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) 396-6050
(800) 456-0590 (Outside of 412 Area Code)

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) 396-5034

A. P. J. Falumbo School of Business Administration,
Rockwell Hall, Room 705
Telephone: (412) 396-6277 / 5702
School of Education,
Canevin 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 Moreland Hall
Telephone: (412) 396-4921

School of Nursing,
College Hall, Sixth Floor
Telephone: (412) 396-5046 / 6534

Mylan School of Pharmacy,
Bayer Learning Center, Room 304
Telephone: (412) 396-6933

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

CAMPUS MINISTRY—
Administration Building, First Floor
Telephone: (412) 396-6202 / 5045

CAREER SERVICES CENTER—
Rockwell Hall
Telephone: (412) 396-6644

School of Education Career Center
Telephone: (412) 396-6647

CASHIER—Payment of Tuition and Fees,
Administration Building, Ground Floor
Telephone: (412) 396-6585 / 6587 / 6588

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

FINANCIAL AID—Loan, Scholarship,
Student Employment, Applications
Administration Building, Ground Floor
Telephone: (412) 396-6607

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) 396-1650

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

INFORMATION CENTER—For University Events,
Duquesne Union, Third Floor
Telephone: (412) 396-6632 / 6633

OFFICE OF INTERNATIONAL AFFAIRS—
Sixth Floor, Duquesne Union
Telephone: (412) 396-6113

LEARNING SKILLS CENTER—
Administration Building, Ground Floor
Telephone: (412) 396-6651

PSYCHOLOGY CLINIC—
Rockwell Hall, Ninth Floor
Telephone: (412) 396-6582

PUBLIC AFFAIRS—
220 Fisher Hall
Telephone: (412) 396-6050

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 (Transcripts)
(412) 396-6212 (General Office)

RESIDENCE LIFE—Assumption Hall, Ground Floor
Telephone: (412) 396-6635 / 528

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

STUDENT ACCOUNTS—
Administration Building, Room 208
Telephone: (412) 396-6585 / 6587 / 6588

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

UNIVERSITY COUNSELING CENTER—
100 Administration Building
Telephone: (412) 396-6294 / 6208

Undergraduate Catalog
2002-2003
RIGHT TO AMEND

As the educational process from admission through graduation requires continuous review and appropriate approval by University officials, the provisions of this catalog are to be considered directory 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, 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, religion, 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 6601.

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 (PC. 101-542), information regarding Duquesne University's crime statistics, security policies and procedures is available in the Admission's Office, and daily crime logs are available for review in the Public Safety Department.

Information contained in this catalog is accurate to the date of publication.

Published by Duquesne University, 600 Forbes Avenue, Pittsburgh, PA 15282.
Academic Calendars
Fall 2002 — Summer 2003

FALL SEMESTER — 2002
Classes Begin
August 26 (Monday)
Labor Day Holiday
September 2 (Monday)
All Saints Day
November 1 (Friday)
Holy Day
Thanksgiving Holiday
November 25-30 (Monday-Saturday)
Immaculate Conception
December 8 (Sunday)
Friday Class
December 10 (Tuesday)
Reading Day
December 11 (Wednesday)
Final Exams
December 12-18 (Thursday-Wednesday)
Commencement
December 19 (Thursday)

SPRING SEMESTER — 2003
Classes Begin
January 6 (Monday)
Martin Luther King Holiday (Observance)
January 20 (Monday)
Spring Break
March 3-8 (Monday-Saturday)
Easter Holiday
April 17-21 (Thursday-Monday)
(Monday Class April 22 (Tuesday)
Monday Class
April 22 (Tuesday)
Schedule Followed
April 23 (Wednesday)
Friday Class
Schedule Followed
April 23 (Wednesday)
Final Exams
April 25-May 1 (Friday-Thursday)
Commencement
May 3 (Saturday)

SUMMER SEMESTER — 2003
Summer Term Begins
May 5 (Monday)
Memorial Day Holiday
May 26 (Monday)
Ascension Holy Day
May 29 (Thursday)
Independence Day Holiday
July 4 (Friday)
End of 12 week term
July 25 (Friday)
Assumption Holy Day
August 15 (Friday)

Please refer to the current schedule of classes booklet for detailed academic calendar dates and deadlines.
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), the Schools of Law (1911), Business Administration (1913), Pharmacy (1925), Music (1926), Education (1929), Nursing (1937), Health Sciences (1990), 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 Ghost 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 that 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.

Duquesne offers a wide variety of programs and curricula from which students may select freely in accordance with their interests, capabilities and goals in life.

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 Ghost), 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 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.

THE UNIVERSITY SETTING

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-contained 43-acre site.

Long considered 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 centers 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 on 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 points of interest as The Pittsburgh Zoo, Carnegie Museum of Art and History, SCFA 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 retraining dormitories in the world. The Duquesne Dukes play their season on 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.

PHYSICAL FACILITIES

The Administration Building, "Old Main," was the first building constructed on the Duquesne campus, dedicated in 1885. Recently renovated, it houses the Executive Offices of the University, Office of Admissions, Registrar's Office, Campus Ministry, Business Offices, University Counseling Center, Financial Aid Office, Learning Skills Center, and the offices of University Events, Alumni, and Development. Adjacent to the building is the University Chapel, which offers daily Masses.

A J Palumbo Center dedicated in 1988, is the home of the Duquesne men's and women's basketball as well as the volleyball and wrestling teams. In addition to the Dukes home court, the center serves as a recreational facility for students, faculty and staff. The 6,200-seat arena also houses intramural activities, racquetball and squash courts, modern athletic training facilities, a weight room, exercise room, sauna and locker facilities. The arena is also a convocation facility that allows the entire University to come together for major events.

Assumption Hall, the oldest residence hall on campus, was dedicated in 1956. A four-story structure with 284 student capacity, the building's facilities include the campus's oldest radio station, WJSU-FM, and a new student lounge.

The 6,200-seat arena also houses intramural activities, racquetball and squash courts, modern athletic training facilities, a weight room, exercise room, sauna and locker facilities. The arena is also a convocation facility that allows the entire University to come together for major events.

Assumption Hall, the oldest residence hall on campus, was dedicated in 1956. A four-story structure with 284 student capacity, the facility has its own recreation area, and offers both single and double occupancy rooms. The hospital 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.
Institute of Architects for their creative design in their renovation and expansion of the original structure constructed in the 1920s.

The Gurnberg Library holds an extensive collection of books, journals, electronic resources, microform, 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. These various disciplines 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 dissertations from Vatican Council II and the Synods. His sermons, addresses, and papers cover the field of spirituality, including the role of the Church in the various religions 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 Judaism, Christian, and Jewish theological relations during the Middle Ages.

- Honorable Michael A. Musmanno Collection — A collection of the papers 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 through primary source material, including the abolition of the Civil War and the Iron Police, interrogations of the close associates of Adolf Hitler, transcripts of the Nuremberg trial that Musmanno presided over, and information on the Sacco and Vanzetti trial in which Musmanno was a 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 faculty from the Department of Mathematics and Computer Science and the School of Music, Education, and Business to teach a one-credit computer and information literacy course for freshmen.

The Gurnberg Library publishes BibliaTech, 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 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/dek hockey court.

The Public Safety Building is headquarters 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 biological sciences and chemistry, the Dean's Office for the Bayer School of Natural and Environmental Sciences, and faculty offices, classrooms and laboratories for the Mylan School of Pharmacy and Graduate School of Pharmaceutical Sciences. Designed by one of the world's most renowned architects, Mies van der Rohe, the building won the "Laboratory of the Year" award in 1969. Instructional facilities include two large amphitheater-style lecture halls with seating capacities of 290 each, well-equipped laboratories, and science computer facilities.

The Music School, dedicated in 1967, has 68 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 two new Steinway model D concert grand pianos. The Fender-Flammer Studio, Duquesne University Recording Complex, Keyboard Lab, and 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 Administration and the John F Donahue Graduate School of Business and whose skywalk connects downtown Pittsburgh with Duquesne's campus. The building has been totally remodeled in recent years. Rockwell Hall also houses a student lounge / vending machine area, Rockwell Express (Burger King and Pizza Hut), the School of Business Technology Center, Computing and Technology Services, Chrysler Corp Small Business Development Center, the School of Leadership and Professional Advancement, Career Services Center, Psychology Clinic, Furnishings and Textiles Department, Institute for Economic Transformation, the Mailing Center, the Mills Complex, University Press, and University Purchasing Department.

Arthur J. Rooney Field is a multi-purpose field named in honor of Arthur J. Rooney, former owner of the Pittsburgh Steelers and Duquesne Letterman. The facility provides a home for Duquesne University's football, men's and women's soccer, and women's lacrosse teams as well as intramural activities. In the winter, an air-supported structure (bubble) is erected over a majority of the field for soccer, practices and throw-down conditioning. The field, which is equipped with lights and a special astroturf surface, houses an adjacent fieldhouse with locker room facilities, an athletic training room and coaches offices.

