

493 Directed Readings in Biblical Studies 1-3 cr
Independent Study. Department permission required.

499 Advanced Study in Biblical Studies 1-3 cr
Independent Study. Department permission required.

RELIGIOUS AND THEOLOGICAL STUDIES

205 The Mystery of God 3 cr
An exploration of basic questions concerning God and the world, and how it is possible to think about them.

220 Jesus the Christ 3 cr
A study of the humanity and divinity of Jesus, in Scripture, church tradition, and in contemporary times.

225 The Theology and Practice of Prayer 3 cr
Exploration of the experience, understanding, and various forms of prayer in the Christian tradition.

THE McANULTY COLLEGE OF LIBERAL ARTS

230 The Church 3 cr
The major influences that have shaped the Christian community, and how they provide insights for contemporary church and society.

232 Faith and Atheism 3 cr
An examination of the claims which atheists make against faith and the response made by believers to these arguments.

235 Christian Worship 3 cr
An experience-based study of how ritual functions in human life, leading to a survey of how worship has both expressed and formed the Christian tradition.

242 Love in Theological Thought 3 cr
A study of family love, friendship, and romantic love and their relationship to God’s love.

258 Catholicism 3 cr
The spirit, beliefs and practices of Roman Catholicism, and the issues confronting it today.

271 Beginnings of Christianity 3 cr
How in 300 years the Jesus whom the Romans crucified became the God even the emperor worshipped.

280 Religious Experience 3 cr
How the Divine is sensed and responded to in various geographical, cultural, and chronological contexts.

283 Judaism 3 cr
The faith, beliefs and practices of Jewish life over the centuries and today.

301 Marriage 3 cr
An examination of conjugal love as the basis for marriage as a Christian sacrament.

311 The Church in the Modern World 3 cr
How the Christian community is a prophetic presence in secular society and a community which affirms and sustains human dignity and values.

335 Theology of the Sacraments 3 cr
The seven sacraments as rituals and symbols in the growth of the life of Christians.

345 Women and Christianity 3 cr
From the Bible to the churches today, with special attention to contemporary roles and spirituality.

348 Religion in the United States 3 cr
The role played by religion in American society and culture, with special attention to historical developments and contemporary trends.

372 Religious Themes in Literature and Film 3 cr
An exploration of religious experience and religious...
15 credits These must include 6 credits from the Core and the remaining 9 credits must be selected from qualifying courses in at least two of the participating departments

15 credits These must include 6 credits from the Core and the remaining 9 credits must be selected from qualifying courses in at least two of the participating departments

205 Survey, Literature of the Western World I 3 cr
A thematic survey of literature through the Renaissance

206 Survey, Literature of the Western World II 3 cr
A thematic survey of literature from the Renaissance onwards

215 Non-Western Literature 3 cr
English translations of representative Asian and African literature

490 Topics in World Literature 3 cr
Study of literary texts from various national traditions addressing issues involved in the comparative study of literature. May be cross-listed with one or more courses in Classics, English, or Modern Languages and Literatures.

QUALIFYING DEPARTMENT COURSES

Classics Any literature course, whether in translation or in the original language, numbered 200 or higher

English Any literature course at the 300 or 400 level

Modern Languages and Literatures Any literature course, either in translation or in the original language, above 306
Bayer School of Natural and Environmental Sciences

The Bayer School of Natural and Environmental Sciences (BSNES) offers Bachelor of Science degrees in Biological Sciences, Biochemistry, Environmental Chemistry, Environmental Science, and Physics, as well as Bachelor of Arts degrees in Chemistry, Biological Sciences, Biochemistry, Chemistry, Environmental Science, and Physics, as well as Bachelor of Arts degrees in Chemistry or Biochemistry and in Physics. Science majors may join the Pre-Health Profession's Program. Science majors may apply for a dual degree in the following programs:

- BS Biology/MS Environmental Science & Management
- BS Chemistry/MS Environmental Science & Management
- BS Environmental Science/MS Environmental Science & Management
- BS Biology/MS Education
- BS Chemistry/MS Education
- BS Physics/MS Education
- BA Physics/BS Engineering

*The Binary Engineering Program in cooperation with Case Western Reserve University or the University of Pittsburgh*

### DEGREES

The undergraduate programs at the School for its outstanding achievements in both the natural and environmental sciences. The School offers undergraduate and graduate programs and includes the Center for Environmental Research and Education.

### DEGREE REQUIREMENTS

To receive the Degree of Bachelor of Science or Bachelor of Arts in the BSNES, a student must complete the following requirements:

- A minimum of 120 semester hours of course credits
- The last 30 hours must be taken at the University
- University Core Curriculum as described below

### Core Curriculum

- Imaginative Literature and Critical Writing 3 cr
- Problem Solving with Creative Math WAIVE
- Core Science (Biology, Chemistry or Physics) WAIVE
- Core Theology (Select one of six courses) 3 cr
- Base Philosophical Questions 3 cr

### ACADEMIC POLICIES

Effective Catalog

The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the School. The Bayer School of Natural and Environmental Sciences reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled, students should consult with their Faculty Mentor and Academic Advisor for specific information regarding academic policies pertaining to their respective program.

### QPA

Students must maintain a quality point average (QPA) of 2.00 or better to remain enrolled in the School.

### CLEP and Advanced Placement

(Refer to page 9 of the Undergraduate Catalog)

### SPECIAL PROGRAMS

**PRE-LAW**

Students who intend to prepare for a career in law may select any subject area for the undergraduate major. In consultation with the Pre-Law advisor, the student will be expected to meet degree requirements in the major department, as well as admission requirements of the law school of their choice.

**BACHelor-Master's Program in Biology, Environmental Science, or Chemistry and Environmental Science and Management**

For students planning careers as environmental professionals, the School offers a unique, five-year program providing a bachelor of science degree in biology, environmental science, or chemistry and a master of science in environmental science and management. Students who wish to complete the joint BS/MS program will follow the curriculum for the appropriate major in the Bayer School of Natural and Environmental Sciences. They may begin course work in the environmental science and management in the third year. The bachelor of science degree will be

### University-Level Courses Taken While in High School

University-level courses taken by freshmen students while in high school will be evaluated for credit if the following criteria have been met:

1. The courses are recorded on an official transcript from an accredited institution of higher learning.
2. The grades are C or better.
3. The student has completed one semester at Duquesne with a C+ average, or better.

### Academic Load

Students normally carry five courses (15-17 credits) in one semester, although a 12-credit schedule in a regular semester is considered full-time study. A schedule of more than 18 credits must be approved by the Student Advisor. Students on academic probation may not take more than 12 credits. Students who wish to carry more than 12 credits of courses in the summer sessions must consult with the Chair of the department in which the student is majoring.

### Majors

A major may be declared at the time of a student’s application into the BSNES, and must be declared at the end of the student’s freshman year. Transfer students must declare a major when accepted into the BSNES.

### Minors

A student may, at his/her discretion, declare a minor. An overall minimum cumulative quality point average of 2.0 is required for the minor for graduation. Refer to Departmental listing for specific minor requirements.

### Sequencing Courses

Sequencing courses must be taken in proper sequence. Credit will not be given for a prerequisite course if courses for which it is a prerequisite already have been taken.

### BS/MS Temporary Transfers (Summer Classes)

No course taken by a student in the BSNES will be considered toward the degree unless approved by the Chair of the department in which the student is majoring.

### Science Classes

- The BSNES will accept science courses taken at a 4-year college/university outside Duquesne University upon the approval of the syllabus by the department of the student’s major. If the student has not yet reached 60 credits, he/she may take the class at a two-year college upon the approval of the student’s major department.

### Non-science Classes

- The BSNES will continue to accept courses that are not science courses taken at a 4-year college/university outside Duquesne University. The course description must be approved by the student’s academic advisor prior to taking a course. If the student has not yet reached 60 credits, he/she may take the class at a two-year college.

### Resident Requirement

The last thirty credits must be taken in residence at Duquesne University.

### Academic Policies

- Major program (refer to departmental requirements)
- An overall minimum cumulative quality point average of 2.0
- Removal of I and F grades in the major department and in the required courses
- Pre-registration (with academic advisor) for B S/B A degree in major field
- Submission of application for the degree on form provided by the Registrar, before the deadline published in the current University catalog
- No student is considered a degree candidate prior to submission of this form and official registration for the degree

**Some requirements may vary depending on selected major**

**Biology, Biochemistry, Environmental Chemistry, and Environmental Science majors are required to substitute Math 225 Biostatistics for Scientific Programming/ Numerical Analysis**

- Major program (refer to departmental requirements)
- An overall minimum cumulative quality point average of 2.0
- A minimum cumulative quality point average of 2.0 in the major
- Removal of I and F grades in the major department and in the required courses
- Pre-registration (with academic advisor) for B S/B A degree in major field
- Submission of application for the degree on form provided by the Registrar, before the deadline published in the current University catalog
- No student is considered a degree candidate prior to submission of this form and official registration for the degree

### ACADEMIC POLICIES

Effective Catalog

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### QPA

Students must maintain a quality point average (QPA) of 2.00 or better to remain enrolled in the School.

### CLEP and Advanced Placement

(Refer to page 9 of the Undergraduate Catalog)
awarded at the end of the fourth year if all University and College Core Curriculum requirements have been met. Students must have earned a cumulative GPA of 3.0 or better to be permitted to continue graduate course work in the Environmental Science and Management (ESM) program during the fifth year.

JOINT DEGREE PROGRAMS FOR SCIENCE TEACHERS

For students who are seeking a rewarding career as science educators, the BS/ESM and the School of Education offer a unique five-year Bachelor of Science in biology, chemistry, or physics and Master of Science in education joint degree program.

Students enrolled in the BS/ESM in the Departments of Biological Sciences, Chemistry and Biochemistry, or Physics and apply to the Graduate School of Education in their junior year. The Bachelor of Science degree is generally awarded in the senior year after completion of the undergraduate course requirements and the Master of Science in Education degree in the fifth year of study after completion of all graduate course requirements.

Further information is available from the Student Advisor or the Office of the Dean.

SECOND BACHELOR’S DEGREE

A student who has received a bachelor’s degree from another school may become eligible for a second bachelor’s degree by earning an additional 30 semester hours in residence in the BS/ESM and by meeting all department and School requirements if not already satisfied. The additional 30 credits must be completed at the University, and they may not be taken through cross registration. Further information is available from the Student Advisor.

THREE-YEAR BACHELOR’S DEGREE

For more information contact the Office of Admissions or the Dean’s Office.

MAJORS

Biochemistry

Biology

Chemistry

Environmental Science

DEPARTMENT OF BIOLOGICAL SCIENCES

Associate Professors

Mary Alleman, Ph.D

John Doctor, Ph.D

Joseph McCormick, Ph.D

John A. Pollock, Ph.D

Kyle W. Zelcer, Ph.D

Assistant Professors

David J. Lampe, Ph.D

Lisa Ludvico, Ph.D

Jana Patton-Vogt, Ph.D

Nancy Trun, Ph.D

Nelson D. Young, Ph.D

Chair Emeritus

H. Bernard Hartman, Ph.D

Biology is the study of mechanisms and principles governing living systems. Based upon chemistry, physics and mathematics, knowledge of biology is an essential element in a liberal education. Through lectures, seminars, laboratories, and participation in research projects, the department of Biological Sciences at Duquesne University provides not only insight into this vast and exciting area, but intellectual enrichment, as well as preparation for professional careers. Students majoring in biology develop a course of study suited to their long-term goals. They are assisted in their course selections each semester by Biology department faculty mentors. Mentors provide advice to students wishing to pursue graduate training, or the many and diverse biotechnological research career opportunities in industry, government or universities. For those interested in health professions, the Pre-Health Professionals Program advisor counsels students as they progress through their curriculum and apply for admission to health-related professional schools.

REQUIREMENTS FOR THE MAJOR

The Department of Biological Sciences offers a Bachelor of Science in Biological Sciences. Of the credits required for graduation from Duquesne University, majors in biological sciences are required to complete the 38 credit hours of biology, and 30 corequisite science/math credits toward the 121 credits required for the Bachelor of Science in Biology. Prerequisites for 300 level or higher courses in Biology are C or better in BIOL 111/113, 112/114, 212 and CHEM 121,222.

Course objectives are met through lectures, laboratory experiments and exercises, field work, participation in professional organizations, weekly seminars, and research. Students are encouraged to become involved in undergraduate research projects with faculty.

DEPARTMENT OF NATURAL AND ENVIRONMENTAL SCIENCES

BAYE'S SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

REQUIREMENTS FOR THE BS IN BIOLOGICAL SCIENCES

Biology Requirements Total Credits 38

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Biology I</td>
<td>4 cr</td>
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<tr>
<td>Biology I Lab</td>
<td>0 cr</td>
</tr>
<tr>
<td>Biology II</td>
<td>4 cr</td>
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<tr>
<td>Biology II Lab</td>
<td>0 cr</td>
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<tr>
<td>Cell and Molecular Biology</td>
<td>3 cr</td>
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<tr>
<td>Genetics concentration</td>
<td>3 cr</td>
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<tr>
<td>Microbiology concentration</td>
<td>3 cr</td>
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<tr>
<td>Physiology concentration</td>
<td>3 cr</td>
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<tr>
<td>Organismal concentration</td>
<td>3 cr</td>
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<tr>
<td>Biology Seminar</td>
<td>1 cr</td>
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<tr>
<td>Lab I Experimental</td>
<td>3 cr</td>
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<tr>
<td>Lab II, III or IV</td>
<td>3 cr</td>
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<tr>
<td>Biology Electives</td>
<td>8 cr</td>
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<tr>
<td>Courses in CONCENTRATIONS</td>
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<tr>
<td>GENETICS pick one</td>
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<tr>
<td>General Genetics</td>
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<tr>
<td>Microbial Genetics</td>
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<tr>
<td>MICROBIOLOGY pick one</td>
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<tr>
<td>General Microbiology</td>
<td></td>
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<tr>
<td>Immunology</td>
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<tr>
<td>PHYSIOLOGY pick one</td>
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<tr>
<td>Mammalian Physiology</td>
<td></td>
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<tr>
<td>Comparative and Environmental Physiology</td>
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<tr>
<td>Neurobiology</td>
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<tr>
<td>Endocrinology</td>
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<tr>
<td>ORGANISMAL pick one</td>
<td></td>
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<tr>
<td>Microbial Ecology</td>
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<tr>
<td>Evolution</td>
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<tr>
<td>Applied and Environmental Microbiology</td>
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<tr>
<td>Developmental Biology</td>
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<td>Plant Biology</td>
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<td>Environmental Ecology</td>
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<tr>
<td>ELECTIVES</td>
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</tbody>
</table>

May be chosen from courses listed above, other departmental courses, Biochemistry (CHEM 401), undergraduate research.

Co-requisite Science/Math Requirements Total Credits 30

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>General Chemistry I</td>
<td>5 cr</td>
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<tr>
<td>General Chemistry II</td>
<td>5 cr</td>
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<tr>
<td>Organic Chemistry I</td>
<td>4 cr</td>
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<tr>
<td>Organic Chemistry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>General Physics I</td>
<td>4 cr</td>
</tr>
<tr>
<td>General Physics II</td>
<td>4 cr</td>
</tr>
<tr>
<td>Calculus I</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

REQUIREMENTS FOR THE MINOR

A minor in Biology consists of BIOL 111, 112, 113, 114 and a minimum of 12 credits selected from the Department’s courses numbered 200-495. Normally, this will include BIOL 212 and 2-3 other courses. Individual prerequisites for courses must be satisfied.

NON-MAJOR COURSES (Courses may not be taken for Biology major credit)

101 Introduction to Life’s Processes 2 cr

An emphasis on the fundamental biochemical and cellular concepts required for a solid understanding of life’s processes. This information will provide the background for the Anatomy & Physiology and Biology of Microbes courses. Lecture and recitation.

102 Introduction to Life’s Processes Laboratory 1 cr

Laboratory experiments and demonstrations illustrating biochemical and cellular processes. The lab is designed to accompany the lecture and recitation.

201 Biology of Microbes 2 cr

Examination of microbes as to what they are, how they grow, how they may be controlled, what their relationships to other living things are, and how some of them cause disease. Prerequisite C or better in 101/102 Lecture.

202 Biology of Microbes Laboratory 1 cr

Prerequisite 201 (or concurrent registration).

203 Introductory Microbiology 3 cr

Introduction to microorganisms, their morphology, metabolism, ecology, and cultural characteristics, with emphasis on their interaction with other organisms, including man. Principles of medical and health-related aspects of microbiology, immunology and animal virology are presented. This course is restricted to Health Sciences students only. Lecture.

204 Introductory Microbiology Laboratory 1 cr

Prerequisite 203 (or concurrent registration).

207 Anatomy and Physiology I 3 cr

This course is for aspiring health care workers. It provides a solid foundation in normal human anatomy and physiology. Then helps the student to integrate the knowledge with exposure to pathological conditions and clinical applications. Prerequisite C or better in 101/102 or 111/113 Lecture.

208 Anatomy and Physiology I Laboratory 1 cr

Laboratory exercises include both microscopic and gross examination of human anatomy, studies of
DEPARTMENT OF BIOLOGICAL SCIENCES

physiological processes and exposure to basic clinically significant phenomena. The "hands-on" approach in the laboratory provides an opportunity for students to experience and better understand the topics covered in lecture. Prerequisite 207 (or concurrent registration).

209 Anatomy and Physiology II 3 cr
Continuation of BIOL 207, emphasizing the mechanisms employed to maintain the body. Prerequisite C or better in BIOL 211, 212 Lecture.

311 Genetics 3 cr
This course is a survey of the subject of genetic analysis in biology. A problem solving approach is used to demonstrate the principles of genetics. Topics include classical Mendelian genetics, chromosomal inheritance, human genetic disease, population genetics, and gene expression. Prerequisites BIOL 212 or permission of the instructor. Lecture.

313 Developmental Biology 3 cr
The study of the progression through time and space from a single cell, the fertilized egg, to a complex multicellular organism. The powerful tools of molecular and cellular biology have linked the fields of embryology, morphology, genetics, and evolutionary biology to reveal how cells, tissues, organs, and organisms develop. This course explores the processes of morphogenesis, differentiation, pattern formation, growth, and reproduction at the molecular, cellular, and organismal levels to provide a current overview of development in a wide variety of organisms. Prerequisite BIOL 212 Lecture.

315W Mammalian Physiology 3 cr
Examination of the molecular and cellular mechanisms of mammalian body function, including consideration of the basic components of biological control systems and the manner in which various tissues and organ systems contribute toward the maintenance of physiological homeostasis in health and disease. Prerequisite BIOL 212 or permission of the instructor. Lecture.

316 Comparative and Environmental Physiology 3 cr
This course focuses on the diversity of physiological mechanisms that different animals employ, including the high level of physiological and biochemical adaptation and specialization found in animals that live in diverse and challenging environments, or that possess other exceptional physiological abilities. Prerequisite BIOL 212 or permission of the instructor. Lecture.

319 General Microbiology 3 cr
Survey of the microbial world, metabolism, biochemistry, regulation, growth, structure and function. Also included is an introduction to the fundamentals of immunology and virology. Recommended for students majoring in biology and post-baccalaureate students. Prerequisite BIOL 212 Lecture.

BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

340W Evolution 3 cr
Evolution is the single most important concept uniting the many fields of biology. This course covers the theory of evolution and the various levels at which evolution works in living systems. Topics to be addressed include evolutionary genetics (including molecular evolution), adaptation and natural selection, evolution and diversity (including phylogeny reconstruction), and paleobiology and macroevolution. Prerequisites BIOL 212, a genetics course is strongly recommended. Lecture.

370W Lab I Experimental Biology 3 cr
This junior level laboratory course is designed to provide students with a multidisciplinary lab that reflects the integration among different disciplines in the broad areas of cellular and molecular biology. The course emphasizes techniques and approaches in the molecular, biochemical, and cellular biology of organisms from bacteria to mammals. Included are an introduction to research skills (computer use, library resources), characterization and manipulations of cellular macromolecules including proteins and nucleic acids, and microscopy. Prerequisites BIOL 212. Laboratory and recitation.

371W Lab II Cell and Molecular Biology 3 cr
The second semester continues to build on BIOL 370W through investigative labs in cellular and molecular biology including cell culture, genetic mapping, constructing transgenic organisms, and microscopy of cellular structures. Prerequisite 370W Laboratory and recitation.

372W Lab III Cell and Systems Physiology 3 cr
The second semester continues to build on BIOL 370W through investigative labs in cardiovascular/respiratory physiology, muscle and neurophysiology, and endocrinology. Students will investigate selected physiological processes at different levels (whole organism to molecular) using a range of techniques (electrophysiological, isolated organ, pharmacological, cellular, molecular) and procedures (computer-based data acquisition, surgical, tissue culture, microscopy). This course exposes students to a broad range of skills and understandings that contemporary physiological research encompasses. Prerequisites 315, 316, 370W Laboratory and recitation.

373W Lab IV Microbiology 3 cr
The second semester continues to build on BIOL 370W through investigative labs in microbial physiology, ecology, and genetics. This laboratory also includes an independent research project designed and conducted by each student. Prerequisite 370W Laboratory and recitation.

395 Special Topics — Biology I 1-3 cr
Treatment of topics of current or special interest in biology. Lecture, laboratory, or combinations.

396 Special Topics — Biology II 1-3 cr
Treatment of topics of current or special interest in biology. Lecture, laboratory, or combinations.

398, 399 Undergraduate Research 1-3 cr
Opportunity for selected students to work in the laboratory on research problems under the direction of a faculty member. Registration by permission of the instructor.

400W Biotechnology Laboratory Techniques 3 cr
A course to familiarize the student with a variety of biological and biochemical techniques useful in such areas as medical and industrial biotechnology, science education, and biological research. The extraction, assay, and chemical analysis of a bacterial enzyme will be carried out. Purification of this enzyme by non-exchange chromatography and gel filtration will be done. Physical analyses of this enzyme using polyacrylamide gel electrophoresis (of native and denatured protein) as well as electroblotting and isoelectric focusing will be carried out. Prerequisite BIOL 212, CHEM 212 or 212H or permission of the instructor. Lecture and laboratory.

405 Microbial Genetics 3 cr
A course providing the fundamentals to the rapidly growing field of microbial genetics. Emphasis is on gene structure and function. Areas to be discussed are DNA replication, transcription, translation, control of gene expression, recombination, transformation, conjugation, transduction, postgenetic fine structure and colinearities, mapping methods, mutation, DNA repair, plasmids, and their properties. Genetic engineering and gene cloning are described. Prerequisite 212. Lecture.

414H Honors Seminar 1 cr
Discussion of current issues and research literature in the Biological Sciences. Format includes student presentations, faculty seminars, and invited speakers. Prerequisite Application and acceptance into the honors program in Biology. 1 hour seminar per week. May be taken a total of two times for credit.

415H Honors Thesis 2 cr
A written honors thesis to be based on research that was conducted under the mentorship of faculty in the Department of Biological Sciences. Also includes a public presentation of the thesis research. Prerequisites 1-4 credits of 416H and application and acceptance into the honors program in Biology.
416H Honors Research 1-4 cr
Laboratory research under the direction of a faculty mentor leading to a written honors thesis (BIOL 415H, Honors Thesis) and a presentation of the thesis research. Application and acceptance into the honors program in Biology May be taken more than once for a total of 4 credits.

424 Immunology 3 cr
A course in the fundamental mechanisms of the immune system, with applications in basic research, medicine and public health. Topics include the mechanisms of induction, regulation, and expression of the cellular and humoral immune responses, immunonchemistry, antigen-antibody reactions, immunogenetics, immunopathologies, and immunodeficiencies. Prerequisite: BIOL 212 or permission of the instructor. Lecture and laboratory.

426 Pathogenic Microbiology 3 cr
Study of the infectious agents of human disease with emphasis on host-parasite relationships, unique aspects of bacterial activities and organization, metabolism, regulation and genetics which contribute to pathogenicity, including identification of bacteria and principles of prevention, treatment, and laboratory diagnosis. Prerequisite: BIOL 212, a course in microbiology, or permission of the instructor. Lecture and laboratory.

427W Microbial Ecology 3 cr
In this course the interaction of microorganisms, primarily prokaryotes, with each other, plants, animals, and fungi, and the environment is explored. The course takes a systematic approach, examining these interactions at the ecosystem, organismal, subcellular, and historical level. Topics include microbial primary production and photosynthesis, biogeochemical cycling, the structure of microbial communities, modeling, symbiosis, and microbial evolution. Prerequisites: BIOL 212, 319, and CHEM 222 or 222H or permission of the instructor.

429 Microbial Physiology 3 cr
This is a course which focuses on microbial energy metabolism, biosynthesis, metabolic regulation, and cell structure. Energy metabolism includes organotrophy (aerobic and anaerobic respiration, fermentation), chemolithotrophy, and phototrophy. Selected topics of microbial biosynthesis, including cell envelope biosynthesis, will be covered. Regulation of energy metabolism and biosynthesis at the levels of gene expression and enzyme activity will be a major topic in this course. Prerequisites: BIOL 212, a course in microbiology, CHEM 222 or 222H or permission of the instructor. Lecture.

432 Applied and Environmental Microbiology 3 cr
This course takes an in-depth look at microbial biogeochemical cycling and the application of microbial processes (both prokaryotic and eukaryotic) for biotechnology and bioremediation. Topics include biogeochemistry, the design and application of genetically engineered microbes (GEMS), natural attenuation, fermentation, and water treatment, in addition to current issues in environmental science. Prerequisites: BIOL 212, 319, and CHEM 222 or 222H or permission of the instructor.

436 Environmental Ecology 3 cr
This course provides an overview of man's impact on the environment. Basic ecological principles are examined in the context of man's interaction with the biosphere. The ecological effects of pollution and other man-made disturbances are described. Topics include principles pertaining to ecosystems, communities and populations, biogeochemical cycles, sources of pollution, effects of pollutants on terrestrial and aquatic ecosystems, deforestation, loss of species richness, biomarkers, and bioremediation. The course is appropriate for science majors and for nonmajors with a strong science background. Prerequisite permission of the instructor. Lecture.

444 Plant Biology 3 cr
An in-depth examination of plant biochemistry, genetics, development and physiology. Emphasis is placed upon the presentation of current research problems and findings in plant biology. Typical subjects will include developmental genetics, applications of molecular biology to understand cellular structure and function, ecological physiology, and plant/pathogen relationships. Prerequisites: BIOL 212 or permission of instructor. Lecture.

455W Cardiovascular & Respiratory Physiology 3 cr
This advanced course provides students with an in-depth understanding of contemporary mammalian cardiovascular and respiratory system biology. Topics covered include cardiac cell biology and regulation, the endothelium, the microcirculation, vascular smooth muscle biology and regulation, regional circulations, body defense mechanisms, the respiratory properties of blood, pulmonary mechanics and gas exchange, ventilation/perfusion matching, and acid-base balance. After considering the molecular and cellular mechanisms that underlie normal function, the integrated responses to various stresses and diseases are considered. Prerequisite: BIOL 212, a mammalian-based physiology course or permission of the instructor. Lecture.

469 Signal Transduction 3 cr
This advanced cell biology course addresses the question of how the messages from various chemical signaling molecules are "transduced" into biological responses. Topics include modes of cell communication, types of chemical signals, steroid hormone action, transduction by cell-surface receptor proteins, channel-linked receptors, G-protein-linked receptors, catalytic receptors, second messengers, cAMP, calcium, calmodulin, muscarot triphosphate pathway, dacylglcerol pathway, protein kinases and growth factors. Prerequisites: BIOL 212 and permission of the instructor. Lecture.

475W Reproductive Physiology 3 cr
This course offers a broad overview of mammalian reproductive physiology. The major emphasis will be on human/primate biology, but other mammalian species will be included for comparison. The application of modern techniques of cellular and molecular biology to answer central questions of reproductive physiology will be explored in more detail. Prerequisite: BIOL 212, 315 or 316 or comparable and permission of the instructor. Lecture.

480 Readings in Biology I 1 cr
Discussion and critical evaluation by faculty and students of significant papers from recent research literature.

481 Readings in Biology II 1 cr
Discussion and critical evaluation by faculty and students of significant papers from recent research literature.

492 Stream Field Biology 3 cr
This course is the study of the functional relationships and productivity of fresh water streams as they are affected by their physical, chemical and biotic environment. The course material is presented as a combination of lecture, laboratory and field sessions. Prerequisites: There are no specific course prerequisites, however, students should have knowledge of basic biology, chemistry and fundamental algebra. Lecture and Laboratory.

496 Terrestrial Field Biology 2 cr
An applied ecology course is designed to present an overview of field and laboratory methods used by ecologists to describe and analyze plant and animal aggregations and their environments. The course focuses on the principles and practice of various ecological processes and the explanation of how to collect, record and analyze data. The course reviews the basic concepts of ecology that are needed to understand the various methods and their significance. The course material is presented as a combination of lecture, laboratory and field sessions. Prerequisites: There are no specific course prerequisites, however, students should have knowledge of basic biology, chemistry and fundamental algebra. Lecture and Laboratory.

497 Molecular Biology 3 cr
An advanced course in molecular genetics with emphasis on eukaryotic organisms. Content will vary from year to year but will include topics in gene regulation, gene expression, and genome structure and function. Special topics include experimental approaches to human genetic disease and transgenic organisms. This course is designed for biology seniors who have had BIOL 212 and 311 and biochemistry majors who have completed CHEM 402. Lecture.

499 Seminar 1 cr
Students attend and participate in weekly departmental research presentations and demonstrations by biological scientists from the Department of Biological Sciences, field stations, biotechnology laboratories, and other universities.
BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Chairperson
Jeffrey D. Madura, Ph.D

Professors
H. M. Kingston, Ph.D.
David W. Seybert, Ph.D.
Omar W. Steward, Ph.D.

Associate Professors
Bruce D. Beaver, Ph.D.
Charles T. Dameron, Ph.D.
Jeffrey D. Evanseck, Ph.D.
Frederick Fleming, Ph.D.
Mitchell E. Johnson, Ph.D.

Adjunct Professors
Shahed U. Khan, Ph.D.
Jeffry D. Madura, Ph.D.
Julian Talbot, Ph.D.

Assistant Professors
Partha Basu, Ph.D.
Paul G. Johnson, Ph.D.
Kerry C. McMahon, Ph.D.

Professor Emeritus
Paul G. Johnson, Ph.D.

Adjunct Professors
Hersz W. Machutski, D.Sc.
Ted J. Wessmann, Ph.D.

The Chemistry program is designed to provide the student with a fundamental background in chemistry and an understanding of the relationship of chemistry to other sciences and disciplines. Elective courses and the opportunity to do undergraduate research allow the chemistry major to develop interests in a specialized area of chemistry, such as analytical, inorganic, physical chemistry, and biochemistry.

Because of the fundamental nature of chemistry as a science, numerous opportunities for advanced study, as well as employment, are open to chemistry and biochemistry majors. A large percentage of students elect to continue their study in graduate programs in chemistry and related fields. Chemists and biochemists provide a core of personnel in pure and applied research, technical sales, technical libraries, management positions in the chemical and related industries, the space industry, education, the environmental sciences and the health professions, such as medicine, dentistry and veterinary medicine. The major in biochemistry centers upon the core of basic chemistry courses while also providing advanced courses in biochemistry and electives in biology.

Requirements for the Chemistry and Biochemistry Majors

All students must take 121, 122, 221H, 211L, 212L, 321, 322, 421 Lecture, three hours, laboratory, three hours, recitation, two hours.

Chemistry Major

B A Chemistry 120 cr. All students must take 211, 212H, 212L, 311, 322, 421 Physics 201, 202

B S Chemistry 128 cr All students must take 211H, 212H, 211HL, 212HL, 311, 322, 401, one Chemistry elective of 3 or 4 credits, Physics 211, 212, and Math 215

Environmental Chemistry Major

B S Environmental Chemistry 130 cr All students must take Chem 211H, 212H, 211HL, 212HL, 322, 375, Math 215, 225, Physics 211, 212 and four environmental science electives

Biochemistry Major

B A Biochemistry 121 cr. All students must take 211, 212, 212L, 401, 402 and Physics 201, 202 and Math 225

B S Biochemistry 128 cr All students must take 211H, 212H, 211HL, 212HL, 322, 401, 402, Physics 211, 212 Biology 467 and one 300-400 level Biology elective and Math 225

Approved chemistry electives are the following: 401, 402, 501, 504, 541, 540, 581, 582, 585, 586, 587. Course descriptions for 500 level courses are on the web at www.science.duq.edu/chemistry/graduate/gradcourse

To meet the American Chemical Society's requirements for Professional Certification, the B S students in chemistry must also take Math 308 or 315. B S students in Biochemistry must take Chem 311, Math 308 or 315 and an additional chemistry elective.

Requirements for the Minors

A minor in Chemistry or Biochemistry consists of 121, 122 and a minimum of 12 credits selected from Departmental courses numbered 200 or above. Individual course prerequisites must be satisfied.

121, 122 General Chemistry 5 cr each

The fundamental principles and concepts of chemistry are presented from the standpoint of atomic and molecular structure with illustrative examples from descriptive chemistry. The basic concepts of thermodynamics, chemical kinetics and equilibrium are introduced. The laboratory portion of the first semester illustrates the principle of ionic equilibria including qualitative inorganic analysis. Prerequisite for 121 Math 105 (College Algebra and Trigonometry) or a Math SAT greater than 500 and/or Math Placement Exam score greater than 17 Toledo Chemistry Placement Exam is required by all students. Prerequisite for 122 121 Lecture, three hours, laboratory, three hours, recitation, two hours.

122H Honors General Chemistry 5 cr each

The fundamental principles and concepts of chemistry are presented from a molecular standpoint. The basic concepts of bonding, molecular structure, intermolecular forces, thermodynamics, chemical kinetics, and equilibrium are introduced with relevant biological and environmental examples. A discovery-based approach format is used in the laboratory, Toledo Placement Exam is required. Prerequisite for 122H 121 Lecture, three hours, laboratory, three hours, recitation, two hours.

121H, 212H Organic Chemistry Lab 1 cr each

This lab exposes students to basic synthetic and purification techniques used in organic chemistry. Both microscale and macroscale equipment are used. The student acquires a knowledge of the various wet methods of qualitative organic analysis and also learns to generate and interpret IR and NMR spectra. Prerequisites 211L for 212L. 211L must be taken prior to or concurrent with 211L. 212L must be taken prior to or concurrent with 212L. Laboratory, three hours.

211H, 212H Lab Organic Chemistry Honors Lab 1 cr each

This course covers the fundamental principles of organic chemistry, organic chemistry, and biochemistry in an integrated two semester sequence. The first part of the course deals with basic chemical concepts, including stoichiometry, reaction equations, reaction mechanisms, and acid-base chemistry. The second part of the course covers a survey of the chemical properties of the principle functional groups of organic chemistry, including alcohols, ethers, ketones, carboxylic acids and derivatives. Integrated with this functional group discussion is an introduction to the carbohydrates, lipids, and proteins. The latter portion of the course provides an overview of metabolism and emphasizes the roles of enzymes in catalyzing and regulating the various reactions involved in energy transformations in the cell. The course does not serve as a prerequisite for CHEM 211, 212. Prerequisites for 131 High school or its equivalent, as evidenced by satisfactory performance on a math placement examination. Prerequisite for 132 131 Lecture, four hours, laboratory, three hours, recitation, two hours.

211, 212 Organic Chemistry 3 cr each

Students are given a firm foundation in the fundamentals of the structure and reactivity of organic compounds. Emphasis is on the basic mechanistic principles of the reactions and the strategies used to synthesize organic compounds. The use of NMR, MS, IR and UV-visible methods in organic chemistry is stressed. Prerequisites 121 or 122H for 211H. Prerequisite for 212H 211H Lecture, four hours.

230 Research Laboratory Techniques 1 cr

This course introduces students to the fundamentals of experimental methods and practice of research analysis. The student gains practical experience in environmental chemical sampling, modeling and testing methods. Prerequisites 121, 122, and/or 211H.

275 Environmental Chemistry 3 cr

This course introduces students to the fundamentals of experimental methods and practice of research analysis. The student gains practical experience in environmental chemical sampling, modeling and testing methods.

311 Inorganic Chemistry 3 cr

A survey of the basic principles required for understanding inorganic chemistry including atomic and molecular structure, Crystal structure, non-aqueous solvents and coordination compounds. Prerequisite 122 122 Lecture, three hours.

321, 322 Physical Chemistry 4 cr each

A study of the structure and properties of the various states of matter, thermodynamics, thermochromy and coordination compounds. Prerequisites 202 or 212, Chemistry 122,
Mathematics II
Prerequisite for biomembrane structure and function, the structure of analytical instrumentation. Experiments are open four hours.

401 General Biochemistry I
3 cr
An introduction to modern biochemistry at the molecular level. The course includes discussion of the structure and function of proteins, the chemical mechanisms and regulation of enzyme catalysis, biomembrane structure and function, the structure and metabolism of carbohydrates, and the bioenergetics of ATP synthesis and utilization. Prerequisite: 321. Laboratory, eight hours.

402 General Biochemistry II
3 cr
This course is a continuation of CHEM 401. The course presents an overview of the metabolic transformations of fatty acids, complex lipids, amino acids, and the purine and pyrimidine nucleotides. The second half of the course offers a discussion of the molecular basis of genetics, including DNA and RNA metabolism, protein biosynthesis, and an introduction to the biochemical basis of recombinant DNA methodology. Prerequisite: 401. Lecture, three hours.

423 Analytical Chemistry
3 cr
Theoretical and practical training in modern chemical analysis with emphasis on instrumental methods. Corequisite: 321. Lecture, three hours.

425L Advanced Integrated Lab I
1-3 cr
Students consolidate basic laboratory technique and learn to use and interpret results from modern chemical analytical instrumentation. Experiments are open four hours.

475 Senior Seminar
1 cr
Students learn to prepare the presentation of a chemistry topic to a general audience having some knowledge of chemistry. They learn to use scientific references, journals and electronic information retrieval. Students will incorporate different types of multimedia in presenting a seminar. Prerequisite: 325L

490 Undergraduate Research
Maximum 2 cr/ Semester
Selected students work on a research problem under the direction of a staff member.

DEPARTMENT OF PHYSICS
Chairperson
K. Thomas R. Davies, Ph D
Professors
K. Thomas R. Davies, Ph D
Rev. J. Clifton Hill, Ph D
Associate Professors
Barbara M. Mannier, Ph D
Monica Sorescu, Ph D
Assistant Professors
Scott Colver, Ph D
Simonetta Frettelli, Ph D
Instructor
Anna D’Eranos, B Sc

The program in the Department of Physics is primarily aimed at providing today’s students with a fundamental background in traditional physics as well as an understanding of the interrelationships with other sciences and disciplines. The Department is also aware that in today’s changing world, there must be a suitably flexible program that will best fit the graduate for the challenges faced in the many professions that are based on the science of physics. Also, it is realized that there are many expanding paths to professional growth. The Department program, therefore, is structured to provide the essential background for students who will enter graduate school, as well as equipping students to successfully compete for the available positions in research institutions, government agencies or private corporations. Department policy calls for individual attention to student needs.

REQUIREMENTS FOR THE B S PHYSICS MAJOR, Track #1
(primarily for those students who are planning to attend graduate school)

At least 46 semester hours of physics courses are required for this track. These credits must include PHYS 211, 212, 213, 301, 329, 330, 350, 361, 372, 402, 430W, 471, and three of the following four courses PHYS 474, 480, 482, and SPRG 103. Note that 480 also includes the one-credit computer lab 480L.

Extra-departmental Science and Mathematics Requirements Chemistry 121, 122 or Biology 111/113, 112/114, Mathematics 115, 116, 215, 301, and 315, Computer Science 160 or (an approved substitute) and 308 in order to enhance his/her background and understanding of chemistry, biology, computer science, and mathematics.

REQUIREMENTS FOR THE B S PHYSICS MAJOR, Track #2 (primarily for those students who are pursuing the five year joint B S Physics/M S Education program)

At least 40 semester hours of physics courses are required for this track. These credits must include PHYS 211, 212, 213, 301, 329, 330, 361, 372, 402, 430W, 471, SPRG 103, and one of the following two courses PHYS 480 and 482. Note that 480 also includes the one-credit computer lab 480L.

Extra-departmental Science and Mathematics Requirements Chemistry 121, 122, Mathematics 115, 116, 215, 301, and 315, Computer Science 160 or (an approved substitute) and 308.

REQUIREMENTS FOR THE B A PHYSICS MAJOR, Track #3 (special value to those students who wish to double major in Physics and another department at the University, particularly the Department of Mathematics and Computer Science and the Department of Chemistry and Biochemistry)

At least 32 semester hours of physics courses are required for this track. These credits must include PHYS 211, 212, 213, 471, 480, 480L, SPRG 103, and at least 10 credits from the following courses PHYS 301, 329, 330, 350, 361, 372, 402, 474, and 482.


REQUIREMENTS FOR THE MINOR
The minor consists of twelve hours in General Analytical Physics (211, 212, 213) and eight credits of upper division physics at the 300 and above level. The department will structure the minor program from the course offerings to fit, as nearly as possible, the needs and desires of the individual student.

REQUIREMENTS FOR THE BINARY ENGINEERING STUDENTS, B A in Physics, B S in an Engineering Specialty from Case-Western Reserve University or from the University of Pittsburgh

In addition to those courses needed to fulfill the University and Bayer School of Natural and Environmental Sciences Core requirements, each Binary Engineering student is required to complete the following Physics courses 211, 212, 213, 350, and 471, Chemistry 121 and 122, Mathematics 115, 116, 215, 301, and 315, and Computer Science 160 or (an approved substitute) and 308. Depending upon the field of engineering that a student elects to pursue, the Binary Engineering student may select additional courses from the following list.

Extra-departmental Science and Mathematics Requirements Chemistry 121, 122 or Biology 111/113, 112/114, Mathematics 115, 116, 215, 301, and 315, Computer Science 160 or (an approved substitute) and 308.

210, 202 Physics for the Life Sciences I and II
4 cr each
Designed to give the student a basic knowledge of physics and understanding of mechanics, properties of matter, heat, wave motion, sound, magnetism, electricity, light, and modern physics through the use of modern day examples and applications. At the completion of this course, the student should have attained a working knowledge of physics, its techniques and reasoning such that the knowledge of physics gained may be applied to future work in the sciences or other fields of endeavor. The course is particularly structured for students in the life sciences. Prerequisite: 201. A good knowledge of high-school algebra and trigonometry is required. Prerequisite: 202. 201 Students who have
203 Astronomy 3 cr
This course provides the student with a sampling of the principles and concepts of elementary astronomy and astronomical observation. Topics covered may include the scale of the cosmos, the celestial sphere, the solar system - past, present and beyond, astronomical tools, properties of stars and starlight, the life cycle of stars, black holes and neutron stars, and the origin, evolution and properties of galaxies. The question of life on other worlds may also be examined. This course presumes no scientific background, and is open to all students within the University.

211, 212 General Analytical Physics I and II 4 cr each
An introduction to the fundamental theories and applications of classical physics designed for students of science, math, computer science and engineering. A good algebra and trigonometry background is presumed and methods of using calculus are presented. The approach is strongly quantitative and emphasizes the solving of problems. Mechanics and electromagnetism are treated in detail in 211 and 212, respectively. Other topics such as wave motion, fluid mechanics, elasticity and oscillations may also be included. Corequisite for 211: Mathematics 116, or with permission of the instructor. Prerequisite for 212: Mathematics 215, Lecture, four hours; Laboratory, two hours.

213 General Analytical Physics III 4 cr
The topics to be covered may include (with subtopics in parentheses) (1) Thermodynamics (the First and Second Laws of Thermodynamics, entropy, the Carnot cycle, and the kinetic theory of gases), (2) Optics (the electromagnetic spectrum, geometric optics, interference, and diffraction), (3) Modern Physics (the special theory of relativity, quantization, the wave-particle duality, the deBroglie relation, and the uncertainty principle), (4) Wave Motion (the Doppler Effect, water waves, and acoustics), (5) Fluids (Archimedes' principle and Bernoulli's equation). Prerequisite: 212. Lecture, three hours; Laboratory, two hours.

301 Thermodynamics 3 cr
This is an intermediate level course covering the fundamental principles of thermodynamics, kinetic theory and statistical mechanics. The following is a partial list of items generally included: temperature, thermodynamic systems, work, heat, the ideal gas, the first and second laws of thermodynamics, Carnot cycles, entropy, Maxwell's equations, the kinetic theory of an ideal gas, P-V and P-T diagrams for a pure substance, first- and second-order phase transitions, the chemical potential, and the basic concept of classical statistical mechanics. Quantum statistics may also be studied. Prerequisite: Mathematics 215.

306 Applied Electronics 3 cr
This course seeks to combine a treatment of the principles of modern electronic instrumentation with practical laboratory experience. Topics, which will be included, are passive and active electronic components, electronic measuring instruments, power supplies, amplification, feedback and control, linear and digital devices. Emphasis will be on understanding instrumentation rather than on advanced principles of design. Prerequisites: Mathematics 212, or permission of instructor. Lecture two hours; Laboratory, three hours.

329 Advanced Laboratory I 1 cr
This course is a two-part course designed to prepare the student for later research, either in graduate school or in industry. In the first semester, the student will be introduced to laboratory electronics, performing experiments and analyzing data. Some of the experiments will include basic electrical circuits, gating and Boolean Algebra, binary and hexadecimal numbering systems, multiplexing and sequencing, flip-flops, counters, and electronic measurement. There will be some discussion of experimental design and systems not studied in the lab. Prerequisites: Mathematics 213 or 202 and the consent of the instructor. Laboratory, three hours.

330 Advanced Laboratory II 1 cr
A continuation of Advanced Laboratory I that concludes the electronics section and delves into Modern Physics experiments. Some topics include operational amplifiers, filters, power supplies, practical application of digital circuits, lasers, the Franck-Hertz experiment, the Millikan oil drop experiment, the charge to mass ratio (q/m) of the electron, and, if time permits, basic holography. Prerequisites: Mathematics 213 or consent of instructor. Laboratory, three hours.

350/550 Theoretical Methods in Science 3 cr
This course will include a variety of theoretical methods that are useful for general problem solving in advanced science and engineering courses. For example, in atomic and molecular structure, mechanics, electricity and magnetism, thermodynamics, and hydrodynamics, there are a variety of specialized differential equations (both ordinary and partial) that will be covered. We will also address certain elementary problems that may arise in the Schrödinger equation, which occurs in quantum mechanics. In addition, we will include other important theoretical topics, such as tensor methods, complex variable theory, Fourier and Laplace transforms, and general expansions using orthogonal functions. Also, statistical methods and numerical algorithms may be covered, e.g., least squares fitting, Newton's method, and various Gauss-Seidel methods. Prerequisite: Mathematics 215.

361/561 Mechanics 4 cr
An intermediate level theoretical classical mechanics course involving concepts and problems that require the mathematical tools of vectors, calculus, matrices. A good calculus background is assumed. The topics normally covered are: oscillations, the motion of a particle in 3-dimensions, vector calculus, central force systems, dynamics of many particles, transformation to the center-of-mass system, collisions, rigid body motion, nonrational systems, and the Lagrangean and Hamiltonian formulations of mechanics. Prerequisites: Mathematics 213, Mathematics 315.

372/572 Electromagnetism 4 cr
An intermediate course for the science and engineering students. This course may be discussed electostatics, energy relations in electrostatic fields, dielectrics, currents, and their interaction, magnetic induction, magnetic properties of matter, AC circuits, Maxwell's equations, and electromagnetic radiation from oscillating charges. Prerequisites: Mathematics 215.

402 Optics 4 cr
This course introduces the student to the principles and applications of wave optics, geometric optics and quantum optics. Specific topics include Maxwell's equations as they apply to electromagnetic radiation, reflection and refraction wih dielectric and conducting media, polarization, properties of lenses and mirrors, photon theory and the laser. Lecture, three hours; Laboratory, two hours (once every two weeks). Prerequisite: Mathematics 215.

403 Applied Laser Optics 2 cr
This course is primarily an experimental course with an emphasis on student work in a laboratory setting. It is open to all interested science students, and it is mandatory for all physics majors. Some experiments to be performed are: Laser assembly, the characteristics of polarized beams, observation of interference and the transverse nature of a laser beam, the reflection, refraction, interference, and spectra of lasers and holography. More advanced experiments could be assigned as special projects. Prerequisites: Mathematics 212, or consent of the instructor.

404/504 Theoretical Methods in Quantum Mechanics 4 cr
This is an intermediate level course covering the fundamental principles of quantum mechanics. Gaussian integration schemes. Prerequisite: Mathematics 215.

480/580 Chaos 3 cr
This course provides an introduction to quantum mechanics with applications drawn mainly from modern theories of atomic and nuclear structure. Topics include the old quantum (Bohr) Theory, the periodic table, the wave-particle duality, the uncertainty principle, the Schrödinger equation, and other aspects of elementary quantum mechanics. We may include Fermi-Dirac and Bose-Einstein statistics, the Pauli exclusion principle, and elementary angular momentum theory. We may also study developments in nuclear physics, condensed-matter physics, and elementary particle physics. Prerequisites: Mathematics 215 and 216.

471 Modern Physics 3 cr
This course provides an introduction to quantum physics with applications drawn mainly from modern theories of atomic and nuclear structure. Topics include the old quantum (Bohr) Theory, the periodic table, the wave-particle duality, the uncertainty principle, the Schrödinger equation, and other aspects of elementary quantum mechanics. We may include Fermi-Dirac and Bose-Einstein statistics, the Pauli exclusion principle, and elementary angular momentum theory. We may also study developments in nuclear physics, condensed-matter physics, and elementary particle physics. Prerequisites: Mathematics 215 and 216.

474 Quantum Mechanics 3 cr
This course provides an undergraduate introduction to the formalism of modern quantum theory. The course usually begins with a review of Schrödinger theory. The course content includes one-dimensional potentials, the harmonic oscillator, angular momentum, spin, and perturbation theory. Throughout the course, emphasis is placed on the Hilbert space formulation, the Dirac notation and the matrix representation. Prerequisites: 471 (The department will accept Graduate Chemistry 537, Quantum Chemistry, in lieu of 474.)

480/580L Chaos Computer Laboratory 1 cr
This course provides an introduction to the theory and applications of chaos. The topics presented include characteristic functions of dynamical systems and of maps and flows, sensitivity to initial conditions, studies of one-dimensional maps including fixed points, periodic orbits, bifurcation theory, the period-doubling cascade to chaos, universal scaling laws and the Feigenbaum constants, the Lorenz attractor, and the critical orbit, and the Newton Fixed Point Theorem. Then, the last part of the course is devoted to fractals, Julia Sets, and the Mandelbrot Set. If time permits, we may study the Lyapunov exponents and the Lorenz attractor. Students taking this course are strongly urged to take 480L. However, all majors enrolled are required to take 480L. Prerequisite: Mathematics 115.
also discuss the Hônon Map, the Lorenz attractor, Julia Sets, and the Mandelbrot Set Laboratory, two hours

482 Elementary Particle Physics  3 cr
This course will include elements of nuclear structure, as well as the discoveries and ideas of modern elementary particle physics. The material covered will be, part cultural and historical. The topics presented may include the Special and General Theorems of Relativity, an introduction to quantum mechanics, the charge, independent, nuclear interaction, the four fundamental forces in nature, the properties of baryons, mesons, and leptons, the quark structure of the hadrons, including the "flavor" and "color" labels, "asymptotic freedom" and "infrared slavery", parity violation in the weak interactions and other symmetries obeyed or violated in the various interactions, the electroweak theory, the unification of the various forces, and GUTS, supersymmetry, and string theories. Connections between particle physics and cosmology may be discussed Pre requisite 213, Mathematics 116

484, 485, 486 Special Topic Courses  1-3 cr each
These courses are designed to allow the Physics Major flexibility in designing his/her program. These courses are offered irregularly and at times when there is sufficient student demand to justify the offering of the course. The courses offered include 484 Introductory Solid State Physics, 485 Relativity, and 486 Shop Techniques. Descriptions of these courses follow

484 Introductory Solid State Physics  3 cr
Bulk properties of materials are discussed with both the phenomenological and microscopic approaches. Typical topics are the geometry of structure, solids, waves and diffractions, thermal properties, the free electron model, band theory, superconductivity, magnetic properties and magnetic resonance. Prerequisites 213 and 471, Mathematics 215

485 Relativity  3 cr
This course is an introduction to the Special and General Theorems of Relativity. Topics which may be discussed include space-time coordinates and four vectors, the Lorentz transformation, simultaneity, the Lorentz contraction, time dilation, relativistic dynamics, relativistic threshold problems, Einstein's Theory of Gravity, the Principle of Equivalence, space-time curvature, the gravitational red shift, the Einstein Equations, and applications to Astrophysics and Cosmology. Prerequisites 213, Mathematics 315

486 Shop Techniques  1 cr
A basic introduction to machine shop practices necessary to experimentalists in all fields. Some of the areas covered are shop equipment and its use, materials, soldering and welding techniques, mechanical drawing and schematics, electronics construction techniques and practical application

487/878 Problems in Physics  1-4 cr
Special topics and problems in physics and related subjects suitable for an independent study

488 Advanced Problems in Physics  1-4 cr
Problems of a more sophisticated nature than those in 487

495 Field Studies  1-4 cr

EARTH SCIENCE COURSES
( NOTE These courses have Physics Department course numbers )

PHYS 101 Physical Geology  3 cr
A comprehensive survey of materials, rocks, structures and geologic processes of the solid earth. Topics covered may include earthquakes, plate tectonics, volcanism, surface and groundwater, glaciers and mountains. This course presumes little or no geologic or scientific background, and is open to all students within the University. It is also suitable for completion of bench-core science requirements for students in the College of Liberal Arts, and as an earth science course for School of Education students

PHYS 102 Historical Geology  3 cr
A course which examines the essentials of the earth's evolutionary development through time. Topics covered in this course may include the physical composition and structure of Earth, plate tectonics and mountain building processes, concepts of geologic time and its measurement, and a history of the development of life on Earth. Evolution of local features may also be discussed along with their relationships to plate tectonics. This course presumes little or no geologic or scientific background, and is open to all students within the University. It is also suitable for completion of bench-core science requirements for students in the College of Liberal Arts, and as an earth science course for School of Education students

PHYS 232 Geology of the National Parks  3 cr
The national parks provide accessible and protected examples of important geologic processes. Volcanism, mountain building tectonic activity, glaciations, groundwater and geothermal activity, and river erosion are illustrated. Geologic history and features of each of the parks will be presented using slides, supplementary reading material, and maps. This course presumes little or no geologic or scientific background, and is open to all students within the University. It is also suitable for completion of bench-core science requirements for students in the College of Liberal Arts, and as an earth science course for School of Education students

PHYS 304 Environmental Earth Science  3 cr
Analysis of geologic aspects of man's environment with emphasis on geologic hazards and environmental impact of society's demand for water, minerals, and energy. Topics covered include coastal processes, earthquakes, volcanic eruptions, river alternative energy sources, and environmental law. This course presumes little or no geologic or scientific background, and is open to all students within the University. It is also suitable for completion of bench-core science requirements for students in the College of Liberal Arts, and as an earth science course for School of Education students

PHYS 491 Environmental Hydrogeology  2 cr
This course introduces students to the fundamentals of geologic materials and soils and deals with ground and surface water and hazardous earth processes, such as flooding and earth movements. Geologic issues of solid waste disposal, hazardous waste management, and land-use planning will be covered. The course will include case histories, field trips, and a research paper

CENTER FOR ENVIRONMENTAL RESEARCH AND EDUCATION

Director
Daniel K. Donnelly, Ph.D
Research Professor
Stanley J. Kabala, Ph.D
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Kyle W Selcer, Ph.D, Department of Biological Sciences
John F Stolz, Ph.D, Department of Biological Sciences
Charles Rubin, Ph.D, Political Science Department

Human influence on the environment promises to be one of the most pressing problems of the 21st century. Because assertions based on a lack of empirical evidence frequently occupy center stage in environmental debates, sound science is needed for environmental decision-making. Duquesne University has responded to this need with the Bachelor of Science in Environmental Science.

The B.S. in Environmental Science provides a broad environmental background. Career choices could include positions in the private, public and non-profit sectors. Graduates would be prepared to work in such areas as environmental consulting, laboratory or field research, geology, compliance, and environmental education

Students that go on to receive the five-year Master in Environmental Science and Management at Duquesne would also gain a background in environmental management systems, public policy, and law. The M.S. provides for such careers as environmental policymaking, pollution prevention, or risk assessment, in addition to the positions listed above

REQUIREMENTS FOR THE MAJOR
It is our belief that students should receive individual attention during their entire undergraduate career. Each student plans a course of study in close cooperation with a faculty advisor. The student's progress is closely monitored, with developing interests and abilities strongly encouraged to pursue independent research as an essential part of their educational program. Research permits students to develop an even closer relationship with a faculty research director, who then serves as a mentor during career planning

REQUIREMENTS FOR THE B.S. IN ENVIRONMENTAL SCIENCE

<table>
<thead>
<tr>
<th>Foundational Science Requirements</th>
<th>Total credits</th>
</tr>
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<tbody>
<tr>
<td>CHEM 121</td>
<td>General Chemistry 1/Lab 5 cr</td>
</tr>
<tr>
<td>CHEM 122</td>
<td>General Chemistry 2/Lab 5 cr</td>
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<tr>
<td>CHEM 211</td>
<td>Organic Chemistry I 3 cr</td>
</tr>
<tr>
<td>CHEM 211L</td>
<td>Organic Chemistry II 1 lab 1 cr</td>
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<tr>
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<tr>
<td>CHEM 212L</td>
<td>Organic Chemistry II Lab 1 cr</td>
</tr>
<tr>
<td>CHEM 230L</td>
<td>Research Lab Tech 1 cr</td>
</tr>
<tr>
<td>CHEM 421</td>
<td>Analytical Chemistry 3 cr</td>
</tr>
<tr>
<td>BIOL 111/113</td>
<td>Biology I/Lab 4 cr</td>
</tr>
<tr>
<td>BIOL 112/114</td>
<td>Biology II/Lab 4 cr</td>
</tr>
<tr>
<td>BIOL 212</td>
<td>Cell/Molecular Biology 3 cr</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I 4 cr</td>
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<tr>
<td>MATH 116</td>
<td>Calculus II 4 cr</td>
</tr>
<tr>
<td>MATH 225</td>
<td>Intro to Biostatistics 3 cr</td>
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<tr>
<td>MATH 325W</td>
<td>Applied Stats with Regression 3 cr</td>
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<td>PHYS 211</td>
<td>Gen Analytical Physics I 4 cr</td>
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<tr>
<td>PHYS 212</td>
<td>Gen Analytical Physics II 4 cr</td>
</tr>
</tbody>
</table>

Majors Courses Total credits 24

| ESM 444 | Public Policy and Environmental Politics 3 cr |
| ESM 451 | Foundations of Energy & Environment 3 cr |
| ESM 452 | Intro to Env Engineering 3 cr |
| ESM 470 | Environmental Chemistry 3 cr |
| ESM 496 | Environmental Toxicology 3 cr |
| ESM 497 | Survey of Environmental Technologies 3 cr |
## ENVIRONMENTAL RESEARCH AND EDUCATION

### 466/566 Terrestrial Field Biology
**3 cr**
This applied ecology course is designed to present an overview of field and laboratory methods used by ecologists to describe and analyze plant and animal aggregations and their environments. The course focuses on the principles and practice of various ecological procedures with explanation of how to collect, record, and analyze data. The course reviews the basic concepts of ecology that are needed to understand the various methods and their significance. The course material is presented as a combination of lecture, laboratory, and field sessions (Cross-listed with BIOL 466/566). Prerequisites: Biology 111/113, 112/114

### 491/591 Environmental Hydrogeology
**3 cr**
The course introduces students to the fundamentals of geologic materials and soils and deals with ground and surface water and hazardous earth processes, such as flooding and earth movements. Geologic issues of solid waste disposal, hazardous waste management, and land-use planning will be covered. The course will include case histories and field trips. Prerequisites: Biology 111/113, 112/114

### 492/592 Stream Field Biology
**3 cr**
Stream Field Biology is the study of the functional relationships and productivity of fresh water streams as they are affected by their physical, chemical, and biotic environment. The dynamics of flowing streams, with their linear pattern, make an ever-changing ecosystem dominated by constant erosion and deposition. Increasing knowledge about the operational stream ecosystem and factors that regulate productivity of the total watershed is crucial. The participants in this course will categorize stream order in a watershed, explain the abiotic and biotic relationships that exist with stream ecosystems, analyze the parameters of a watershed, and evaluate the trade-offs, costs and benefits of conserving stream watersheds. Prerequisites: Biology 111/113, 112/114

### 494/594 Environmental Sampling
**3 cr**
Environmental sampling will explore the fundamentals of sample collection and the various methods used for obtaining environmental samples from air, water, and sediment. Field trips on the Pittsburgh Voyager are used to obtain samples from the Three Rivers. Prerequisites: Biology 111/113, 112/114

### 495/595 Environmental Biotechnology
**3 cr**
This course looks at microbial biodegradation pathways, bioremediation processes, regulatory hurdles and the assessment and application of remediation technologies. Prerequisites: Biology 111/113, 112/114

### 496/596 Survey of Environmental Technologies
**3 cr**
This course will address the principles of waste minimization and widely used environmental control technologies. The course objective is to provide the student with an overview of the many environmental technologies and their potential applications in treatment and remediation. Emission control technologies for air, water, and solid waste management will be covered, including physical and chemical processes, biological methods, stabilization, and disposals as well as remediation strategies. The thrust of this course is not "how to" manage hazardous waste but as a survey course of environmental technology, treating in some depth widely used and emerging technologies as they apply to air, water, and solid media in remediation. Prerequisites: Biology 111/113, 112/114. Chemistry 121, 122. Mathematics 115

## BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

### 497/597 Applied and Environmental Microbiology
**3 cr**
This course takes an in-depth look at microbial biogeochemical cycling and the application of microbial processes (both prokaryotic and eukaryotic) for biotechnology and bioremediation. Topics include biogeochemistry, the design and application of genetically engineered microbes (GEMS), natural attenuation, fermentation, and water treatment, in addition to current issues in environmental science. Prerequisites: Biology 212, 319. Chemistry 222 or permission of instructor

### 498/598 Environmental Ecology
**3 cr**
This course provides an overview of man's impact on the environment. Basic ecological principles are examined in the context of man's interaction with the biosphere. The ecological effects of pollution and other man-made disturbances are described. Topics include principles pertaining to ecosystems, communities, and populations, biogeochemical cycles, sources of pollution, effects of pollutants on terrestrial and aquatic ecosystems, deforestation, loss of species richness, biomes, and bioremediation. Prerequisites: Biology 111/113, 112/114

### 499/599 Microbial Ecology
**3 cr**
In this course the interaction of microorganisms, primarily prokaryotes, with each other, plants, animals, and fungi, and the environment is explored. The course takes a systematic approach, examining these interactions at the ecosystem, organismal, subcellular, and historical level. Topics include microbial primary production and photosynthesis, biogeochemical cycling, the structure of microbial communities, modeling, symbiosis, and microbial evolution. Prerequisites: Biology 212, 319. Chemistry 222 or permission of instructor

## SCIENCE PROGRAM COURSES

### SPRG 103 The Big Bang and Beyond
**3 cr**
Deals qualitatively with the modern scientific understanding of the origin and evolution of the universe. The theory of the Big Bang is presented, together with its observational evidence, the redshift of distant galaxies, the cosmic background radiation and the cosmic abundance of hydrogen and helium. The inflationary universe and the dark matter problem are included. The topics of relativistic cosmology, white dwarfs, neutron stars, black holes, and gravitational waves manifest explicitly the gravitational regime of the course gravity modeling the cosmos, ruling star evolution and opening a new window to the universe. The course uses computer-based resources and includes field trips to nearby observatories. No previous knowledge of astronomy, physics or mathematics is required

### SPRG 104 Internship
**3 cr**
This program provides students with meaningful professional experience related to the student's selected course of study. It introduces the student to a work environment in the student's chosen field of study, and provides first-hand organization experience that affords the opportunity to assess organizational behavior and interpersonal communications. It also provides an opportunity to enhance the student's sense of professionalism

### SPRG 105 Career Development Seminar
**1 cr**
Students will learn the skills and be given background information necessary to make informed career decisions in the natural and environmental sciences. Basic skills such as resume writing, application process, and interview skills will be discussed during the initial part of the course. In addition, each student will prepare a career plan, resume, and cover letter. Subsequent sessions will involve outside speakers who will discuss their career choices and the breadth of career opportunities within their field.

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**MAJOR COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>444/544</td>
<td>Public Policy and Environmental Politics</td>
<td>3 cr</td>
</tr>
<tr>
<td>451</td>
<td>Foundations of Energy and the Environment</td>
<td>3 cr</td>
</tr>
<tr>
<td>452</td>
<td>Environmental Chemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>462/662</td>
<td>Enhanced Microwave Chemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>466/566</td>
<td>Terrestrial Field Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>470/670</td>
<td>Environmental Toxicology</td>
<td>3 cr</td>
</tr>
<tr>
<td>491/591</td>
<td>Environmental Hydrogeology</td>
<td>3 cr</td>
</tr>
<tr>
<td>492/592</td>
<td>Stream Field Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>494/594</td>
<td>Environmental Sampling</td>
<td>3 cr</td>
</tr>
<tr>
<td>495/595</td>
<td>Environmental Biotechnology</td>
<td>3 cr</td>
</tr>
<tr>
<td>496/596</td>
<td>Survey of Environmental Technologies</td>
<td>3 cr</td>
</tr>
<tr>
<td>497/597</td>
<td>Applied and Environmental Microbiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>498/598</td>
<td>Environmental Ecology</td>
<td>3 cr</td>
</tr>
<tr>
<td>499/599</td>
<td>Microbial Ecology</td>
<td>3 cr</td>
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</table>

**Electives**

- Biochemistry, Chemistry, or Biology elective, required 3 cr

* This course is taught at CMU. Students will need to cross-register

**Choose from the following electives**

- ESM 462, 466, 491, 492, 494, 495, 497, 498, 499, or from GEOL 860, 1460, 1515 at the U of Pittsburgh
A J. Palumbo School Of Business Administration

PHILOSOPHY AND OBJECTIVES
The mission of the A J. Palumbo School of Business Administration is to be the premier teaching institution in our market, helping our students to acquire the knowledge, skills and values necessary for participation and leadership in the evolving global marketplace. In carrying out that mission, the School provides an environment of excellence in teaching and learning. The faculty pursues a balance of theoretical knowledge and practical experience through instructional excellence, research and intellectual inquiry and a commitment to professional and community service.

A J. PALUMBO SCHOOL OF BUSINESS ADMINISTRATION

Administration
Dean
James C. Stalder, B S
Associate Dean and Director of Undergraduate Studies
Thomas A. Pollock, Ph D
Associate Dean and Director of Graduate Studies
William D. Presutti, Jr, Ph D

HISTORY
The A J. Palumbo School of Business Administration was established in 1935 as the School of Accounts and Finance. In 1931, the name was changed to the School of Business Administration to reflect the expansion of its course offerings and its growing professional stature in the education community. By 1961, the School had earned accreditation by the premier business school accrediting agency, AACSB, joining the less than 30 percent of business schools nationwide who have achieved this distinction. During the next several decades, new degree programs were added to enhance the scope of the curriculum and help prepare students for careers in all types of organizations.

Following a generous endowment in October of 1991 by Anthony A. Palumbo, an accomplished business professional, the School adopted its current name, the A J. Palumbo School of Business Administration.

A J. PALUMBO SCHOOL OF BUSINESS ADMINISTRATION

ADMISSION
Students who wish to enroll in the A J. Palumbo School of Business Administration should apply through the Duquesne University Office of Admissions, 600 Forbes Avenue, Pittsburgh, PA 15282 — Phone (412) 396-5000. The regular University admission requirements can be found on page 14. Acceptance of all international students will be contingent upon successful completion of the Duquesne University English Placement test and any required English language course work. This may involve at least one semester or more of course work until such time as the student's English proficiency sufficiently improves to take undergraduate classes.

Students transferring from a school of business that is accredited by AACSB International — The Association to Advance Collegiate Schools of Business, must present an overall quality point average of 2.5 (on a 4.0 scale) or better. For other students, including those transferring from another school within the University, an overall quality point average of 2.5 or better and a grade of C or better in all business courses and in their highest level math course are necessary. Up to sixty credits of course work taken outside of the School of Business will be accepted for transfer credit. No more than 27 of those credits may consist of business courses. Exceptions will be made if the student is enrolled in a school with an established articulation agreement with Duquesne University. If extenuating circumstances exist, the student may petition the Student Standing Committee. For further information, the student should consult an academic advisor.

SECOND BACHELOR'S DEGREE
Persons who have received a bachelor's degree from an approved college or university may be eligible to enter the program for a second bachelor's degree in Business Administration. A second degree candidate must meet the requirements of the School's degree program. A minimum of 30 credits must be completed in residence.

THREE-YEAR BACHELOR'S/J D
A student who has completed 96 credits in the A J. Palumbo School of Business Administration, who is a student in good standing, and who has satisfied all undergraduate curricular requirements at Duquesne University may apply for a bachelor's degree after successful completion of the first year of academic work at the Duquesne University School of Law. Students interested in this program should consult their advisors in their sophomore year to plan their program of studies. Because of the restrictive nature of this program, it is not open to transfer students.

DEGREE
The School of Business Administration grants the degree of Bachelor of Science in Business Administration. Descriptions of advanced degrees are found in other publications available from Duquesne University's John F. Donahue Graduate School of Business.

SATURDAY PROGRAMS
The School of Business Administration offers its accounting, information technology, and marketing programs in a Saturday format. These accelerated programs provide adult learners the opportunity to earn a degree by attending classes only on Saturdays. For additional information on these programs, please contact the School of Business Administration Admission Office — Phone (412) 396-6277 or the School of Leadership and Professional Advancement — Phone (412) 396-5990.

DUAL DEGREE PROGRAMS WITH COLLEGE OF LIBERAL ARTS
The School of Business Administration and the College of Liberal Arts have developed a dual degree (BSBA/BA) option. Students interested in this program should consult their advisors in the School of Business Administration or in the College of Liberal Arts.

BUSINESS CERTIFICATE PROGRAM WITH COLLEGE OF LIBERAL ARTS, SCHOOL OF NURSING AND SCHOOL OF MUSIC
The School of Business Administration and the College of Liberal Arts, the School of Nursing, and the School of Music have developed certificate programs in business for liberal arts, education, nursing and music students. Students in the College of Liberal Arts, the School of Education, the School of Nursing and the College of Music who are interested in these programs should consult their advisors in the School of Business Administration.

EARLY ADMISSION TO MBA PROGRAMS
The School of Business Administration of the University of Pittsburgh offers an opportunity for students in the School who achieve the Dean's List to apply for early admission to the MBA program. Provided they receive a satisfactory score on the Graduate Management Admission Test, these students may apply to take certain MBA courses during their senior year. Students interested in this program should consult their advisors early in their junior year.

EARLY ADMISSION TO MBA PROGRAMS WITH COLLEGE OF LIBERAL ARTS, SCHOOL OF NURSING AND SCHOOL OF MUSIC
The School of Business Administration and the College of Liberal Arts, the School of Nursing, and the School of Music have developed certificate programs in business for liberal arts, education, nursing and music students. Students interested in these programs should consult the advisors in the School of Business Administration or in their college's office.