St. Ann's Living-Learning Center, dedicated in 1964, is a seven-floor coed residence hall which houses 526 freshman 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 facilities, a recreational lounge, a Campus Ministry Office, computer labs, and vending machines. Each student room has access to the campus computer mainframe.

St. Martin's Living-Learning Center is 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 facilities, a recreational lounge, computer labs, and vending machines. Each student room has access to the campus computer mainframe.

Trinity Hall, dedicated in 1952, is the residence of the Holy Ghost Fathers who serve the University as administrators and teachers. The grounds of the hall include an attractive mall and grove.

Vickroy Hall opened for Fall 1997. It is a 283 bed, air-conditioned facility, double rooms, bathroom shared by two rooms (four people). Hallways and lounge areas are carpeted. Study/television lounges on each floor. Laundry room on each floor, with one washer and two dryers. Front desk security, security cameras in elevators and all outside doors. Ground floor multi-purpose room for meetings, programs and building functions. Each room has individual heating and air-conditioning units. Upperclassmen building. Coed by floor.

ACCREDITATION AND AFFILIATION

University

Accreditation

Middle States Association of Colleges and Schools

State Board of Education of the Pennsylvania Department of Education

Membership

American Association of Collegiate Registrars and Admissions Officers

American Council on Education

Commission on Social Studies

Higher Education Commission

National Association of Student Personnel Administrators

Admissions Officers

National Association of Student Financial Aid Administrators

Pennsylvania Association of Catholic College Admissions Officers

Pennsylvania Association of Colleges and Universities

Pennsylvania Association of Student Financial Aid Administrators

Pittsburgh Board on Higher Education

McAnulty College of Liberal Arts Membership

American Association for Higher Education

American Association for State and Local History

American Conference of Academic Deans

American Historical Association

American Mathematical Association

American Psychological Association

American Sociological Association

Association for Communication Administration

Association for Integrative Studies

Association for Professional and Practical Ethics

Association of Schools of Journalism and Mass Communication

Association for Theological Field Education

Association of American Colleges and Universities

Association of Computing Machinery

Association of Graduate Schools in Catholic Colleges and Universities

Association of Departments of English

Association of Graduate Programs in Ministry

Broadcast Education Association

Central States Communication Association

Collegium

Council of Colleges of Arts and Sciences

Council of Graduate Schools

Eastern Communication Association

Historical Society of Western Pennsylvania

International Communication Association

Modern Language Association

National Association for Foreign Student Affairs (NAFSA)

National Collegiate Honors Council

National Communication Association

Organization of American Historians

Teachers of English to Speakers of Other Languages (TESOL)

A J Palumbo School of Business Administration

Accreditation

The Association to Advance Collegiate Schools of Business (AACSB)

Membership

Middle Atlantic Association of Colleges of Business Administration

School of Education

Accreditation

Pennsylvania Department of Education

Membership

American Association of Colleges of Teacher Education

Association of Independent Liberal Arts Colleges for Teacher Education

International Council on Education for Teaching

The Pennsylvania Association of Colleges and Teacher Educators
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.

Duquesne School of Health Sciences
Accreditation
The Commission on Accreditation of Allied Health Education Programs (CAAHEP) 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 (CAAHEP) 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 (RHIA). 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 (CAAHEP) in collaboration with the Accreditation Review Committee on Education for the Physician Assistant (ARC-PA)
The Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA), (Candidacy Status)
Membership
Association of Schools of Allied Health Professions
Association of University Programs in Health Administration (ALPHA)

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
Percusive 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 Environment

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
National League for Nursing (Council of Baccalaureate and Higher Degree Programs)
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) 612-5200 or (888) 308-2525 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/cts.

INFORMATION

For additional information, please see the catalog or call (717) 612-5200 or (888) 308-2525 for more information.

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EARLY DECISION

Students who intend to only 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 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 begin 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.
9. Students applying to programs in Health Sciences please refer to the application and school handbook for application deadlines.

It is the responsibility of the applicant to arrange to have all supporting credentials on file with the Office of Admissions and Financial Aid Office prior to the deadline dates.

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 candidate'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 on campus 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 requirements set forth by the Duquesne University Office of Admissions. Students who wish to apply to ACHI must have a GPA of 3.5 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.

The International Baccalaureate (IB)

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 6 or 7 will be accepted in foreign languages for a maximum of 8 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 college level program in secondary schools and have performed satisfactorily in the advanced placement examinations are eligible for advanced placement Duquesne University grants 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 of 4.0 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. 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) 396-5644 or 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

Roberta Aronson, 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 outstanding success.

The foundation of Duquesne's Honors College is the Integrated Honors Program, an enhanced track of 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 in 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 their leadership and teamwork skills by organizing and implementing service projects and academic interest programs.
- 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 evening study, or as international students, to send documents to the Office of Admissions before 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 students.

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 letter of recommendation from a teacher or counselor.

Eligibility criteria for a transfer student include:

- Graduation from a secondary school recognized as an acceptable equivalent to a U.S. high school, and
- A letter of recommendation from a teacher or counselor.

**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 resources documentation. (Note: Limited scholarships are available to undergraduate international students. 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.

### ADMISSION AND FINANCIAL AID

- No immigration documents can be issued until all application materials, including financial resources 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 otherwise notified. 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 demonstrated language proficiency is required of all international applicants.

- Since Duquesne University maintains an on-campus Intensive and Semesters Abroad 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 with scores that place them in 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

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

### Admission and Re-Admission

- All international 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) or English proficiency test may qualify for conditional admission into full-time academic coursework. Therefore, while TOEFL scores are not required in order to receive an undergraduate admission, submission of TOEFL scores is strongly recommended.

### Application to English as a Second Language Program

The 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 either a short-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.

### Additional Information on International Student Applications

Please direct all inquiries and requests for additional information and application materials to:

**Department of International Affairs**

Duquesne University

601 Duquesne Union

Pittsburgh, Pennsylvania 15282-1660

Phone: 412-396-6113
Fax: 412-396-3178

Email: oia@duq.edu

### POST-GRADUATES

Post-Graduate 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 another institution other than Duquesne University. 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 readmission is being made, once the appeal has been submitted to the Office. The school then will be responsible for notifying both the student and the Office of Admissions of any decision concerning acceptance or rejection.

### TRANSFERS

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 students.
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. Honors 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.

Honors 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 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 encourages students to work together on team projects and allows 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 evening study, or 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 before deadline date.

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:

- a) graduation from a secondary school recognized as an acceptable equivalent to a U.S. high school, and
- b) 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. A 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:

- a) Duquesne University Undergraduate Application Form,
- b) Completed Duquesne University Affidavit of Support Form along with required accompanying financial resource certifications.

( NOTE Limited scholarships are available to undergraduate international students.)
- c) 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.
- d) One letter of recommendation, and
- e) Application fee in the amount specified on the application form.

Duquesne University is authorized under federal law to enroll non-immigrant foreign nationals. How-
FINANCIAL AID

A financial aid package includes scholarships, grants, loans, and work-study opportunities to help you meet your college expenses. There are several sources of financial aid available to Duquesne students:

1. State and Federal Programs: These programs provide funds based on need and academic performance. They include Federal Pell Grants, Federal Work-Study, and Federal Perkins Loans.
2. Institutional Programs: Duquesne University offers several scholarships and grants specifically for its students. These can be merit-based or need-based.
3. Outside Agencies: There are numerous external organizations that provide financial aid to students, such as private scholarships, state agencies, and non-profit organizations.
4. Student Employment: Students can earn money through on-campus employment opportunities, such as research assistantships and teaching assistantships.

Eligibility for financial aid is determined by the Financial Aid Office based on the FAFSA and other financial information submitted by the student. The deadlines for applying for financial aid vary, so it's important to check the specific dates provided by the university.

SUMMER SESSION DUQUESNE STUDENTS

Any Duquesne University undergraduate student who was granted continuance at the close of the preceding Spring Semester is authorized to register in the Summer Session. Students who were dismissed by their school at the close of the preceding Spring Semester for academic reasons may register for summer classes by permission of the Committee on Student Standing of their school. All students must have course selections approved by their academic advisor.

STUDENTS FROM OTHER INSTITUTIONS

A student of another college or university who wishes to enroll for the Summer Session and who intends thereafter to return to the original institution and is eligible to continue there, may be admitted to the Summer Session. A tear-out applications and registration form for the summer study is provided in the announcement of summer offerings, which may be obtained from the Summer School Office at mid-March. These students are considered to be Temporary Transfer Students.

GRADUATE STUDENTS

Students interested in graduate school admissions must directly contact the specific school for their program of interest (see Programs and Courses). For general questions, you may also send e-mail to gradinfo@duq.edu.

Financial Aid

Financial aid is defined as scholarships, grants, loans and part-time employment awarded to help meet the cost of education. Costs of education includes tuition, fees, room and board or a living expense, books and allowances for personal and transportation costs.

Awards can be merit-based or need-based and come through a variety of sources including Federal and State Government, Private Organizations and the University itself.

APPLICATION PROCEDURE

Students must apply for any awards by May 1 of each year. Where awards are based in whole or part on financial need, the student must also complete a Free Application for Federal Student Aid (FAFSA) each year. Since this form also constitutes application for State Grants, special attention should be paid to state grant deadlines listed with the FAFSA form for Pennsylvania, the deadline is May 1.

PROGRAMS OF AID ADMINISTERED BY THE FINANCIAL AID OFFICE

University Scholarships/Grants: Initial academic eligibility is determined by the Undergraduate Admissions Office, based on the academic credentials of the applicant pool each year. Awards are renewable for the normal course of the student’s undergraduate programs provided (1) student is full-time, (2) maintains minimum cumulative QPA required by award, (3) files a University Aid Application by May 1 each year, and (4) continues to meet any other requirements of the award.

Available to incoming Freshmen - then renewable with cumulative QPA indicated:
- Chancellor’s Scholarship: 3.50
- Founders Ment Scholarships: 3.00
- Presidential Ment Scholarships: 3.00
- Parish Ment Scholarships: 3.00
- Provost Ment Scholarship: 2.50 or 3.00
- Laval Ment Scholarship: 2.50
- Libermann Scholarship for International Students: amount varies

Available to renewal students only - with cumulative QPA indicated:
- President’s Scholarship: 3.00 and need
- Provost Scholarship: 3.00 and need
- Scholarship/ROTC: Assistance toward room and board costs for ROTC Scholarship winners.
- Duquesne Grant: These grants are available to students entering with the Fall 2000 semester and thereafter. They are awarded to students with cumulative QPA of 3.00 or need after utilizing all aid resources available.
- Auxiliary Grant: This grant is awarded to students who began prior to the Fall 2000 semester. It is renewable provided the student demonstrates need. The minimum cumulative QPA for renewal is 2.00 effective Fall 2000.
- Liz & John E. Murray, Jr. Scholarship: Every 4 years.

Loans:

The Federal Stafford Loan is need-based. In the event the student does not demonstrate need, the Federal Stafford Loan is available to undergraduate students who do not qualify for Federal Pell Grants. The Federal Stafford Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan. The Federal Stafford Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan.

OTHER SOURCES OF AID

Federal Pell Grant Program: Direct grant assistance through the Federal Government is available to undergraduates based on 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. The deadlines for each state appear in the FAFSA information. Pennsylvania’s deadline is May 1.

Scholarships:

Scholarships are available to independent students and dependent students whose parents are not eligible for the Federal PLUS Loan. The Federal Parent Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan. The Federal Parent Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan. The Federal Parent Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan. The Federal Parent Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan. The Federal Parent Loan is available to independent students and dependent students whose parents are not eligible for the Federal Parent Loan for Undergraduate Students (PLUS) Loan.
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 Vincentian 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 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 professed members of a recognized Christian and Jewish Religious and have completed a minimum of two years of full-time teaching in a Catholic School 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 Diocese 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 procedure contact the Military Science Department at the University of Pittsburgh, (412) 624-6197.

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

- John E. Albo Scholarship Based on need and academics
- Allegheny Centennial Scholarship Based on need and academics
- Allegheny County residents
- Betty V. Beaman Scholarship Need based Enrollment in School of Business
- Margaret Leach Memorial Scholarship Based on need and academics
- Clifford E. Brown Scholarship Based on need and academics
- Byzantine Rite Seminarian Scholarship For Byzantine seminarians
- Richard S. Caliguire Scholarship Child of judge from Allegheny County or Western Pennsylvania or child of any employee in Court System
- Cindy Campbell Memorial Scholarship Awarded to freshmen based on need and academics
- Anthony Caputo Scholarship Based on need and academics
- Century Club Scholarship Need based. Final year student with 3.5 QPA or higher. One male and one female student each year
- Chemistry Department Scholarship Chemistry major
- Computing and Technology Services Scholarship Based on need Computer Science or Information Technology majors
- Robert J. Costesera Scholarship Based on need Awarded to freshmen from Clairton High School

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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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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.
FINANCIAL AID

The following are awarded by financial aid and outside representatives:

1. Albert and Ana Kusma College Scholarship Based on academics, residence in Pennsylvania, and financial need.
2. Margaret and Arthur College Scholarship Based on academics and financial need.
3. Charles and Margaret College Scholarship Based on academics and financial need.
4. Jane and John College Scholarship Based on academics and financial need.
5. Edward and Margaret College Scholarship Based on academics and financial need.
6. William and Mary College Scholarship Based on academics and financial need.
7. Joseph and Margaret College Scholarship Based on academics and financial need.
8. Mary and John College Scholarship Based on academics and financial need.
9. Donald and Mary College Scholarship Based on academics and financial need.
10. Charles and Margaret College Scholarship Based on academics and financial need.
11. Richard and Susan College Scholarship Based on academics and financial need.
12. Margaret and John College Scholarship Based on academics and financial need.
13. William and Mary College Scholarship Based on academics and financial need.
14. Joseph and Margaret College Scholarship Based on academics and financial need.
15. John and Susan College Scholarship Based on academics and financial need.
16. Edward and Margaret College Scholarship Based on academics and financial need.
17. Margaret and Arthur College Scholarship Based on academics and financial need.
18. Charles and Margaret College Scholarship Based on academics and financial need.
19. Jane and John College Scholarship Based on academics and financial need.
20. Edward and Margaret College Scholarship Based on academics and financial need.
21. William and Mary College Scholarship Based on academics and financial need.
22. Joseph and Margaret College Scholarship Based on academics and financial need.
23. John and Susan College Scholarship Based on academics and financial need.
24. Margaret and John College Scholarship Based on academics and financial need.
25. William and Mary College Scholarship Based on academics and financial need.
26. Joseph and Margaret College Scholarship Based on academics and financial need.
27. John and Susan College Scholarship Based on academics and financial need.
28. Margaret and John College Scholarship Based on academics and financial need.
29. William and Mary College Scholarship Based on academics and financial need.
by fall of award year. Final determination based on essay
Duquesne African-American Accounting Scholarship
African-American accounting majors who maintain a 3.0
GPA Application and information available from the School of Business Admissions Office
Charles and Lucille Gebhardt Scholarship Awarded to Business
students of documented merit
John L. McDonough, Jr. Scholarship Awarded to students majoring in Accounting, who demonstrate financial need and academic merit, with a preference for incoming freshmen students
Edward Matzke Memorial Scholarship Awarded to qualified Business students who are sophomores, juniors, or seniors
Based on financial need and merit
Joseph Monteverde Scholarship For sophomores, juniors and seniors; Based on academic achievement 3.3 GPA, University and community service and a personal statement
James Louis Radakovich Scholarship Awarded through Delta Sigma Pi to a qualified Business student. Based on academic achievement with preference to Accounting/Information Technology majors
Patrick F. and Susan M. Spano Scholarship Awarded annually to an undergraduate Business student with financial need Administered by the Financial Aid Office
Traffic Club of Pittsburgh: Competitive Scholarship for junior or senior Supply Chain Management majors with minimum 2.75 GPA; Apply in February
James F. and Mary Ellen Will Scholarship Awarded annually to an undergraduate Business student with financial need Administered by the Financial Aid Office
School of Education
Mary Buschhoff Scholarship Need based
Katherine M. Carney Scholarship Based on need and academics Special Education major
William F. Faith Memorial Scholarship Sophomore involvement in on or off campus professional development
Heard Scholarship Preference to minority students who have completed associate degree at Allegheny, Beaver or Butler County Community College
Dr. Lawrence Roche Scholarship Juniors Based on need and academics
Mary E. Godshall Scholarship Juniors or Seniors with Special or Elementary Education majors
Valisner Foundation Scholarship Awarded to minority computer summer camp participants
School of Health Sciences
Athletic Training Scholarships and grants are available to students who are members of National, Regional and State athletic trainers’ associations Contact Department of Athletic Training for details
FINANCIAL AID
Health Management Systems Loan and scholarships for final year students Information available through American Health Information Management Association 519 N. Michigan Avenue Suite 1400, Chicago, IL 60611-1683 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. Usaco 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
Physical Assistant Financial aid and scholarships are available through the American Academy of Physical Assistant, the Physical Assistant Foundation Scholarship Program, and the Pennsylvania Society of Physical Assistants The Department of Physical 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) 897-5730
William and Mary Lowry Scholarship One is awarded this scholarship based on significant financial need RSFS fourth year students in physical assistant, physical therapy, occupational therapy and speech-language pathology and third year students in athletic training and health management systems are eligible to apply Not renewable
Jerome E. Martin Scholarship This scholarship provides support to Rongos School of Health Sciences students in the doctoral or professional level of their academic program who demonstrate academic excellence primary criteria) and financial need (secondary criteria) Institutional Employment Contracts Hospitals in southwestern Pennsylvania may provide scholarships for students in the professional phase While information may be posted by departments, the University will not initiate or coordinate these programs Students must independently seek out these sources Students are advised to seek legal counsel before signing any documents
School of Music Alfred d’Asberghe Scholarship Based on need and academics
Marc W. and Richard H. Barry Scholarship Recommended by the Dean
FINANCIAL AID
Dorothea M. Frolich Scholarship Students who are studying voice in order to pursue a career in opera
James Hunter Memorial Award Based upon musical and scholarly excellence
Ronald Lavalle Memorial Scholarship Trumpet player Need based
Robert Minarsh Scholarship Need based, academics secondary
Music Therapy Scholarship Music Therapy students
Anne K. Patton and George Locker Scholarship Based upon musical and scholarly excellence
Pauli Tombone Scholarship Based upon talent and promise of Jazz trombone student
Paul B. Reyholz Scholarship Based upon musical and scholarly excellence
Riley Piano Award One award per semester for piano excellence
Loans V Racoreto Scholarship Woodwind major Based on academics
Matty & Eddie Shiner Students studying brass instruments
Josephine Tucci 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
Hernetta Vogtwhick Cello Scholarship Cello student, minimum 3.0 GPA
Women’s Advisory Scholarship Full time student
Other Awards Contact Dean’s Office for information — Presser Scholarship, Loyar 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 Maraniouk 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 upon financial need and merit Candidates must have graduated in the top 20% of their graduating class Renewable if student maintains a GPA of 3.5/4.0 in their major and GPA of 3.0/4.0 overall Preference for graduates of Central Catholic or North Catholic High School
School of Nursing
Richard J. Bohan Memorial Scholarship For nursing students based on need and academics
Joseph William Hauser Scholarship For male nursing students based on need
Ruth Maszczenick Memorial Scholarship For nursing students, based on need and academics
James P. McQuade Family Scholarship For female nursing students based on need
Connie Miller Scholarship For RN-BSN/MSN nursing students
Adelle Petraitis Scholarship For nursing students based on need and merit
Herbert Schreiber Scholarship For junior or senior nursing students based on need and academics
Barbara Ann Verhar Scholarship For nursing students based on need
Leila Hoover Memorial Scholarship For nursing students based on need
Thomas Blase Lezakicn Scholarship For nursing students based on need
School of Pharmacy
Unless otherwise stated, apply through School of Pharmacy
Women of Galen Provided 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
Chulson Loan To provide assistance for Pharmacy students
Joel P. Laughton Scholarship Awarded by the Graduate Chapter of Phi Delta Chi in memory of Joel P. Laughton Awards made to fraternity brothers who have demonstrated academic achievement and active participation in fraternity functions
Manzote 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 GPA, and have an interest in and demonstrated support of the University athletic program
NCFA 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 J. Scarnati ’79 Pharmacy Anniversary Endowed Scholarship Awarded to deserving Pharmacy students based on merit and need
John Clother Sims Loan Revolving loan fund for
by fall of award year. Final determination based on essay.