EARLY ADMISSION TO MBA PROGRAMS WITH COLLEGE OF LIBERAL ARTS, SCHOOL OF NURSING AND SCHOOL OF MUSIC
The School of Business Administration and the College of Liberal Arts, the School of Nursing, and the School of Music have developed certificate programs in business for liberal arts, education, nursing and music students. Students interested in these programs should consult their advisors in the School of Business Administration or in their college's office.
nity at large Among the most active of the Business Community and Economic Development, the SBDC con-
munity, with over 500 individuals every year. The SBDC also conducts special projects related to entrepreneurial
training, international trade assistance, environmental compliance, youth entrepreneurship, women's
business ownership, coordination of the region's entre-
preneurial assistance network, special training events and numerous other projects related to market
research
The Beard Center for Leadership in Ethics
The mission of the Beard Center for Leadership in Eth-
ics is to accentuate issues of ethical concern by pro-
 moting public discussion in an attempt to develop an
 overall awareness of ethical conduct and an increase in
leadership standards for the organization. Impor-
tant initiatives in this mission are the Distinguished
Speaker Series on Ethics and the Ethics Breakfast For-
ums. At these programs, prominent executives from
the local and national business community share their
experiences and philosophy on ethical conduct with
students and local business people
The Institute for Economic Transformation
The mission of the Institute for Economic Transform-
ation (IET) is to foster and accelerate the growth and
development of the region's business community,
while, at the same time, building and strengthening
relationships between firms, their sustaining commu-
nities, and the broader business infrastruc-
ture. The Institute is currently focusing its efforts
on education and training, manufacturing improvement, and workforce development. Through the Center for
Corporate Development, the Center for Executive Education and the newly formed Center for Enter-
prise Leadership, IET offers a full range of executive education leadership, business performance improve-
ment and management training services. The
Community Manufacturing Initiative assists manufactur-
ing firms located in distressed communities. Through
its workforce development initiative, designed to
address issues of regional manufacturing workforce
shortages, IET has created Manufacturing 2000, New
Century Careers, Inc, a state-funded Customized Job
Training Consortium and numerous networks of
manufacturing firms, education and training organi-
zations that focus on specific workforce skill short-
ages
Investment Center
The School of Business Investment Center is one of
only a handful of facilities in the nation designed to
allow students to manage real money using state-of-the-art software and computer technology.
The Center provides a wide range of analytical mod-
els and decision-making tools in a lab equipped with
computers and custom software that allows real-time
access to stocks, bonds, futures, currencies and options
markets from around the world
School of Business Administration Computer Facilities
To enhance our students' learning experience, the
School of Business operates an expansive, newly reno-
vated Technology Center. The facility includes all the
major financial markets, technology-rich classroom learning centers that provide access to Enter-
prise Resource Planning (ERP) software applications, a networking laboratory and a
general computer laboratory
Student Organizations
The following student organizations in the A J
Palumbo School of Business Administration exist for
the promotion of the scholarly and professional inter-
ests of members.
The American Marketing Association members at
Duquesne University interact with the Pittsburgh pro-essional chapter on a regular basis to organize seminars featuring successful marketing executives, work-
shops, career forums, and networking events. The
American Marketing Association chapter at Duques
ne University offers opportunities for students to gain
real world experiences, network with industry pro-
fessionals and enhance their professional development.
The Duquesne University Business Women Association is a network of Duquesne alumnae, graduate and
undergraduate students, as well as businesswomen from the region. This organization is committed to
the development of women's roles in business and deals with issues and problems that all women share
in education and their careers.
The Financial Management Association is a student
organization for those interested in careers in finance. The International Business Association is a student
organization for those with interest in careers in the area of international business.
The Pennsylvania Institute of Business and Public
Accounting offers a total of thirteen concentrations (majors) from which to choose courses. The respective
areas of concentration include Accounting, Accounting Informa-
tion Systems, Economics, Finance, Information Tech-
Studies, Marketing, Sports Marketing, Supply Chain Management and Technology Marketing.
Recommended programs of study for specific disci-
plines are listed on the pages that follow.
Students entering the School of Business Administration are expected to inform their advisors about their
career objectives and their desired academic area(s) of concentration, and to consult with them when planning their program of study. They should use the personal curriculum choices must, of course, include the University requirements and Business Administration Core requirements as indicated in the illustra-
tions set forth in this catalog. Students are strongly encouraged to include additional course work in speech and communications and in advanced writing in their programs. Regulations for certification in accounting make the program very rigid, this is dealt with in the section describing the accounting curriculum on the following page.
Programs of study should be based upon care-
ter career objectives and constitute a broad and flexible edu-
cational process. Students are also encouraged to take
courses that will broaden and strengthen their career objectives. Many courses are offered to all School of Business students.
The following academic programs in the School of Business Administration are offered.

Program for Professional Development
All students in the School of Business Administration are required to take the first two courses in the follow-
ing professional development program in order to complete their degree requirements.
Four Year Sample Plan
(Freshman Year)

University Core
101 Thinking and Writing
Across the Curriculum 3 cr
102 Imagination and Critical Writing
101 Literature and College Algebra 3 cr
111 Calculus 3 cr
132 Basic Philosophical Questions 3 cr
141 Social, Political and Economic Systems 3 cr
151 The Shaping of the Modern World 3 cr
161 The Arts and the Human Experience 3 cr
A J PALUMBO SCHOOL OF BUSINESS ADMINISTRATION

BUSINESS CORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>182 Information Systems I</td>
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<tr>
<td>183 Information Systems II</td>
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<tr>
<td>103 Introduction to Business</td>
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<tr>
<td>300 Career Strategies</td>
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TOTAL Credits: 31 cr

SOPHOMORE YEAR

UNIVERSITY CORE

<table>
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<td>Core Theology Requirement</td>
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<td>Core Science Requirement</td>
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BUSINESS CORE

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<tr>
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<tbody>
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<tr>
<td>Quantitative Analysis II</td>
<td>3 cr</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>Managerial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>3 cr</td>
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<tr>
<td>Principles of Macroeconomics</td>
<td>3 cr</td>
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<tr>
<td>Business Law</td>
<td>3 cr</td>
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<td>Career Strategies</td>
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<tr>
<td>Communication Requirement</td>
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TOTAL Credits: 25 cr

JUNIOR YEAR

BUSINESS CORE

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<tr>
<td>Business Finance</td>
<td>3 cr</td>
</tr>
<tr>
<td>Introduction to Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>Introduction to Marketing</td>
<td>3 cr</td>
</tr>
<tr>
<td>Total Quality and Operations</td>
<td>3 cr</td>
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<tr>
<td>Business Ethics/Communications</td>
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TOTAL Credits: 18 cr

MAJOR AREA OF CONCENTRATION

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<td>3 cr</td>
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<tr>
<td>Major Area of Concentration</td>
<td>3 cr</td>
</tr>
<tr>
<td>Major Area of Concentration</td>
<td>3 cr</td>
</tr>
<tr>
<td>Major Area of Concentration</td>
<td>3 cr</td>
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</table>

TOTAL Credits: 12 cr

EFFECTIVE CATALOG

The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the School. The A. J. Palumbo School of Business reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled, students should consult with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective program. This catalog has been prepared with the best information available as of February 2002.

CLASS ATTENDANCE

Regular class attendance in the School of Business Administration is strongly recommended for maximum educational advantage and, in some cases, may be required. The responsibility for all course material rests wholly with the student. It is the prerogative of each instructor to establish specific policies for attendance at examinations and class lectures, deadlines for reports, and other specific school or course requirements. A student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstances is responsible for notifying his/her advisor. The student should supply a written verification as soon as possible. A student who is absent for cause is expected to complete all the work as soon as the course is over. It is the student's responsibility to make up all assignments in all courses and to be familiar with any instructions that may have been given during the absence.

STUDENTS WITH DISABILITIES

Students with disabilities requiring special assistance are urged to notify the Office of Special Student Services before the first day of class.

ENROLLMENT IN BUSINESS COURSES BY STUDENTS IN OTHER SCHOOLS OF THE UNIVERSITY

Students enrolled in other schools in the University are welcome to take business courses provided they meet all prerequisites. Under no circumstances, however, may a student in another school take more than 27 credit hours in business courses.

ACADEMIC REGULATIONS

ACADEMIC LOAD

Students may normally carry 15 credits in one semester. A schedule of more than 15 credits must be approved by the Advisement Office. Students on academic probation may not take more than 12 credits in the summer session. Students normally carry one credit per week, i.e., six credits in the six-week session. A 12-credit schedule in a regular semester is considered full-time study.
### ACCOUNTING CURRICULUM

The Accounting curriculum prepares students for excellent career opportunities as professionals in the areas of corporate, industrial, government, nonprofit and public accounting. The program provides students with a sound theoretical foundation as well as practical business experience opportunities, such as internships. The program also satisfies course preparation requirements for the Certified Public Accountant (CPA) exam and the Certified Management Accountant (CMA) exam.

Students interested in sitting for the CPA exam are strongly encouraged to take the following courses in their major area of concentration: 216, 311, 312, 314, 315, 413 and 414. Additionally, Law 354 is strongly recommended.

Students interested in other areas of accounting should take at least six (6) of the above listed Accounting courses along with additional electives from the areas of Accounting, Information Technology or Finance, such as QSMIS 481, 485 and Finance 333.

Students should contact an academic advisor or a member of the accounting faculty for further information.

### COURSE PREREQUISITES - see p 119

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CR</th>
<th>PREREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>214 Financial Accounting 3 cr</td>
<td>Provides an introduction to the discipline of accounting, the principles of external financial reporting, and the use of general purpose financial statements (balance sheet, income statement and statement of cash flows) in decision making. Students will develop a basic understanding of how to use the financial statements to assess the profitability, liquidity and solvency of business enterprises.</td>
<td>Prerequisites: QSMIS 182</td>
</tr>
<tr>
<td>215 Managerial Accounting 3 cr</td>
<td>Provides an introduction to cost concepts, product costing systems, budgeting systems, and the development of accounting data for internal managerial decisions.</td>
<td>Prerequisite: Accounting 214</td>
</tr>
<tr>
<td>216 Accounting Information Systems 3 cr</td>
<td>Develops a sound understanding of the practices and procedures used to process accounting information. Emphasis is placed on computerized information systems.</td>
<td>Prerequisite: Accounting 214</td>
</tr>
<tr>
<td>314 Advanced Accounting 3 cr</td>
<td>Exposes students to some of the more advanced and topical accounting subject matter. Potential areas of study include accounting for partnerships, accounting for government entities, the preparation of consolidated financial statements and foreign currency transactions and translations.</td>
<td>Prerequisites: Accounting 311 and 312</td>
</tr>
<tr>
<td>315 Cost Accounting 3 cr</td>
<td>Addresses the use of accounting information for purposes of cost determination, cost control and cost analysis. Topics include cost terminology, cost behavior, job order costing, process costing, cost allocations, and standard costing.</td>
<td>Prerequisite: Accounting 215</td>
</tr>
<tr>
<td>411 Auditing 3 cr</td>
<td>Standards and procedures employed by auditors in the examination of financial statements for the purpose of rendering an opinion are studied and evaluated. Case problems are used to demonstrate the application of the principles studied.</td>
<td>Prerequisite: Accounting 312</td>
</tr>
<tr>
<td>412 Introductory Income Tax Accounting 3 cr</td>
<td>A study of basic tax regulations and procedures affecting individuals, and to a lesser extent, business units.</td>
<td>Prerequisites: Taxation 411 and 413 or 414, and either Accounting 215 or 315.</td>
</tr>
<tr>
<td>414 Corporate and Partnership Taxation 3 cr</td>
<td>Acquaints the student with the principles of taxation as applied to corporations, shareholders, partnerships and partners.</td>
<td>Prerequisite: Accounting 412</td>
</tr>
<tr>
<td>419 Seminar in Accounting 3 cr</td>
<td>Designed to develop a student's ability in technical expression, deepen understanding of accounting theory, and acquaint the student with contemporary accounting problems and literature.</td>
<td>Prerequisite: Accounting 314</td>
</tr>
<tr>
<td>311, 312 Intermediate Accounting 3 cr each</td>
<td>An investigation and analysis of the accounting problems and practices of the corporation, with detailed study of the component elements of the balance sheet and income statement. Basic topics include generally accepted accounting principles, financial statements, income determination and presentation.</td>
<td>Prerequisites: Accounting 214 and 215</td>
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</tbody>
</table>

### ACCOUNTING INFORMATION SYSTEMS CURRICULUM

The Accounting Information Systems (AIS) program prepares students for career opportunities in the fields of accounting systems design, accounting systems management, accounting systems auditing, and other systems-related areas of accounting. The AIS major addresses the current scarcity of Information Technology graduates who have a fundamentally sound understanding of a firm's accounting system coupled with conceptual knowledge and hands-on experience with Enterprise Resource Planning (ERP) applications.

For a concentration in AIS, students must take either COSC 101 Basic Programming or COSC 150 Computer Programming. C++ in their freshman or sophomore year. The concentration also requires completion of three accounting courses (ACCCT 216, 311 and 315) and three Information Technology courses (QSMIS 481, 482 and 485). In addition, students must choose one of the following accounting electives (ACCCT 314, 411 or 412) and one of the Information Technology electives (QSMIS 385, 484 and 486).

### COURSE PREREQUISITES - see p 119

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<tr>
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<tr>
<td>311 Intermediate Accounting I 3 cr</td>
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<tr>
<td>315 Cost Accounting 3 cr</td>
<td>See Accounting Curriculum</td>
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<tr>
<td>481 Systems Analysis and Design 3 cr</td>
<td>See IT Curriculum</td>
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<tr>
<td>482 Database Management 3 cr</td>
<td>See IT Curriculum</td>
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<tr>
<td>485 Systems Quality Assurance and Control 3 cr</td>
<td>See IT Curriculum</td>
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### ECONOMICS CURRICULUM

Economics studies how people make choices when faced with scarcity and how societies distribute scarce resources such as land, labor, raw materials and machinery to produce goods and services. Economists provide a logical way of looking at problems and applicable to a wide variety of topics from making sound business decisions to understanding challenging issues facing societies.

As a discipline, economics prepares students for many professional careers since it can be applied to a wide range of real-world problems. The flexibility of this preparation can make the student more adaptable to changing opportunities after graduation and provides excellent preparation for graduate studies in a variety of disciplines.

Students in the economics concentration choose to follow either the Business Economics or Public Policy track. For all students, the program culminates in the Economics Senior Seminar in which each student completes an independent research paper under the direction of a faculty member.

For a concentration in economics, all students are required to take ECON 301, 332, 381, 384, 480 and one economics elective above the 300-level. In addition, for the Business Economics Track students complete ECON 461 and 462. Students in the Public Policy Track complete ECON 451 and 452. A grade of C or better must be achieved in all economics courses.

### COURSE PREREQUISITES - see p 119

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<tbody>
<tr>
<td>311 Principles of Microeconomics 3 cr</td>
<td>This course introduces students to the way in which a free market economic system resolves the basic social questions of what goods and services to produce, how scarce resources are organized to produce these goods, and to whom the goods are distributed once they are produced. Students will explore the components of the market system, supply and demand, and how they interact under conditions ranging from perfect competition to monopoly. Prerequisites: MATH 101 or knowledge of algebra.</td>
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<tr>
<td>202 Principles of Macroeconomics 3 cr</td>
<td>This course introduces students to the basic economic principles of the aggregate economy. Students will explore the determinants of, and relationships among, the level of Gross Domestic Product (GDP), unemployment, inflation, foreign trade, and interest rates. In addition, various theories of the role of fiscal and monetary policy to promote stabilization will be addressed.</td>
<td>Prerequisites: ECON 201</td>
</tr>
<tr>
<td>301 Intermediate Microeconomics 3 cr</td>
<td>The purpose of this course is to develop the analytical skills required for dealing with problems of economic behavior and resource allocation, along with an appreciation of the methodological issues involved in modern economic analysis. The course covers the traditional body of microeconomic theory, including utility theory and consumer behavior, the analysis of production and the behavior of the firm, coordination in product and factor markets under perfect competition, and the impact on market operations of monopoly, imperfect competition, externalities, asymmetric information, and public goods.</td>
<td>Prerequisites: ECON 201 with a C or better, MATH 111 or 115</td>
</tr>
<tr>
<td>324 Comparative Economic Systems 3 cr</td>
<td>A comparative study of the history and development of the theories and paradigms of capitalism, socialism, communism, and other economic systems. Emphasis will be placed on the philosophies and economic implications of the various systems.</td>
<td>Prerequisites: ECON 201 and 202</td>
</tr>
<tr>
<td>328 Urban Land Economics 3 cr</td>
<td>A study of the economic forces that influence business and residential location in a metropolitan area.</td>
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Specific areas of study include transportation, housing, poverty, and the urban public sector. Prerequisites: ECON 201 or 202.

342 Global Economic Perspectives 3 cr
Examines the influence of monetary policy on various variables as the nominal interest rate, level of income, inflation rate, foreign exchange rate, etc. Specific topics include bank portfolio management, interest rate risk, the yield curve, real versus nominal interest rates, financial intermediation, etc. Prerequisites: ECON 202 with a C or better, MATH 111 or 115.

420 Labor Economics 3 cr
Analysis of the principles of wage and employment determinations in the U.S. economy under non-union conditions as well as under collective bargaining arrangements. Includes the factors underlying labor demand and supply with an emphasis on a human capital approach to relative earnings differentials. Prerequisites: ECON 201 or 202.

425 Current Economic Issues 3 cr
Focuses on specific current economic issues. The course and its content vary. For example, topics might include the federal budget deficit, economics and politics, or global economic changes. Prerequisites: ECON 121 or Core 141.

426 Monetary Theory and Policy 3 cr
Deals with the chief theoretical contributions in monetary theory along with their policy implications. Specific topics include the modern quantity theory of money, monetarists versus Keynesians, the stability of the demand for money, rules versus discretion, rational expectations, monetary policy in an open economy, foreign exchange markets, and international capital flows. Prerequisites: ECON 201 and 202.

430 Theory of Finance 3 cr
Theory of Finance presents fundamental principles of corporate finance and investments. It provides the necessary conceptual foundation for upper-level courses in Finance and Investment Management and is required for students in Investment Management. After completing the course, students will understand and be able to apply time value of money concepts, and understand equity valuation models and the theoretical foundation between risk and return. Prerequisites: ECON 201, 202, Accounting 214, 215 and QMSIS 281 and 284.

431 Business Finance 3 cr
Concerned with maximizing the value of the firm in reference to the risk-return relationship. The student is introduced to financial statement analysis, the time value of money, capital budgeting, cost of capital, and the impact of leverage on the value of the firm. Prerequisites: Accounting 214 and 215, ECON 201, 202, QMSIS 281 and QMSIS 284.

342 Money and Financial Institutions 3 cr
Examines the influence of monetary policy on such variables as the nominal interest rate, level of income, inflation rate, foreign exchange rate, etc. Specific topics include bank portfolio management, interest rate risk, the yield curve, real versus nominal interest rates, financial intermediation, etc. Prerequisites: ECON 202 with a C or better, MATH 111 or 115.

343 Global Economic Perspectives 3 cr
Uses economic principles and concepts to analyze business-related current issues in a global context. Emphasis is placed on the process of economic development in different parts of the world, research incorporating the World Wide Web, and overall geographic literacy. Prerequisites: ECON 201 and 202.

381 Econometrics 3 cr
Econometrics is the application of statistical methods for the purpose of testing economic and business theories. This course will introduce students to the skills used in empirical research including, but not limited to, data collection, hypothesis testing, model specification, regression analysis, violations of regression assumptions and corrections, dummy variables, and limited dependent variable models. Extensive focus will be on the intuition and application of econometric methods, and as a result, statistical software will be used extensively. Students will be required to complete an independent research project involving the application of regression analysis. Prerequisites: QMSIS 284, or MATH 125, 225, or 301.

381 Forecasts Techniques 3 cr
In this course, students learn how to apply statistical and econometric tools in an attempt to forecast economic and business data. Drawing on techniques learned in Econometrics, students collect data, build forecasts, evaluate the forecasts, and apply economic theory and econometric techniques to refine the forecasts. Emphasis is placed equally on the student correctly performing and consciously communicating the forecasts. Prerequisites: ECON 381 with a C or better.

401 Game Theory 3 cr
Game theory is a distinct and interdisciplinary approach to the study of human behavior, combining mathematics, economics and the other social and behavioral sciences. Game theory has found applications in virtually every discipline. It has been used to describe the behavior of competing firms, labor unions and management, elected officials, nations, international organizations, parents and children, and even rats and pigeons. A mathematically rigorous way of modeling virtually any situation in which humans interact, it is especially helpful in that it allows one to model information as a valuable resource. This course provides a concise, yet rigorous, introduction to game theory and its applications. Students examine the fundamental concepts and tools of game theory, while maintaining a focus on the application of the theory. The class combines lectures, discussions, tutorials, classroom experiments, and student-led presentations. Prerequisites: 3 credits in economics, MATH 111 or 115.

421 Economic Policy 3 cr
This is the second of a two-course sequence dealing with the economic aspects of public policy. Its purpose is to help students learn how to apply economic principles to the analysis of the effects of government policies, concentrating on the analysis of revenues and taxation. The emphasis in the course is analytical, making sure that students first understand how the tools and techniques of economics are applied to the analysis of the public sector. Topics include public choice, program evaluation, and federal, state and local expenditures. Institutional knowledge and specific applications will be introduced to illustrate the important consequences of policies. Prerequisite: ECON 301 with a C or better.

452 Government Tax Policy 3 cr
This is the second of a two-course sequence dealing with the economic aspects of public policy. Its purpose is to help students learn how to apply economic principles to the analysis of the effects of government policies, concentrating on the analysis of revenues and taxation. The emphasis in the course is analytical, making sure that students first understand how the tools and techniques of economics are applied to the analysis of the public sector. Topics include tax incidence, welfare economics, deficit finance, and federal, state and local taxation. Institutional knowledge and specific applications will be introduced to illustrate the important consequences of policies. Prerequisite: ECON 451 with a C or better.

FINANCE CURRICULUM

Students who seek careers in finance management should plan their program of studies to include both Finance and Investment Management courses. The professional designation of Chartered Financial Analyst (CFA) is highly desirable for graduates pursuing a financial career. Those finance majors who are interested in sitting for the CFA exam should include INVMG 310 and 410 among their choice of electives.

Required courses: Courses 333, 342, and 450 Accounting 311 and either Accounting 312 or 315 (preferably 312). Three additional electives from finance, or investment management courses must be completed. With permission, selected courses in economics may be considered as electives for the finance area.

330 Theory of Finance 3 cr
Theory of Finance presents fundamental principles of corporate finance and investments. It provides the necessary conceptual foundation for upper-level courses in Finance and Investment Management and is required for students in Investment Management. After completing the course, students will understand and be able to apply time value of money concepts, and understand equity valuation models and the theoretical foundation between risk and return. Prerequisites: ECON 201, 202, Accounting 214, 215 and QMSIS 281 and 284.

331 Business Finance 3 cr
Concerned with maximizing the value of the firm in relation to the risk-return relationship. The student is introduced to financial statement analysis, the time value of money, capital budgeting, cost of capital, and the impact of leverage on the value of the firm. Prerequisites: Accounting 214 and 215, ECON 201, 202, QMSIS 281 and QMSIS 284.

332 Money and Financial Institutions 3 cr
Examines the influence of monetary policy on such variables as the nominal interest rate, level of income, inflation rate, foreign exchange rate, etc. Specific topics include bank portfolio management, interest rate risk, the yield curve, real versus nominal interest rates, and financial intermediation, etc. Prerequisite: ECON 201 and 202.

333 Financial Management 3 cr
Provides a theoretical and conceptual framework utilized by managers to make strategic investment and financial decisions that maximize the value of the firm. The course focuses on issues dealing with risk analysis and real options in capital budgeting, capital structure analysis and dividend policy. In addition, the course covers tactical financing decisions concerning issuance of securities and lease financing. Students
are exposed to merger and acquisitions activity. Prerequisite Finance 331

334 Risk Management 3 cr
A study of the broad spectrum of risk exposures in business enterprise, with special attention to the need for identifying these in terms of nature and magnitude. Emphasis is on techniques available to aid the decision-maker in making decisions under constraints of uncertainty. Prerequisite Finance 331

336 Security Analysis 3 cr
An intensive study of the analytic techniques applicable to the selection of the various securities of private as well as public entities. Consideration is given to the markets in which these securities are traded and the types of information necessary to the decision-making process of the investor. Prerequisite Finance 331

338 Futures and Options 3 cr
Designed to develop an understanding of futures, options and other derivative financial instruments. The main emphasis is on the reduction of asset and liability risk for business and financial institutions through hedging operations in debt and equity instruments, commodities and currencies. Students will have an opportunity to study actual market behavior through project analysis. Prerequisites Finance 331 and 336

339 Fundamentals of Real Estate 3 cr
A study of the problems involved in financing residential, commercial and industrial real estate from the present authority of both owner and lender

431 Real Estate Investment Analysis 3 cr
Emphasis is on the estimation and revenues/expenses and risk/return relationships in investment valuation of realty and the effects of financing, income taxes, and entity selection upon investment profitability. Prerequisite Real Estate 339

432 Credit Management 3 cr
This course will focus on various analytical tools and techniques used to assess a potential borrower for credit details. Portfolio considerations will be evaluated. Prerequisites Finance 331, Recommended Finance 333

433 Financial Markets 3 cr
A comprehensive examination of the evolving nature of the money and capital markets, as well as the underlying forces which shape them. Attention is also paid to the clearing, settlements, and payment systems, which play an important part in the markets' performance. Prerequisites Finance 331

437 International Financial Management 3 cr
The course provides the conceptual tools necessary to understanding and making international financial decisions. Topics covered include foreign exchange markets and exchange rate determination, parity conditions, types of foreign exchange risk and hedging techniques, and capital budgeting for multinational firms. Prerequisite Finance 331

439 Seminar in Finance and/or Real Estate 3 cr
Concentration upon selected contemporary topics presented by distinguished visiting professors or resident faculty. Open only to senior students. Prerequisite Finance 331

450 Cases in Finance 3 cr
Students draw on a wide range of concepts and tools from previous finance and accounting courses to address a series of realistic case-based problems in financial analysis. Emphasis is placed on identifying problems and developing persuasive and professionally presented solutions. Prerequisites Finance 331 and 333

INFORMATION TECHNOLOGY CURRICULUM

The Information Technology program prepares students for career opportunities in the analysis, design, development, implementation, integration, management, and maintenance of evolving information systems in organizations. The IT curriculum provides exposure to established hardware, software, and methodologies as well as incorporating emerging technologies. Emphasis is placed on the ability to utilize technology to provide added value to the processes, products, methods and decision-making found in organizations. For a concentration in IT, students must complete 18 credits of required IT courses. In addition, two IT elective courses must be taken. Students must also take either COSC 101 Basic Programming or COSC 150 Introduction to Programming in their freshman or sophomore years.

COURSE PREREQUISITES - see p 119

182 Information Systems I 3 cr
An introduction to the productivity potential of spreadsheet, graphics, database, multimedia and word processing applications. In recognition of the importance of information resources, students will develop proficiency using Internet tools and networking data structures, and Java utilities. Prerequisites QSMIS 183, COSC 101 or COSC 150

481 Systems Analysis for Process Definition 3 cr
A detailed study of all phases of the system life cycle with emphasis on structured analysis and design and object-oriented techniques. Case studies are used to generate detailed system flow diagrams. Issues involving conversion, testing, training, documenting, maintaining and integrating a system are addressed. Prerequisites QSMIS 183, and COSC 101 or 150

482 Systems Analysis for Data Definition 3 cr
Focuses on the theory derivation and development of the relational database model using entity relationship modeling and a commercial desktop database management system. Emphasis is on the principles of database modeling, data organization and resource issues in database design. Prerequisites QSMIS 183 and COSC 101 or 150 (may be taken concurrently)

483 Systems Integration 3 cr
Students are expected to use tools and techniques learned in prior MIS courses to develop an information system using Computer-Aided Software Engineering (CASE) products and fourth generation languages. Students design and implement a project relevant to business practices and systems. Students work in teams toward a solution. Prerequisites QSMIS 385, 387, 481 and 482

484 Networks and Telecommunications 3 cr
Develops an understanding of the importance of an open systems approach, such as OSI, and contrasts it with several proprietary ones, like IBM's SNA and TCP/IP. Using the OSI model as a base, students learn fundamentals of physical components, error detection and correction, line disciplines and network addressing. Special emphasis is placed on local area networks and connecting them to organizational networks. Prerequisite QSMIS 385, 387, 481 and 482

485 Systems Quality Assurance and Control 3 cr
Presents EDP auditing standards with a blend of systems concepts and applications. Techniques for testing computer programs, files, and processing systems are presented. Special attention is devoted to the particular aspects of auditing online, real-time systems. Case studies and generalized audit software are used to create a simulated audit environment. Prerequisite QSMIS 183

486 eBusiness Technologies 3 cr
This course provides an introduction to the topic of electronic commerce through the search for successful e-business models, reflection and application of basic economic concepts underlying e-commerce, and
practice at rigorously analyzing e-business strategies and their implementations. Prerequisite: QSMIS 484

487 Advanced Application Development 3 cr
The course provides a practical familiarity with higher level technologies used for accomplishing the tasks found in systems analysis, design, and development, specifically those centered on database technologies. This includes advanced database management systems (DBMS) creation and manipulation, as well as the use of computer-aided systems engineering (CASE) tools. Prerequisite: QSMIS 385, 387, 481, 482

488 Collaborative Computing 3 cr
This course attempts to make the student aware of the current state of technology, issues in the technical areas of collaborative computing, and how collaborative computing is used in organizations. Emphasis is placed on the business relevance of these technologies. Prerequisites: QSMIS 385, 387, 481, 482, 484 (may be taken concurrently)

INTERNATIONAL BUSINESS CURRICULUM

The International Business program prepares students for exciting managerial careers in the international operations of business and non-business organizations. Students learn about the global environment of business, international economics and finance, international law and export trade, and business and society in major economic regions of the world. In addition, students develop strong multicultural awareness and competency in a second language. This IB program offers the students the opportunity to study abroad in one of the colleges with whom Duquesne University is affiliated. Students majoring in IB may elect to include a functional area of business as part of their program of study.

For a concentration in International Business, students will take: (1) International Business 341, Finance 437, Marketing 443, and Law 454, (2) Four courses from the following: International Business 342, 369, 444, 446, 448, 491, Economics 442, and Management 445, and (3) Twelve credit hours of a second language. Students are encouraged to include courses of international studies offered by the College of Liberal Arts as electives. For study abroad opportunities, students are encouraged to consult with their academic advisors, IB professors, or the University’s Office of International Affairs. Students can request a waiver of the language requirement if (1) they pass the level proficiency test administered by the Department of Modern Languages or a specialized language testing institute, or (2) they are natives of a non-English speaking nation.

COURSE PREREQUISITES – see p 119

341 International Business 3 cr
An introductory study of the environment and management of cross-national business activities. Topics include sociocultural, legal and political environment, international monetary and financial systems, international trade, foreign direct and portfolio investments, and the management of international marketing, financial, production and personnel functions. Prerequisite: Management 361

342 International Business Study Abroad 3 cr
Study abroad opportunities with a number of universities are available. Students should check with their advisor in the School of Business Administration regarding both opportunities and the possibility of transfer of credits.

369 Export Management 3 cr
This course offers a comprehensive study of international export procedures and operations. Topics covered include export documentation, managing export transactions, planning export operations, export communications, shipping and packaging, export payment and collection methods, export insurance, governmental and foreign export regulations, export support programs and services, exports within NAFTA, and designing export management systems. Prerequisite: IBUS 341

375 International Financial Management 3 cr
See Finance Curriculum

442 International Economics 3 cr
See Economics Curriculum

443 International Marketing 3 cr
See Marketing Curriculum

444 Business and Society in Europe 3 cr
Survey of the major cultural, social and political factors influencing the conduct of business in Europe. The course includes an overview of the major European economies, a description of the institutions and politics of the European Community, and a detailed examination of business and society in Germany and at least two other European countries. Prerequisite: Management 361

445 International Management 3 cr
See Leadership and Change Management Curriculum

446 Japanese Business and Management 3 cr
Focuses on the history of Japanese business, the essential elements of Japanese management practices, and the strategies used by successful Japanese global corporations including their approaches to marketing, operations management, human resource management, and financial strategy. Prerequisite: Management 361

448 Business and Society in Latin America 3 cr
Survey of the major cultural, social, political and economic factors influencing the conduct of business and the prospects for continued economic development in Latin America. The impact of contemporary changes in economic and political conditions is illustrated as it affects the prospects for long term economic development is discussed. The course includes a more detailed examination of economic, social and political conditions in Mexico, Brazil and at least one other Latin American country. Prerequisite: Management 361

454 The Law of International Commercial Transactions 3 cr
See Legal Studies Curriculum

491 Practicum in International Business 3 cr
This course integrates international business skills and methods into a professional practicum. Students teams work with an international business firm as consultants to help the company deal with international business projects and issues. Prerequisite: Senior standing

INVESTMENT MANAGEMENT CURRICULUM

The Investment Management Curriculum is closely related to the Finance curriculum. Investment Management students take courses in security analyses, money and financial institutions, futures and options and portfolio management, along with basic finance courses and a business core curriculum that exposes them to all business disciplines.

Upon successful completion of the Investment Management program, graduates will be able to effectively communicate their analyses of the global economy and its effect on values of financial and real assets. They will have developed an in-depth understanding of the financial models used by investment professionals to develop strategies and make asset allocation decisions between stocks, bonds, mutual funds, money markets, currencies, futures, options and derivatives.

For a concentration in Investment Management, students will take Finance 331, Investment Management 310, 410, and Accounting 311 and 312. Students will also take three courses chosen from Finance 336, 338, Investment Management 440 or from selected offerings in Investment Management or Economics, chosen in consultation with their academic advisors.

COURSE PREREQUISITES - see p 119

301 The Investment Environment 3 cr
The Investment Environment provides important strategies for investing in a broad array of financial assets with a focus on common stocks, bonds and mutual funds. Course topics include the structure and functioning of financial markets, trading mechanics, the measurement and presentation of performance, features of common stocks, bonds and mutual funds, financial market regulation and standards of professional conduct. Attention is given to legal, regulatory and accounting issues.

302 Personal Financial Planning 3 cr
Personal Financial Planning provides detailed coverage of important issues and techniques employed in the financial planning process. The course deals with identifying client needs and making recommendations on establishing retirement plans. Course topics include investments in bonds and mutual funds, insurance, tax and estate planning. Attention is given to developing a financial plan for potential clients. Prerequisites: Finance 331 and Investment Management 301

310 Fixed Income Securities 3 cr
Topics include bond pricing, the Treasury Market (operations of bond dealers, treasury auctions), bond risk management based on duration and convexity, yield-curve, trading strategies, and term structure estimation. Part of the course will be devoted to understanding and using stochastic interest rate models for valuing fixed income securities and derivatives. The course emphasizes modern evaluation techniques based on an observed “term structure” (maturity structure) of interest rates, or on a theoretical model of such a structure. Therefore, interest rate risk is a primary consideration. That is, most of the work is based on situations where credit risk is virtually non-existent (i.e., U.S. Treasury securities) or ignored for simplicity, the valuation principles of the default-free framework are fundamental and widely applicable. Prerequisites: Finance 330 and 331

401 Business Administration Internship 3 cr
See General Business Curriculum

410 Equity Portfolio Management 3 cr
Extends modern portfolio principles (covered in Finance 330) to a theory of active portfolio management. Within the context of portfolio optimization, the course provides a general framework for designing, evaluating and implementing a variety of active strategies for selecting common stock portfolios. The essence of active management lies in forecasting abnormal returns, and, to this end, the course reviews a number of empirical regularities in stock returns. A
discussion of the basic tools of the ‘technical’ analyst is also presented. Using the ‘trading room,’ students apply these concepts in the development and evaluation of their own portfolio strategies. Prerequisites: Finance 330, and a level of comfort with basic statistical concepts such as mean, variance, correlation and linear regression.

440 Seminar in Investment Management 3 cr
Concentration upon selected contemporary topics presented by distinguished visiting professors or resident faculty. Prerequisite: Investment Management 310 and 410.

LEADERSHIP AND CHANGE MANAGEMENT CURRICULUM

The Leadership and Change Management concentration teaches undergraduates valuable change management process skills and prepares them to use and apply these skills in a wide range of organizations in the new economy. In addition, it encourages a student’s understanding of a specialized business area while still providing a high degree of flexibility in pursuing a wider range of subjects. Leadership and Change Management provides students with the flexibility to customize course selections to meet specific job interests. Career opportunities include a wide range of management, consulting, and entrepreneurial positions in organizations ranging in size from start-ups to multinational firms.

For a concentration in Leadership and Change Management, students can select courses from the following two areas: Leadership and Change Management (Management 364, 365, 366, 445, 461, 462, 466, or 468) and Entrepreneurial Management (Management 401, 465, and 494). Students should consult with an academic advisor in order to review the course offerings and select the appropriate courses. In addition, students can take six to nine credits in another business discipline, such as international business, information technology, marketing, supply chain management, etc. The remaining credits required to complete the concentration should be chosen in accordance with the student’s career plans, after consultation with a division faculty member and/or an academic advisor.

COURSE PREREQUISITES - see p. 119

361 Introduction to Management 3 cr
This course is an introduction to the basic tasks, functions and responsibilities of managers and the overall environment in which managers and organizations must operate. Areas covered include the planning, organization, and leadership activities and the context (internal and external) in which managers work to discharge their responsibilities effectively.

364 Human Resource Management 3 cr
Explores the strategic role, technical functions and services provided by an organization’s personnel/human resources department. Among the topics covered are human resource planning and systems, job evaluation, recruiting, performance appraisal, compensation, occupational health and safety, employee rights, labor unions, and equal employment opportunity issues. Prerequisite: Management 361.

365 Management Labor Relations 3 cr
Presents the role of labor, management and government in collective bargaining and current industrial relations policies and practices. Prerequisite: Management 361.

366 Leading Behavior in Organizations 3 cr
Students learn a number of theories, concepts, and applications regarding people-oriented managerial skills. Topics covered include motivation, personality, perception, group dynamics, performance appraisal, leadership and decision making, cooperation and conflict, organizational politics, organizational structure, managing change, and organizational development. Prerequisite: Management 361.

367 Total Quality and Operations Management 3 cr
An introduction to the principle topics and issues in production and operations management with an emphasis on total quality management. Both manufacturing and service operations are addressed with consideration of how operations support overall strategy and contribute to productivity and competitiveness. Prerequisites: QSMIS 284 and Management 361.