Duquesne African-American Accounting Scholarship

African-American accounting majors who maintain a 3.0 QPA. Application and information available from the School of Business Admissions Office.

Charles and Lucille Gehrhardt Scholarship

Awarded to Business students of documented merit.

John L. McDonough, Jr. Scholarship

Awarded to students majoring in Accounting, who demonstrate financial need and academic merit, with a preference for incoming freshmen students.

Edward Maciak Memorial Scholarship

Awarded to qualified Business students who are sophomores, juniors, or seniors. Based on financial need and merit.

Joseph Monterende Scholarship

For sophomore, juniors and seniors. Based on academic achievement—3.0 QPA. University and community service and a personal statement.

James Louis Radikovich Scholarship

Awarded through Delta Sigma Pi to a qualified Business student. Based on academic achievement with preference to Accounting/Information Technology majors.

Patrick F. and Susan M. Spence Scholarship

Awarded annually to an undergraduate Business student with financial need. Administered by the Financial Aid Office.

Traffic Club of Pittsburgh Competitive Scholarship for junior or senior Supply Chain Management majors with minimum 2.75 QPA. Apply in February.

James F. and Mary Ellen Will Scholarship

Awarded annually to an undergraduate Business student with financial need. Administered by the Financial Aid Office.

School of Education

Mary Boschek Scholarship

Need based.

Katherine M. Carney Scholarship

Based on need and academics. Special Education major.

William F. Faust Memorial Scholarship

Sophomore involvement in or off campus professional development.

Harriet Scholarship

Preference to minority students who have completed associate degree at Allegheny, Beaver or Butler County Community College.

Dr. Lawrence Roche Scholarship

Juniors based on need and academics.

Marjorie Eyles Sudzura Scholarship

Juniors or Seniors with Special or Elementary Education majors.

Valpar Foundation Scholarship

Awarded to minority computer summer camp participants.

School of Health Sciences

Athletic Training

Scholarships and grants are available to students who are members of National, Regional and State athletic trainers’ associations. Contact Department of Athletic Training for details.

FINANCIAL AID

Health Management Systems Loan or scholarships for final year students. Information available through the American Health Information Management Association, 915 N. Michigan Avenue, Suite 1400, Chicago, IL 60611-1683. Phone: 1-800-432-3243.

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) 847-2872.

Daniel V. Lewis 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 Mirly Levy Scholarship

One is awarded this scholarship based on significant financial need. NSHS fourth year students in physician assistant, physical therapy, occupational therapy and speech-language pathology, and third year students in athletic training and health management systems are eligible to apply. Not renewable.

 Jerome L. Martin Scholarship

This scholarship provides support to Rangos School of Health Sciences students in the doctoral or professional level of their academic program who demonstrate academic excellence (primary criteria) and financial need (secondary criteria).

Institutional Employment Contracts

Hospitals in southwestern Pennsylvania may provide scholarships for students in the professional phase. While information may be posted by departments, the University will not initiate or coordinate these programs. Students must independently seek out these sources. Students are advised to seek legal counsel before signing any documents.

School of Music

Alfred d’Auberge 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 Hunter Memorial Award

Based upon musical and scholarly excellence.

Ronald Lavelle Memorial Scholarship

Trumpet player. Need based.

Robert Munro Scholarship

Need based, academics secondary.

Music Therapy Scholarship

Music Therapy students.

Anne K. Patton and George Locker Scholarship

Based upon musical and scholarly excellence.

Purcell Trombone Scholarship

Based on talent and promise of Jazz trombone student.

Paul B. Reinhold Scholarship

Based upon musical and scholarly excellence.

Rady Piano Award

One award per semester for piano excellence.

Louis V. Rectora Scholarship

Woodward major. Based on academics.

Matty & Eddie Shimer Students studying brass instruments

Josephine Tucci 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.

Hennetta Vowelsch Cello Scholarship

Cello student, minimum 3.0 QPA.

Women’s Advisory Scholarship

Full time student.

Other Awards

Contact Dean’s Office for information — Presser Scholarship, Loyal 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 Marasanski Endowment Awarded to an undergraduate student and 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 3.5/4.0 in their major and GPA of 3.0/4.0 overall. Preference for graduates of Central Catholic or North Catholic High School.

School of Nursing

Richard J. Belan Memorial Scholarship

For nursing students based on need and academics.

Joseph William Hausler Scholarship

For male nursing students based on need.

Ruth Mazikewicz Memorial Scholarship

For nursing students, based on need and academics.

James P. McQuade Family Scholarship

For female nursing students based on need.

Connie Miller Scholarship

For RN-BSN/MSN nursing students.

Adele Petratis Scholarship

For nursing students based on need and merit.

Herbert Schreiber Scholarship

For junior or senior nursing students based on need and academics.

Barbara Ann Verba Scholarship

For nursing students based on need.

Leslie Hunter Memorial Scholarship

For nursing students based on need.

Thomas Blaine Leskauskas Scholarship

For nursing students based on need.

School of Pharmacy

Unless otherwise stated, apply through School of Pharmacy.

Women of Galen

Provided 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.

Chilson Loan

To provide assistance for Pharmacy students.

Joel P. Laughton Scholarship

Awarded by the Graduate Chapter of Phi Delta Chi in memory of Joel P. Laughton. Awards 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 declared Pharmacy majors, 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 J. Scarnati 75th Pharmacy Anniversary Endowed Scholarship

Awarded to deserving Pharmacy students based on merit and need.

John Clothier Sims Loan

Revolving loan fund for Pharmacy students based on need.
Finnancial Aid

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

Sonja F. DeGray, 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'80 Award to Pharmacy student based on merit and need and demonstrated interest in community or long term care practice

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

Gerard J. Wolf Pharmacy Alumni Scholarship Endowed fund established by Pharmacy Alumni Association in memory of Jerry Wolf, P'49, longtime 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. Duncan, P'54, Scholarship Annual award to a deserving Pharmacy student

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

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

Louis C. DiPalo, P'75, Scholarship Annual award to a needy and worthy Pharmacy student with interest in industrial pharmacy

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 Procaccio, P'73, Scholarship Annual award to a deserving Pharmacy student

Sylva Bartos Maltinull, MD, P'57, Scholarship Annual award to a deserving Pharmacy student

Sarginger Family Scholarship Endowed fund established by Larry J. Sarginger, MD, P'75 Annual award to a deserving Pharmacy student

Lawrence G. Heller Scholarship Endowed fund established by Michael Derng, P'37, to honor Lawrence G. Heller Annual award to a deserving Pharmacy student

Samuel W. Curtis, P'50, Scholarship Annual award to a deserving Pharmacy student with demonstrated interest in independent pharmacy practice

Pharmacists Mutual Companies Scholarship Scholarships for Pharmacy students. Based on financial need and good academic standing in the Pharmacy program

Mary McPartland Beck Scholarship Award Assistance to Pharmacy students

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

Laws J. DeBone, Jr., P'58, Scholarship Assistance based on merit and need to Pharmacy athlete in professional phase of Pharm D program

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

Hofstine, P'66, Endowed Scholarship Annual award to a Pharmacy student who demonstrates need and interest in pursuing a career in industrial pharmacy

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

Dr. Robert and Patrice Gasser 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. Mauri Scholarship Students that demonstrate financial need. Strong preference will be given to students with disabilities

Athletes

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
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 and lists fees, tuition, housing charges, deposits, financial aid awards, and balance due is mailed to the student at her or his 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 Room and Board—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.

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 Preregistration, 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 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).

Exception 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 Guidelines
The purpose of Cross-Registration is to provide opportunities for enriched educational programs by permitting students at any of the ten Pittsburgh Council of 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 he/she 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 included in 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 the 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) he/she 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.

LATE REGISTRATION

Late registration may be permitted for serious cause with the approval of the student's dean and with payment of the penalty fee. However, no student may be registered and begin attending classes later than the last 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 REPORTS

Soon after the close of each semester, a grade report is sent to the permanent address of every student who is free of financial obligations to the University. The student's advisor or dean is responsible for ascertaining the accuracy and immediately reporting 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 be charged 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 443, 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 or the student must prove the financial dependence of their child upon them according to the dependency test as defined in section 352 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 his or her 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 for personal enrichment and for credit. There are no 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 their academic advisor for details on auditing. Non-degree students should contact Duquesne's School of Leadership and Professional Advancement. No courses may be completed to 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 irreversible after the last day for change of schedule. No student may read the academic record as in a regular student, no major, no degree, no free time. 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 enrolling for audit 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 to alter, 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 should supply any required written verifications as soon as possible.

The audit must be assigned and taken, 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 could 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 a D. If the temporary 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

COMPUTATION OF THE QUALITY POINT AVERAGE

Quality Point Average is the ratio expressed to the decimal thousands of the sum of A, A-, B+, B, B-, C+, C, D, and F were received to the sum of quality points earned. The Quality Point value of these grades are:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points Per Credit</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
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<td>D</td>
<td>1.0</td>
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<tr>
<td>F</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Grades H, S, P, U, N, I, and W are independent of the Quality Point System. Courses credits graded F, 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. Authorization 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 only once for a course, prescribes that a student may not move backward 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 returning. 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: 1.50 to 1.74 QPA (Subject to the jurisdiction of the appropriate Committee on Student Standing and 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 of 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 and 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)

Students who have attempted 61 or more credits and who have a QPA of between 1.85 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 current catalog of the particular graduate school.

UNDERGRADUATE GRADE POLICIES

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+: Very Good
B: Good
B-: Above Average
C+: Satisfactory
C: Average (Minimum general average for graduation)
D: 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. Faculty are to announce at the first class meeting whether or not plus and minus grades will be used in grading course work and rating academic performance of the students in their class.

A class inaugurated in plus/minus grading may not revert to non plus/minus grading, and vice versa. (The grading system for graduate students is published in the catalog of the particular graduate school.)
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 the fall, spring, and summer semesters in which to earn these 24 credits. In addition, the student-athlete must satisfy the standing policy as outlined in the Student Handbook and University catalogs
c) Student-athletes must maintain a 2.0 cumulative QPA at all times in order to be academically eligible to compete in inter-collegiate competition. QPAs for student athletes are calculated at the end of each semester"

ACADEMIC ADVISEMENT 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 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 of 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 graduate school catalogs

GRADUATION REQUIREMENTS
The candidate for a University degree must be a person of good moral character who has successfully completed all academic requirements for the degree program and, in addition, has the recommendation of the appropriate Academic Dean, filed the Application for the University Degree with the Office of the Registrar on or before the last 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 credits
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 residence 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 clear, correct, and effective prose 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 unusual 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 a week of lecture or recitation, or at least two hours 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 pre-registration. 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
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 2002-2003 term only, unless otherwise indicated.

TUITION

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Services Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
<td>$17,012.00</td>
<td>1,515.00</td>
<td>$18,527.00</td>
</tr>
<tr>
<td>University Services Fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
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Per-credit

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
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<td>59.00</td>
<td>634.00</td>
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<td>University Services Fee</td>
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<td></td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
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RATE 2 (Natural and Environmental Sciences, Pre-Pharmacy, M S Forensic Sciences)

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Services Fee</th>
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</thead>
<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
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<td>1,515.00</td>
<td>$18,687.00</td>
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<tr>
<td>University Services Fee</td>
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<td>Total</td>
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Per-credit

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Services Fee</th>
<th>Total</th>
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<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td>578.00</td>
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<td>University Services Fee</td>
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RATE 3 (Health Sciences excluding Health Sciences Special Status and Health Management Systems)

<table>
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<th>Services Fee</th>
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<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
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<td>University Services Fee</td>
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Per-credit

<table>
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<tr>
<th>Description</th>
<th>Rate</th>
<th>Services Fee</th>
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<tbody>
<tr>
<td>Undergraduate Tuition</td>
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<td>Total</td>
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</table>

RATE 4 (Music)

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<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Services Fee</th>
<th>Total</th>
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<tbody>
<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
<td>$21,142.00</td>
<td>1,515.00</td>
<td>$22,657.00</td>
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<td>University Services Fee</td>
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<tr>
<td>Total</td>
<td></td>
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</table>

Per-credit

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
<th>Services Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td>695.00</td>
<td>59.00</td>
<td>754.00</td>
</tr>
<tr>
<td>University Services Fee</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
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</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>Registration Correction Fee</td>
<td>100.00</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>Continuing Registration Fee</td>
<td>15.00</td>
</tr>
<tr>
<td>Undergraduate Pharmacy Student Activities</td>
<td>100.00</td>
</tr>
<tr>
<td>*University Services Fee</td>
<td>$59.00</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>
</tbody>
</table>

*English Language Placement Testing (ESL) fee is a one-time fee

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.
TUITION AND FEES

**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 for approval from 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.

### Tuition Remission Schedule

<table>
<thead>
<tr>
<th>Period</th>
<th>Percent of Remission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the Semester</td>
<td></td>
</tr>
<tr>
<td>First Week</td>
<td>80</td>
</tr>
<tr>
<td>Second Week</td>
<td>80</td>
</tr>
<tr>
<td>Third Week</td>
<td>70</td>
</tr>
<tr>
<td>Fourth Week</td>
<td>60</td>
</tr>
<tr>
<td>After Fourth Week</td>
<td>None</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 application procedure and has paid the matriculation deposit, the residency request is processed 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.

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 after receiving 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, be 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. Also, included with the Primary Plan is a $450 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 $550 flexible spending and 10 Meals per week with refundable spending.

Residence Halls are closed during vacation periods (Thanksgiving, Christmas, Easter, and Spring Break).

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

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single per week</td>
<td>$4,332.00</td>
</tr>
<tr>
<td>Double per week</td>
<td>$5,385.00</td>
</tr>
</tbody>
</table>

### Summer Session-Room and Board (Summer '02 rates)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single per day</td>
<td>$28.50</td>
</tr>
<tr>
<td>Double per day</td>
<td>$23.50</td>
</tr>
</tbody>
</table>

### Tuition and Fees

The University charges all amounts which the student has previously paid pursuant to this Housing Agreement shall be refunded with the exception of $300.00 non-refundable room reservation fee and $100.00 penalty.

1. If the student notifies the Assistant Director of Residence Life after classes begin that the student has decided to move out of the 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 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.

2. 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 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.

**FINANCIAL MATTERS**

All charges for tuition, fees, room, and board, less financial assistance authorized by the University, are payable at registration. For your convenience, MasterCard, VISA, and Discover can be utilized to pay tuition and fees.