368 Business Ethics/Communications 3 cr
Discusses the relevance of social needs in developing a sense of ethics, the need for personal ethics in making business decisions, and the importance of a shared sense of values in developing productive work communities. The emphasis throughout is on practical issues facing people in business. The discussions of ethical issues are used as a forum for developing basic communication skills.

445 International Management 3 cr
A study of multinational companies’ strategies, strategies and management processes. The course includes a thorough understanding of international management, competent awareness of cultural diversity and development of decision making skills in multinational settings. Prerequisite: Management 361.

461 Leadership and Teamwork 3 cr
An advanced, experiential Organizational Behavior course designed to aid the student in developing practical skills in managing interpersonal relationships in the workplace. Topics covered include organizational socialization, learning styles, listening skills, intercultural communication, performance appraisal, group dynamics, group problem solving, team effectiveness, managing conflict, and the management of change. Prerequisite: Management 361.

462 Leading Change 3 cr
Introduces the student to the process of successfully implementing organizational changes. Students learn to analyze the external and internal drivers of change, assess the organizational capability for change and reduce the barriers to successful implementation. Prerequisite: Management 361.

465 Entrepreneurship and Small Business Management 3 cr
Deals with the overall management of small business enterprise. Coverage includes entering the small business arena, organizing and financing a business, operation of the small firm, growth planning, and problems associated with being small. Prerequisite: Management 361.

466 Compensation and Benefits 3 cr
This is an advanced course focusing on pay and benefits issues. Coverage includes relating compensation to strategy, internal equity, performance evaluation, market pay surveys, developing a pay structure, variable pay, incentive systems, gain sharing, executive compensation, paying ex-protitute, employee benefits including social security, workers’ and unemployment compensation, medical, retirement, cost containment. Prerequisites: Management 361 and 364.

468 Training and Development 3 cr
Explores the training and development function in human resource management. Covers the assessment of training needs, designing and conducting training programs, and evaluations of training effectiveness. Prerequisite: Management 364.

493 Independent Scholarly Study 3 cr
Students must initiate an original research project in a field of business of their choice. The research proposal must be submitted (in written form) for approval first, to a faculty sponsor, then the division Chairperson, and finally, the Associate Dean. The project must be completed within an academic semester. This course is open to students in all concentrations in the School of Business. Once all necessary signatures have been obtained, the form must be submitted to your Academic Advisor to register. Prerequisite: Student must qualify as a University Scholar.

LEGAL STUDIES CURRICULUM

This program has two distinct career objectives.

1. To provide solid preparation and an “edge” for those who plan to attend law school. See three-year Bachelor’s/J.D. p. 115

2. To provide the legal background needed for managerial positions in law administration.

For a concentration in Legal Studies, the students will take Law 353, 354, and 355 as well as electives offered in this concentration. Students should consult an academic advisor in order to plan their specific course of study.

COURSE PREREQUISITES – see p. 119

353 Contracts 3 cr
The fundamental concepts of the law of contracts are examined to provide the student with an understanding of the common law system regarding formation, performance, third party rights, duties, discharge and remedies. Prerequisite: Law 251.
For a concentration in Marketing, students will take the following courses: Marketing 373, 374, 375, 376, and three of the following: Marketing 443, 471, 472, 474, 475, 478, 479.

**COURSE PREREQUISITES** - see p 119

**371 Introduction to Marketing** 3 cr
Provides an understanding of the dynamic role marketing plays in the economy and in organizations. Students build a knowledge base with regard to strategic marketing, market segmentation, marketing research, consumer behavior, the product mix, the promotion mix, the distribution mix, the pricing mix, technology integration, international marketing, and non-profit marketing.

**373 Sales Administration** 3 cr
Introduces the fundamentals of salesmanship and the problems confronted by the sales manager. Emphasis will be placed on developing an understanding of production planning, pricing, market analysis and specific areas of sales management. Attention will be given to management of the sales force, recruitment, selection and ethical considerations. Prerequisite: Marketing 371.

**374 Research Applications in Marketing** 3 cr
Examines the methods used by business management to obtain the information needed to support marketing decisions. Selection of target market, design of product, distribution, promotion, and pricing policy. These methods include exploratory (qualitative) research, conclusive (quantitative) research, sampling theory and application, and various statistical techniques used to support marketing research. Prerequisites: QSMIS 281 and 284, and Marketing 371.

**375 Introduction to Supply Chain Management** 3 cr
Analyzes the physical distribution concept in its various components including its interface with other functions in an organization. Costs, governmental regulations, and international aspects of physical distribution are also covered in detail. Prerequisites: Management 361, Marketing 371.

**443 International Marketing** 3 cr
Helps students develop skills in analyzing economic and non-economic factors for identifying and evaluating foreign market opportunities, allows students to become familiar with different approaches for segmenting international markets, encourages students to develop skills in formulating product, price, distribution, and promotion strategies in the context of business outside the United States, and helps develop skills in undertaking international strategic marketing planning. Prerequisite: Marketing 371.

**471 Services Marketing** 3 cr
This course focuses on the marketing of services and the techniques necessary to improve customer service. It is taught from the perspectives of both marketing managers and customers. Students will develop a broad knowledge base regarding the following marketing concepts: customer expectations, complaint behavior, measures of customer satisfaction, relationship marketing, servicescapes, collaborative service culture, discretionary collaborative behavior and service rules. Upon completion of the course, students will understand not only how to effectively market a service, but also how to get the best service. Prerequisites: Marketing 371.

**472 Transportation** 3 cr
A detailed and comprehensive examination of the historical evolution, operation, and development of the various components that make up the transportation system of the U.S. The overall effects of technology, regulation (federal, state, and local), deregulation, and world economic factors will also be examined in detail. Prerequisites: Marketing 371 and 375.

**474 Purchasing Management** 3 cr
An introductory course on the principles of purchasing and materials management. Topics covered include the profit-generating potential of purchasing, the role of purchasing in total quality management, the price versus cost distinction, supplier selection and evaluation, inventory management, value analysis, and just-in-time purchasing. Prerequisites: Management 361, Marketing 371 and 375.

**475 Consumer Behavior** 3 cr
Encourages the student to develop an understanding of the consumer from the perspective of the marketing manager. The course explores the factors that affect the consumer, which range from a macro level (the effect of the physical and social environment on the consumer) to a micro level (knowledge, attitudes, and actions of the individual consumer). Segmentation, positioning, and marketing mix strategies are discussed in relation to consumer behavior theories. Prerequisites: Marketing 371.

**476 Product Management** 3 cr
Examines methods and tools leading to successful product development and commercialization, as well as the maintenance of existing products and product lines, including product positioning, design, marketing mix, testing, forecasting and product launch, plus product strategy and product life cycle management, using case studies and computer simulations. Prerequisites: Marketing 371 and 374.

**477 Strategic Marketing Planning** 3 cr
Designed to enable the student to apply acquired marketing knowledge and expertise to real world opportunities. The case method is employed using scenarios that illustrate opportunity analysis, marketing environments, product management, communication planning, pricing and distribution strategies, and global planning. Students demonstrate decision making skills through learning to identify and define a marketing problem, analyze and evaluate it, and prepare recommendations concerning implementation for the organization and its environment. Prerequisites: minimum of 12 credits in marketing (including 371). This course is recommended as a spring offering for graduating seniors.

**478 Industrial Marketing** 3 cr
Focuses on business-to-business marketing. The course will demonstrate the differences between industrial and consumer marketing, how industrial marketers evaluate their marketing environments, including an understanding of customers and competitors, supply chain management, market research, and new product development. Prerequisite: Marketing 371.

**479 Retail Management** 3 cr
Focuses on retail management from a strategic perspective while emphasizing the similarities and differences between the retail and industrial sector. Emphasis will be placed on consumer behavior, market research, store location, service retailing, franchising and the changing retail environment. Prerequisites: Management 361, Marketing 371.

**QUANTITATIVE METHODS CURRICULUM**

Students in the undergraduate School of Business Administration complete a basic sequence in Quantitative Methods. This sequence is concerned with the application of mathematics, statistics, and information processing to the analysis of business and economic problems. Prior to entry into the sequence, Mathematics 101 and 111 in the College of Liberal Arts or the equivalent are required.

**COURSE PREREQUISITES** - see p 119

**152 Information Systems I** 3 cr
See Information Technology Curriculum.

**153 Information Systems II** 3 cr
See Information Technology Curriculum.

**251 Quantitative Analysis I** 3 cr
An introduction to probability and the more commonly used statistical techniques for analyzing data from one population, with an emphasis on their application to decision making and quality management.
Coverage includes basic descriptive statistics, the concepts of probability and specific distributions, and inferential statistics. Prerequisites: QSMIS 182 and Mathematics 111.

284 Quantitative Analysis II 3 cr
A continuation of statistical analysis, extending to the comparison of two or more populations and analyzing the association between variables through regression, correlation, and contingency analysis. Developing fundamental marketing concepts, explores strategic marketing concepts, sales management, product development, and marketing research techniques, while creating a skill base for employment. For a concentration in Sports Marketing, students will take Marketing 373, 376, 377, 476 and 477 plus two of the following: Marketing 373, 376, 474, 475, 479 and 481. In addition, students will take Media and Sports Management Curriculum.

367 Total Quality and Operations Management 3 cr
See Leadership and Change Management Curriculum.

386 Computer Simulation 3 cr
See Information Technology Curriculum.

SPORTS MARKETING CURRICULUM
The Sports Marketing Program provides a working understanding of the role of marketing in sports and sports-related organizations, develops skills in applying fundamental marketing concepts, explores strategic marketing concepts, sales management, product development and marketing research techniques, while creating a skill base for employment. For a concentration in Sports Marketing, students will take Marketing 373, 376, 377, 476 and 477 plus two of the following: Marketing 373, 470, 471, 474, 475, 479 and 481. In addition, students will take Media and Sports Relations in the Department of Communications as non-business electives.

COURSE PREREQUISITES - see p 119

376 Sports Marketing and Promotion 3 cr
This course will provide an intensive evaluation of marketing techniques and promotional strategy. In addition, the topical coverage will include the marketing mix, new product strategy and services, interactive promotion, event marketing, and value-added marketing. Prerequisite: Marketing 371.

377 Sports Management 3 cr
This course will provide a knowledge base in planning, organizing, motivating, and controlling sports organizations. The content of this course will help in the development of skills necessary to manage organizations in the sports industry including marketing firms, licensing agencies, major retailers, professional sports organizations, and sporting venues. Prerequisite: Marketing 371.

470 Legal Environment of Sports Management and Marketing 3 cr
This course will cover regulation in the sports industry including NCAA regulations, collective bargaining, and codes of industry conduct. In addition, royalties, rights and licensing issues will be covered. Prerequisite: Law 251.

471 Special Topics in Sports 3 cr
The course will focus on specialized areas of interest in the form of a practicum designed by the instructor or the individual student. This course provides an opportunity for the student to pursue special areas of interest in sports marketing and management covering major issues in specific sports venues or the sports industry in general. Prerequisites: Marketing 376 and 377.

SUPPLY CHAIN MANAGEMENT CURRICULUM
The Supply Chain Management concentration prepares students to assume roles as supply chain professionals in both profit and non-profit organizations. The focus will be on providing students with the necessary theoretical, analytical, and practical skills required to manage the flow of materials and products from original source to the final consumer. The program of study emphasizes the materials management, operations management, and physical distribution management dimensions of the field of logistics. For a concentration in Supply Chain Management, students will take Strategic Supply Chain Management 469, Marketing 375, 472 and 474, plus four of the following: International Business 341, Law 353, 354 and 355, QSMIS 481 and Business Internship 401.

COURSE PREREQUISITES - see p 119

373 Sales Administration 3 cr
See Marketing Curriculum.

374 Research Applications in Marketing 3 cr
See Marketing Curriculum.

385 Computer Systems 3 cr
See IT Curriculum.

471 Services Marketing 3 cr
See Marketing Curriculum.

476 Product Management 3 cr
See Marketing Curriculum.

481 Systems Analysis for Process Definition 3 cr
See IT Curriculum.

482 Systems Analysis for Data Definition 3 cr
See IT Curriculum.

484 Networks and Telecommunication 3 cr
See IT Curriculum.

486 eBusiness Technologies 3 cr
See IT Curriculum.
School of Education

http://www.education.duq.edu

Administration
Dean
James E. Henderson, Ed D
Chair, Department of Instruction and Leadership in Education
William P Barone, Ph D
Chair, Department of Foundations and Leadership
Susan M Brookhart, Ph D
Chair, Department of Counseling, Psychology, and Special Education
Joseph F Maola, Ph D
Director, Office of Educational Services
George J Szymanski, Ph D

HISTORY
The School of Education was founded in 1929. In that year the newly organized School of Education granted its first degrees in programs of secondary education. The following programs have since been approved for certification by the Department of Education of the Commonwealth of Pennsylvania: music education in 1930, graduate education in 1936, elementary education in 1937, guidance in 1952, school administration in 1952, special education in 1964, reading specialist and reading supervisor in 1969, school psychology in 1969, early childhood education, 1975 and 1997, school supervision, 1976, and Superintendent's Letter of Eligibility, 1993

SELECTION AND ADMISSION TO THE SCHOOL OF EDUCATION
Candidates who desire to become teachers are admitted to the School of Education through the University Office of Admissions. Apply to the Director of Admissions, Duquesne University, Pittsburgh, PA 15282. During the first two years of study, the curriculum is devoted to broad learnings in general and professional education. Students are expected to demonstrate personal and professional characteristics, attitudes, and competencies that will recommend them as worthy candidates for the teaching profession.

ADMISSION TO THE PROFESSIONAL EDUCATOR CERTIFICATION TRACK
Candidates are formally admitted to the Professional Educator Certification Track after completion of four semesters of full-time or full-time equivalent (60 credits) of college level study. Candidates will be admitted to the Professional Educator Certification Track with a minimum grade point average of 3.0 in each of three areas: General Education Core, Foundations of the Leading Teacher Program, and Academic Cognate for Early Childhood and Elementary Education students or Academic Major for Secondary Education students. The Student Standing Committee may admit a limited number of candidates for admission to the certification program who do not meet the minimum GPA, if exceptional circumstances justify admission.

Checkpoints and Gateways: The Leading Teacher Program (LTP) provides students with checkpoints and gateways to assure their success in fulfilling the requirements of the Professional Educator Certification Program. Checkpoints are formative in nature and are provided to assist students in assessing their progress toward completion of the program. Gateways are summative in nature, include checkpoint requirements, and must be achieved in order to progress to the next stage of the program. The Pennsylvania Department of Education has periodically changed the Praxis Tests required for state certification.

Semester One
Checkpoint Act 33 & 34 Clearances, Referrals for Speech and Language concerns

Semester Two
Checkpoint Oral and written demonstration of skills to Foundations' faculty

Semester Three
Checkpoint Praxis Pre-Professional Skills Tests for Reading, Writing, and Mathematics. All K-6 and K-12 certification areas require a minimum of 30 credits for the degree must be earned at Duquesne University. The minimum number of credits for graduation is 120.

DEGREE
The School of Education offers the Bachelor of Science in Education degree.

THE LEADING TEACHER PROGRAM
The School of Education at Duquesne University aspires to become “Home of the Nation's Leading Teachers.” The Leading Teacher Program meets the standards of excellence for the practice of teaching in the 21st century. Aspiring teachers are challenged throughout the Leading Teacher Program to develop expertise in the critical aspects of becoming a leading teacher and to pursue continuous improvement in the following domains:

Domain I - Becoming a Learning Theorist - this domain emphasizes the cognitive and affective process that will address the learning needs of people of all ages.

Domain II - Becoming a Curriculum Designer - this domain emphasizes curricular decisions based on research theory, informed practice, and recommendations of the learned societies.

Domain III - Becoming an Expert in School Context - this domain focuses on the ethical, ethical, cultural, economic, political, and social influences upon schools including traditional and emerging perspectives.

Domain IV - Becoming a Master Practitioner - this domain focuses on the ethical, cultural, economic, political, and social influences upon schools including traditional and emerging perspectives.

Domain V - Becoming an Instructional Leader - this domain emphasizes the leader and knowledge of self in relationship with the group and the relationship with the community and society.

Additionally, learning experiences that reflect the themes of leadership, diversity, and technology are infused throughout the Leading Teacher Program.

Leadership: A leading teacher is a life long learner inspiring a community of learners to pursue continuous improvement and growth.

Diversity: A leading teacher is an advocate, creating learning experiences that demonstrate sensitivity, acknowledgment of students of all abilities and valuing human differences.

Technology: A leading teacher is an architect building learning environments that acknowledge and incorporate the power of technology.

Four major curriculum components comprise the Leading Teacher Program: General Education Core, Academic Cognates, Foundations of the Leading Teacher Program, and the Professional Educator Certification Track. The courses in the School of Education must also comply with all Pennsylvania Department of Education requirements and will be notified of any modifications regarding entrance into certification programs of study. The Undergraduate Advisors and Program Coordinators make the program requirements known to students.

General Education Core: The University and the School of Education require completion of general education courses in humanities, social sciences, natural and behavioral sciences and technology. Generally, thirty-nine credits of general education are completed during the first two years of study for Early Childhood and Elementary Education. There are varying certifications in Secondary Education, depending on the specific academic major. Students must consult their advisor for program specific requirements. General Education Core courses include Thinking and Writing, Imaginative Literature and Critical Writing, 3 credits of English electives, Problem Solving, Soc/Poli/Econ Systems, Shaping of the Modern World, Arts and the...
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDLTF 101</td>
<td>Orientation to the LTP</td>
<td>2</td>
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<td>EDLTF 102</td>
<td>Instructional Technology I</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 105</td>
<td>Critical Issues in Spec Ed</td>
<td>1</td>
</tr>
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<td>EDLTF 181</td>
<td>Field Experience</td>
<td>1</td>
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<tr>
<td>EDLTF 182</td>
<td>Cohort Experience</td>
<td>0</td>
</tr>
<tr>
<td>EDLTF 201W</td>
<td>Ed Psych I Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDLTF 202W</td>
<td>Ed Psych II Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDLTF 205</td>
<td>Critical Issues in Spec Ed</td>
<td>1</td>
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<tr>
<td>EDLTF 209</td>
<td>Field Experience</td>
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</tr>
<tr>
<td>EDLTF 210</td>
<td>Cohort Experience</td>
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</tbody>
</table>

The School has also developed broad and diversified professional laboratory experiences designed to provide opportunities for observing and working with children and youth, beginning the second semester of full-time study. These experiences include planned observations in public and private schools, agencies, institutions and educational settings and teacher aide and tutoring experiences. Experiences are provided in urban, suburban, rural and international settings. All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agency.

### Course Descriptions - Foundations of The Leading Teacher Program

**EDLTF 101 Orientation to the LTP**

Orients aspiring teachers to the organizational structures, the professional challenges, and learning opportunities of the Leading Teacher Program. Introduces aspiring teachers to the domains of learning and associated competencies as well as the themes that will frame their documentation of learning and continuous improvement.

**EDLTF 202W Ed Psych II Classroom Leadership, Assessment & Evaluation**

Provides the aspiring teacher with the set of technology-based tools required to integrate technology into the curriculum. Advanced features of word processing, graphics presentation, and the Internet are presented. In addition, online lesson plans, content-rich images, and related digitized resource materials are harvested from the Worldwide Web and incorporated into classroom-ready instructional materials.

**EDLTF 102 Instructional Technology II**

Provides the aspiring teacher with the set of technology-based tools required to integrate technology into the curriculum. Advanced features of word processing, graphics presentation, and the Internet are presented. In addition, online lesson plans, content-rich images, and related digitized resource materials are harvested from the Worldwide Web and incorporated into classroom-ready instructional materials.

**EDLTF 103 Historical & Legal Foundations of Special Education**

Chronicles the historical and sociological development of the field of special education with a focus on the legal foundations for educating students with diverse learning and behavior needs. Inclusive educational practice as it relates to the principle of least restrictive environment will be introduced and students will identify a variety of school/community resources and services available for individuals with disabilities.

**EDLTF 104 Field Experience**

Provides an opportunity for students to reflect critically on their developing knowledge base and practical experiences. This experience is designed to foster personal as well as professional growth. Emphasis of this first field experience is an urban context.

**EDLTF 201W Ed Psych I Learning, Development & Motivation**

Provides opportunities to reveal and examine assumptions underlying the teaching-learning process. Key theoretical principles in human development, learning, and motivation are studied in an effort to evaluate theory for its relevance to, and operation in, classroom practice. Writing is used extensively to enhance learning and, therefore, quality of writing is assessed throughout the course.

**EDLTF 202 Critical Issues in Special Ed**

Investigates the skills required for collaboration in the team decision-making process with parents, teachers, administrators, and community agencies. Focuses on building family partnerships, effective communication, and developing instructional and behavioral supports for students with diverse learning and behavior needs based on individualized assessments.

**EDLTF 203 Leadership, Assessment & Evaluation**

This course is a continuation of the learning opportunities from EDLTF 201W. The assumptions underlying the teaching-learning process remain a focus of study. Key theoretical principles in classroom leadership, assessment, and evaluation are examined to determine how relevant theory operates in effective practice. Writing is used extensively to enhance learning and, therefore, quality of writing is assessed throughout the course. (EDLTF 201W is a prerequisite for EDLTF 202W.)

**EDLTF 204 Field Experience**

Provides additional opportunity for students to reflect critically on their developing knowledge base and practical experiences. This seminar fosters personal and professional growth to prepare students for admission to the Professional Educator Certification Track.

**EDLTF 205 Ed Psych II Classroom Leadership, Assessment & Evaluation**

This course is a continuation of the learning opportunities from EDLTF 201W. The assumptions underlying the teaching-learning process remain a focus of study. Key theoretical principles in classroom leadership, assessment, and evaluation are examined to determine how relevant theory operates in effective practice. Writing is used extensively to enhance learning and, therefore, quality of writing is assessed throughout the course. (EDLTF 201W is a prerequisite for EDLTF 202W.)
The Early Childhood Education program is guided by Pennsylvania state standards and by standards of national professional organizations. Students will address professional standards in each of the early childhood school curriculum areas through course projects and will implement the standards in their fieldwork. All of the experiences in the Early Childhood Education program reflect the themes of leadership, diversity, and technology and are based on the five domains of the Leading Teacher Program.

The Early Childhood Education program is a 130 credit program that consists of courses and experiences organized into four major areas of study: General Education - 39 credits, Academic Cognate - 15 credits, Foundations of Education - 19 credits, Professional Preparation - 51 credits, and Electives - 6 credits. Students in the Early Childhood education program concentrate studies in the General Education Core, Foundations of the LTP, and Cognate Studies during the first four semesters.

Details are provided in the description of the Foundations of the Leading Teacher Program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>Semesters 5-7</strong></td>
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<tr>
<td>Academic Cognate</td>
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<td>EDLTC 201</td>
<td>Orientation to ECE</td>
<td>3</td>
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<tr>
<td>EDLTC 202</td>
<td>Child Development (Birth-8)</td>
<td>3</td>
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<tr>
<td>EDLTC 301W</td>
<td>Literacy</td>
<td>7</td>
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<td>EDLTC 391</td>
<td>Literacy Field Work</td>
<td>1</td>
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<tr>
<td>EDLTD 330</td>
<td>Literacy Academic Adaptations</td>
<td>1</td>
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<tr>
<td>EDLTC 302</td>
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<tr>
<td>EDLTC 392</td>
<td>Numeracy Field Work</td>
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<td>EDLTD 335</td>
<td>Numeracy Academic Adaptations</td>
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<td>EDLTC 401</td>
<td>Educated Citizenry</td>
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<td>EDLTC 491</td>
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<td>EDLTD 430</td>
<td>Educated Citizenry Academic Adaptations</td>
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<tr>
<td><strong>Semester 8</strong></td>
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<tr>
<td>Professional Preparation</td>
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<td>EDLTC 492</td>
<td>Student Teaching</td>
<td>12</td>
</tr>
<tr>
<td>EDLTC 402</td>
<td>Senior Seminar</td>
<td>3</td>
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<tr>
<td><strong>Electives 6 credits</strong></td>
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<tr>
<td>Students may register for 6 credits from the following areas: International Studies, Instructional Technology, Cognate Study, Leadership Studies or Independent Research. Students can complete electives during semesters 5-7 or summer sessions</td>
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</tbody>
</table>

**Course Descriptions — Early Childhood Education**

**EDLTC 201 Orientation to Early Childhood Education**

This course provides an overview of early childhood education and explores the ways teachers can nurture and challenge the whole child (physically, socially, emotionally, and cognitively) by providing developmentally appropriate practices.

**EDLTC 202 Child Development Birth-8**

In-depth examination of the development of the child from birth through eight years of age in physical, social, emotional, and cognitive years of growth. Emphasis is given to application of theoretical principles, as well as techniques for observing and assessing growth and development.

**EDLTC 301W Literacy**

The Literacy semester merges the areas of reading instruction, language arts education, and children's literature for grades N-3. Students will participate in three instructional modules and will be assigned to a local school to do field work focusing on literacy. Writing is used extensively to enhance learning and, therefore, quality of writing is assessed throughout the course. The focus is on instructional planning, instructional practice, and formative evaluation.

**EDLTC 302 Numeracy**

This course provides an overview of early childhood education and explores the ways teachers can nurture and challenge the whole child (physically, socially, emotionally, and cognitively) by providing developmentally appropriate practices.

**EDLTC 391 Literacy Field Work**

The Literacy semester concentrates on classroom teaching and learning of mathematics in grades N-3 and on the development of mathematical thinking.

**EDLTC 392 Numeracy Field Work**

The Numeracy semester consists of three major components that will be integrated and focused on the teaching and learning of mathematics in grades N-3 and on the development of mathematical thinking.

**Knowing Mathematics and School Mathematics**

Students will develop knowledge of the content and discourse of N-3 mathematics, including:

- Mathematical concepts and procedures and the connections among them,
- Multiple representations of mathematical concepts and procedures,
- Ways to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formality.

**Knowing Students as Learners of Mathematics**

Students will develop knowledge of:

- The effects of children's age, abilities, interests, and experience on learning mathematics,
- The influences of linguistic, ethnic, racial, and socioeconomic backgrounds and gender on learning mathematics,
- The effects of children's age, abilities, interests, and experience on learning mathematics,
- The influences of linguistic, ethnic, racial, and socioeconomic backgrounds and gender on learning mathematics.

**Mathematical Pedagogy**

Students will develop knowledge of and ability to use:

- Instructional materials and resources,
- Ways to represent mathematics concepts and procedures,
- Instructional strategies and classroom organizational models,
- Ways to promote discourse and foster a sense of mathematical community,
- Means for assessing students' understanding of mathematics.

**EDLTC 392 Numeracy Field Work**

Students will apply knowledge of mathematics, school mathematics, and mathematical pedagogy in an N-3 school setting.
Throughout the program, students will have the opportunity to develop professional and personal competence by participating in experiences that are both theoretical and applied in local, national, and international settings. All students will complete a set of core experiences in teaching methodology and will participate in guided fieldwork. Students have options to distinguish themselves through independent research and/or international study and teaching opportunities.

The Elementary Education program is guided by Pennsylvania state standards and by standards of national professional organizations. Students will address professional standards in each of the elementary school curriculum areas through course projects and will implement the standards in their fieldwork. All of the experiences in the elementary education program reflect the themes of leadership, diversity, and technology and are based on the five domains of the Leading Teacher Program.

The Elementary Education program is a 130 credit program that consists of courses and experiences organized into four major areas of study: General Education - 39 credits, Academic Cognate - 15 credits, Foundations of Education - 19 credits, Professional Preparation - 51 credits and Electives - 6 credits. Students in the Elementary certification program concentrate in the General Education Core, Foundations of the LTP and Cognate Studies during the first four semesters. Details are provided in the description of the Foundations of The Leading Teacher Program.

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<tr>
<td><strong>Professional Preparation - Focused Semesters</strong></td>
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<td>Numeracy Field Work</td>
<td>1</td>
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<tr>
<td>EDTLD 335</td>
<td>Numeracy Academic Adaptations</td>
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<tr>
<td>EDTLE 401</td>
<td>Educated Citizenry</td>
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<tr>
<td>EDTLE 491</td>
<td>Educated Citizenry</td>
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<tr>
<td>EDTLD 430</td>
<td>Educated Citizenry</td>
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<td><strong>Semester 8</strong></td>
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<tr>
<td>Professional Preparation</td>
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<tr>
<td>EDTLE 492</td>
<td>Student Teaching</td>
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</tr>
<tr>
<td>EDTLE 402</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives 6 credits**

Students may register for 6 credits from the following areas: International Studies, Instructional Technology, Cognate Studies, Leadership Studies or Independent Research. Students can complete electives during semesters 5-7 or summer sessions.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDLTS 336 Teaching Mathematics Gr 5-8</td>
<td>3 cr</td>
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<tr>
<td>EDLDS 341 Teaching Secondary Mathematics</td>
<td>3 cr</td>
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<tr>
<td>EDLTS 346 Teaching Secondary Science</td>
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<tr>
<td>EDLTS 341 Teaching Secondary Mathematics</td>
<td>3 cr</td>
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<tr>
<td>EDLTS 342 Teaching Secondary Science</td>
<td>3 cr</td>
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<tr>
<td>EDLITS 302 Instructional Technology IV</td>
<td>3 cr</td>
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<tr>
<td>EDLTS 391 Field Experience</td>
<td>1 cr</td>
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<tr>
<td>EDLTS 346 Teaching Secondary Social Studies</td>
<td>3 cr</td>
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<tr>
<td>EDLDS 492 Field Experience</td>
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<td>EDLTS 391 Field Experience</td>
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<tr>
<td>EDLTS 342 Teaching Secondary Mathematics</td>
<td>3 cr</td>
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<tr>
<td>EDLTS 392 Field Experience</td>
<td>1 cr</td>
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<tr>
<td>EDLDS 345 Adaptive Strategies for Secondary Inclusive Programs</td>
<td>3 cr</td>
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<tr>
<td>EDLTS 341 Teaching Secondary Mathematics</td>
<td>3 cr</td>
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<tr>
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<tr>
<td>EDLTS 347 Teaching Foreign Language</td>
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<td>EDLTS 348 Teaching Sec Social Studies</td>
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<td>3 cr</td>
</tr>
<tr>
<td>EDLTS 491 Field Experience</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

*No student may register for additional coursework during the student teaching semester without permission from the Committee on Student Standing.*
SCHOOL OF EDUCATION

MUSIC EDUCATION
The School of Music determines general and professional coursework and professional education courses required for this program.

SPEECH AND LANGUAGE PATHOLOGY IN EDUCATION
The School of Education, in cooperation with the Rangos School of Health Sciences, provides coursework for students majoring in speech-language pathology to obtain Pennsylvania state certification as teachers of Speech and Language Impaired.

STUDENT TEACHING
The undergraduate experience in the School of Education culminates in student teaching. Student teaching allows the undergraduate to apply the principles and techniques in an actual classroom or other instructional settings for a full semester in the senior year. Students must make application and satisfy the specific requirements for student teaching as outlined in the School of Education Handbook.

TEACHER CERTIFICATION
The School of Education has been approved by the Pennsylvania Department of Education to offer coursework leading to the Pennsylvania Instructional I Certificate. This certificate is valid for six years beginning the first year the individual is actually employed as a teacher in the State of Pennsylvania. In order for a student to be eligible for certification, the following requirements must be met:

1. Completion of all coursework with a cumulative grade point average of a minimum of 3.0
2. Successful completion of student teaching
3. Completion of all requirements for the Bachelor of Science in Education degree
4. Completion of the application for certification
5. Recommendation of the Dean of the School of Education
6. Successful completion of Praxis tests as required by the Pennsylvania Department of Education

STUDENT ORGANIZATIONS
The School of Education provides opportunities for participation in student organizations related to professional education preparation. Students are encouraged to take an active part in these professional organizations.

HONORS
As an assurance of the quality of the most outstanding graduates from Duquesne University’s School of Education, truly outstanding students are designated as the Dean’s Teaching Fellows. The Dean’s Teaching Fellows are selected after a rigorous application and screening process.

OTHER AWARDS
Other awards are available to undergraduates in the School of Education. Students may consult the School of Education Handbook for specific information regarding academic policies pertaining to their program.

PROGRAM REQUIREMENTS
The material contained herein is subject to change from time to time, and this publication cannot be considered an agreement or contract between individual students and the School. The School of Education reserves the right to alter or amend the terms, conditions and requirements herein, and to eliminate programs or courses as necessary. Once enrolled, students should refer to the Leading Teacher Program Student Handbook for specific information regarding academic policies pertaining to their program.

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MARY PAPPERT SCHOOL OF MUSIC

MARY PAPPERT SCHOOL OF MUSIC

ADMINISTRATION

Dean
Edward Kocher, Ph.D.

Director, Undergraduate Division
Kenneth Burky, M.M.

Administrator of Music Enrollment
Nicholas Jordanoff, M Ed

Assistant Dean
John Mumper, B.A.

Assistant to the Dean
Kathleen Ingold

HISTORY
Founded in 1926, the Mary Pappert School of Music recently celebrated its seventy-fifth anniversary. The earliest course of study led to the Bachelor of Music degree, the Bachelor of Science in Music Education program was added four years later. On April 25, 1967, the present music building was dedicated, on this occasion Van Cliburn was awarded an Honorary Doctorate of Music degree. The School of Music has been fully accredited by the National Association of Schools of Music since 1966.

PHILOSOPHY AND OBJECTIVES
The Mary Pappert School of Music offers a comprehensive musical education in tune with the realities of the times. Overlooking the City of Pittsburgh, with its unique blend of old and new, with its thriving cultural life, the campus itself symbolizes the goal development of a well-rounded professional musician who is well equipped to contribute to the contemporary musical world.

To meet that goal, the Mary Pappert School of Music aims to develop in each student the highest caliber of individual performance informed by current music scholarship. Music studies at Duquesne are enriched by the core curriculum, a sequence of courses which place music studies within a broader cultural context.

Duquesne maintains a commitment to the new and innovative - to the proposition that music is ever alive and always changing, that the musician of the future must be versatile and adaptable. This philosophy is evidenced by the various programs and offerings available to students, from traditional studies in music to a focus on contemporary music and the role of current technology in the life of a twenty-first-century musician.

To that end, the Mary Pappert School of Music offers students an education for the 21st century, rooted in the traditions of historical thought.
Steve Vai

Applied faculty in the Mary Pappert School of Music include members of the Pittsburgh Symphony Orchestra as well as distinguished concert artists. Ensembles in residence include the Faculty Guitar Ensemble, Catch 22, and the Children's Festival Chorus. Other faculty are recognized in the academic and cultural communities for their activities as performers, conductors, composers, music technologists, church musicians, clinicians, and music scholars. Interaction with these outstanding professional musicians is invaluable in the education of the developing professional musician.

Duquesne students also take advantage of the many performance opportunities afforded them by local music organizations. Students perform in the Pittsburgh Youth Symphony, the Pittsburgh Civic Orchestra, the Westmoreland Symphony, the McKeesport Symphony, and others.

**FACILITIES**

The Mary Pappert School of Music offers a wide range of state-of-the-art facilities for its students. The school is located in the historic Beamer Hall on the campus of Duquesne University. The building houses numerous rooms and studios designed for teaching and practice.

- **Fender Electronic Studio**: Dedicated in the Fall of 1994, this studio is a state-of-the-art electronic studio for MIDI/hard disk recording and electronic guitar and ensemble rehearsal. It features a Fender 32-channel board, an advanced sound reinforcement system, and a power amplifier for both guitar and bass.

- **Music School Technology Facilities**: These facilities are equipped with the latest technology, including computer systems, digital audio workstations, and MIDI-equipped keyboards.

- **Keyboard Lab**: A computer lab housing 17 Macintosh computers equipped with Macintosh hard disk recording systems, along with 17 Yamaha clavinovas, printers, Yamaha headphones, and more.

- **SCHOOL TECHNOLOGY**: The program is designed for talented students who desire to increase their flexibility in order to take advantage of the new professional opportunities available to musicians possessing sophisticated music technology skills.

- **Studio 1, 2, and 3**: State-of-the-art electronic studios for MIDI/hard disk recording and all electronic music organizations. Students perform in the Pittsburg Symphony, Westmoreland Symphony, the McKeesport Symphony, and others.

- **Musical Instrument Grant**: Duquesne offers a Musical Instrument Grant that provides the latest technology, supporting student and faculty use. This grant is renewed each year, providing the latest in technology for the students of the Mary Pappert School of Music and designates the school as an "All Fender Facility.""
K-12 and encompassing both vocal and instrumental music. General education courses are designed to develop well-rounded teachers who are able to relate to their students and classroom culture. These include the 27 credits of the university core curriculum.

**MUSIC EDUCATION CERTIFICATION**

Students completing the course work in music education receive the BS in Music Education and may be recommended for certification to the Pennsylvania Department of Education. An additional period of admission to the certification program includes interviews with a department member. Candidates are expected to demonstrate leadership qualities, excellent communication skills, critical thinking and analysis ability, and a genuine interest in a service-oriented profession.

Post-graduate certification course work in music education is available to those with B.M. or B.S. in Education degrees. Audition and/or course requirements are available upon request.

**MUSIC THERAPY**

**Admission**

Selection of students for the music therapy program depends upon completion of the admissions and audition procedures and an interview with a department member. Candidates are expected to demonstrate leadership qualities, excellent communication skills, critical thinking and analytical abilities, and a genuine interest in a service-oriented profession.

**Curriculum**

Students complete 132 credits in the areas of music, music therapy, human sciences, and general education. Course requirements include 24 credits of core music major classes, including applied music, music education, voice teaching, piano instruction, and piano improvisation. Clinical experience begins during the first year and culminates in the clinical internships.

**Board Certification**

Students who successfully complete the entire bachelor's degree program may apply for a six-month internship that includes not less than 1040 hours of clinical work under the supervision of a board-certified music therapist at a clinical site approved by the American Music Therapy Association, Inc. Upon completion of the internship, the Bachelor of Science in Music Therapy Degree is granted and the student is eligible to sit for the board certification exam which is administered by the Certification Board for Music Therapy, Inc.

Post-graduate Certification

Post-graduate certification course work in music therapy is available to those with a B.M. or B.S. in music education or performance. Selection of students for this program depends upon completion of the admissions and audition process, review of transcripts, and interview with the department chair.

** COURSE DESCRIPTIONS**

**PERFORMANCE**

- **Applied Music**
  - 1-3 credits
  - Private study of voice, piano, harpsichord, organ, guitar or orchestral instruments

- **Piano Accompanying**
  - 1-2 credits
  - This course is designed for the undergraduate with the purpose of affording the student instruction in the art of piano accompanying

- **Vocal Coaching**
  - 1-2 credits
  - Individual work with pianist as a supplement to Opera Workshop and/or Applied Music

121, 123, 125 French, German, Italian for Musicians

Rudiments of each foreign language offered on a rotating basis in the fall semester in preparation for the appropriate Dictation and Repertory course offered in the following spring.

- **Alexander Technique**
  - 2 credits
  - This course is an introduction to the Alexander Technique in which students examine bodily movement patterns and identify those which are destructive or interfere with musical performance. The technique heightens kinesthetic sensitivity, offering performers a control that is fluid and lively, thus lessening chances of performance injury. The principles are based on an understanding of human anatomy which promotes ease and freedom of movement, balance, flexibility, and coordination.

116, 117, 118, 119 Dictation and Repertory

Choral techniques and notation in German and French.

118 Career Perspectives/Music

This course focuses on the details of making a living in the music world. Topics include creating and maintaining a portfolio and resume, negotiating business matters and marketing.

150, 151, 152 Orchestral Repertoire

An intensive study of orchestral excerpts with emphasis on style, performance practice, and audition preparation.

**MARY PAPPERT SCHOOL OF MUSIC**

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**MARY PAPPERT SCHOOL OF MUSIC**

155 Beginning Piano for Performance Majors I

Class piano instruction in basic techniques of piano performance, including scales, keyboard harmonization, and introductory score reading. MIDI piano lab equipped with music workstations, synthesizer modules, and six track records are used.

156 Beginning Piano for Performance Majors II

Class piano instruction in intermediate techniques of piano performance including two octave scales, keyboard harmonization of secondary chords, transposition, and score reading. Upper elementary piano literature is studied.

212, 214, 216 Chamber Music

The course includes performance of selected chamber music literature from the standard repertoire for various combinations of instruments. Weekly coachings, with additional scheduled rehearsals required. Each ensemble must present a performance during the semester.

217 Piano Ensemble

1-2 credits

This course focuses on the study and performance of literature written for various piano ensemble combinations. Works for one or two pianos will be emphasized.

218 Performance Development for Guitar

This course is designed for the performing musical artist, in which the emphasis is to gain control and composure of one's self in a performance setting. Proper preparation of material and practice techniques for performance is studied. Through weekly in-class performances each student gains experience in proper recital procedure, mental focus for minimizing errors and successful artistic performances.

225 Intermediate Piano for Performance Majors

Intermediate Piano class. This course piano instruction in intermediate techniques of playing, harmonization, theory, score reading, jazz choruses and transposition utilizing MIDI piano lab equipped with music workstations. Emphasis is placed on intermediate literature and harmonization patterns in all keys and styles.

227 Advanced Piano for Performance Majors

This course piano instruction in advanced techniques of playing, harmonization, score reading, theory and transposition utilizing MIDI piano lab equipped with music workstations. Emphasis is placed on advanced use of harmonization patterns in all keys and mastery of literature.

230 Piano Literature I

This course explores the major piano works from 1868-1828, with particular emphasis on the works of Bach, Haydn, Mozart, Beethoven and Schubert. Extensive reading and listening assignments and exams will familiarize the students with the important piano music of these composers. Prerequisite: Two years of university level piano major study, or by permission of instructor.

232 Piano Literature II

A continuation of Piano Literature I from 1828 to the present, with emphasis on the great composers of the Romantic Period (Chopin, Schumann, Liszt, Brahms) and the 20th century. Extensive reading and listening assignments and exams will familiarize students with the piano music of the important composers of this period. Prerequisite: Two years of university level piano major study, or by permission of instructor.

313 Piano Pedagogy I

2 credits

Students will become acquainted with the techniques and materials for teaching piano at the elementary level. For piano majors, junior standing is recommended.

314 Piano Pedagogy II

2 credits

A continuation of 313 concentrating on the techniques and materials for teaching piano at the intermediate and advanced levels.

315 Pedagogy for Performance Majors

1 credit

The course is designed to provide an introduction to the elements of studio teaching. The course is divided into two segments, six weeks of class and eight weeks of labs. The Pedagogy class session includes topics such as learning theory, business considerations, and developing a teaching philosophy.

316 Pedagogy Lab for Performance Majors

1 credit

Pedagogy lab sessions provide specialized instruction for voice, individual instruments, and instrumental groups. Topics include pedagogical/technical approaches and teaching materials. Prerequisite: Concurrent enrollment in 315.

321 Guitar Pedagogy

2 credits

To prepare the guitar performance student to teach individual and classroom guitar successfully, primary focus is the classic and jazz styles of playing, more specifically finger style and plectrum style. Concepts of anatomy and how to properly utilize our bodies with the guitar are the foundation. Students will be exposed to available materials for teaching the guitar and proper curriculum techniques will be discussed for ensembles, development of graded musical items, and the business of guitar instruction.
MARY PAPPERT SCHOOL OF MUSIC

396 Student Recital 0 cr
This course is designed for students giving non-degree recitals.

398 Junior Recital 0 cr
The candidate for the Bachelor of Music degree must perform a recital during the junior year.

400 Recital 1 cr
The candidate for the Bachelor of Music degree must perform a recital during the senior year. The recital is presented to a faculty committee for approval at least one month prior to the date of the performance.

420 Performance Internship 0-12 cr
A rigorous occupational and academic opportunity for highly-qualified students to combine career goals in an individually-designed work experience. Skills in performance, research, analysis, and communication are developed under the supervision of an onsite supervisor in cooperation with a faculty member who may require an academic project.

ENSEMBLE/CHAMBER MUSIC
Required for all students as laboratory work, during most semesters of full-time enrollment. Non-music majors are invited to register for ensemble with permission of instructor.

Large Ensembles 0-1 cr each
The Large Ensembles include Wind Symphony, Orchestra, Concert Choir, Chamber Singers, and Jazz Band.

Small Ensembles 0-1 cr each
The Small Ensembles include Trombone Choir, Brass Ensemble, Guitar Ensemble, Percussion Ensemble, Jazz Ensemble, various woodwind ensembles, and Electronic Ensemble.

144 Opera Workshop 0-1 cr
A performing class in which students learn standard and other opera repertory in the original languages.

Chamber Music 1-2 cr
Study and performance of all types of chamber music for various instrumental combinations including electronic.

MUSICIANSHIP
110, 112 Musicianship I and II 4 cr each
These courses comprise the first two semesters of the seven-semester Musicianship sequence. This sequence integrates many areas of learning within music, including history and literature, solfège, aural comprehension, harmony and counterpoint, analysis and interpretation, arranging and composition, improvisation, and keyboard skills. All of these areas of music are tied together in an integrated fashion, highlighting interpersonal relationships among the various aspects of music. Students learn a wide variety of musical styles, including jazz, world music, and the European tradition from the Middle Ages until the present day. These first two semesters, students utilize tonal materials up to the level of the secondary dominant. Students also learn basic contrapuntal and formal techniques. The first semester includes a brief survey of music history, and the second focuses on the music of the Medieval through the mid-Baroque eras. Prerequisites: passing the entrance examinations to the Mary Pappert School of Music.

113, 114 Musicianship III and IV 4 cr each
These courses continue work in all areas started in Musicianship I and II. These semesters focus on the music of the late Baroque, Classical, and Romantic eras. Work in harmony, counterpoint, form, solfège, aural comprehension, composition, keyboard skills, and improvisation is tied to the structures encountered in the covered historical eras. Students acquire sufficient skills to analyze, interpret, sight-sing, compose, arrange, and perform music in styles and forms which evolved during those eras. Prerequisites: Musicianship I and II.

115, 116 Musicianship V and VI 4 cr each
These courses continue work in all areas started in Musicianship I through IV. The first semester focuses on jazz, and the second semester examines music from the first half of the 20th century. Work in harmony, form, solfège, aural comprehension, composition, keyboard skills, and improvisation is tied to the structures encountered in the covered historical eras. The first semester, students study jazz forms, styles, arranging, and history, and acquire a working improvisational vocabulary. In the second semester, students acquire skills related to the analysis, interpretation, composition, sight-singing, and performance of music from the first half of the 20th century. Prerequisites: Musicianship I through IV.

117 Musicianship VII 4 credits
Musicianship VII completes the seven-course sequence. This course utilizes tonal and atonal music from the Norton Scores. Students acquire skills related to the analysis, interpretation, composition, sight-singing, and performance of music from 1950 to the present. Students identify, analyze, and demonstrate knowledge of advanced harmonic concepts and applications of set theory. Students compose short pieces in various styles and arrange short pieces for string orchestra and full orchestra. Students experiment with group improvisation on a given motive. Prerequisite: Musicianship VI.

MUSIC EDUCATION

091, 092 Fundamentals of Piano I, II 2 cr
This course introduces students to basic piano skills including scales, trills, cadences, sight-reading, and improvisation. This course is intended for students preparing for Piano for Music Education. It is also open to non-music majors.

101 Introduction to Music Education 1 cr
This course for music education majors is an overview of the primary facets of the profession: the national and state standards for arts education, components of the music program, advocacy, inclusion, field observation, skills, relation between music in the school and the community, cultural awareness, diversity of the profession, professional ethics and behavior, and home schooling.

105, 106 Voice for Music Education I, II 1 cr
This course teaches fundamental techniques of singing, including posture, breathing, tone, diction, expression, and style. Repertoire includes folk songs, art songs, and multicultural songs sung in solo, unison, duets and small ensembles. Students learn standard voice classifications taught through opera, oratorio, and art song.

111W, 112W Piano for Music Education I, II 2 cr each
This course provides piano instruction in harmonization, improvisation, and transposition using a MIDI piano lab equipped with music workstations that consist of electronic keyboards, synthesizer modules and six-track recorders.

173 Woodwind Techniques 2 cr
This course focuses on playing skills and pedagogical applications of clarinet, flute, saxophone, oboe and bassoon. Students learn to play each instrument and become knowledgeable of appropriate teaching materials for each.

251 Music Ed Methods I 2 cr
This course presents an introduction to a sequence in music teacher training based upon the National Standards for Arts Education. Content emphasizes early childhood development in music from pre-K to grade 1. The structure of the course is based on the Kodaly concept of music education, with singing and movement as the primary means of building a foundation for further musical learning. Students learn the basic components of effective lessons and begin the creation of an anthology of musical materials suitable for this.
age group. On-site field experiences are incorporated into this class. Students begin a professional portfolio which will continue throughout the Music Education Methods sequence.

253 Music Ed Methods II  
A continuation of MEM I, with emphasis on the general music class from grades 2-4. The song anthology is expanded. Fifteen hours of field experience in a school system emphasizes grades 2-4. Students continue to develop their portfolios.

254 Music Ed Methods III  
This course advances the sequence of the National Standards, developing skills in general, choral, instrumental, and orchestral methods for grades 5-6. Study of inclusion and assessment techniques appropriate for these grades are included. The song anthology is expanded. Students continue advocacy work by becoming mentors for freshman projects. Portfolio development continues, including the incorporation of the second 15 hours of field experiences emphasizing grades 5-6.

256 Music Ed Methods IV  
This course focuses on grades 7-8. Emphasis is on the development of performing ensembles as well as non-performance classes and appropriate means of assessment. Students complete a third field experience of 15 hours. The anthology and portfolios are expanded.

258 Music Ed Methods V  
This is the final course in the MEM sequence. Its structure parallels that of previous semesters, and completes the study of grades 9-12. It includes the fourth 15-hour clinical experience.

282, 283 Brass Techniques I, II  
1 cr each
This course focuses on playing skills and pedagogical applications of trumpet, French horn, euphonium, trombone, and tuba. Students learn to play each instrument and become knowledgeable of appropriate teaching materials for each.

290 Guitar Class  
1 cr
An introductory course in guitar techniques for the music educator. Content includes playing skills as well as pedagogical applications for elementary, middle, and high school levels.

295 Classroom Instruments  
1 cr
An introductory course which develops skills in recorder playing, Ohr instruments, standard and non-traditional classroom instruments.

325 Marching Band Methods  
1 cr
This course will introduce students to the various styles of the contemporary marching band. Areas discussed will include philosophy, show design, drill charting and integration into the total music curriculum.

330 Choral Materials Lab  
1 cr
This lab is an appendix to the conducting class. It emphasizes the selection, analysis, score preparation, and laboratory conducting of choral repertoire appropriate for various grade and proficiency levels of students.

331 Instrumental Materials Lab  
1 cr
This lab is an appendix to the conducting class. It emphasizes the selection, analysis, score preparation, and laboratory conducting of instrumental and orchestral materials appropriate for various grade and proficiency levels of students.

381 String Techniques  
2 cr
This course focuses on playing skills and pedagogical applications of violin, viola, cello, and bass. Students are expected to play each instrument and to be knowledgeable of appropriate teaching materials for each.

386W Children's Chor Lab  
1 cr
This course provides field and clinical experiences in conjunction with three training levels of the Children's Choral Chorus, in residence at Duquesne. Students will study rehearsal techniques, group motivation, repertoire, and concert production.

481 Percussion Techniques  
2 cr
This course is designed to develop an introductory understanding of percussion pedagogy with special emphasis on the musical growth of elementary school age students. Secondary considerations will include percussion related information and ideas needed to conduct and train junior high and high school individuals in traditional instrumental ensembles.

490 Student Teaching  
6 cr
For the senior music education student who has completed all required music and professional education classes satisfactorily and has been recommended for student teaching. This student teaching experience is a full-time placement for students who have previous certification in a non-musical area. Daily, 14 weeks.

492 Student Teaching - Instrumental  
6 cr
For the senior music education student who has completed all required music and professional education classes satisfactorily and has been recommended for student teaching. Placement is with the grade 6-12 instrumental music program in a selected school with a qualified cooperating teacher. Daily, 7 weeks.

MARY PAPPERT SCHOOL OF MUSIC

493 Student Teaching - Choral  
6 cr
For the senior music education student who has completed all required music and professional education classes satisfactorily and has been recommended for student teaching. Placement is with the grade K-12 vocal or choral music program in a selected school with a qualified cooperating teacher. Daily, 7 weeks.

JAZZ STUDIES

110 Jazz Harmony, Form & Notation  
2 cr
This course presents the foundations of harmony and form essential to the jazz musician. Topics to be covered include chord types and movement, chord voicing and substitutions, voice leading, scales, modes, the blues and other standard jazz song forms.

141 Chamber Music - Jazz  
2 cr
The purpose of this course is to develop the skills and techniques necessary for small jazz ensemble performance. Emphasis is on rhythm section techniques, interaction among the members of the group, and development of repertoire.

151 Jazz History  
2 cr
A study of the origin, development, and styles of jazz music and its ramifications with an emphasis on recorded music as well as scores.

226 Jazz Improvisation  
2 cr
Study and practice of melodic improvisation, conventional forms, chord progressions, employing idiomatic jazz articulations, major-minor and modal scales, altered scales and chords, extended forms, and practical applications to standard and jazz literature.

330 Jazz Ear Training, Transcription and Analysis  
2 cr
The course is designed to train the student to recognize aurally the melodic, rhythmic, and harmonic elements of contemporary jazz. The devices used are sight-singing, keyboard work, and extensive dictation. Emphasis is placed on four, five, and six-note chords, chromatically-altered chords and polychords.

340 Jazz Arranging  
2 cr
A study of the basic techniques of scoring for individual instruments and jazz ensembles of various sizes, from small groups to studio orchestras. Analysis of scores by contemporary big band arrangers.

MUSIC THERAPY

107W Music Therapy Orientation  
3 cr

109W Music Therapy In Context  
3 cr
Focus on Music Therapy methods utilized in a variety of therapy settings. Includes assessment, planning, implementation and evaluation of sessions designed for a variety of populations.

124W Practicum 1-7  
2 cr
Field placement in a clinical setting for a minimum of 15 hours per semester. Certified Music Therapists and other specially trained clinicians assist in the educational training and professional developmental growth of the student.

300W Psychology of Music Teaching and Learning  
3 cr
A study of the physiological, psychological, and sociological aspects of music teaching and learning with emphasis placed on current research.

306W Influence of Music on Wellness and Healing  
3 cr
An examination of the impact of music and its effects on the mind, body, and spirit healing from a holistic point of view.

310W Directed Study  
2 cr
Capstone Seminar in Music Therapy research. Students select Music Therapy topics.

315 Piano Improvisation I  
2 cr
Piano Improvisation I is open to all music education and music therapy majors. This course students will learn basic improvisation skills and how to utilize improvisation in today's classroom and therapeutic settings. Course prerequisites: Piano for Mus Ed II or 2 years of Piano 119.

317 Guitar for Music Therapy I  
2 cr
The scope of this course is designed to focus on developing an introduction to the skills needed for playing the guitar in a clinical setting. Special emphasis will be placed on performance and accompanying, right and left hand techniques, fretboard visualization, sight reading, basic improvisational tools, introduction to chord voicing rhythmic studies, and an increased awareness of music interpretation.

318 Guitar for Music Therapy II  
2 cr
This course continues to expand the guitar competencies completed in Guitar I with the addition of bar chord voicings. Emphasis will also be placed on the building of clinical repertoire.
374W Music and Movement for the Exceptional Person 3 cr
This course is experimental and didactic in its approach. The rationale of using music and movement as therapeutic teaching tools to meet the developmental needs of special persons will be explored.

SACRED MUSIC
201 Sacred Choral and Solo Literature 2 cr
A survey of choral and vocal literature for the church with emphasis on practical materials for church choirs, soloists, and congregations.

103 Service Playing 1-2 cr
The objective of this course is to develop the service playing skills necessary to play for church services of all denominations through a study of applied harmony, counterpoint, hymnody, anthem accompaniments, and conducting from the console. Students unable to enroll for this course will study this material in their applied music lesson.

112 Church Music Practicum 1 cr
Seminar in practical aspects of church music, establishing the music program in a church, graded choir systems, children's choirs, instruments in workshop, contracts, caroler systems, worship commissions, etc.

420 Hymnody 2 cr
A study of the church's heritage of song, the Psalms, the great hymns of the Medieval Church, the heritage of Luther, Calvin and their followers, English hymnody, American contributions, twentieth-century hymnody with special emphasis on the theological framework for each major development in the history of hymns.

421 Gregorian Chant 2 cr
The history, notation, and modal system of Gregorian chant. Class participation in the singing of chant as prayer and current liturgical application.

431, 432 Organ Improvisation 2 cr each
A practical application of the basic tools of improvisation including harmonicization of melodies at the organ, two and three part counterpoint, short ABA forms, and chorale preludes with emphasis on their liturgical application.

451, 452 Organ Literature 2 cr each
A survey of organ literature and organ buildings as it relates to organ registration. The first semester treats organ music from the Renaissance through J. S. Bach. The second semester deals with the literature from 1750 to the present. Outside listening and readings will be required.

470 Sacred Music Internship 2 cr
An exploration of the relationship of liturgy and the music which expresses the rituals of liturgy. Fifteen areas of liturgical celebration in the worship life of the church are analyzed, set into historical perspective, and evaluated as to their effectiveness in parish life including the demands of ritual, theology of the rites and its musical expression, and pastoral issues in their celebration.

476 Organ Design and Maintenance 2 cr
A study of the basic concepts of organ construction with emphasis on the historical development of the organ and the mechanical operation of the pipes and console. Tuning, voicing, and esthetics of organ design will be discussed.

MUSIC TECHNOLOGY
SOUND RECORDING TRACK
101 Introduction to Audio I 2 cr
Introduction to basic concepts of audio propagation both acoustically and electrically. Mathematics for audio concepts are covered in full. All concepts are then related to the audio.

102 Introduction to Audio II 2 cr
The focus of this course is a presentation of more basic audio concepts. An introduction and overview of the hardware and software used in the recording process. Prerequisite: Introduction to Audio I.

145 Audio I 2 cr
Foundations of the digital recording process. Covered are all aspects of the recording chain and basic procedures for two track and multi-track production. Lab required. Prerequisite: Introduction to Audio I.

146 Audio II 2 cr
An intensive study of the commercial recording process. Intensive hands-on and production projects. Lab required. Prerequisite: Audio I.

149 Audio III 2 cr
Individual studio projects with instructor coaching. Prerequisite: Audio II.

153 Audio IV 1 cr
The focus of this course is reinforcement of recording techniques learned in Audio I, II, and III. Each student is required to be engaged in a current weekly recording session and to be working toward completion of assigned projects. Students meet with the instructor upon completion of recordings and are critiqued on their performance. Prerequisite: Audio II.

MUSIC TECHNOLOGY
COMPOSITION TRACKS
350 Electronic Chamber Music 2 cr
A performance based course that covers the basics of Electronic Performance Practice. Includes the preparation, rehearsal, and performance of electronic music through solo, ensemble, and sequencer-based pieces. Students are assigned to small chamber groups, both solo and ensemble pieces are prepared by students for performance in a recital at the end of the semester. Prerequisite: MIDI Controller Techniques.

355 Introduction to Composition I 2 cr
An introduction to composition that focuses on the fundamentals: melody, harmonic content, rhythm, and compositional forms. Students will begin development of individual composition portfolios and are encouraged to have their works performed at a student composition recital held during the semester. (Class format)

356 Introduction to Composition II 2 cr
A continuation of basic concepts needed to write successful musical compositions. Students will continue development of individual composition portfolios, and are encouraged to have their works performed at a student composition recital held during the semester. Prerequisite: Introduction to Composition I. (Class format)

358 Electronic Orchestration 2 cr
A study of technical exercises, students will learn to compose for both electronic and electro-acoustic ensembles. Additional explanations of computer searchers and Excel, Word, and Power Point are an integrated part of this course.

366 Electronic Music Technology 2 cr
Prerequisite: Audio I. A continuation of the study of technical exercises, students will learn to compose for both electronic and electro-acoustic ensembles. Additional explanations of computer searchers and Excel, Word, and Power Point are an integrated part of this course.

370 Sacred Music Internship 2 cr
An exploration of the relationship of liturgy and the music which expresses the rituals of liturgy. Fifteen areas of liturgical celebration in the worship life of the church are analyzed, set into historical perspective, and evaluated as to their effectiveness in parish life including the demands of ritual, theology of the rites and its musical expression, and pastoral issues in their celebration.

371 Applied Audio 2 cr
Directed individual study in Audio.

372 Sound Recording Technology Internship 3-4 cr
Students will be provided an opportunity to work as an assistant at a corporation related to the field of sound recording.

PERFORMANCE AND ELECTRONIC COMPOSITION TRACKS
115 Computers for Musicians 2 cr
An introductory music technology course. Includes basic MIDI theory, computer notation, sequencing, Internet explorations, computer assisted instruction, and computer software uses for musicians. Additional explanations of computer searchers and Excel, Word, and Power Point are an integrated part of this course.

125 Music Technology I 2 cr
A continuation of computers for musicians coursework, with more advanced applications of MIDI theory, computer notation and sequencing, and the history of electronic music (1945 to the present). Prerequisite: Computers for Musicians.

201 Music Technology II 2 cr
Synthesis and sound design, advanced sequencing and basic web page design. Prerequisite: Music Technology I.

217 Music Technology III 2 cr
Multimedia design and production with an emphasis on musical elements, incorporates some digital imaging, digital audio, and digital video. Prerequisite: Music Technology II.

260 Music Technology IV 2 cr
Sampling, digital sound design and editing, SMF/TE synchronization and advanced score notation. Desktop video production and surround sound mixing. Advanced project in music technology which demonstrates expertise in a variety of music technology skills, includes the creation of a professional portfolio. Prerequisite: Music Synthesis III.

314 Electronic Orchestration 2 cr
A study of the basic problems of scoring for electronic instruments in a variety of musical contexts, including scoring for both electronic and electro-acoustic ensembles. Analysis of the techniques of electronic orchestration of selected contemporary composers in a variety of musical styles. Prerequisites: Music Technology II and Traditional Orchestration.

311 MIDI Controller Techniques 1 cr
The study and application of unique performance techniques used with electronic instruments. Through analyses of acoustic and electronic performances and study of technical exercises, students will learn to control the nuances of performance on electronic instruments. Prerequisites: Computers for Musicians and Music Technology 105.

350 Electronic Chamber Music 2 cr
A performance based course that covers the basics of Electronic Performance Practice. Includes the preparation, rehearsal, and performance of electronic music through solo, ensemble, and sequencer-based pieces. Students are assigned to small chamber groups, both solo and ensemble pieces are prepared by students for performance in a recital at the end of the semester. Prerequisite: MIDI Controller Techniques.

335 Introduction to Composition I 2 cr
An introduction to composition that focuses on the fundamentals: melody, harmonic content, rhythm, and compositional forms. Students will begin development of individual composition portfolios, and are encouraged to have their works performed at a student composition recital held during the semester. (Class format)

356 Introduction to Composition II 2 cr
A continuation of basic concepts needed to write successful musical compositions. Students will continue development of individual composition portfolios, and are encouraged to have their works performed at a student composition recital held during the semester. Prerequisite: Introduction to Composition I. (Class format)

320 Composition/Performance Final Technology Project 1 cr
Students prepare and complete composition and performance projects to be presented at their senior recital. All projects will demonstrate the student's
School Of Nursing

Telephone 412-396-6550  Fax 412-396-6346
Website www.nursing.duq.edu

Effective Catalog

The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the School. The School of Music reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled students should consult on a regular basis with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective programs.

School Of Nursing

HISTORY

Since it is the policy of the University to establish its schools under control of an already established school, the School of Nursing was originally organized in 1935 as a unit in the College of Liberal Arts and Sciences. In March 1937, the Department of Nursing Education was given the status of a separate school with a Dean in charge.

In December 1937, the State Board of Education of the Commonwealth of Pennsylvania approved the school and authorized Duquesne University to confer the degree of Bachelor of Science in Nursing and the degree of Bachelor of Science in Nursing Education upon graduates according to the appropriate curriculum. The program leading to the degree of Bachelor of Science in Nursing Education was designed to meet the specific needs of the registered nurse while the basic program leading to the degree of Bachelor of Science in Nursing, the first in Pennsylvania, was designed for the high school graduate. The School of Nursing continued to offer two separate degrees until 1964. In September of that year, a single revised professional nursing program was implemented for admission of both basic and registered nurse students leading to the degree of Bachelor of Science in Nursing.
general concepts and nursing practice through collaboration with professional role models and within and between nursing and other programs in the university. Didactic and clinical education will be based on active learning principles.

Opportunities will be provided that support empathy, sensitive, and compassionate care for individuals, groups, and communities. This environment will promote and reward integrity and accountability, encourage altruism, increase students' awareness of social and ethical issues, and nurture students' awareness of their own value systems as well as those of others.

The learning environment will be designed to anticipate progress in the field of information technology and will provide the students with the ability to assess the need for, as well as, the efficacy and use of technology both locally and globally. Students will be encouraged to balance the use of technology with the use of human touch and caring.

This environment which embraces cultural diversity will welcome all qualified students and faculty to join our community of learners. Opportunities for multicultural learning experiences will be offered both locally and globally.

CONCEPTUAL MODEL

The person, as the central core of the conceptual framework, is the focus of the professional nurse and is viewed as a unique creation holding values and beliefs reflective of the person's culture and life experiences. The person is an active agent in the health care system. The School of Nursing believes that nursing is a human science profession and academic discipline focusing on the diagnosis and treatment of human responses to actual or potential health problems and their outcomes within a caring environment. Underlying the nurse's ability to provide, design, manage, and coordinate care are certain core competencies which include critical thinking, assessment, communication, and technical and information technology skills. These skills are delicately balanced with intelligence, confidence, understanding, caring, and compassion.

Various interdisciplinary and nursing theories and research provide the basis for professional nursing practice. The nurse collaborates with the person, interdisciplinary health care team, and health care agencies focusing on the promotion of health and prevention of illness. Thus, takes place in an external dynamic environment which encompasses diverse populations in both local and global communities. As advocates for high-quality care and social justice, the professional nurse will assume responsibility for life-long learning, practice within an ethical framework, participate in political and regulatory processes, and ultimately, in the shaping of the health care delivery system.

PROGRAM PURPOSES AND OUTCOMES

The purpose of the School of Nursing is to provide professional education for students pursuing a baccalaureate degree in nursing, a master of science in nursing, and a doctor of philosophy degree in nursing.

Within the philosophy and purposes of the School of Nursing and guided by the American Nurses Association Standards of Clinical Nursing Practice, the faculty has formulated a curriculum that provides learning experiences to assist students to acquire specific knowledge and skills. Based upon the mission, vision, and conceptual model of the School of Nursing, upon completion of the undergraduate program, the graduate will demonstrate the following:

1. Utilize the nursing process in the promotion of health and prevention of illness with individuals, groups, and aggregates
2. Assess critical thinking skills in the practice of professional nursing
3. Demonstrate cultural caring in the practice of professional nursing
4. Synthesize theoretical and empirical knowledge within the caring context of professional nursing
5. Collaborate with health care consumers and providers to meet health care needs of individuals, groups, and aggregates
6. Demonstrate responsibility and accountability for decisions, actions, and outcomes in the practice of professional nursing
7. Practice within the legal and ethical framework of the nursing profession
8. Assume a multidimensional professional role in the delivery of health care
9. Responsibly manage human, fiscal, and material resources to achieve quality health outcomes
10. Promote the rights, responsibilities, and dignity of the person in the delivery of health care
11. Advocate positive change in professional practice and health care policies, utilize organizational and political processes

DEGREE

The School of Nursing undergraduate program leads to the degree of Bachelor of Science in Nursing

PROGRAM OF STUDY

The School of Nursing offers a program with a major in nursing leading to a baccalaureate degree in nursing to qualified high school graduates, registered nurses, non-nursing baccalaureate graduates, and qualified transfer students. The program includes four years of study, and is designed to provide the student with the knowledge and the skills needed to practice as a professional nurse generalist upon graduation. The general and professional education acquired in this program provides a basis for the graduate to progress to positions of increasing responsibility and to undertake graduate study.

The curriculum is designed to provide a strong liberal arts and science base. The course offerings in the natural, biological and behavioral sciences, and the University core courses support the philosophy that provides the basis for the organizing framework of the professional nursing program. Professional nursing courses, which constitute the nursing major, include theory and practice in the nursing care of individuals, families, and aggregates. Learning opportunities are provided in hospitals, homes, schools, health agencies and a variety of community settings. The Heysor Nursing Resource Center in the School provides students with access to computerized learning, media review, and simulations used in learning nursing skills. The School's Center for International Nursing Education, Wellness Centers offer students an environment of cultural exchange and inquiry and research in nursing.

The faculty of the School of Nursing conducts all professional nursing courses and also guides and directs the practicum (clinical) learning experiences. Nursing students are assigned faculty mentors for career and professional development. A variety of hospitals and agencies collaborate with the School of Nursing to provide a wide selection of excellent practice settings.

Upon the successful completion of their program of study, graduates are eligible to take the NCLEX-RN examination for licensure, and to graduation, students are required to successfully complete program requirements designed to prepare them for the NCLEX-RN exam.

While completing their BSN, students have an opportunity to pursue a minor in select areas such as Spanish, Business, Psychology, Sociology, and Communications. A focus area in Music Therapy is also available. The faculty reserves the right to make changes in the curriculum and program requirements which are believed to be in keeping with the changing health needs of society and/or the best interest of the student and the School to maintain quality professional nursing education.

The undergraduate program of study is fully approved by the State Board of Nursing (PO Box 2649, Harrisburg, PA 17105-2649, Phone 1-717-783-7142, http://www.dos.state.pa.us/bpoa/nurd/ and is fully accredited by the National League for Nursing (350 Hudson Street, New York, NY 10014, Phone 1-800-669-1656, Ext 146) and the Commission on Collegiate Nursing Education (One Dupont Circle, NW, Suite 520, Washington, DC 20036-1120 202-887-6791, www.aacn.nche.edu)

Admission Requirements for BSN Students

Students who are interested in applying for admission to the School of Nursing should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, Pennsylvania. The specific entrance requirements for admission are:

1. The applicant's high school curriculum must include a minimum of 16 units distributed as follows:
   - 1 unit = 1 year
   - English: 4 years required
   - Social Studies: 3-4 years recommended
   - Language: 2 years recommended
   - Math & Science: 4 years required
   - Chemistry: 1 year
   - Algebra: 1 year
   - One additional year is also required in science or math
   - Economics
   - Physics, Algebra, Computers, etc.

2. A candidate must have graduated from an approved secondary school in the upper two-fifths of the class, and must have demonstrated exemplary personal conduct in the institution. Students whose class rank is below the upper two-fifths are evaluated individually by the University Admissions Committee according to their overall academic achievement (e.g., high school quality point average and testing results are reviewed).

3. The primary consideration for admission is the secondary school academic record.

4. A candidate must present satisfactory scores on the required College Entrance Examination Board (ACT) Scholastic Aptitude Test in accordance with the standards to which the University adheres.

5. A personal interview with a representative of the School of Nursing may be requested prior to admission.

6. Letters of reference may be requested.

Individuals convicted of a misdemeanor, felony, felonious act, an illegal act associated with alcohol, or an illegal act associated with substance abuse(s) may be prohibited from licensure or relicensure as an RN in Pennsylvania (PA) by the Pennsylvania State Board of Nursing. At the time of application to the School of Nursing, individuals are made aware that the State Board may inquire about any previous convictions.

Other additional School of Nursing requirements include evidence of physical and emotional health adequate to meet the demands of the program and compliance with the standards of personal conduct as outlined in the School of Nursing Standards of Personal Conduct Policy. Following notification of acceptance to the University by the Office of Admissions, the School of Nursing candidate must submit the following:
1. School of Nursing’s required health forms to the University Health Services Department.
2. A signed School of Nursing Standards of Personal Conduct Statement.

In specific instances, and at the discretion of the Committee on Admissions, the equivalent of these requirements may be accepted in lieu of the aforementioned requirements. All applicants are evaluated based on individual potential and total profile with variances permitted as necessary and desirable.

THE ACCELERATED BSN

The accelerated BSN enables high school honor students to complete the BSN in 3 years including 2 summers. The curriculum is identical to the 4-year BSN program except for the accelerated pace. Once accepted, students will work closely with their advisor to develop an individualized program of study. Students enrolled in this program must maintain a 3.5 GPA. Advantages of the Accelerated BSN include earlier graduation and entry into nursing practice.

Admission Requirements for Accelerated BSN Students

Applicants to the Accelerated BSN program must have an SAT score of 1100 or greater and a high school GPA of 3.5 on a 4.0 scale. Students must first be accepted into the BSN Program through the Office of Admissions. Accepted students who meet the admission criteria for the accelerated track will receive a letter of invitation from the Dean of Nursing and will be interviewed by the School of Nursing Chair or designee.

TRANSFER STUDENT

See the section on Admissions for further University requirements.

Admission Requirements for Transfer Students

1. A cumulative GPA of 2.5 from the transferring institution.
2. A unit of chemistry and a unit of algebra, which can be from either a secondary school or post-secondary institution.
3. Personal interview with a representative of the School of Nursing and two letters of reference.
4. Compliance with the School of Nursing Standards of Personal Conduct Policy.
5. Evidence of physical and emotional health adequate to meet the demands of the program as indicated above.