### BILLING PROBLEMS

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

a) Balance Forward, Credits, Payments, Deposits - Student Accounts Office
c) Student Finance Program (Deferred Payment Plan) - Student Accounts Office

d) Housing Reservations and Housing Charges - Office of Residence Life

**STUDENT FINANCING PROGRAM**

(All priority 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.

**Ten-Month Payment Plan**

The University is offering a 10-month payment plan through Tuition Management Systems (TMS). The basic plan is:

1. The parent pays TMS $125.00 to enroll in the plan. Enrollments must be completed prior to August 31st.

2. The parent makes 10 monthly payments to TMS making allowances for any financial aid. TMS then forwards payment to the University on a monthly basis.

**BAD CHECKS**

If a student who is a charge to the University cashes a bad check, the University will charge the student an NSF fee of $20.00 for each returned check. If the check is returned NSF, the student will not be allowed to register for the next semester. If the student fails to occupy an assigned room or make written notification of the room, the student will not be allowed to register for the next semester.

**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.

**CASHING CHECKS**

A student who cashes a bad check at the Cashier’s Office will be charged an NSF fee of $20.00 for each returned check. If the check is returned NSF, the student will not be allowed to register for the next semester.

**STUDENT FINANCIAL PROGRAM**

(All priority 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 funding for up to 50% of the current semester charge less financial aid and authorized other payments. To be repaid to the University by ten equal installments. Interest is charged at the rate of 2/3 of 1% per 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.
Part V: Student Life, Programs, Services, and Organizations

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 Student Judicial Affairs, the Office of Residential Life, the Office of Student Affairs, the Office of Student Life, and the University Outreach Office. These departments are briefly described below.

ATHLETICS
The Duquesne University Department of Athletics sponsors 20 NCAA Division I sports including baseball, men's and women's basketball, men's and women's crew, men's and women's cross country, football (Division I-AA), men's golf, women's lacrosse, nfc (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 to 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 assists students with University parking information and in forming carpools. PATH bus schedules are available. Bus passes are sold in the Information Center of the Union.
- Off-Campus Housing Information: Up-to-date listings of unaffiliated rooms, apartments, houses and “roommate needed” situations are available. Apartment directories are also available.
- Commuter Message Center: If someone needs to get a non-emergency message to a student 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 family programming.
- Commuter Assistant Program: This program is a support network of upperclassman students who serve as advisors and provide resources for new commuters.
- CSA 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. to 5:30 p.m. and Friday from 8:30 a.m. to 4:30 p.m. For 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, providing programming and administrative support for all recognized student organizations, publishes the Activities Calendars, and coordinates the Duquesne University Volunteers (DUV), 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 all phases of campus programming, arranges all scheduling of events in the Duquesne Union, coordinates all programming for student organizations and produces and presents a balanced 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 all aspects of planning and implementing various programs. The DPC offers students a chance to be creative and to gain effective leadership, communication, planning skills. The Duquesne University Volunteers is the organization which promotes all volunteer activities of Duquesne students.

OFFICE OF JUDICIAL AFFAIRS
The Office of Judicial Affairs protects 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. Legal technologies are minimized and attention is focused on the student development process.

OFFICE OF RESIDENCE LIFE
The Office of Residence Life is committed to creating an environment in which the student may grow and develop as a total person. Its philosophy and programs are based on the belief that the Living Learning Center experience is an important part of the University education. The purpose of the Office of Residential Life is to facilitate 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 GPA of below 2.5, except those residing with their parents or relatives, are required to live in one of Duquesne's Living Learning Centers.

The Office of Educational Development provides additional information about educational development opportunities within the framework of the Duquesne University Mission Statement. The Office provides tutoring and consulting in leadership development, program processes, and interpersonal skills, sponsors educational and social programming, promotes a sense of community through life-long friendships, develops alumni involvement in undergraduate programming and activities, and fosters learning outside of the classroom.

B. PROGRAMS: COMPREHENSIVE STUDENT ADVISEMENT
Students pursuing undergraduate studies are assigned to a student advisor who will work with them throughout their undergraduate career at the University. The student advisor, located in the school in which the student is majoring, acts as the point of contact for the student in his/her interaction with all officials throughout the University.

Advisors are trained to assist students in developing and maintaining academic schedules, in facilitating financial aid, and in interacting with professionals in other fields who will assist them in their social, psychological and spiritual development. To help maximize their success and satisfaction with university life, students are encouraged to meet with their advisors regularly.
Students and graduates of Duquesne University have their advisor regularly and use of the career resources Early use of this available to them the full services and programs of changing vocational goals may seek career planning under the University's Internship Program, which academic credit for approved preprofessional work Undergraduate/graduate students may earn academic credit for approved preprofessional work under the University's Internship Program, which is administered by the Career Services Center The part-time and summer employment program is important to students in financing their education and to those seeking practical experience to augment college training Part-time and summer jobs in the community are also available through the center Students interested in campus employment should contact the Office of Human Resource Management

UNIVERSITY COUNSELING CENTER

The University Counseling Center offers personal, career, and academic counseling to all Duquesne students Short and long-term personal counseling are provided for a variety of reasons such as difficulty adjusting to college life, personal and/or emotional distress Services are confidential and psychiatric consultation is available as needed Testing and career counseling are available for helping students in choosing a major and/or deciding on an occupation and for academic difficulties A variety of support groups and workshops are held throughout the academic year on topics of current interest such as time and stress management, test anxiety, eating disorders, cultural diversity, and others upon request Information about applications for national qualification examinations (CLEP, MAT, GRE, LSAT, GMAT, PRAXIS, etc.) is also available Please contact the University Counseling Center at (412) 396-6204/6208 for any additional information The Counseling Center is located in Room 308 of the Administration Building Please call (412) 396-6204 for an appointment or to obtain more information

HEALTH SERVICE

Medical/Nursing
The Health Service provides for the evaluation and treatment of illness and injury Staff The medical/nursing professional staff consists of Registered Nurses, Certified Nurse Practitioners and Board Certified Physicians

Immunizations
Duquesne University has established a Pre-Matriculation Immunization Policy. All incoming undergraduate students (Freshmen, Transfers, Fellows, and Second-Degree) are required to provide documentation of immunizations. Immunization requirements will follow guidelines from the Centers for Disease Control. Students must provide this documentation or registration for class will not be permitted

In-Hospital Care
University physicians are attending staff physicians at the Mercy Hospital of Pittsburgh. In emergency situations, students are transported and/or referred to the Mercy Hospital of Pittsburgh. At that time, University physicians are consulted regarding the student's treatment and disposition

Location
The Health Service is located on the second floor, Towers Living Learning, (412) 396-1650

Eligibility
All full-time registered students. Cost of treatment or diagnostic procedures by non-University physicians, clinics or hospitals must be assumed by the students, their family or their medical insurance. This includes laboratory work performed in the Health Service and gynecological laboratory services such as PAP smears.

All health records are confidential and will not be released without the student's permission

INSURANCE

- It is strongly recommended that each student obtain some form of health insurance. The University provides a Student Health Insurance Plan designed to meet the needs of students. It is typically priced lower than individual health insurance policies. Inquiries about health insurance should be directed to Risk Management (412) 396-6677

- The University is not responsible for medical expenses resulting from participation in intramural sports

EMERGENCY

- A Crisis Coordinator is available 24 hours a day to assist in any type of emergency resulting from psychological problems

- Call Campus Security (412) 396-4747. They will provide assistance and will contact Paramedics, Health Service and the Crisis Coordinator as needed

STUDENT LIFE, PROGRAMS, SERVICES, AND ORGANIZATIONS

RETENTION OFFICE

The Retention Office, under the direction of the Executive Vice President for Student Life, coordinates the efforts of the entire University community to ensure that the personal and educational experience for all students is the best possible. Policies, programs, services and opportunities are constantly reviewed, refined and improved in an effort to meet the legitimate needs of students consistent with the mission and goals of the University

UNIVERSITY ARCHIVES

The University Archives is the center for the documented history of Duquesne University. It provides a central location of information about University Schools, departments, people, buildings, and a variety of many other activities. The Archives seeks to promote knowledge of the heritage and growth of the University through the years. Members of the Duquesne community and the community at large are encouraged to utilize the many collections for research or special interest.

The University Archives is located on the first floor of the Gumberg Library. Phone (412) 396-6323

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. These specialized services include furnishing pre-arrival information to accepted students, facilitating compliance with U.S. Immigration and Naturalization Service (INS) requirements, assisting in academic and cross-cultural adjustment through initial arrival and extended orientation programs, promoting and supporting 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 supports the University's strong commitment to international education as a valued component of the overall mission of the institution.