Provisions Affecting Placement

1. Transfer student cannot be accepted into nursing clinical practicum courses during the first semester of attendance at Duquesne University.
2. Only courses taken within the past ten years will be evaluated for transfer credit. For courses in the natural sciences, the limit is five years. This time limit may be waived in specific instances.

REGISTERED NURSE STUDENTS

Duquesne University School of Nursing offers the registered nurse (RN) an opportunity to obtain a baccalaureate and master’s nursing degree. Part-time or full-time enrollment is available to allow an RN to continue to be employed while undertaking the course of study. Select courses in the RN-BSN/MSN Track are available online. Through the acceptance of transfer credits, CLEP testing, and challenge examinations, the School of Nursing strives to apply the RN’s previous learning experience towards the requirements of the BSN degree.

Following completion of required university core curriculum and nursing prerequisites, the BSN program can be completed online and part-time in 5 semesters. The BSN is awarded after completion of 32 nursing credits, 17 of which are at the MSN-level.

Following completion of the BSN, the student can earn the MSN degree at Duquesne part-time in an additional 2 years. The Miller Analogies Test (MAT), a required admission test for the MSN program, is waived for students who have met all graduate admission criteria and have maintained a 3.0 GPA.

Specific information concerning the acceptance of transfer credits, eligibility for CLEP testing, and challenge examinations can be obtained by contacting the coordinator of the RN-BSN/MSN Track within the School of Nursing.

Admission Criteria for RN-BSN/MSN Students

Students who are interested in applying for admission to the RN-BSN/MSN Track should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, PA 15282.

1. High school diploma or equivalent
2. Graduation from an accredited associate degree or diploma nursing program (3.0 GPA minimum)
3. Verification of current licensure as a registered professional nurse
4. Associate degree or diploma transcript
5. Current or past clinical experience in nursing
6. Verification of active registered malpractice insurance prior to clinical practicum
7. Personal interview with the coordinator of the Second Degree Track within the School of Nursing
8. Completion with the Standards of Personal Conduct Policy
9. Evidence of physical and emotional health adequate to meet the demands of the program

TEMPORARY TRANSFER

With prior written approval, a nursing student may take courses during the summer at an accredited college or university other than Duquesne University. Students wishing to do this will become a temporary transfer student, provided they receive the necessary clearance from both institutions.

SCHOOL OF NURSING

SECOND DEGREE STUDENTS

The Second Degree-BSN/MSN Track is available to college graduates who earned a baccalaureate degree in another discipline and who wish to earn a bachelor’s degree in nursing at Duquesne University. A possible 55 credits may be transferred into the program. Other possible opportunities such as challenge examinations and CLEP testing for University credit will be evaluated for course equivalency and appropriateness.

Ordinarily, a student who has acquired 60 or more transfer credits may not receive advanced standing for courses taken at accredited community or two-year colleges. Students desiring waiver of this policy must obtain the permission of the undergraduate Student Standing Committee of the School of Nursing.

A candidate for the Bachelor’s degree must complete a minimum of 30 credits (exclusive of challenge credits) toward the degree at Duquesne University.

Second Degree-BSN/MSN Track

Students who are interested in applying for admission to the Second Degree-BSN/MSN Track should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, PA 15282.

1. Graduation from a baccalaureate program in another discipline and who wish to earn a bachelor’s degree in nursing at Duquesne University.
2. Applicants are responsible for earning a minimum of a 2.0 GPA, or its equivalent.
3. Students wishing to earn the BSN degree must meet the demands of the program in a 2-year period.
4. Students must pass all courses in the Second Degree-BSN/MSN Track within the School of Nursing.
5. A grade of B or better is required for all courses in the Second Degree-BSN/MSN Track.
6. Students must complete a minimum of 30 credits toward the degree at Duquesne University.
7. Completion of the MSN degree is waived for students who have met all graduate admissions criteria and have maintained a 3.0 GPA.

Specific information about this option can be obtained by contacting the coordinator of the Second Degree Track within the School of Nursing.

Admission Requirements for Second Degree Students

Students who are interested in applying for admission to the Second Degree-BSN/MSN Track should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, PA 15282.

1. Graduation from a baccalaureate program in another discipline
2. Personal interview with the coordinator of the Second Degree Track within the School of Nursing
3. Completion with the Standards of Personal Conduct Policy
4. Evidence of physical and emotional health adequate to meet the demands of the program

ADDITIONAL COSTS AND FEES

1. Uniforms, identification pin, shoes $12.00
2. Transportation to and from clinical agencies (weekly) $150.00
3. Physical examinations, diagnostic procedures, and immunizations (if desired) $10.00
4. School of Nursing pin, upon graduation $200.00
5. NCLEX Diagnostic Examination $100.00
6. All expenses are approximate (per test)

Training in Cardiopulmonary Resuscitation (CPR) for health care professionals is a prerequisite for all nursing clinical courses. Students must show evidence of current CPR training prior to entering the clinical area and annually thereafter.

Preadmission and periodic physical examinations, immunizations, and laboratory tests are required for all students in the School of Nursing. Students must complete these health requirements by the designated deadline date in order to register for the following semester courses or before proceeding to the clinical practicum. The School of Nursing provides information on required school uniforms to students prior to entrance into the clinical area. Nursing students enrolled in clinical courses must purchase liability insurance in the amount of $1,000,000.
professional coverage. Seniors will be required to apply for Act 33/44 clearance for a small fee prior to their pediatric clinical experiences.

Each student is responsible for transportation to and from hospitals and other clinical agencies. Each student will be expected to have access to an automobile to permit experience with home care of clients and their families during the senior year.

STUDENT ORGANIZATIONS

Each nursing student is a member of the general student body and may select and participate in any of the many campus organizations. There are numerous social sororities and organizations as well as professional organizations. These organizations exist for the promotion of the scholarly and professional interests of members.

Alpha Tau Delta (meaning “through force of character”) is a national professional fraternity for persons in nursing. Theta Chapter was chartered on the Duquesne University campus on April 21, 1938. Eligibility is limited to full-time students who have completed a minimum of one semester in the School of Nursing with a cumulative quality point average of 2.5.

Kappa Alpha Beta, an undergraduate nursing sorority of Chu Eta Phi, Inc., was established in 1996. The purpose of this organization is to increase minority students in nursing and to foster continuing education. While membership is predominantly African-American, individuals from other ethnic/racial groups, male nursing students, and others are invited to join.

Sigma Theta Tau International, Inc. is the international honor society of nursing. The Duquesne University Nursing Chapter was officially chartered as Epsilon Phi Chapter in March 1982. Membership is open to upper level students and community leaders who meet the international criteria.

Student Nurses Association of Pennsylvania. The Student Nurses Association of Pennsylvania (SNAP) is a constituent of the National Student Nurses Association, Inc. (NSNA). The purpose of SNAP is to foster responsibility for contributing to the nursing profession, to provide programs representative of fundamental and current pre-professional interest and concern, and to aid in the development of the whole person. Active membership is open to undergraduate students enrolled in state approved programs leading to licensure as a registered nurse and registered nurses enrolled in undergraduate programs of nursing.

Class Organizations. Each class is officially recognized organization in the School of Nursing. As such, each class elects its own representatives and conducts such programs and affairs as its members deem desirable toward achieving its goals.

Nursing Alumni Association. Upon graduation, each graduate is cordially invited to join this organization as a School of Nursing Alumnus.

HONOR AWARDS

In addition to graduation honors, the following awards are available to eligible undergraduate students. Specific criteria for awards are available in the School of Nursing:

- Richard F. Beahan Award
- Mary Tobin Gold Medal for General Excellence in Nursing
- Ruth Johnson Gold Medal for General Excellence in Nursing
- Faculty Award
- Lura A. Award for Excellence in Nursing Practice in the Home Care Setting
- Air Force Leadership in Nursing Award
- Community Health Education Project Award
- Nursing Alumns Association Award
- Sigma Theta Tau International, Epsilon Phi Chapter Award
- Marra C. Miller Award for Excellence in Medical-Surgical Nursing
- Army Nurse Corps and the National Students Nurses’ Association Spirit of Nursing Award
- Student Leadership Award

GRADUATION REQUIREMENTS

General University requirements for graduation are in the Academic Policies section of this catalog. In addition, specific School of Nursing requirements are:

1. Successful completion of 120 credits and all clinical practicum courses
2. A minimum cumulative overall quality point average of 2.5
3. Completion of the required curriculum plan
4. Removal of I and F grades in all required courses
5. A candidate for the Bachelor's degree must complete a minimum of 30 credits toward the degree at Duquesne University. Challenge credits are not included in this 30-credit requirement
6. The student must submit an application form provided by the Registrar for the degree
7. Successful completion of NCLEX-RN Diagnostic Exam(s) and formal and informal coursework designed to prepare students to take the licensing exam.

Degree requirements must be completed within 10 years after initial enrollment. At the end of the 10-year period, the student's record is re-evaluated and the student is advised of any additional requirements for graduation based on curriculum changes. The responsibility for fulfilling degree requirements rests with the student.

TOTAL = 126 credits

*University Core Courses

SCHOOL OF NURSING

RECOMMENDED COURSE SEQUENCE

<table>
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<tr>
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<tr>
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<td>132 - Basic Philosophical Questions*</td>
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<tr>
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<td>141 - Social Political, Economic Sys*</td>
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<td>201/202 - Biology of Microbes</td>
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<td>— Theology Core*</td>
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<td>103 - Introduction to Psychology*</td>
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<tr>
<td>N101 - Professional Development Sem</td>
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<td>N102 - Nurses' Ways of Knowing</td>
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<tr>
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Sophomore

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<td>N204 - Lifespan Issues</td>
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<td>N208 - Conceptual Foundations of Nursing Practice</td>
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<td>N209 - Nursing Technologies</td>
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<td>14 - N210 - Health Assessment</td>
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Junior

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<td>N302 - Human Response and Health Promotion in Acute Illness</td>
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<td>N301 - Human Response and Health Promotion in Chronic Illness</td>
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<td>N303 - Human Response and Health Promotion in Mental Health &amp; Illness</td>
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<td>N310 - Health Care Delivery &amp; Economics</td>
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<td>N304 - Junior Synthesis Seminar</td>
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Senior

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<td>N405 - Concepts and Issues of Professional Nursing</td>
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<td>N402 - Human Response and Health Promotion in Children's Health &amp; Illness</td>
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<td>N406 - Clinical Integration in Complex Settings</td>
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TOTAL = 126 credits

*University Core Courses
Student Rights
Bill of Rights—A statement of the student Bill of Rights is available to all students in the Duquesne University Student Handbook. The Student Handbook can be acquired in the student government office located in the student union.

School of Nursing Grievance Procedure
Grievance procedures must be initiated within 30 calendar days of the occurrence which gave rise to the grievance. With the knowledge of the involved parties, either party may request that another person be present during the discussions. If difficulty arises between student and faculty, the student should first discuss the difficulty with the faculty directly involved, followed by the course facilitator. If the matter is not satisfactorily resolved, the Associate Dean should be consulted. If the problem is not satisfactorily resolved, a consultation with the Dean of the School of Nursing should be arranged, and an Appeals Committee in the School may be convened. Should the problem still remain unresolved, a Request of Hearing form should be filed with the Provost within 20 days of the Appeals’ Committee decision. If the Provost determines that a legitimate grievance exists, the Provost convenes an Academic Due Process Committee. In all cases, the decision of the Academic Due Process Committee is final. If the Provost finds that a legitimate grievance does not exist, the Provost will inform the student within 30 days of the determination.

Regulations
Students in the School of Nursing are preparing themselves for entry into a respected health profession where the highest degree of character and sense of responsibility are basic requirements. As such, they are expected to conduct themselves, at all times, in a manner befitting this position and according honor to it. For these reasons, the School of Nursing insists on strict adherence to the following regulations:
1. Class Attendance: Attendance is expected for every class session of each course within the School of Nursing. Students are expected to attend the entire class session. Specific class attendance requirements (in relation to grading) will be stated in each course syllabus. Acceptable reasons for absence will be in accordance with the current Undergraduate Catalog statement of scholastic policies. Consideration of any other request for an excused absence will be at the faculty’s discretion.
2. Students who are unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstances are responsible for notifying the appropriate faculty member. A student who is absent is expected to complete all coursework. It is the student’s responsibility to make up assignments in all courses and to be familiar with any instructions which may have been given during the absence. Attendance is mandatory for all scheduled hours in every clinical practicum. This includes community clinical hours as well as those scheduled in the acute care area. Acceptable reasons for absence will be in accordance with the current Undergraduate Catalog statement of scholastic policies. The student is expected to notify the clinical instructor of the absence prior to the scheduled clinical time. The specific procedure for an excused absence will be at the instructor’s discretion. Tardiness or unexcused absence(s) are serious offenses of professional responsibility and accountability that may result in failure to meet course goals and objectives. Regardless of cause or reason, all clinical practice time must be made up.

Nursing Course Descriptions:
N101 Professional Development Seminar 1 cr
This course introduces the student to nursing as an academic discipline and human science profession according to the philosophy and conceptual framework of the School of Nursing. Students explore the assumptions about person, environment, health, and nursing. The concepts of health promotion and illness prevention are examined personally and professionally.

N102 Nurses’ Ways of Knowing 2 cr
This course introduces the student to the different ways that nurses come to know. Included is an assessment and further development of intellectual capacity of student nurses as independent critical thinkers through the use of critical thinking exercises and other instructional strategies. Students will describe how they think and utilize concepts of logic in preparation for the critical thinking process and its components. The basic research process. Through the process of critical thinking, this course provides a foundation that promotes open inquiry into assumptions, beliefs, goals, and values that characterize nursing.

N208 Conceptual Foundations of Nursing Practice 4 cr
This course introduces the student to specific concepts as they apply to the practice of professional nursing. Concepts specific to the promotion of health and prevention of illness in all client situations requiring nursing care will be presented. Specific needs of and strategies for caring for the older adult will be closely examined. Students will study the nursing process which promotes critical thinking as a competency and allows nurses to make judgments and take actions based on reason. Home health nursing, community based care, and cultural care will be introduced. Psychological concepts, which include self-concept and sexuality, spiritual health, family, stress, anxiety and adaptation, and loss and grief will be emphasized. Physiological concepts of safety, hygiene, body mechanics, sensory alterations, immobility, oxygenation, fluid, electrolyte, and acid-base balance, sleep, comfort, bowel and bladder elimination, immobility, skin integument and wound care, infection control, perioperative nursing, and rehabilitation nursing are presented and serve as the foundation for future practice. Concepts of therapeutic communication and client education are integrated throughout.

N209 Nursing Technologies 2 cr
This course introduces the student to specific skills and technologies utilized when implementing nursing care. The course will consist of both didactic and clinical component. Students are provided with the opportunity to perform these skills and technologies in the laboratory setting prior to utilizing them in the clinical setting.

N210 Health Assessment 3 cr
This course builds on previously learned knowledge of natural and human sciences. A systems approach is utilized to teach students to perform physical assessments across the lifespan. Students learn to critically evaluate assessment findings and differentiate between normal and alterations indicative of actual or potential health problems. Students are provided with the opportunity to perform physical assessments in the laboratory setting and to utilize these skills in the clinical setting. This course provides the foundation for health assessment critical to nursing practice.
in all settings. It enhances the student’s ability to utilize knowledge of body systems for the purpose of planning a holistic approach to nursing care.

N215 Basic Pharmacology 3 cr. This course will cover the basic principles of pharmacology and drug therapy necessary for general nursing practice. Concepts of drug effectiveness, pharmacokinetics, mechanism of action, and drug-drug interaction will be examined. In most cases, the emphasis will be on the pharmacological action of drugs on specific organ systems. Periodically, drugs will be discussed in relation to their clinical use in the treatment of specific disease conditions.

N220 Transcultural Nursing and Health Care 3 cr. This course is built on the basic concepts of person, health, nursing, and the cultural environment, and the inter-relationships as developed in previous sciences, humanities, and nursing courses. Emphasis is placed on the development of Leininger’s theory of transcultural nursing and transcultural healthcare systems. Various issues related to the nurse’s role in the delivery of health care and the client’s acceptance of health care are explored. Focus is placed on self-reflection and cultural rooting in preparation for assessment and analysis of selected cultures as related to nursing and health care practices. Methods utilized in transcultural nursing research that foster culture-specific nursing and health care are included in the course.

N253 Nutrition for Health Promotion 3 cr. This course focuses on nutrition and the role of nutrition in health promotion for well individuals and groups throughout the life cycle. Emphasis is placed on nutrition assessment and intervention. Food needs for energy and the major nutrients are considered for the promotion of health.

N301 Human Response and Health Promotion in Chronic Illness 6 cr. This course builds on previously learned knowledge of normal and human sciences and, on general, psychosocial, and physiological concepts specific to client care. This course will integrate and synthesize the concepts of adult client care presented in Human Response and Health Promotion in Mental Health & Illness as well as in Acute and Chronic Illness. The course will focus on the application of these concepts through the use of case studies with a grand rounds format, reflecting the uniqueness of the client’s response to the health experience in providing holistic nursing care. Concepts of cultural care, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. Students will explore ways to promote health through the referral and utilization of community resources. Previously learned and more advanced concepts will be integrated to provide a holistic nursing approach in the diagnosis and management of human responses to chronic illness.

N302 Human Response and Health Promotion in Acute Illness 7 cr. This course builds on previously learned knowledge of natural and human sciences, health assessment, conceptual foundations of nursing practice and skills and technologies required to practice professional nursing. The opportunity is provided to apply the nursing process to the care of adult health settings. Increasingly complex concepts related to the integrality of biological, psychosocial, spiritual, and environmental aspects are presented. Concepts of cultural care, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. Students explore ways to promote health through the referral and utilization of community resources. Previously learned and advanced nursing concepts reflecting the uniqueness of a person’s health experience will be integrated to provide holistic nursing care to adult clients experiencing acute illness.

N303 Human Response and Health Promotion in Mental Health Nursing 5 cr. This course builds on the concepts of person in relationship with the multifaceted environments of culture, family, community, and nursing as they interact with a variety of settings in the promotion of health and well-being. Emphasis is placed on understanding and treating individuals, families, communities, and aggregates who may be experiencing human responses related to psychosocial alterations. Methods of care will be utilized to promote mental health and well-being in the cultural contexts appropriate for the individual, families, community, and aggregate.

N304 Junior Synthesis Seminar 1 cr. This course builds on previously learned knowledge of natural and human sciences, and on general, psychosocial, and physiological concepts specific to client care. This course will integrate and synthesize the concepts of adult client care presented in Human Response and Health Promotion in Mental Health & Illness as well as in Acute and Chronic Illness. The course will focus on the application of these concepts through the use of case studies with a grand rounds format, reflecting the uniqueness of the person’s human response to the health experience in providing holistic nursing care. Concepts of cultural care, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. Students will explore ways to promote health through the referral and utilization of community resources. Previously learned and more advanced concepts will be integrated to provide a holistic nursing approach in the diagnosis and management of human responses to chronic illness.

N310 Health Care Delivery and Economics 2 cr. This course is designed to provide a systemic overview of the healthcare delivery system in the United States and healthcare economics and to compare with systems existing in other countries. It will examine the various mechanisms through which healthcare services are delivered. System resources such as health services, professionals, technology, and financing will be considered. Processes such as primary care services, managed care, and healthcare services for special populations will be explored. Outcomes such as cost, access, and quality will be considered. The impact of healthcare policy will be addressed.

N312 Pathology 4 cr. This course is designed to introduce the student to the basic mechanisms involved in the pathogenesis of various body systems and the body as a whole. Mechanisms associated with pathogenesis are contrasted with the similar mechanisms that support normal health. The underlying molecular, cellular, and histological deviations from homeostasis and the mechanisms that disrupt this optimal state will also be explored.

N315 The Research Process 3 cr. This course focuses on the role of the professional nurse as a consumer of research. Both quantitative and qualitative methods of research are examined and the advantages and disadvantages of both are explored. Each step of the research process is examined. Application of the research process to clinical practice is reinforced. Emphasis is placed on bridging the gap between research and practice.

N401 Human Response and Health Promotion in the Childbirth Family 5 cr. The focus of the course is on health promotion with the family as it relates to childbirth and neonatal care. Utilizing the nursing process, the student will focus on the practice of maternal-infant health nursing based on selected nursing theories, knowledge of normal and altered developmental processes relative to the pregnant client, newborn, and family. Concepts of cultural care and sensitivity, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. Concepts of loss, grief, maternal and paternal role identity, body image, and self-esteem are explored relative to the childbearing family. Changes in family belief systems related to health promotion for mothers and newborns are examined from ethical, sociocultural, and political perspectives. The student’s role as a health educator is further developed through teaching the family. Growth in critical thinking and inquiry is expected as students continue to synthesize their knowledge of childbearing in the performance of their professional roles.

N402 Human Response and Health Promotion in Children’s Health and Illness 5 cr. This course incorporates physiological and developmental concepts in the care of the child and family. Concepts of sensitivity, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. Norms and alterations in growth patterns will provide the basis for discussion as they relate to children of various developmental levels. Therapeutic communication skills will be integrated into the care of children and families. The student will utilize specific nursing strategies as they apply to nursing care of the child and family. The nurse’s role in the promotion of health and prevention of illness is identified as a major focus of the course.

N403 Human Response and Health Promotion in the Aggregate 4 cr. This course builds on previous learning and synthesizes that knowledge with a focus on the promotion of health and prevention of illness of groups and aggregates in community settings. The student will be introduced to the concepts of population-based community health nursing. This course will examine groups and aggregates within a variety of community settings. The student will investigate the multidimensional health needs of culturally diverse populations and seek to identify high-risk aggregates. Concepts of health education will be explored and evaluated for possible changes that enhance the promotion of health. Various roles of the community health nurse are investigated with an emphasis on the role of the nurse as health educator. Concepts of epidemiology as a means of gathering pertinent data about the health of groups and aggregates will be explored. The concepts of health promotion and illness prevention are examined in relation to groups and aggregates within the community. R.N.s take N409, 55 R.N. Aggregate Practicum for 2 credits.

N404 Concepts and Issues of Professional Nursing 4 cr. This course provides the student with the opportunity to synthesize previous learning and develop knowledge and skill relevant to leadership, management, and the professional role of the nurse. Concepts of power, change, decision-making, and delegation form the foundation for exploring leadership styles and functions. The course considers current issues in nursing and health care, including political, legal and ethical accountability, trends and issues and their interrelationship, and explored in order to assist the student to assume professional responsibility and involvement in issues affecting nursing and the delivery of health care.
N405 Clinical Integration in Complex Settings 4 cr
This clinical, preceptor course will be conducted in a variety of complex settings. The student will enhance skills relevant to the leadership and management roles of the professional nurse, such as delegation of duties, priority setting, and time management when caring for multiple patients. Clinical knowledge, judgement, and technical skill refinement encourages an environment in which the student performs as a beginning professional nurse. RNs take N414-55 RN Role Practicum for 2 credits.

N406 Senior Synthesis Seminar 2 cr
This capstone course synthesizes all previously learned knowledge and integrates concepts of cultural care, therapeutic nutrition, ethics, critical thinking, leadership/management, and professional practice. The focus of the course is on the application of these concepts through the use of case studies with a grand rounds format reflecting the uniqueness of the person's human response to health experiences.

N412 Role Preparation 1 cr
This course serves as an NCLEX-RN/CAT examination preparation course. Students will work individually as well as in cooperative learning groups. Content will focus on test-taking strategies, test anxiety, and NCLEX-RN preparation. The course assignments will include NCLEX items and computer-assisted instruction. The course will not re-teach nursing content. Students will be given a comprehensive assessment examination based on the results of the comprehensive assessment, students will be given an individualized prescriptive study plan.

COSC 030 Research and Information Skills 1 cr
Computer and Information Literacy will be offered online with supervised labs. This course offers an introduction to fundamental computer skills needed for using the Windows operation system, word processing, spreadsheet, database, and e-mail software. In addition, you will learn the skills associated with information literacy — the ability to locate, evaluate, and use information for independent learning. The goal of this course is to help you develop the computer and information handling skills you will need to succeed at Duquesne University. The course will focus on basic skills needed by every student regardless of major, and will examine selected ethical issues surrounding computing.

NURSING ELECTIVES

Nursing and Spirituality 3 cr
Nursing and Spirituality is a non-clinical nursing elective. Students explore the universal and timeless truth of the spiritual dimension of human nature. Case histories in nursing are investigated which focus on spiritual needs encountered in the nurse/client/family relationship. Students are encouraged to develop an awareness of their own spiritual dimension and its growth through nursing experiences. In addition, students discover the gifts they bring to the nursing situation when spiritual needs are recognized and shared with the client.

Health Care of Women 3 cr
Health Care of Women is a nursing elective that provides students with an opportunity to explore many of the prevalent health experiences of women in contemporary society in the United States. This course investigates aspects of women's health and choices relative to the quality of their lives. It provides students with an opportunity to analyze health promotion for women from a historical and nursing perspective and provides them with the knowledge of health resources available to meet the specific needs of women. Prerequisite: Human Response and Health Promotion in Chronic Illness.

Patient/Consumer Health Education 2-3 cr
Today's health care professional is required to be more than an expert clinician. The client as a consumer of health care expects to be taught the intricacies of illness and selective treatments. The client requires extensive knowledge of health promotion and self-care. It becomes the responsibility of the health care professional to meet these needs through the process of health education. This course, utilizing an interdisciplinary approach, introduces the student preparing for a health care career to the role of educator through identification, analysis, synthesis and application of the teaching-learning process. Students from various disciplines have an opportunity to share their perspectives on health and health promotion as related to client education.

Emergency Nursing Role Practicum 1-3 cr
This course provides an experience in Emergency Department (ED) nursing, exploring the role of the RN in the ED, and providing person-centered holistic care across the life span. Depending on the number of credits, the student may investigate an area of ED nursing of particular interest and do additional research under the guidance of the faculty member. Opportunities in flight nursing may be available to interested students.

Introduction to Case Management 3 cr
This course introduces the student to the theory and concepts inherent in the process of case management. The role of the case manager is analyzed within the framework of health care delivery systems, quality, cost, legal, and ethical issues. Several case management models are examined.

Directed Study in Nursing 1-3 cr
This course, which can be taken for variable credits (one to three) in either clinical and/or non-clinical areas, is designed to provide students with a unique opportunity to pursue an area of interest in nursing that enriches and expands upon basic knowledge provided in the required program of studies, or to achieve particular objectives that require individualized consideration. Students, in consultation with faculty, have the opportunity to generate objectives and behavioral outcomes, and to formulate and implement a plan of study to achieve these objectives. Prerequisites vary based on content area involved.

Effective Catalog
The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or a contract between individual students and the School. The School of Nursing reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled, students should consult with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective program.
The School of Pharmacy has entered its fourth century of providing quality pharmacy education. The first Pharmacy class matriculated in September, 1920 under the leadership of the founding dean Dr. Hugh C. Muldoon. In May 2000, the Mylan School of Pharmacy graduated the first entry-level Doctor of Pharmacy class. The School of Pharmacy continues to educate pharmacists who are making important contributions as health care practitioners.

The Mylan School of Pharmacy offers a six-year on-campus Doctor of Pharmacy program of study and an on-line Non-Traditional Doctor of Pharmacy program for practicing pharmacists. The full-time on-campus PharmD is configured in a two-year preprofessional and four-year professional curriculum format. The faculty of the School has developed a competency-based, outcomes-oriented curriculum that prepares future generalist pharmacists to practice quality pharmaceutical care to patients. The new professional curriculum emphasizes critical thinking, problem solving, active learning, enhanced communication skills, an appreciation of ethical and spiritual values, and an understanding of personal, social, and professional responsibilities. Integrated studies in the biological, chemical, pharmaceutical, administrative, behavioral, and clinical sciences are taught using traditional and innovative instructional techniques. It includes a multi-year, introductory-to-advanced level experiential component. Opportunities are provided for additional preparation in community pharmacy practice, institutional practice, geriatrics, management, industrial pharmacy, and for graduate study.

Duquesne University graduates may work as community pharmacists, hospital/institutional pharmacists, consultant pharmacists, or pharmacists in government service. Many are employed as medical service representatives for drug manufacturers, while others enter the pharmaceutical industry in research, development, and manufacturing. Pharmacists may find positions in nuclear pharmacy and drug information/poison control. Pharmacists are employed as chemists or biologists in industrial and research organizations, or, with advanced degrees, obtain research and teaching positions in academia.

**SCHOOL OF PHARMACY MISSION AND GOALS**

The mission of the School of Pharmacy and the Graduate School of Pharmaceutical Sciences is to prepare students for life-long learning and careers in the profession of pharmacy. The programs are outcome-based and emphasize an appreciation for ethical and spiritual values, a foundation in the pharmaceutical, administrative, social, and clinical sciences which are the bases for pharmaceutical care and research, an ability to think critically and communicate effectively, and an understanding of personal, professional and social responsibilities. The goals of the School of Pharmacy and the Graduate School of Pharmaceutical Sciences are to prepare graduates of the professional degree program to provide pharmaceutical care in a manner which promotes positive health care outcomes, prepare graduates of the Graduate School of Pharmaceutical Sciences to serve as pharmaceutical scientists, function as educators, and make contributions to the body of scientific knowledge, and provide programs, services and resources which maintain an environment for the personal and professional growth of faculty and students in their quest for academic excellence.

**APPLICATION AND ADMISSIONS**

Students are accepted into the Mylan School of Pharmacy at the preprofessional and professional levels. For admission directly from high school, prospective Pharmacy students must apply to:

**Duquesne University Office of Admissions**

**Administration Building**

**Pittsburgh, PA 15282**

Qualified high school students are admitted directly into the pre-professional program of study. The preprofessional requirements for entrance into the professional program are:

1. Completion of the preprofessional course requirements
2. Minimum cumulative and science/math grade point average of 2.50 and no grade lower than C- in each of the required courses in the preprofessional curriculum
3. Completion of the Pharmacy College Admissions Test (PCAT) with a minimum composite scaled score of 180

Non-academic requirements include a written essay, three letters of recommendation, and an interview with Pharmacy faculty. Evidence of participation in community service is strongly encouraged.

Any questions about transfer student applications or the transfer credits from other colleges and universities should be directed to:

**Admissions and Recruitment Coordinator**

**Duquesne University**

**Bayer Learning Center—3rd Floor**

**Pittsburgh, PA 15282**

**APPROVAL AND ACCREDITATION**

The Doctor of Pharmacy (Pharm D) degree program is accredited by the American Council on Pharmaceutical Education (ACPE), 311 West Superior Street, Suite 512, Chicago, IL 60610, 312-664-3575 or 800-333-3606, FAX 312-664-4652. The Pharm D degree program is accredited by the Pennsylvania State Board of Pharmacy. The University is accredited by the Middle States Association of Colleges and Secondary Schools.

**PROFESSIONAL PHARMACY CURRICULUM**

**Sem** | **Hrs**
--- | ---
First Professional Year | 
Biochemistry I and II and Lab | 6
Human Physiology and Pathology | 9
Immunology and Clinical Microbiology | 3
Pharmaceutical Principles and Drug Delivery Systems I and II | 6
Pharmaceutical Principles Lab I and II | 2
Pharmaceutical and Biomedical Statistics | 2
Pharmaceutical Law and Ethics | 2
Clinical and Drug Information Skills | 1
Experiential Education | 34
### Second Professional Year

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<td>Clinical Skills I and II</td>
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#### Professional Electives

- Herbal Remedies: 3
- Alternative/Complementary Therapies: 2
- Dental Therapeutics and Pharmaceutical Care: 3
- Independent Study and Research: 1-4
- Pharmacy and Health Systems Informatics: 3
- Issues in Women’s Health: 2
- Drug Induced Diseases: 2
- Physical Assessment Practicum: 2
- Evidence-Based Pharmacotherapy: 2
- Selected Topics in Drug Development: 2
- Faith and Healing: 2
- Role of Spirituality in Health Care: 2
- Drugs of Abuse: 3
- Palliative Care: 2
- Medication Errors: 2
- Recovery, Response, and Repair: 2
- Men’s Health Issues: 2
- Personal Financial Planning: 2
- Human Gene Therapy: 3
- Critical Issues with Herbal Product Information: 2
- Veterinary Pharmacy: 3
- Manufacturing Pharmacy and Lab: 4
- Pharmaceutical Formulation and Development and Lab: 4
- Regulatory Aspects of Industrial Practice: 2
- Data Analysis and Modeling: 2
- Advanced Pharmacokinetics I - Compartmental Modeling: 2
- Advanced Pharmacokinetics II: 3
- Pharmaceutical Unit Operations - Solids: 3
- Pharmaceutical Unit Operations-Liquids: 3
- Analytical Separation Methods: 3
- Spectral Methods: 3
- Chemometrics: 3
- Clinical Toxicology: 3
- For Geriatric Concentration: 3
- Selected Topics in Geriatrics: 3
- Pharmacy in Long Term Care: 3
- Advanced Therapeutic Cases in Geriatrics: 2
- Elective Experiential Education: 4
- Rotation in Geriatrics: 4

### Third Professional Year

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>Biomedical Sciences and Therapeutics II</td>
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<tr>
<td>(Inflammation/Pain/Rheumatology/Gastrointestinal Diseases/Pediatrics/</td>
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<td>Geriatrics)</td>
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<td>Management Theory and Applications</td>
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<td>Professional Elective</td>
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#### For Geriatric Concentration:

- Selected Topics in Geriatrics: 3
- Pharmacy in Long Term Care: 3
- Advanced Therapeutic Cases in Geriatrics: 2

### Fourth Professional Year

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<tr>
<th>Course</th>
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<td>Optional Professional and/or General Electives</td>
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#### For Pharmacy Management Concentration:

- Marketing and Customer Service: 3
- Health Care Economics: 3
- Health Care Financial Management: 2
- Managed Care Principles and Policies: 2
- Social and Behavioral Aspects of Pharmacy: 3
- Research Methods in Pharmacy Administration: 3
- Pharmacoconomics: 2
John G. Rangos, Sr.
School of Health Sciences

Administration
Dean
Gregory H. Frazer, Ph.D
Director of Student and Alumni Services
Deborah L. Durica, B.S.P.S.
Director of Budget and Management
Denise M. Dmuidse, B.S.P.S.

HISTORY
On January 29, 1990, Dr. John E. Murray, Jr., President of Duquesne University, announced that the John G. Rangos Sr. School of Health Sciences was being created to "graduate professionals who will provide assistance to people in maintaining their physical well-being. It will make them more self-sufficient physically and provide greater hope for their futures. It meets an overwhelming societal need, and it enlarges opportunities for students at Duquesne. In serving the citizens of Western Pennsylvania and our students, this initiative is precisely in accordance with the purposes of Duquesne University."

On March 18, 1991, Mr. John G. Rangos, Sr. (President and Chief Executive Officer of Chambers Development Company, Inc.), Pittsburgh-based Chambers Development Company, Inc., the John G. Rangos Charitable Foundation, and the Chambers Development Charitable Foundation, made a major gift to Duquesne University in support of the School of Health Sciences. In recognition of that gift, Dr. Murray announced the School would be named John G. Rangos, Sr. School of Health Sciences (RSHS)

MISSION
The faculty will educate students to be excellent clinical practitioners, leaders in their field, and health care professionals who understand the uniqueness of their patients/clients. As with all academic programs at Duquesne University, moral and spiritual values support the educational and philosophical underpinnings of all RSHS curricula. Curricula will provide students opportunities to develop comprehensive knowledge and experiences for practice in health care, education, and other professional settings, which will also support work in advanced graduate education, research, and scholarship. Graduates from the RSHS will possess the characteristics of leadership, expertise, initiative, responsibility, and a profound moral respect for their patients/clients, professional colleagues, and the general public.

PHILOSOPHY
The RSHS was founded in concert with the educational philosophy and objectives of Duquesne University. Students in the RSHS are exposed to a broad liberal arts education with emphasis on understanding the scientific, theoretical and theological constructs of the world. The academic programs focus on the scientific theories, which support the skilled ethical practice of the various professions, coupled with a strong appreciation and understanding of spiritual values.

In recent years, health care in the United States has seen a transition to massive, complex health care delivery systems, which offer society choices to receive health care. A mixture of generalists and specialists practice in this sophisticated system to meet the growing health service demands of our society. To integrate our graduates into this system, the academic programs in the RSHS insist in-depth scientific and theoretical knowledge of health care practice, enhanced by a rich infusion of moral and spiritual values, necessary to prepare our graduates to be competent health care professionals. Through this preparation, students are encouraged to become cognizant of the needs of their patients/clients, their colleagues, and the health care systems in which they practice. Students are also required to develop an understanding of the necessity for ongoing research and are prepared to advance the bodies of knowledge in their respective professions through their research efforts.

All aspects of the students' education are coupled with an awareness and sensitivity of the human response to the functional limitations in various social and health care delivery contexts. The ultimate goal of the educational programs within the RSHS at Duquesne University is to educate truly outstanding health care professionals and citizens capable of explaining, investigating, and delivering the highest level of quality care with kindness, dignity, responsibility, and respect.

ACADEMIC PROGRAMS AND DEGREES

GENERAL INFORMATION
Bachelor's Degree Programs
The RSHS offers four-year bachelor's degree programs in athletic training (B.S. in Athletic Training) and health management systems (B.S. in Health Management Systems) which follow a traditional curricular design. The academic model for these programs is two years of liberal arts and science requirements followed by two years of professional education.

Entry-Level Master's Degree Programs
The RSHS offers five-year entry-level master's degree programs in occupational therapy (M.O.T.), physician assistant (M.P.A.), and speech-language pathology (M.S.L.P). Health management systems students may also complete a five-year, entry-level master's degree program. The academic model for occupational therapy, physician assistant, and speech-language pathology is three years of liberal arts and science requirements followed by two years of professional education.

The occupational therapy program also has a two-year post-baccalaureate academic model. Students in the speech-language pathology program have the option of completing a master's thesis. Typically, professional-level education occurs on a year-round basis during the fall, spring, and summer semesters. These models are unique for these professions and provide the RSHS faculty the opportunity to maximize the excellent core curriculum and science offerings at Duquesne as the basis for creative, professional curricula. All of the five-year entry-level master's degree programs, with the exception of health management systems, award a Bachelor of Science in Health Sciences at the end of the fourth year and a professional master's degree at the end of the fifth year. Students in health management systems receive a Bachelor of Science in Health Management Systems at the end of four years and a Master of Health Management Systems at the end of the fifth year. Students who have already earned a bachelor's degree will not be awarded a B.S. in Health Sciences, but will work directly toward the appropriate master's degree.

Master Degree Programs
The Master of Health Management Systems program is a 36-credit, project-oriented, problem-based curriculum. A joint MHMS/MA option is available to those who have been granted admission into the MBA program as well.

For further information, please contact the Department of Health Management Systems at (412) 396-4772.

A Master of Science in Rehabilitation Science is also available. See Graduate Program in Rehabilitation Science.

Doctor of Physical Therapy Program
The six-year Doctor of Physical Therapy (DPT) program is a clinical doctorate, akin to the Medical Doctor (M.D.), Doctor of Podiatric Medicine (DPM), or Optometry Doctor (OD), and is not a research-oriented degree like the Doctor of Philosophy (Ph.D.) or Doctor of Education (Ed.D.). In September 2000, the University gave its final approval to the program. The DPT curriculum was approved by the Pennsylvania Department of Education on March 6, 2001.

Graduate Program in Rehabilitation Science
The Graduate Program in Rehabilitation Science offers a Ph.D. program (60 credits) and M.S. (40 credits) degree. The graduate program prepares students to be successful faculty in professional education programs typically housed in schools of health science. Students receive a background in research methods, foundations of rehabilitation science, and the pedagogy of professional, clinical education, followed by courses and research experiences that develop a specific area of content expertise. Dissertations and theses topics are diverse and consistent with faculty expertise.

For further information, please contact James V. Ward, M.D., M.S., Ed., Office of the Dean at (412) 396-5534 or wardj@duq.edu.

Joint Degree Programs
The RSHS offers some joint degree programs to currently enrolled RSHS students. Students must formally apply for these programs. These joint degree programs are not offered to students seeking initial admission into the RSHS.

Joint majors in athletic training also have the opportunity to complement their degree with a Master of Science in Education with eligibility for Instructional I Certificate in the areas of Cognitive Behavior Physical/Health Disabilities (CBP/HD), Secondary General Science, Secondary Biology, or Elementary Education.

Athletic training majors also may apply for a joint degree opportunity with the Department of Physician Assistant. Applications for this joint program will automatically be sent to all second semester sophomore athletic training students. Joint degree opportunities also are available with the master's degree program in Occupational Therapy or the bachelor's degree in Nursing.

The Department of Health Management Systems also offers a joint HMS/Pre-Health Professions Program.

Inter-School Majors and Minors
Should students decide to pursue an inter-school major or minor, they should carefully investigate the implications of an increased course and credit load, as well as ensure they will be able to complete all RSHS program requirements in time for entry into the professional phase of their respective program.

Inter-School Majors
At this time, there are no inter-school majors available to RSHS students.

Inter-School Minors
Students interested in pursuing an inter-school minor within the McMurray College and Graduate School of Liberal Arts or the Bayer School of Natural and Environmental Sciences should work with a RSHS academic advisor to discuss minor requirements and the minor declaration process. While the academic advisor will assist in identifying the appropriate course work for the minor, it is the student's responsibility to verify the
ADMISSIONS POLICIES

Please note that admissions policies are subject to change at the discretion of the RSHS and the Offices of Domestic Admissions and International Affairs.

Students will only be considered for admission into one specific program, students are not able to apply to the RSHS as undecided.

New Students

All new incoming freshmen, transfer and second degree candidates (includes any student who is NOT currently enrolled at Duquesne or who has ALREADY graduated from Duquesne University) must apply through the Office of Admissions.

Internal Transfer Students

All internal transfer students must apply through the RSHS. The RSHS considers an internal transfer student to be:

1. Any student seeking to transfer into the RSHS from another School at Duquesne University
2. Any student within the RSHS who seeks to transfer to another program within the RSHS itself

All prospective internal transfer students must schedule an appointment with the Assistant Director of Student and Alumni Services or a RSHS academic advisor by stopping at the Office of the Dean, Room 302, Health Sciences Building, or by calling (412) 396-6652.

Students with Disabilities

The University and the RSHS do not discriminate on the basis of nonperformance-related handicaps or disabilities. All students seeking admission to the RSHS will be expected to perform certain physical, mental and emotional tasks in order to complete graduation and professional requirements as measured by state and national certification, licensure and registration process.

Students with disabilities must notify the Office of Special Student Services if a physical or mental impairment will require accommodations to enable the student to complete academic and professional performance requirements or skills. Modification of requirements will be in compliance with ADA standards and the RSHS technical standards.

Waitlist Process

Once spaces have been filled in a particular program, qualified students will be selected for placement on a waitlist in the event that positions do become available at a later date. Should a student accept a waitlist position, he/she will complete any required course work, continue to update his/her file with any additional transcripts or other materials, and apply for financial assistance in the event he/she will later be offered a seat. Waitlisted students may be contacted as late as the start of the academic year. Waitlisted students who cannot be offered positions for the current academic year will be notified after the start of classes to provide them an opportunity to reapply for another year.

Changes in Admissions/Enrollment Status

An offer of acceptance into a particular RSHS program (e.g., athletic training), class level (e.g., as a third year student), or academic year (e.g., Fall 2004) is only valid for that respective program, class level or academic year.

Students who are granted approval to change programs, class level or academic years must meet the academic and program requirements dictated by their new status. Any student who is granted a change in class level after matriculation will not be able to request any subsequent change in class level.

ADMISSION OF FRESHMEN

Admissions Deadlines for Freshmen

1. All Early Action applications to the physical therapy and physician assistant programs must be completed and postmarked by December 1. This is the only deadline for these programs.
2. Admission to the athletic training, health management systems, occupational therapy, and speech-language pathology programs is either Early Decision or Regular Decision.
   a. Early Decision applications must be completed and postmarked by November 1.
   b. Regular Decision applications must be completed and postmarked by January 10 of their senior year.
3. All qualified students whose applications are submitted by January 10 of their senior year will be reviewed for scholarship consideration.

Volunteer experience in the field to which they are applying is not required for the admission of freshmen applicants, but it is highly recommended. Students who have volunteered in the field of physical therapy which requires 40 hours are highly recommended.

Please note that once enrolled, RSHS students may be required to participate in volunteer experiences prior to entering the professional phase of their respective program.

Credit by Examination/Challenge Examinations

Under NO circumstances may any clinical education course be taken through credit by examination, and in general, the courses within the RSHS professional phase are not available through these examinations. Each department will determine any courses which can be challenged, and each department is responsible for administering its own examinations.

It is the student's responsibility to contact the department involved to determine the availability of these examinations.

ADMISSIONS CRITERIA FOR FRESHMEN

Freshmen admissions will be on a selective basis. Prospective freshmen should have graduated from an approved secondary school and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school must submit a High School Equivalency Diploma issued by their state department of education. Applications should be sent to the Office of Domestic Admissions.

Candiates should have:

a. Seven units of math and science, including Algebra I, Algebra II, Geometry and Trigonometry (with Calculus recommended but not required) and General Science, Biology and Chemistry (with Physics or advanced sciences strongly recommended). All RSHS programs have an intensive science component.

b. Students who feel they do not have a strong background in Algebra, Trigonometry and Chemistry should seriously consider taking college preparatory courses, particularly in College Algebra/Trigonometry.

c. A class rank in the top two-fifths of their graduating class. For Physical Therapy candidates a class rank in the top one-fifth of their graduating class.

d. A QPA of at least 2.5 for Physical Therapy, Physician Assistant, and Speech-Language Pathology candidates at a QPA of at least 3.0.

e. A total SAT score of at least 1100 or a composite ACT score of at least 24.

ADMISSIONS CRITERIA FOR INTERNAL TRANSFER, TRANSFER AND SECOND DEGREE CANDIDATES

Admissions Deadlines for Internal Transfer, Transfer and Second Degree Candidates

1. All applications to the athletic training, health management systems, occupational therapy, and speech–language pathology programs must be completed and postmarked by December 1.
2. All applications to the athletic training, health management systems, occupational therapy, and speech–language pathology programs must be completed and postmarked by July 1.

Admissions criteria for Internal Transfer, Transfer and Second Degree Candidates

1. All applications to the athletic training, health management systems, occupational therapy, and speech–language pathology programs must be completed and postmarked by December 1.
2. All applications to the athletic training, health management systems, occupational therapy, and speech–language pathology programs must be completed and postmarked by July 1.

Admissions criteria for Internal Transfer, Transfer and Second Degree Candidates

In order for applications to be considered “complete,” all applicants must submit/have the following by the application deadline:

1. The application form
   a. Internal Transfers – Must contact the Assistant Director of Student and Alumni Services or a RSHS academic advisor by stopping at the Office of the Dean, Room 302, Health Sciences Building, or by calling (412) 396-6652.
   b. Transfers and Second Degrees – Must contact the Offices of Domestic Admissions and International Affairs for the standard undergraduate admissions application (excluding the personal statement on the back of the application and the initial letter of reference). Applicants to the master’s program in Health Management Systems should contact the Department of Health Management Systems at (412) 396-4772.

2. The addendum
3 A minimum cumulative QPA of at least a 2.75 for academic training, health management systems, and occupational therapy programs, and a minimum cumulative QPA of at least a 3.0 for physical therapy, physical therapy assisting, and speech-language pathology.

4 A "C" or better in all courses.

5 GRE's are not required for admission.

READMISSION
Students who are no longer enrolled, but had previously attended or graduated from Duquesne University, must fill out the "Application for Readmission" available through the Offices of Domestic Admissions and International Affairs.

Students who have completed 12 credits or less at another institution(s) since leaving Duquesne, are considered "straight readmits," their applications for readmission will be forwarded to, and handled by the RSHS as internal transfer candidates.

Students who have completed more than 12 credits at another institution(s) since leaving Duquesne, are handled by the Offices of Domestic Admissions and International Affairs.

EDUCATIONAL EXPENSES AND FINANCIAL AID
ADDITIONAL EDUCATIONAL EXPENSES FOR RSHS STUDENTS

Pre-Professional Phase

Students must meet with their respective program(s) by their respective departments.

Professional Phase

Expenses for all programs may include the purchase of a lab coat/clothes, medical instruments for laboratory work or professional practice, clinical education costs (e.g., travel and living expenses), and fees for certification, licensure and registration. Information on required supplies will be provided to all students during their respective orientation program(s).

FINANCIAL IMPLICATIONS OF STUDENT CLASSIFICATION AND ACADEMIC LOAD

Students who are interested in financial aid or scholarship assistance through the various sources offered at the University and elsewhere, should be aware that most financial aid and scholarship opportunities and athletic eligibility requirements must be met by students in order to receive these benefits.

The Office of Financial Aid requires students to investigate the financial implications of their academic load and eligibility requirements related to the cost of enrollment. It is the student's responsibility to investigate these requirements and work with his/her academic advisor to meet them. In particular, students should carefully investigate how their credit loads each semester/term, each academic year, and overall, will affect financial aid and athletic eligibility not only for the current year, but also subsequent years. Students should consult the Office of Financial Aid for further information regarding their personal financial situation and the appropriate credit load for their financial needs.

Once enrolled, students should consult on a regular basis with their Faculty Mentor and/or Academic Advisor to develop a plan for financial aid.

Important Note
The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the School. The Ranges School of Health Sciences reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled, students should consult with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective programs.

The following interdisciplinary courses may be required by some of the programs.

HTLSC 315/315L & 515/515L Anatomy

This course is designed to provide Athletic Training and Occupational Therapy students with a relatively broad picture of human anatomy with special emphasis on peripheral systems, the musculoskeletal, peripheral nervous, and peripheral circulatory systems. There is also an introduction to the structure and content of the thoracic, abdominal, and pelvic cavities. The course consists of both a lecture and laboratory component.

HTLSC 320/320L & 470/470L Physiology

This course is designed to study the embryology and gross anatomy of the human organism. The activities in this course will present an account of basic human embryology as well as a relatively detailed description of peripheral systems, the musculoskeletal, peripheral nervous, and peripheral circulatory systems found in the upper extremities and neck of the human body. In addition to the peripheral systems, a detailed account of the contents of the thoracic cavity and the heart will be presented to the student. The course consists of a lecture and required laboratory component.

HTLSC 330/480 Physiology

This course presents the normal functions of the human body, with additional emphasis on histologic organization and histophysiologic mechanisms. These mechanisms are highlighted at all levels of structural organization, from cells to organs. Topics in this course present a two-course sequence range from the structure and function of cells and tissues, to homeostatic regulation by the major control systems.

HTLSC 331/481 Physiology

This course continues the presentation of normal functions of the human body, with additional emphasis on histologic organization and histophysiology. Pertinent examples of pharmacologic and pathophysiological mechanisms are used to reinforce concepts of normal physiologic design. Topics in this course include the various aspects of regulation and control of the body, including the cardiovascular, respiratory, digestive, nervous, endocrine, and integumentary systems.
systems that perform coordinated and integrated functions. The goal for the student is to achieve a good understanding of total body function based upon the organization, functional mechanisms, and interactions of these systems. Prerequisites: HLTSC 330 or 480, 320/320L or 470/470L, or permission of the instructor.

HLTSC 360/460/560 Sociocultural Systems & Networks 5 crs
This course considers the impact of cultural diversity and implications for health service delivery. Prerequisite: Permission of the instructor.

HLTSC 400 Independent Study 1-3 crs
With the guidance of a faculty member, a student may pursue an in-depth study of a specific area or develop an individual project in an area of interest related to their professional goals. Prerequisites: Endorsement of the supervising faculty member and approval of the Department Chair.

HLTSC 403/503 Neuroscience 4 crs
This course introduces the central nervous system in the context of clinical problem solving. The course begins with an overview of neuroanatomy, moves to functional systems within the nervous system, and finishes with a description of vasculature and the clinical ramifications of regional vasculature insufficiency. Throughout the course, case histories are presented with an emphasis on clinical problem solving. Prerequisites: HLTSC 315/315L or 515/515L, or 320/320L or 470/470L, 321/321L or 471/471L, 330 or 480, 331 or 481, or permission of the instructor.

HLTSC 404/504 Biomechanics Lab 4 crs
This course is designed to study, in detail, the elements of normal human motion. Basic concepts of kinesiology and biomechanics will be applied to the major articulations in the human body and used to analyze common movement patterns such as gait. Prerequisites: PHYS 201, HLTSC 315/315L or 515/515L, or 320/320L, or 470/470L.

HLTSC 441/551 Medical Sciences I 3 crs
An overview of common medical diagnoses is conducted utilizing various disease images and incorporating discussion of current events in medicine. Prerequisite: Permission of the instructor.

HLTSC 442/552 Medical Sciences II 3 crs
This course is a continuation of Medical Sciences I. Prerequisite: HLTSC 441/551, or permission of the instructor.

DEPARTMENT OF ATHLETIC TRAINING (AT)
Chair
Paula Sammarone Turocy, Ed D, ATC

Sports Medicine

SCHOOL OF HEALTH SCIENCES

ATHTR 201 Essential Concepts & Techniques in Athletic Training 3 crs
This course is designed to provide pre-professional students with an introduction to the basic and essential elements of Athletic Training including risk management/injury prevention, pathology of injuries/illnesses, assessment/evaluation, acute care of injury/illness, pharmacology, therapeutic modalities, therapeutic exercises, general medical conditions/disabilities, psychosocial intervention/referral, health care administration, and professional development/responsibilities. Students must acquire 50 hours of guided observation/practical experience as part of the core requirements. Corequisites: BIOL 207/208

ATHTR 202 Pre-Professional Practicum in Athletic Training 1 cr
This course provides students with guided discovery activities to reinforce the information and psychomotor skills learned in ATHTR 201 to further develop clinical proficiency in the entry-level skills of basic taping and wrapping, management of spinal cord injuries, development of medical notation techniques, evaluation skills including history, observation, palpation, range of motion and manual muscle testing techniques. Students also will be expected to begin to develop an understanding of the professional and ethical responsibilities of a certified athletic trainer. Students must acquire 50 hours of guided observation/practical experience as part of the course requirements. Prerequisite: ATHTR 201, Corequisites: 209/210

ATHTR 302 Pre-Professional Practicum II 1 cr
This course provides students with guided discovery activities to reinforce the information and psychomotor skills learned in ATHTR 201 to further develop clinical proficiency in the entry-level skills of basic taping and wrapping, management of spinal cord injuries, development of medical notation techniques, evaluation skills including history, observation, palpation, range of motion and manual muscle testing techniques. Students also will be expected to begin to develop an understanding of the professional and ethical responsibilities of a certified athletic trainer. Students must acquire 50 hours of guided observation/practical experience as part of the course requirements. Prerequisite: ATHTR 201, Corequisites: 209/210

ATHTR 303 Art & Science of Athletic Training 2 3 crs
This second part of the course is designed to provide the students with learning experiences in evaluation techniques, selection of common pathologies, and initial management procedures associated with the upper extremity and head, neck, and spine. Evaluative skills learned in ATHTR 302 will be reinforced during this course. Prerequisites: ATHTR 302, HLTSC 315/315L

ATHTR 305W Health & Medicine 3 crs
This course is designed to provide students with a basic understanding of the health issues that influence their lives, the lives of those around them, and their environment. Content of this course includes general, as well as in-depth information on the pathophysiology of disease, disease processes, and conditions that affect the physically active. Prerequisites: BIOL 111/113, ATHTR 201, 202, Corequisites: HLTSC 315/315L

ATHTR 306Therapeutic Exercise & Reconditioning in Athletic Training 4 crs
This course provides students with a solid foundation of the theory and practice associated with the design, implementation, progress, and supervision of rehabilitation programs. Content of this course includes skillful evaluation, establishment of realistic goals, and plan of scientifically supported rehabilitation and reconditioning plans for athletes and physically active individuals. Prerequisites: Phys 302, 303, 304, 305, 306.

ATHTR 315 Clinical Practicum in Athletic Training I 2 crs
This course incorporates a didactic course (one day a week) along with the clinical experiences the students encounter in a high school or collegiate setting. The didactic coursework will include functional splinting/padding, advanced CPR and AED training, equipment fitting and standards, professional development (resume, cover letter, portfolio), as well as discussion of sexual harassment, multi-cultural diversity, and working with minorities. Clinical and field experiences, under the direct supervision of a Certified Athletic Trainer, will reinforce didactic learning and will be limited to 20 hours/week (with the exclusion of camp and vacation times). Prerequisites: All pre-professional requirements, ATHTR 201, 202

ATHTR 316 Clinical Practicum in Athletic Training II 3 crs
This is a continuation of the clinical experiences encountered in Clinical Practicum I, however, students now apply knowledge and competencies gained from the previous semester to enhance their skills and abilities needed to work with athletes and the physically active population. The didactic coursework for this
SCHOOL OF HEALTH SCIENCES

ATHTR 411 Advanced Clinical Practicum in Athletic Training 3 crs
During this practicum, students receive experiences in high school, collegiate, professional or sports medicine clinic settings. Students are responsible for the care of the assigned athletes, including the design and implementation of rehabilitation and reconditioning programs. The emphasis of the didactic component of this course includes preparations for the NATABOC examination, professional development (portfolio presentations, mock interviews) and advanced psychomotor skills such as casting, splinting, and suture/needle removal. Prerequisites: ATHTR 303, 306, 316, HTLSC 425.

ATHTR 412 Organization & Administration in Athletic Training 3 crs
This course provides students with information that will enhance their ability to function effectively as a professional Athletic Trainer and to enhance their awareness of current administrative, professional, organizational, and legal issues pertaining to Athletic Training. Topics include budget management, facility design, record keeping, professional organizations, and liability. Additional areas of discovery include educational requirements, personnel management, public relations, and preparation for the future of Athletic Training. Prerequisite: ATHTR 316, Corequisite ATHTR 410.

ATHTR 414W Medical Perspectives in Athletic Training 2 crs
This course is designed to expose students to a wide variety of resources and professionals in medicine and allied health professions and to assist the students in the development of an appreciation for those professions with whom they work. Professionals will provide information to enhance the interdisciplinary approach of the responsibilities of an athletic trainer. Prerequisites: ATHTR 303, 305W, 410.

ATHTR 416 Applied Science of Physical Performance 3 crs
Expanding upon basic principles learned in Physiology of Exercise, Kinesiology and Biomechanics, and Therapeutic Exercise and Reconditioning in Athletic Training, students are expected to research and teach via peer teaching, information for specific sport skill training, biomechanical analysis of common chronic and acute injuries, and physiological requirements for the common and alternative sports such as football, volleyball, soccer, wrestling, basketball, lacrosse, baseball, track and field, swimming, tennis, ice hockey, rock climbing, and karate. This class involves physical activity and participation in all physical activities. Prerequisites: ATHTR 306, 407W, HTLSC 437/438.

SCHOOL OF HEALTH SCIENCES

ATHTR 420 Integrated Training for Performance Enhancement 2 crs
This course is a continuation of the performance enhancement coursework begun in Clinical Practicum in Athletic Training. This course will prepare students in the knowledge and psychomotor skills required to achieve the National Academy of Sports Medicine's Performance Enhancement Specialist certification. This course is designed specifically as an elective for Athletic Training majors only. Prerequisite: ATHTR 410.

DEPARTMENT OF HEALTH MANAGEMENT SYSTEMS (HMS)

Clair Joan M. Kiel, Ph.D.

Health Management Systems is the utilization of healthcare knowledge, keen management skills, and information systems to effectuate the healthcare delivery system. The healthcare environment is challenged to provide cost-effective quality care. To meet this challenge, innovative business strategies, data analysis, and advanced information technologies are being utilized.

This health professional possesses a unique blend of skills in health sciences, business administration, and information technology. Health sciences and communication with other medical professionals and in understanding the patient prospective. Business administration strategies are needed to manage and make decisions. Information technology is utilized to collect, manipulate, and transmit data to aid in the delivery of cost-effective healthcare services. The combination of health sciences, business management, information analysis, and computer technology will help professionals to meet the future healthcare challenges.

These integrated skills can be applied in a variety of healthcare and related settings that include acute care hospitals, clinics, software development companies, health insurers, and consulting firms.

The Bachelor of Science in Health Management Systems has the following tracks:

- Health Management Systems gives students the ability to interface in medical and technical settings.
- Registered Health Information Administrator concentrates on administrative and technical positions to manage information, data, and medical records.
- Health Management Systems/Pre-Health gives future physicians and business acumen.

A Master's degree option is available. Students must apply for admission during their fourth year of study. This degree can be completed in one additional year after receiving the Bachelor of Science in Health Management Systems.

PROJECT EXPERIENCE

Undergraduate students will be required to complete two unpaid 360 hour projects, one in the junior year and one in the senior year. Students are able to obtain experience in a variety of health management systems settings in the Pittsburgh area or throughout the country. It is intended that these experiences be suitable for inclusion in the student's portfolio or resume. Placement is on an individual basis given the student's needs and career goals.

HEALTH MANAGEMENT SYSTEMS CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSHS at (412) 396-6652.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

HLTMS 305W/505W Healthcare Management 3 crs
This course covers management functions and operations. This writing intensive course requires essay examinations, case studies, and a group project based on a real world situation.

HLTMS 310/510 Elements of Health Information Science 3 crs
Introduction to the creation of interactive healthcare applications on the World Wide Web. Topics include hypertext markup language, scripting, languages, and methodologies for converting paper forms to electronic forms.

HLTMS 315/515 Clinical Processes I 3 crs
This course examines disease processes and their related procedures, tests, pharmacology and how information technology affects clinical processes.

HLTMS 316/516 Clinical Processes II 3 crs
This course builds on the material learned in Clinical Processes I. It will focus on further review of systems and various related components such as laboratory and pathology.

HLTMS 320/520 Healthcare Delivery & Organizations 3 crs
This purpose of this course is to introduce students to the various organizations and entities that comprise the healthcare delivery system.
Being able to take raw data and create an organized form of data is essential in the management profession. Processes, roles, and responsibilities must be understood to effectively manage research, information, and data across various fields, including healthcare and information technology. As the healthcare and information technology fields evolve, so do the methods and tools used for data management.

**Relevant Courses**

- **HLTMS 328/528 Information Systems Support**
  - 3 crs
  - This course introduces the student to the hardware and software systems of a computer. All components will be demonstrated and reviewed.

- **HLTMS 330/530 Health Information Management**
  - 3 crs
  - Introduction to event-driven object-oriented computer application creation using a visual development environment in the context of trends in the healthcare information systems industry. Prerequisite HLTMS 310/510

- **HLTMS 335 & 445 Health Management Systems Seminar**
  - 1 cr
  - As the healthcare and information technology fields change, speakers, exercises, and technologies will be reviewed.

- **HLTMS 340 Health Policy**
  - 2 crs
  - As the healthcare industry continues to evolve, one must understand how research, information, and data impact the policy process.

- **HLTMS 340W/540W Health Policy**
  - 3 crs
  - As the healthcare industry continues to evolve, one must understand how research, information, and data impact the policy process. This course has extensive writing and data analysis assignments. Prerequisite HLTMS 320/520

- **HLTMS 350/502 Introduction to Health Information Management**
  - 3 crs
  - This course introduces the students to the health information management profession. Processes, roles, and the critical component that health information managers play across the continuum of care are discussed.

- **HLTMS 351/551 Data Base Design & Management**
  - 3 crs
  - Being able to take raw data and create an organized data base to generate reports and manage an organization is a key skill which the course focuses on. Conceptual matters of data base design and management will also be discussed. Prerequisite QMS 183

- **HLTMS 368 Health Management Systems Laboratory**
  - 2 crs
  - This hands-on course will introduce students to access and the use of the systems in the healthcare environment.

- **HLTMS 425/525 Healthcare Human Resource Management**
  - 3 crs
  - This course reviews the human resource process and ancillary topics such as compensation and benefits, unions, negotiations, and conflict.

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**SCHOOL OF HEALTH SCIENCES**

- **HLTMS 435W/553W Managed Care & Integrated Delivery Networks**
  - 3 crs
  - This course examines the structures of managed care entities, the various perspectives (physicians, insurers, and consumers), and managed care operations (capitation, information technology, legalities, and marketing). Prerequisite HLTMS 320/520

- **HLTMS 455W/555W/555W Health Management Systems Project I/II**
  - 3-6 crs
  - This is a capstone experience of the program. Students obtain real world experience in clinical and technical settings. It is intended that this experience be suitable for inclusion in the student's resume or portfolio. Requirements will be discussed on an individual basis with the Faculty Project Director.

- **HLTMS 470/570 Healthcare Systems Analysis & Design**
  - 3 crs
  - The traditional systems development life cycle (SDLC) and the object-oriented approach to the analyses and design of healthcare information systems are compared. Prerequisite HLTMS 330/530

- **HLTMS 471/571 Networking for Health Professionals**
  - 3 crs
  - This course shows how to develop, deliver, and manage such diverse systems such as LANs, WANs, and client server. Prerequisite HLTMS 470/570

- **HLTMS 477/577 Health Law**
  - 3 crs
  - This course focuses on the laws and regulations of the health management systems industry and the technological impact of these on healthcare planning. This course requires in-depth reading.

- **HLTMS 480/580 Healthcare Finance**
  - 3 crs
  - This course focuses on the financing and reimbursement of healthcare and how they affect the availability and utilization of services. Various payment methods, budgets, and the insurance industry will also be examined.

- **HLTMS 485W/585W Health Information Processes**
  - 3 crs
  - This course examines in-depth healthcare processes from a data flow diagramming perspective. This course requires on-site visits.

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**DEPARTMENT OF OCCUPATIONAL THERAPY (OT)**

**Chair**
Patricia A. Crust, Ph. D., OTR/L, FAOTA

OCCUPATIONAL THERAPY CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum, as well as the 2-year post-baccalaureate program, can be obtained from the RSHE at (412) 396-6652.

**COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE**

- **OCCTH 305/505 Foundations & Concepts of Occupational Therapy**
  - 3 crs
  - Overview of the profession’s history, philosophies, roles and functions, scholarship activities, current issues, and future directions. Prerequisite Junior in the pre-professional occupational therapy program.

- **OCCTH 310/510 Occupational Performance Throughout the Life Span**
  - 3 crs

- **OCCTH 337/537 Human Motion & Movement**
  - 3 crs
  - Analysis of movement using motor learning, motor control, motor development, kinesiological theories, and applied principles that contribute to functional human motion. Prerequisites HLTS 315/315L or 315/515L, OCCTH 305/305, 310/510.

- **OCCTH 345/545 Occupational Performance Perspectives**
  - 3 crs
  - Study of theories, models, and frames of reference that guide and shape occupational therapy practice. Emphasis on case study integration.

- **OCCTH 400/500 Independent Study**
  - 1-3 crs
  - With the guidance of a faculty member, a student may pursue an in-depth study of a subject area or develop an individual project in an area of interest related to their professional goals. Prerequisites Endorsement of the supervising faculty member and approval of the Department Chair.

- **OCCTH 411W/511W Clinical Reasoning & Fieldwork IA**
  - 3 crs
  - Transformation of didactic learning into clinical reasoning with a focus on evaluation, treatment planning, and implementation, and documentation. Includes 40 hours of practicum and service learning. Prerequisites: OCCTH 345/345L, 416/516, 435W/535L.

- **OCCTH 412/512 Clinical Reasoning & Fieldwork IB**
  - 3 crs
  - Transformation of didactic learning into clinical reasoning with a focus on further establishing therapeutic interactions, clinical observation, and intervention...
OCCTH 448/548 Medical Conditions in OT 4 crs
Overview of medical conditions typically seen in occupational therapy practice Prerequisites HLTSC 315/315L or 515/515L, 403/503, OCCTH 337/536

OCCTH 537 & 538 Human Motion & Movement A & B 2 crs each
Analysis of movement using motor learning, motor control, motor development, kinesiological theories, and applied principles that contribute to functional human motion Prerequisites HLTSC 315/315L or 515/515L, OCCTH 505/505, 510/510

OCCTH 541W Evidence Based Practice 3 crs
Analysis and synthesis of the research evidence that supports occupational therapy practice

OCCTH 550/550L Environmental Adaptations & Rehabilitation Technology 3 crs
Assessment and modification of the physical environment to enhance occupational performance including computer resources, assistive technology, home health, environmental controls, and environmental accessibility Prerequisites OCCTH 430/430L or 530/530L, 435L or 535L, 561, 565

OCCTH 552 Clinical Seminar 2 crs
Guided discussions regarding Level II Fieldwork to integrate the relationship between the clinical experiences with essential curriculum concepts Advanced learning in several specialty areas will be included Prerequisites OCCTH 555, 556, 557

OCCTH 555, 556, & 557 Level II A, B, & C Fieldwork 8 crs, 4 crs, & 4 crs
Exposure to a wide range of diagnoses and treatment in a variety of settings to gain entry-level practice competence Prerequisites OCCTH 412/512

OCCTH 561 Occupational Therapy Administration 3 crs
Introduction to the basic principles of organization and management of occupational therapy programs Prerequisites OCCTH 412/512, 420/420L or 520/520L, 422W/522W

OCCTH 562 Leadership 2 crs
Analysis of leadership approaches in practice, management, and education Prerequisites OCCTH 555, 556, 557

OCCTH 564 Special Topics 2 crs
Small group discussions of contemporary interventions Prerequisites Permission of the instructor

DEPARTMENT OF PHYSICAL THERAPY (PT)

Chair
Robert C. Morgan, Ph.D., PT

Physical therapists assess and treat patients with a variety of diagnoses They work to prevent, detect, evaluate, correct, treat, and alleviate pain, movement dysfunction, and muscle imbalances Their work includes the administration, interpretation and evaluation of tests, and physical examination They work to prevent, reduce, and/or limit the incidence and severity of physical disability and pain

In addition to successful completion of all course work, there are two Clinical Education Matriculation Examinations that students must pass BEFORE they are permitted to enter into clinical education These examinations are done in order to determine that students have reached a level of proficiency necessary to safely work with patients The first examination is given prior to Clinical Education I, near the end of the Spring Semester, fifth year The second examination is given prior to Clinical Education IV near the end of the Spring Semester, sixth year Students who do not pass all parts of the examination will not be permitted to begin clinical education This will result in students sitting out of the program for one year and retaking the matriculation examination the following year If all parts of the examination are not successfully completed the second year, students will be dismissed from the program

PHYSICAL THERAPY CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSHS at (412) 396-6652

PHYSICAL THERAPY (PT)

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

PHYTH 401 Introduction to Physical Therapy 1 cr
This course provides the physical therapy major with an opportunity to learn the expectations of a student in the professional portion of the curriculum and what the actual practice of physical therapy entails Students will be expected to become well versed in medical terminology and the 10 "generic abilities" of professional practice

PHYTH 421W PT Seminar I 1 cr
This course is a professional seminar in which various topics will be discussed The roles and functions of other healthcare providers and supportive personnel will be discussed The APTA code of Ethics, the Guide to Practice, and the Standards of Practice will be introduced and studied The last four weeks will be dedicated to issues of patient care

PHYTH 435 Psychology of Illness & Disability 3 crs
This clinically oriented course will focus on the psychosocial issues of disease and injury Discussion will cover various topics related to the delivery of physical therapy and will include service delivery issues, patient-practitioner interaction, the grieving process and cultural differences in response to illness and disease

PHYTH 450 Wellness & Nutrition 1 cr
This introductory course provides basic information on nutrition and weight management principles as they relate to the general patient population General weight training, flexibility development, and cardiovascular improvement principles and techniques also are covered in this course

PHYTH 458 Exercise Physiology 3 crs
This course examines in detail the effects of exercise on healthy individuals Emphasis is placed on understanding metabolic, cardiorespiratory and musculoskeletal responses to exercise in the general population Students learn health screening and physical fitness testing and interpretation Designing an exercise prescription directed at improving health status for fitness is also covered in this course

PHYTH 500 Exercise Physiology 3 crs
This course is designed as an introduction to basic evaluation and documentation techniques, which can be used with any patient diagnosis. It will draw heavily on previous classes, especially anatomy and physiology Topics to be included are the models of disablement, bony and soft tissue palpation, vital
This course examines the process of motion and goniometry. Length and girth measurements, postural analysis Prerequisites HLTSC 470/470L, 471/471L, 480, 481

PHYTH530 Clinical Education I 3 crs
This is an introductory clinical experience, which will broaden the student’s perception and understanding of the physical therapist’s professional role. Prerequisites Successful completion of all course work and the Clinical Education Matriculation Examination I. Also required, current CPR, health insurance and clearance from university health services as to appropriate health status to attend clinical education. Some sites may require additional health status examinations and/or criminal/abuse clearances

PHYTH518 Orthopedic Science I 3 crs
This course will introduce the student to the pathophysiology of somatic/movement dysfunction of the lower quarter General principles of musculoskeletal treatment, orthopedic manual therapy, and the application of therapeutic exercise modalities in the treatment of lower quarter dysfunction will also be discussed. Prerequisite PHYTH 547

PHYTH519 Orthopedic Science II 3 crs
This course will serve to enhance and build upon the evaluation skills of Evaluation Methods. Special emphasis will be placed on learning the evaluation and treatment skills for musculoskeletal dysfunction of the lower quarter. Prerequisite PHYTH 508

PHYTH520 Orthopedic Science III 3 crs
This is the third course in the PT sequence that will cover the theories and management of lower quarter dysfunction. The adaptation of this knowledge and skill to diverse populations will be encouraged. Prerequisite PHYTH 519