MICHAEL 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 career 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 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 social and academic skills they need to be successful learners 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 beginning in the summer prior to starting their freshman year. These services continue if the student wishes until graduation. 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 a.m. to 4:00 p.m., and evening hours are available. For an initial interview, call (412) 396-6662.

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

Commuter 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 large 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 resident students are automatically members of the Residence Hall Association and are encouraged to attend meetings, functions, etc. sponsored by the organization.

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 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 fraternity to the administration, faculty, alumni and student body. The IFC works with the university administration to assist in regulating the Men's Greek system.

INTERFRATERNITY COUNCIL

The Interfraternity Council (IFC) serves as the official governing body of the interfraternity system of the university. The Council is composed of the national fraternity representatives and monitors the volunteer activities of all individual students and 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.

PANHELLENIC ASSOCIATION

The purpose of the Panhellenic Association is to develop, maintain, and support sorority life and the Panhellenic Council (PHC) which serves as the 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 sorority to the administration, faculty, alumnae and student body.

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 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.

Fraternalities

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 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 excellence and leadership achievement. There are normally cumulative grade point and leadership requirements for membership in these organizations.

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.

THEATRE

The Red Masque provides 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 accrue from a drama program. Any Duquesne student is eligible for membership.

MINORITIES/AMERICAN EXPERIENCE

The Duquesne Magazine is a literary publication university-based performing ensemble in the United States, the Tamburitzans is named after the stringed instrument prevalent in many of the cultures which the group actually 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 student performers. The group travels extensively throughout the U.S. during its August-to-June performing season, presenting an average of 80 shows. Vacancies are filled through an annual audition process. Experience in folk arts performance is helpful, but not required, performers with ballad, rap, 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, inquiries 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) 396-5083. tamburitzans@duq.edu

THEATRE

The Red Masque provides 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 accrue from a drama program. Any Duquesne student is eligible for membership.

MEDIA ORGANIZATIONS

WDUQ

WDUQ 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 and Code of Student Rights, Responsibilities and Conduct

The Student Handbook contains information about the University which concerns 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 yearbook, highlights student life on campus, including student organizations, varsity, club, and intramural sports, and events on campus. 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.

L'Espérance is the University yearbook, which highlights student life on campus, including student organizations, varsity, club, and intramural sports, and events on campus. Membership is open to all students.
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, wherever 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 at any of the following Campus Ministry locations: 102 Administration Building; the Broderick 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, they encourage students to cultivate the habit of lifelong 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 ennobled 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.
UNIVERSITY PROGRAMS AND COURSES

program sponsors seminars and workshops which provide information about health professional schools, careers in the health professional and the development of personal skills needed for a health professions career. University and college core requirements offer each student the liberal arts education that provides a solid foundation for a career in a health profession. Most health professional schools prefer their applicants to have had a broad and well-rounded academic background with a diverse set of life and health-oriented experiences.

It is important for each student to register with the Pre-Health Office prior to the first day of academic year and preferably upon entering the university. At that time, each student will meet with a pre-health advisor to plan a tentative four-year academic program and other activities that are best suited for the individual student. Students in the program must complete the Pre-Health Professions Core Curriculum described below and declare a major. Students are urged to select a major in any area that is of the most interest to the student.

Generally, students submit their applications during the summer following the junior year in order to matriculate at a health professional school in the fall following graduation. Duquesne's Pre-Health Professions Program provides each student with guidance throughout the comprehensive application process. Gaining admission to a health professional school is dependent on a variety of factors that include meeting standard criteria for overall grade point average, science grade point average, and admissions test score. Each qualified student is interviewed and evaluated by members of the Pre-Health Professions Committee. This evaluation along with evaluations submitted to the Pre-Health Office by faculty and others provides the basis for overall evaluation and recommendation sent to the schools to which the student is applying.

The program maintains affiliations with Temple University School of Medicine and the Lake Erie College of Osteopathic Medicine (LECOM). Admission into the Duquesne Medical Scholars Program in association with Temple University School of Medicine and the "3+4 Program" in association with LECOM must be completed prior to matriculation at Duquesne. For students interested in the management of health delivery, the Pre-Health Professions Program in combination with the Rangos School of Health Sciences offers a degree track for pre-health students in the department of Health and Human Services.

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

120/121 Basic ESL Grammar 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

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 basic English for non-native speakers.

Advanced & Special Purpose Courses 0-2 Cr Hrs/Week

130 Advanced ESL Grammar 4

131 Advanced 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 - IITA 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 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 on its Advisory Board internationally renowned academics, scientists, and professionals. Serving on the board with Dr. Cyril Wecht are Dr. Henry Lee, Dr. Michael Baden, Dr. Michael Wehrer, Dr. Victor Weind, Attorneys Johnnie Cochran, F. Lee Bailey, Harry Litman, Barry C. Scheff, James E. Starks among others. For more information, please call the Admissions Office at 1-800-456-0590

Duquesne University Writing Intensive Requirement

University Core Curriculum

University Writing Intensive Requirement

Graduation Requirements
To receive the Degree of Bachelor of Arts or Bachelor of Science in the College of Liberal Arts, a student must fulfill the following requirements:

A minimum of 120 semester hours of course credit.
The last 30 hours must be taken at the University.

Major program (see departmental listings)
Minor program (see departmental listings)

An overall minimum cumulative quality point average of 2.0. A minimum cumulative quality...
point average of 2.0 both in the major and in the minor.

Removal of I and F grades both in the major department and in required courses.

Pre-registration (on form SR1) for B.A. or B.S. degree requires field submission of application for the degree on form provided by the Registrar, before the deadline published in the current University calendar. No student is considered a degree candidate prior to submission of this form and official registration for the degree.

COLLEGE GENERAL REQUIREMENTS

Students enrolled in the College of Liberal Arts for the B.A. or B.S. degree are required to complete the 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 202 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.

History/Economics 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 loads 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 advisers.

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 minor that offers students who choose to complete an undergraduate minor to all students across the University. This program introduces students to the rapidly expanding areas of scholarship focused upon women, men, and gender that have developed within the academy that is transforming scholarship in virtually every academic discipline today. The program promotes open dialogue directed toward a vision of a world community that embraces diversity, justice, peace, freedom — values central to a liberal education.

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 adviser's 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 the 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 students 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 not 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 in Humanities, or Social Sciences. A concentration requires a minimum of 30 credit hours, and a maximum of 39 hours. Courses must be chosen from courses 200 and above.

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.

JOIN B.A./M.A. PROGRAM

The College of Liberal Arts and the Graduate School of Business Administration offer a unique 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 peremptor 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 redevelopment, 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 and confrontation between artists and photographers.

ART HISTORY

COURSE DESCRIPTIONS

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 1870 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 on 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

432 American Painting and Sculpture
3 cr


442 American Architecture
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 city 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 an art-related area 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 inspired civilizations, the Graeco-Roman world. As such, it offers the student insight into the broadest aspects of human nature and their development. 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.

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 (211-221) 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 the 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, Art History, 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).
CLASSES COURSES IN ENGLISH
(NO GREEK OR LATIN REQUIRED)

121 General Etyymology 3 cr
A study of Greek and Latin roots to facilitate the comprehension of English

122 Etyymology of Scientific Terms 3 cr
Introduction to Greek and Latin elements of scientific terminology

123 Classical Mythology 3 cr
The major myths of Greece and Rome with attention to contemporary interpretations and the influence on art and literature

230 Ancient Theatre 3 cr
An examination of the origins and development of ancient tragedy and comedy

231 Ancient Epic 3 cr
A study of ancient epic literature with particular attention to the techniques of oral and literary composition

232 Contemporary Literature and Classics 3 cr
An investigation of the influence of ancient myths on 20th century French, German, Italian, English and American literature

233 Ancient Sature 3 cr
Investigation of the satirical element with reference to the writings of Lucan, Lucretius, Horace, Persius, Martial, and Juvenal

242 Ancent Law 3 cr
A survey including the contributions of the Greeks and of the Romans to the development of law

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

245 Greek History 3 cr
Greek history and culture from earliest times up to the death of Alexander of Macedon

246 Helenistic History 3 cr
Mediterranean history from the death of Alexander until the accession of Octavian and the establishment of the Roman Principate

DEPARTMENT OF COMMUNICATION & RHETORICAL STUDIES

Chairperson
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 relational 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 keystone. 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/Interpersonal 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...
DEPARTMENT OF COMMUNICATION

C  Specialization dependent on advisement
9 hours
   Corporate Communication/Interpersonal
   Public Relations
   Information Management in Organizations
   Integrated Marketing Communication
   Management Communication
   Media Organizations
   Rhetoric and Argumentation
   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

II  Major in Media Communication
A  Five core courses 15 hours
B  Media Communication Requirement 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

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

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 credit hours.

UNDERGRADUATE CURRICULUM

101 Scientific Presentation & Writing 3 cr
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 cr
Develops communicative skills necessary to analyze, develop, and perform effectively in public speaking situations that confront the educated person.