PHYTH521 Orthopedic Science IV 3 crs
This course will serve to enhance and build upon the evaluation skills of Evaluation Methods and Orthopedic Science II. The major emphasis will be on techniques to assess the lower quarter of the musculoskeletal system. Prerequisite PHYTH 518

PHYTH522 PT Seminar II 1 cr
This course is a clinically related seminar designed to orient students to expectations for documentation, professional communications, major treatment precautions as well as basic policy and procedures generic to a variety of clinical settings

PHYTH530 Topics in Research 2 crs
This course examines the process by which research is performed and analyzed. Research designs and the statistics used to analyze them are presented using actual examples from published research. The material is presented in the context of evidence-based practice. Prerequisite PHYTH 530

PHYTH543 Clinical Neurologic Science I 3 crs
This course will cover theories of motor control, motor development, and motor learning and how these theories are applied to various patient populations. Students will learn to select and perform appropriate examination techniques for patients with neurologic disease/dysfunction and interpret results of clinical findings. Due to the nature of this course the materials from many previous classes will be reexamined. Prerequisite PHYTH 508

PHYTH544 Clinical Neurologic Science II 3 crs
This course serves as a continuation of neurologic rehabilitation introduced in Clinical Neurologic Science I. The focus is on developing treatment rationale and plans. The student will have the opportunity to develop treatment skills in laboratory and clinical settings. Prerequisites HLTSC 503, PHYTH 543, Corequisite PHYTH 572

PHYTH547 Foundational Skills 4 crs
This course is an introduction to the basic physical therapy procedures, patient management, and problem-solving skills that will serve as the foundation for future course work

PHYTH564 Special Topics in Geriatrics 2 crs
This course will focus on the normal changes that occur with aging and how the physical therapist should modify their approach to examination, assessment and planning program based on those changes. Physical therapy issues with patients exhibiting common pathological changes of aging such as osteoporosis, dementia and Type II diabetes will be addressed as well as current topics in geriatric care, including reimbursement and psychosocial concerns

PHYTH567 Patient & Consumer Health Education & Consultation 2 crs
This course introduces the student preparing for a healthcare career to the role of a educator through identification, analysis, synthesis and application of the teaching-learning process

PHYTH570 Ergonomics & Environmental Considerations 3 crs
This course addresses components of ergonomic and environmental assessment and intervention as it relates to management of health conditions commonly encountered in physical therapy practice. Emphasis will be placed on the effects of workplace and environmental variables that can be a causal or influential factor in the disablement process. Prerequisites HLTSC 437/438

PHYTH572 Pediatrics 3 crs
This course will cover the theories of motor control, motor development and motor learning. It will also provide the student with knowledge of issues during early development. Different pediatrics topics will be addressed, including special examination and intervention considerations for special diagnoses

PHYTH601 Differential Diagnosis in PT 3 crs
This course is designed to introduce physical therapy students to the process of differential diagnosis with a particular emphasis on diseases and diagnoses commonly seen in physical therapy practice. Students will also be introduced to diagnostic imaging and how this tool assists in the diagnostic process

PHYTH605 Cardiovascular & Pulmonary Science 3 crs
This is an in-depth study of the body’s physiological function during exercise for rehabilitation of patients with defects in the cardiovascular or pulmonary systems. Emphasis is placed on learning physical therapy evaluation and treatment of the oxygen transport system. Students learn indications and contraindications for exercise and safe implementation of physical therapy exercises for patients with cardiovascular and pulmonary dysfunction. Prerequisites HLTSC 480, 481, PHYTH 504

PHYTH610 Clinical Education II 5 crs
This is an intermediate level clinical experience designed to allow the student an opportunity to develop clinical competencies unique to either inpatient, rehabilitation or an outpatient setting. Prerequisites Successful completion of all course work and the Clinical Education Matriculation Examination I. Also required, current CPR, health insurance and clearance from university health services as to appropriate health status to attend clinical education. Some sites may require additional health status examinations and/or criminal/abuse clearances

PHYTH611 Clinical Education III 5 crs
This is an intermediate level clinical experience designed to allow the student an opportunity to develop clinical competencies unique to either inpatient, rehabilitation or an outpatient setting. Prerequisites Successful completion of all course work and the Clinical Education Matriculation Examination I. Also required, current CPR, health insurance and clearance from university health services as to appropriate health status to attend clinical education. Some sites may require additional health status examinations and/or criminal/abuse clearances

PHYTH612 Clinical Education IV 9 crs
This course is an advanced clinical experience culminating in attaining full professional competence in a clinical setting. This clinical experience will include initiation of a career plan developed by the student. Prerequisites Successful completion of all course work and the Clinical Education Matriculation Examination I. Also required, current CPR, health insurance and clearance from university health services as to appropriate health status to attend clinical education. Some sites may require additional health status examinations and/or criminal/abuse clearances

PHYTH615 Orthotics & Prosthetics 3 crs
This course will provide students with an in-depth understanding of normal and pathologic gait, limb prostheses and orthoses, the preprosthetic and prosthetic training phases of rehabilitation for people with amputations, and the use of orthoses in rehabilitation. Prerequisites HLTSC 437/438

PHYTH620 Clinical Neurologic Science III 3 crs
This course will provide the students with an in-depth understanding of the pathophysiology, clinical signs and symptoms, and treatment of common neurologic disorders related to the spinal cord and peripheral nervous system. Prerequisite PHYTH 544

PHYTH621 Clinical Neurologic Science IV 3 crs
This course will provide the students with an in-depth understanding of the pathophysiology, clinical signs and symptoms, and treatment of common neurologic disorders related to brain injury, diseases, and disorders. Prerequisites PHYTH 544

PHYTH625 PT Management 3 crs
This course examines principles of management in relation to physical therapy services and current healthcare systems

PHYTH630 Grand Rounds 0 cr
Invited clinicians, faculty and selected students will present a weekly case study to the physical therapy students. An interactive format is planned with the objective to enhance the students’ clinical problem solving capabilities

DEPARTMENT OF PHYSICIAN ASSISTANT (PA)

Chair
Bridget C. Calhoun, MPH, PA-C
Medical Director
Michael E. Essig, M.D.
Physician assistants (PA) are health professionals licensed to practice medicine in collaboration with physicians. Physician assistants are qualified by graduation from an accredited physician assistant educat-
PHYSICIAN ASSISTANT CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSI's at (412) 396-6652

PHYSICA 400 W Introduction to PA Profession 
1 cr 
The history, role, practice scope and professional policies of the physician assistant are explored in lectures, literature and group discussion.

PHYSICA 401/402/520 Clinical Medicine I/II/III 3 crs (each) 
Fundamental principles of disease, diagnosis, intervention and management are discussed (includes case-based laboratory).

PHYSICA 403 Clinical History Skills & Practice 2 crs 
The skills of communicating with the patient and documenting data are explored in the context of the medical history.

PHYSICA 404 Clinical Lab Methods 3 crs 
Indications, techniques and interpretation of a variety of common laboratory tests are discussed.

PHYSICA 409 Clinical Pharmacology 4 crs 
The mechanisms of actions of medications are discussed in correlation with specific disease processes.

PHYSICA 411 Applied Clinical Methods I 3 crs (each) 
Cognitive understanding and technical performance of medical procedures are emphasized (includes laboratory).

PHYSICA 412/413/414 Clinical Seminar I/II/III 1 cr, 3 crs, & 3 crs 
The integration of didactic sciences with patient problems is accomplished in case-based discussions.

PHYSICA 415 Pathophysiology 4 crs 
Principles of basic pathalogy and the mechanics of the physiologic responses associated with selected human disease processes are discussed.

PHYSICA 418 Fundamentals of Pediatrics 2 crs 
Childhood diseases are discussed in-depth, including diagnosis, treatment, and prognosis (includes case-based laboratory).

PHYSICA 419 General Medical Topics 2 crs 
An ongoing introduction to medical issues is combined with discussion of related aspects of medicine, including genetics, human sexuality, public health and epidemiology, and medical problems.

PHYSICA 420/421 History & Physical Examination I/II 3 crs (each) 
A study of physical examination techniques of the adult patient including history-taking, integration of examination systems, patient assessment, and documentation (includes laboratory).

PHYSICA 4515 Fundamentals of Surgery 3 crs 
Lecture series addresses preoperative, perioperative and postoperative patient care and management (includes case-based laboratory).

PHYSICA 424 Patient Counseling & Education 1 cr 
Emphasizes basic considerations and techniques needed for effective communication with patients regarding their health problems, with emphasis on enhancing patient compliance with medical therapy.

PHYSICA 529-536 Clinical Internships I-VIII 24 crs (total) 
A coordinated series of supervised clinical internships assignments in a wide variety of clinical areas.

PHYSICA 540 Master's Research 3 crs 
An independent research project is completed with ongoing faculty support and recommendations.

SPEECH-LANGUAGE PATHOLOGY CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSI's at (412) 396-6652.

The Department currently holds accreditation from the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA).

SPEECH-LANGUAGE PATHOLOGY CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSI's at (412) 396-6652.

The Department currently holds accreditation from the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA)
This class will introduce principles of assessment for individually directed study in a specialized area of speech-language pathology. Students will learn about the nature and treatment of stuttering in children, adolescents, and adults. In addition to obtaining practical experience in the analysis of stuttering symptoms, students will explore the complex assessment and treatment issues that impact clients who stutter across the lifespan.

**SLP 455 Fluency Disorders**
- **3 crs**
  - Students will learn about the nature and treatment of stuttering in children, adolescents, and adults. In addition to obtaining practical experience in the analysis of stuttering symptoms, students will explore the complex assessment and treatment issues that impact clients who stutter across the lifespan.

**SLP 460 Speech-Language Pathology in the Medical Setting**
- **4 crs**
  - Students will learn principles and procedures in the clinical management of a variety of communication disorders encountered in the medical setting. Issues specific to the pediatric patient, the geriatric patient, and the complex medical patient will also be addressed.

**SLP 500 Independent Study**
- **1-6 crs**
  - Individually directed study in a special area of speech-language pathology. Prerequisite: Permission of the instructor.

**SLP 520 Aural Rehabilitation**
- **3 crs**
  - This course will discuss the effects of hearing impairment on speech and language in children and adults. Theoretical and methodological issues in the habilitation, rehabilitation, and counseling of hearing impaired individuals will be discussed. Prerequisite: SLP 445W.

**SLP 525 Motor Speech Disorders**
- **3 crs**
  - This course focuses on motor speech disorders in adulthood. Neuroanatomical and neurophysiological mechanisms underlying motor speech disorders will be addressed. Students will demonstrate knowledge of assessment, diagnosis, and treatment of motor speech disorders.

**SLP 530 Aphasia**
- **3 crs**
  - This course will review the neurophysiology and management of communication disorders that result from damage to the language-dominant hemisphere of the brain. Students will learn about theoretical approaches to the study of aphasia and how to differentially diagnose and describe aspects of aphasia. A variety of approaches to the management of aphasia will be presented.

**SLP 535 Neurocognitive Disorders**
- **3 crs**
  - In this course, students will learn about the neurophysiology, neuropsychology, and clinical management of the communication challenges associated with neurocognitive disorders including right hemisphere syndrome, traumatic and non-traumatic brain injuries, and the dementias. Approaches specific to the acute and long-term management of these disorders will be addressed. Prerequisite: SLP 530, or permission of the instructor.

**SLP 536 Language Disorders II**
- **3 crs**
  - This course expands the foundational information presented in Language Disorders I. Additional topics in this course may include the relationship between language and literacy, multicultural considerations in the assessment and treatment of language disorders, and language disorders in special populations. Prerequisite: SLP 435.

**SLP 550 Dysphagia**
- **3 crs**
  - Students will learn the anatomy and physiology of the normal swallowing mechanism as well as the characteristics and physiology of the abnormal swallow (dysphagia). Students will learn to identify symptoms of abnormal swallowing and nutritional intake. They will also learn a variety of treatment approaches for dysphagia.

**SLP 554 Voice Disorders**
- **3 crs**
  - This course includes the study of the processes and systems of normal voice production, incidence, etiologies, and symptoms of voice disorders across the life span including organic, behavioral and psychogenic disorders will be discussed. Instrumental and non-instrumental techniques for assessment and management of voice will be reviewed.

**SLP 555 Augmentative & Alternative Communication**
- **3 crs**
  - Students will learn about the history of Augmentative and Alternative Communication (AAC), models of AAC intervention, assessment principles and procedures, components of augmentative communication strategies, and the uses and benefits of AAC. Students will learn to identify the appropriate tools and strategies to help clients with communication disorders.

**SLP 556 Head, Neck & Cranofacial Disorders**
- **3 crs**
  - This course reviews a number of related clinical problems including cleft lip and palate, laryngeotomies, tracheotomy and ventilator dependency medical speech pathology issues, methods, and philosophies related to teaching esophageal speech, TEP voice, and use of mechanical instruments, as means of providing voice to laryngectomized individuals will be reviewed. Principles and methods of assessment and treatment within an interdisciplinary rehabilitation framework will be reviewed. Prerequisite: SLP 554, or permission of the instructor.

**SLP 557 Communication Disorders in Pediatric Multihandicapped Populations**
- **3 crs**
  - Students will learn how to conduct instrumental testing of speech production and how to interpret and utilize the data collected. The course will include an introduction to fundamentals of electronics and test instrumentation including aural, acoustic, and electronic measurement equipment. Labs will introduce both computer and non-computer based systems of measurement.

**SLP 571 Clinical Seminar I**
- **1 cr**
  - Seminar presents a range of topics specific to the practice of speech-language pathology. Topics focus on aspects of communication disorders.

**SLP 572 Communication Seminar II**
- **1 cr**
  - Seminar provides students with a capstone clinical and advance study experience. Students will learn how to apply principles of evidence-based practice to clinical cases. Issues pertaining to multiculturalism are integrated into the course project.

**SLP 573 Speech-Language Pathology Seminar**
- **2 crs**
  - This seminar will focus on a wide variety of professional content including the management of disorders not addressed in traditional courses.

**SLP 574 Capstone Seminar I**
- **1 cr**
  - The seminar provides students with a capstone clinical and advance study experience and prepares them for professional practice in the field of speech-language pathology.

**SLP 575 Capstone Seminar II**
- **1 cr**
  - This seminar will focus on a wide variety of professional content including the management of disorders not addressed in traditional courses.

**SLP 576 Management of Communication Disorders in Multicultural Populations**
- **3 crs**
  - This course will include a review of the major cultural groups in the United States with particular reference to factors that have an impact on the assessment and treatment of communication disorders. It will also address the role of culture in specific communication disorders, and how diagnostic and treatment protocols may need to differ when providing clinical service to cultural groups different from one's own.

**SLP 577 Communication Seminar in Multicultural Populations**
- **3 crs**
  - Seminar will focus on a wide variety of professional content including the management of disorders not addressed in traditional courses.
Hearing Clinic and in external clinical settings. Students must arrange their own travel to clinic practicum sites.

SLP 700 Thesis 1-3 crs
Students may choose to engage in thesis-based research.

**Army Reserve Officers’ Training Corps (ROTC)**

**DEPARTMENT OF MILITARY SCIENCE**

The Army Reserve Officers’ Training Corps (ROTC) program supporting Duquesne University is located at the University of Pittsburgh. It exists to train the future officer leadership of the United States Army and offers opportunities and challenges that can put college students on the fast track to success in life. ROTC provides a combination of academics and important hands-on training, in addition to physical and mental challenges that will help students succeed in college and beyond. Through the training in ROTC, students will develop the confidence, self-esteem, motivation, and leadership skills they will need regardless of their career plan.

**THE FOUR-YEAR PROGRAM**

The traditional Four-Year Program is divided into two parts. The Basic Course is taken in the freshmen and sophomore years. There is no commitment for non-scholarship students at this level. Upon successful completion of the Basic Course, students are eligible for the Advanced Course, taken in the junior and senior years. At the beginning of the Advanced Course, students must decide whether or not they wish to become officers in the Army and enter into a formal contract. During the summer between the junior and senior years, students are required to attend Advanced Camp. Upon successful completion of a University degree and the Army ROTC program, students are commissioned into the United States Army as a Second Lieutenant.

**THE TWO-YEAR PROGRAM**

If the first two years of ROTC are not taken, students can attend Camp Challenge during the summer between the sophomore and junior year. This camp will qualify students to begin the Advanced Course in their junior year or in the first year of a two-year graduate program. Or, if a student has served in the active duty military, attended a military academy for one year, or participated in JROTC for three years or belong to a Army National Guard or Army Reserve unit, they already qualify for entrance into the Advanced Course.

**ARMY ROTC SCHOLARSHIPS**

Army ROTC offers four, three and two-year scholarships of up to $17,000 per year with additional annual allowances of $600 for books and $2,000 for spending. At Duquesne, this scholarship is increased with up to a $5,000 bonus for room and board if academic standards are met. High school, undergraduate and incoming two-year graduate students are eligible to apply. For application and information call ROTC at the University of Pittsburgh at (412) 624-6197/6198/6199, or visit our web page at www.pitt.edu/~armyrotc.

**THE ARMY ROTC NURSE PROGRAM**

Nursing students may take Army ROTC along with their other studies and begin their professional careers as officers in the Army Nurse Corps. Nursing students are exposed to the professionalism of Army Nursing through a special Nurse Summer Training Program.

**THE SIMULTANEOUS MEMBERSHIP PROGRAM (SMP)**

This program allows students to become members of the Army National Guard or the Army Reserves while enrolled in Army ROTC. Students in the Advanced Course who are SMP are paid for their Guard/Reserve training plus a $1,500 allowance each year from ROTC. The benefit of this program is that students in the Advanced Course are able to act as Army officers in their National Guard or Reserve unit, receiving valuable leadership experience.

**SUMMER PROGRAMS**

Include Advanced Camp, Camp Challenge, Nurse Summer Training Program (NSTP) and Army Adventure Training.

**EXTRACURRICULAR ACTIVITIES**

Include Rangers, Scabbard & Blade, Rho Tau Chi and Color Guard.
Air Force Reserve Officers Training Corps (AFROTC)

DEPARTMENT OF AEROSPACE STUDIES

The Air Force ROTC program is administered by the Department of Aerospace Studies at the University of Pittsburgh. This program is available to undergraduate and graduate students by cross-enrollment through agreement with the University of Pittsburgh. Completion of the four-year or two-year AFROTC program leads to a commission as a Second Lieutenant in the US Air Force. AFROTC courses are open to all students, regardless of whether they are enrolled in a commissioning program.

In the four-year commissioning program, a student takes the general military course (GMC) during the freshman and sophomore years, attends a four-week summer training program, and then takes the professional officer course (POC) in the junior and senior years. In the two-year commissioning program, a student begins by attending a five-week summer training program prior to his or her junior year and then enters the POC. A student is under no contractual agreement to the Air Force until entering the POC or accepting an Air Force Scholarship. In addition to the academic portion of the curriculum, each student attends a one-hour leadership lab each week. This lab utilizes a student organization designed for the practice of leadership and management techniques. Two to three and a half-year scholarships are available on a competitive basis to qualified students. Many AFROTC scholarships may cover all costs of tuition, incidentals and lab fees, books, plus pay each recipient a tax-free monthly stipend.

GENERAL MILITARY COURSE (GMC)

The subject matter for the freshman and sophomore years is developed from a historical perspective and focuses on the scope, structure, and history of military power with emphasis on the development of air power. The freshman courses explore the role of the US military forces, and the Air Force in particular, through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, and support forces. The sophomore courses include an introduction to the history of air power with emphasis on the development of concepts and doctrine governing the employment of US air power.

PROFESSIONAL OFFICER COURSE (POC)

The Professional Officer course, taken during the cadet’s junior and senior years, concentrates on four main themes, the concepts and practices of management, leadership, and national defense policy. During the first term of the junior year the course concentrates on a study of the management functions of planning, organizing, coordinating, directing, and controlling. Basic and advanced management techniques, as found in the military and industrial environment, are explored. The second term deals with the application of general concepts of leadership to Air Force situations. As a basic study of human behavior, human relationships, and professional ethics, the course emphasizes the similarities between the problems encountered in the military and civilian environments. The first term of the senior year concentrates on selected elements of the US government and national security process engaged in producing national strategy as well as various elements of US military forces, doctrine, and employment capabilities. During the second term, the course concentrates on the strategic options available to the US and on the manner in which policy choices are made. The course also includes a review of the military justice system.

For details about the two programs as well as information on the courses, scholarships, and flying programs, interested students are encouraged to contact the Air Force ROTC Detachment at (412) 268-5109, or contact the Department of Aerospace Studies, Air Force ROTC, University of Pittsburgh, 500 Purnell Hall, Pittsburgh, PA 15260-0001. Alternatively, see our website at www.rotc.pitt.edu

NAVAL RESERVE OFFICERS’ TRAINING CORPS (NROTC)

DEPARTMENT OF NAVAL SCIENCE

Captain J R Stapleford, USN
Office 4165 Forbes Ave
Phone (412) 268-5109

The Department of Naval Science was established 16 December 1961. Carnegie Mellon’s Naval Reserve Officers Training Corps (NROTC) is designed for young men and women who are seeking a challenging academic experience and who desire to serve their country as officers in the Navy or Marine Corps after graduation.

NROTC midshipmen lead the same campus life as other Carnegie Mellon students. They make their own arrangements for room and board, choose a preferred area of study and participate in extracurricular activities. Midshipmen wear civilian clothes to classes but wear uniforms one day a week. NROTC students are active in all facets of university life, many in positions of leadership in student government, on varsity and intramural sports teams, in campus clubs, and other student organizations. The NROTC program seeks students who are bright, ambitious, enthusiastic leaders whose lives are enriched by their education at Carnegie Mellon and by their involvement in NROTC.

FOUR-YEAR SCHOLARSHIP PROGRAM

The four-year scholarship program provides full tuition, fees, textbooks, uniforms, and a $200 per month tax-free subsistence allowance to students selected through nationwide competition. Midshipmen must complete the university approved curriculum of their choice, including courses in calculus and calculus-based physics, and specified courses in naval science subjects. Paid summer training periods are also provided. Scholarships are awarded on the basis of national competition and not to individuals. A limited number of full scholarships may be awarded by the NROTC unit on campus. Midshipmen who accept their scholarships are required to serve in the Navy or Marine Corps for a period of four years after graduation.

TWO-YEAR SCHOLARSHIP PROGRAM

Qualified students may participate in NROTC as college program (non-scholarship) midshipmen and earn commissions in the Navy or Marine Corps Reserve upon graduation. The active duty obligation for this program is three years. Students receive all naval science textbooks, uniforms, and during their junior and senior years a tax-free subsistence allowance of $300 per month. A paid summer training period is provided between the junior and senior year. College program students may also compete for a limited number of merit scholarships.

COLLEGE (NON-SCHOLARSHIP) PROGRAMS IN NROTC

Qualified students may participate in NROTC as college program (non-scholarship) midshipmen and earn commissions in the Navy or Marine Corps Reserve upon graduation. The active duty obligation for this program is three years. Students receive all naval science textbooks, uniforms, and during their junior and senior years a tax-free subsistence allowance of $300 per month. A paid summer training period is provided between the junior and senior year. College program students may also compete for a limited number of merit scholarships.

CURRICULUM

The sequence of Naval Science courses is the same for all officer candidates for the first two years. Midshipmen accepted into the Marine Corps option program will have curriculum variations starting with their third year. Additionally, some candidates may be required to complete courses in American military affairs, national security policy, English, mathematics, and/or the physical sciences. Descriptions of the course requirements for each candidate classification (scholarship/college program) may be obtained from the Department of Naval Science office.

All scholarship and college program students are required to attend a weekly two-hour Naval Laboratory (32-100) where military drill, physical fitness, and leadership are emphasized.

Naval Science courses are open to all students. Since these are required courses for NROTC students, they will be given priority in enrollment. Remaining spaces will be filled through the normal university registration process.
School of Leadership and Professional Advancement

Admissions
Dean and Professor
Benjamin Hodes, Ph D
Assistant Dean, Academic Programs
Paul Gentile, Ph D
Director, Student and Alumni Services and Noncredit Programs
Marianne Lester, M A

MISSION STATEMENT
The mission of the School of Leadership and Professional Advancement is to enhance people's lives and contribute to society through the delivery of quality educational programs that extend the resources, traditions and values of the University

SUMMARY STATEMENT OF PHILOSOPHY
Credit Programs
The School of Leadership and Professional Advancement (412-396-5034) addresses the needs of adult learners Through the School, adult students have access to undergraduate courses offered within the University on Saturdays, online or in the evening Entry requirements are that the individual be twenty-one (21) years of age or older and have a high school diploma or GED equivalency The student population of the School includes working adults and other non-traditional students whose preference is to pursue a degree through day, evening, weekend or online study, on either a full or part-time basis

Professional Development Programs
With the Professional Development Programs, the School of Leadership and Professional Advancement is committed to education for the changing workplace A wide range of courses, workshops, certificate programs and seminars is offered to provide participants with the skills, knowledge, and techniques they need to develop in order to meet the demands of the changing world of work

CREDIT PROGRAMS
I) Saturday Undergraduate Degrees
Adult students have the opportunity to earn a degree by attending classes only on Saturday Five eight-week terms comprise the accelerated academic calendar Students earn a Bachelor of Science in Professional Studies or a Bachelor of Science in Business Administration

The School of Leadership and Professional Advancement recognizes that students enrolled on weekends demand the same intellectual integrity in their academic programs as those attending the University in a more traditional manner Hence, the baccalaureate curricula on Saturday require the same level of achievement as those expected of students in more traditional academic environments, but in an intensive, challenging format appropriate only to the adult student

It is a rigorous program with a competitive and high admissions standard Students are considered for admission according to one of the following sets of criteria

a) Applicants with prior college course work must have a minimum cumulative GPA of 2.5 for full admission Provisional admission is possible for students with a cumulative GPA less than 2.5, based upon the quality of the overall application

b) Applicants with no prior college course work must take a series of placement tests to document the skills necessary for college level work Results of the placement tests determine whether remediation at the community college level is necessary prior to entering the program

Due to the challenging nature of this unique, accelerated degree program, all applicants are required to have a personal interview

II) Bachelor of Science in Professional Studies Degree (4 Concentrations)

Students earn a Bachelor of Science in Professional Studies (BSPS) Professional Studies is the term that describes the four (4) interdisciplinary concentration areas Professional Communication, Organizational Leadership, Organizational Behavior, and Computer Technology A minimum of 120 total credits is required to complete this degree Components of the degree are as follows

University Core Curriculum - 33 Total Credits

The University Core provides undergraduates with a common intellectual experience as the foundation for their college careers Core courses focus on issues and values central to the tradition and mission of the University These courses are not merely preparation for professional study but for lifelong learning

General Core - 27 Credits

101 Adult Transition Seminar 3 Cr
101 Thinking and Writing 3 Cr
101 Across the Curriculum 3 Cr
101 College Algebra 3 Cr
101 Survey of Sociology 3 Cr
102 Imaginative Literature and Critical Writing 3 Cr
123 Art History 3 Cr
125 Fundamentals of Statistics 3 Cr
132 Basic Philosophical Questions 3 Cr
151 Shaping of the Modern World 3 Cr

SCHOOL OF LEADERSHIP AND PROFESSIONAL ADVANCEMENT

Science Core

171 Biology 3 credits 3 Cr

Theology Core

184 Introduction to the Bible 3 credits (Students choose one Theology)
186 Roman Catholic Heritage
187 Christian Understanding of the Human Person

Some University Core requirements may be fulfilled by alternative courses Students are advised to consult with their academic advisor to identify alternative courses where appropriate

Professional Core Curriculum - 24 Total Credits

Professional requirements prepare students to meet the challenge of a wide range of professions through an approach of intuitive and responsibility, by encouraging logical thinking and analytical reasoning, and by developing an awareness of the important role of quantitative measurements in today's professional world

191 Computer Applications for the Professional 3 Cr
192 Computer Applications for the Professional II 3 Cr
201 Accounting for the Professional I 3 Cr
202 Accounting for the Professional II 3 Cr
231 Microeconomics 3 Cr
232 Macroeconomics 3 Cr
261W Structure of the Legal Environment 3 Cr
350 Understanding the Marketplace and Competition 3 Cr

Concentration Areas - 36 Total Credits

Four (4) areas of interdisciplinary study, called Concentration areas, comprise the backbone of the BSPS Students are required to select two (2) of the concentration areas, from Organizational Leadership, Professional Communication, Organizational Behavior, or Computer Technology

Concentration Area I

Organizational Leadership - 18 Total Credits

103 Introduction to Psychology 3 Cr
370W Principles of Organizational Leadership 3 Cr
456 Theory and Practice of Organizational Communication 3 Cr
Organizational Leadership Selected Topics I 3 Cr
Organizational Leadership Selected Topics II 3 Cr
499W Organizational Leadership Capstone Seminar 3 Cr

Concentration Area II

Professional Communication - 18 Total Credits

201 Human Communication and Society 3 Cr
210 Mass Communication and Society 3 Cr
383W Writing for Business and Industry 3 Cr
427 Communication Management 3 Cr

Concentration Area III

Organizational Behavior - 18 Total Credits

103 Introduction to Psychology 3 Cr
226 Developmental Psychology II 3 Cr
328W Psychology of Personality 3 Cr
340 Social Psychology 3 Cr
480 Research in Human Behavior 3 Cr

Concentration Area IV

Computer Technology - 18 Total Credits

300 Managing Information Technology in Modern Organizations 3 Cr
410 Databases as Productivity Tools for the Competitive Edge 3 Cr
425 Electronic Communications and Cyberplace for the Leader 3 Cr
450 Network Operating Systems 3 Cr
470 Multimedia Technology 3 Cr
495 Leadership Trends in Information Technology (Capstone) 3 Cr

Electives - 27 Total Credits

Electives provide a balance to the required course work Through the electives, the student achieves the well-rounded quality education which is the hallmark of a Duquesne University degree

B) Bachelor of Science in Professional Studies, Major in Computer Systems Technology

Students in this program take courses within the University Core and Professional Core curricula (as described above in Section A) Several computer systems technology courses and electives are also required Please call (412) 396-5034 for a complete course listing

Three Bachelor of Science in Business Administration degrees are available on Saturdays Concentrations in Information Technology Marketing and Accounting are available Please refer to the School of Business section of this catalog for a complete degree description In addition to the listed curricula, The Adult Transition Seminar is required for the Saturday degree

C) Bachelor of Science in Business Administration - Information Technology Concentration
SCHOOL OF LEADERSHIP AND PROFESSIONAL ADVANCEMENT

D) Bachelor of Science in Business Administration—Accounting Concentration

E) Bachelor of Science in Business Administration—Marketing Concentration

II) The Master of Arts in Leadership and Liberal Studies (Saturday and Online)

Duquesne University’s Graduate School of Liberal Arts has partnered with the School of Leadership and Professional Advancement to create this innovative and exciting program for individuals who wish to be or to become effective leaders. Rooted in the liberal arts, The Master of Arts in Leadership and Liberal Studies (MLLS) emphasizes the importance of integrity and social responsibility in leaders. This approach to leadership education focuses on the dimensions of human behavior and human nature as illuminated by some of the great thinkers of the past and present.

The MLLS program also emphasizes the self-assessment and development of skills that are crucial to the leader’s role, as well as an examination of the world in which today’s leaders will function.

This award-winning program is designed for busy adults who wish to earn their master’s degree without interrupting their careers. Courses are offered on alternate Saturdays in the morning and afternoon, or completely online. Students who take two courses per semester in the Fall, Spring, and Summer semesters can complete their master’s degree in two years.

Thirty-six (36) credits are required to earn a Master of Arts in Leadership and Liberal Studies. The curriculum has three components:

Liberal Studies Core — 12 Total Credits

Liberal Studies—The Humanistic Perspective 3 Cr
Leahership and Liberal Studies Social, Political & Economic Issues 3 Cr
The Ethical and Spiritual Dimensions 3 Cr
Leadership and Liberal Studies Colloquium 3 Cr

Leadership Core Curriculum — 15 Total Credits

Introduction to the Graduate Study of Leadership (required) 3 Cr
Organizational Communication 3 Cr
Decision Making and Problem Solving for Leaders 3 Cr
Conflict Resolution 3 Cr
Valuing a Diverse Workforce 3 Cr
Public Policy and Legal Issues for Leaders 3 Cr

Electives — 9 Total Credits

Select Three of the Following:

730 Science, Technology, and Society 3 Cr
731 The Shaping of the Contemporary World 3 Cr
732 Economics and the Modern World 3 Cr
733 Comparative Political Systems 3 Cr
734 Human and Financial Resources 3 Cr
735 Information Technologies for Modern Organizations 3 Cr

A Master of Science in Leadership and Business Ethics is also available.

III) Evening Bachelor's Degrees

Several Bachelor’s degrees are available in a convenient evening format. Options include a Bachelor of Science in Business Administration with concentrations in Accounting, Management, or Marketing, or a Bachelor of Arts in Psychology. See the School of Business or Liberal Arts portions of the Duquesne catalog for more details or call (412) 396-5600. A Bachelor of Science in Professional Studies is also available. Please see curriculum below.

The Bachelor of Science in Professional Studies Degree

Adult students are provided the opportunity to customize plans of study to meet personal and professional goals by pursuing their BSIPS in an evening format. The degree provides a strong foundation in both business and the liberal arts. Students can individually design two major areas of study, designated as concentrations. Concentrations are designed in conjunction with an academic advisor and are available in a wide range of liberal arts and/or business subjects.

A minimum of 120 total credits is required to complete degree requirements, which are listed below.

University Core Curriculum — 30 Total Credits

The University Core Curriculum for the evening BSIPS is the same as that for the BSIPS in Saturday format, outlined above on page 198.

Professional Core Curriculum — 24 Total Credits

The Professional Core Curriculum for the evening BSIPS offers courses from the A J. Palumbo School of Business Administration, which are available in the day and evening. Those courses are:

183 Information Systems I & II
214/215 Financial and Managerial Accounting
221/222 Principles of Economics I & II
251W Business Law
571 Principles of Marketing

Electives — 18-36 Total Credits

Electives provide the opportunity for students to select courses based upon their areas of interest. Consultation with an academic advisor is recommended.

IV) Professional Certificate Programs

Professional certificates are designed for individuals interested in learning about a focused area of professional knowledge. Certificates are available in evening, Saturday, and online formats.

Professional Certificates include between five and nine (5-9) 3-credit courses. Candidates for the professional certificates usually have an Associate’s or Bachelor’s degree and typically enroll in a certificate program in order to enter a new profession or to advance in their current careers.

Some of these certificate programs have prerequisites. Please call (412) 396-5600 for a complete catalog with all prerequisites and course work specifics.

Professional certificates are available in the following areas:

Accounting (Basic)
This certificate is a six-course, 18-credit program.

Accounting (Advanced)
This certificate is a nine-course, 24-credit program.

Computer Technology
This six-course certificate provides the overview of personal computers and computer technology used in modern organizations.

Database Technology
This six-course certificate will prepare you to increase the efficiency and competitiveness of your organization through workflow automation by using database software.

Electronic Communications
This six-course certificate will prepare you to effectively manage your organization’s electronic resources.

Information Technology
This certificate is an eight-course, 24-credit program that teaches students how to use and build technologies to increase organizational competitiveness.

Professional Development Programs

The Paralegal Institute
A paralegal is a trained professional who works under the direction of an attorney. With the changing needs of the legal profession, it is one of the nation’s fastest growing professions in America today. Paralegals are employed in private law firms, banks, corporations, public service organizations and in state and federal government. A paralegal’s job responsibilities include client and witness interviews, legal research, drafting correspondence, pleadings and other legal documents, conducting real estate closings, summarizing depositions and interrogations and rendering direct assistance to lawyers, clients and the courts.

In response to the demand for highly trained, well qualified paralegals, the School of Leadership and Professional Advancement at Duquesne University prepares professionals for career opportunities. The...
Center for Leadership Development

The Center for Leadership Development provides customized consulting and professional development through innovative and accessible delivery systems with a fundamental commitment to client success. For more information about the Center, please call (412) 396-1643.

Exam Preparation Courses

GMAT and LSAT review courses are offered for individuals interested in preparing to sit for examinations required for graduate school admittance. Each preparation course will enable you to take the selected exam with confidence and skill. Learn how to approach and analyze complex questions and discover the most effective ways to use your test time — identify and strengthen your weak areas!

Instructors are professional local University faculty. Please call (412) 396-1643 for more information and a schedule of upcoming courses.

Effective Catalog

The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the School. The School of Leadership and Professional Advancement reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled students should consult on a regular basis with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective programs.

Part IX:

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McANULTY COLLEGE AND GRADUATE SCHOOL OF LIBERAL ARTS

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<td>Charles Luette</td>
<td>Adjunct Professor of Trumpet</td>
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<td>Philip Pfeiffer</td>
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