103 Introduction to Interpersonal Communication 3 cr
Develops communication skills in a variety of relationships such as friendships, romantic relationships, work relationships, and family relationships.

111 Introduction to Media Arts 3 cr
Familiarizes students with equipment applications and technology, and provides basic hands-on experience in media production.

114 Introduction to Intercultural Communication 3 cr
This course will provide a foundation for your improved intercultural communication.

131 Voice, Diction & Dialects 3 cr
Trains students in the voice and diction skills required of professionals.

177 Language for Journalists 0 cr
Teaches students the basic rules of English grammar.

182 Photography Digital Imaging (majors only) 3 cr
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 cr
Dramatic criticism and theater history are combined with the pragmatic considerations of play production.

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

202 Business & Professional Communication 3 cr
Focuses on one-to-one, group, and individual communication in business, government, industrial, and not-for-profit or service organizations.

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

204 Professional Communication in Integrated Marketing 3 cr
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 cr
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 on social constructions of reality, and (4) major theories and research through which we attempt to understand this impact.

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

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

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

251 News Analysis 3 cr
Examines current issues and the world’s trouble spots regarding histories, economies, ethnic difference and enmities, religious differences, and political systems.
DEPARTMENT OF COMMUNICATION

COURSE DESCRIPTIONS

**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 the rhetoric of religious symbols and their 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, digitizing 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 resolving 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 to use evidence 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 iconism into overall class understanding.

**432 Media Production & Graphic Design** 3 cr
Examines the print publication process 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 multi-faceted 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, & 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
Examines communication and epistemology. The course includes study of the role of communication in the philosophical and ethical thought of ancient, medieval, and modern philosophers. The course looks at communication as a means of knowledge and truth, interpretation, representation, and speech acts.

461 Rhetorical Theory 3 cr
Provides a theoretical introduction to classical and modern rhetorical theory. Students read and discuss texts from various disciplinary perspectives. The course offers an introduction to the history and theory of rhetorical thinking and its application to public communication.

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

471 Civic Journalism Reporting 3 cr
Teaches interpretive reporting of urban affairs.

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 both 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 role 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 WdSR 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 an 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, slide shows, video programs, etc.) commissioned by University or community organizations.

498 Internship 1-6 cr
Provides a supervised observation/service 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 economic decisions in understanding challenging issues facing society.

The economics major concentrates on building a logical foundation that is applicable to a wide range of real-world problems. The flexibility of this preparation will make the student more adaptable to changing opportunities after graduation and provides excellent preparation for graduate study in a variety of disciplines.

1. 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 study 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 insight 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, non-profit 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) or Business Economics Track) (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 analysis, 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 wide variety of 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 and place, and it 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 to aesthetic objects, to 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 clarity 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.B. 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, Imagination 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. More information can be found at the Department of English website.

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 period 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 and 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), and
- Enough other elective English courses to accrue the necessary 18 credits

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 theater 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 two courses 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 at different course numbers than those listed. The course content will not be affected.

210W Introduction to the Novel 3 cr
Introduction to the varieties of short fiction, emphasizing critical analysis and reading

212W Introduction to the Short Story 3 cr
Introduction to the varieties of short fiction, emphasizing critical analysis and writing

213W Introduction to Drama 3 cr
A historical survey of dramatic forms from the classic to the modern

215W Survey, Literature of Western World I 3 cr
A historical survey of western literature through the Renaissance

216W Survey, Literature of Western World II 3 cr
A historical survey of western literature since the Renaissance

217W Readings in Non-Western World Literature 3 cr
Representative Asian and African literature, studied in translation

218W Introduction to Film 3 cr
A basic introduction to the technology and art of the motion picture

219W 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

218W 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

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

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 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, Simms, Rowson, 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 English Literature 1890-1945 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 twentith century theater

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

454 Contemporary American Fiction 3 cr
Works of selected fiction

456 American Literature 1900-1945 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 transcend 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
494 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 Theater Management Practicum 1-3 cr
Students learn the business of theater by working with the Pittsburgh Irish & Classical Theatre Company in the areas of marketing, house management, actor contracts, equity laws, public relations, ticket sales, etc. Admission by permission only

THTR 498 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

DEPARTMENT OF HISTORY

Chairperson
Jean F. 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 WRTG 211 before their third and fifth semesters. The following requirements must also be met: a) six credits at the 100-level including either HISTY 103 or HISTY 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 towards the History major.

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 at least one course at the 100-level and one 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.

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

Honor 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
3 The completion of HISTY 311 with a grade of B+ or better
4 Two letters of recommendation from History professors attesting to the student's ability to do advanced research and writing
5 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

U.S. History I and II
The History of Ancient Law
Historical Evolution of Western Law
Constitutional History of the United States
American Law in Socio-Historical Perspective

Joint Degree Program
B.A. in History/B.S. 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 B.A. in History and a B.S. 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
3 cr
The creation and development of American society, ideals, and institutions from colonial settlements to 1877

104 History of the United States since 1877
3 cr
The historical development of American institutions, ideals, and society since 1877

113 Western Civilization I
3 cr
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
3 cr
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
3 cr
An examination of the origins and development of ancient tragedy and comedy

242 Ancient Law
3 cr
A survey including the contributions of the Greeks and of the Romans to the development of law

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

245 Greek History
3 cr
Greek history and culture from earliest times up to the death of Alexander of Macedon

246 Hellenistic History
3 cr
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
3 cr
The consolidation of the Roman imperial structure from Augustus to the death of Commodus

248 History of the Late Roman Empire
3 cr
Roman history from the accession of Severus to the death of Justian

249 Egyptian Civilization
3 cr
A survey of Egyptian history and culture from the predynastic 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
3 cr
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
3 cr
From the 17th century through the early 20th century, Asian societies faced the challenge of European incursions into their region. This course will examine how the Asian peoples confronted the western challenge and the impact that this early globalization had on their politics, economics, and societies

256 Asia in the 20th Century
3 cr
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
3 cr
Development of society and state in Russia from their origins to the Bolshevik Revolution of 1917

258 Russia in the Twentieth Century
3 cr
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 to Communism
3 cr
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 reassertion of national sovereignty after the end of the Cold War

270 Latin America from Conquest to Independence
3 cr
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
3 cr
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
3 cr
An examination 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
3 cr
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

289 American Law in Socio-Historical Perspective
3 cr
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

307 History of Science
3 cr
This course will concentrate on the developments in science since the 17th century. It will examine the development of modern scientific thought and the impact that scientific discoveries have had on the modern world

311W Writing History
3 cr
A Seminar course that focuses on the skills necessary to the practice of history. Students will work on increasing 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
3 cr
A survey of the archaeology of Greece from pre-history to the Roman period

316 Archaeological History of Athens
3 cr
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
3 cr
A survey of the archaeology of Italy from pre-history to the middle fourth century A.D.

318 Archaeological History of Rome
3 cr
An investigation of the topography and monuments of Rome from pre-history through Constantine

319 Archaeological History Seminar
3 cr
Possible topics include the Bronze Age Aegean, the development of Vase Painting, the Etruscans, etc.

320 Colonial America
3 cr
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
3 cr
An exploration of what caused American colonists to erupt into 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 aegis 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-Historical Perspective 3 cr
Law shapes the social order and social order and society shapes the law. This course will discuss the legal principles that the first Americans brought from England and explore 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, economies, 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 and consequences While the military aspects of the conflict will be discussed in detail, the human, political and economic consequences that occurred during these years will be discussed in detail

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 western 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 also will be examined

386 The American South 3 cr
This course examines a distinctive region and its culture. 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.
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 the diplomatic history of Latin America since the mid-19th century. Topics covered will include Manifest Destiny and the US-Mexican War, the Spanish-Cuban-American War of 1898, the construction of the Panama Canal, US 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 US invasion of the Dominican Republic, the Contra War in Nicaragua, NAFTA, Latin American migration to the US, 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 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.

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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INTERNATIONAL RELATIONS CONCENTRATIONS

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HIST 421, HIST 422, POLSC 321

HIST 254, HIST 258, HIST 261, HIST 271, HIST 277, HIST 347, HIST 394, HIST 421, HIST 422, HIST 446, HIST 449, HIST 450, HIST 479
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

MATHEMATICS PROGRAM

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 liberally educated person 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, allows 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 (or 114), 116, 135, 215, 315, 402W, and 415W. A grade of C or better must be achieved in all mathematics core courses. Remaining courses must be taken at the 300 level or above.
- **Extra-disciplinary Requirements (B.A. and B.S.)**
  - Scientific Programming C++ (COSC 160)
  - Additional B.S. Mathematics Requirements
  - Applications component: At least one course chosen from 301 and 308.
  - Theoretical component: At least two courses chosen from 403W, 412W, 416W, and 420.

REQUIREMENTS FOR A MINOR

The minimum requirements for a minor in mathematics are 115 (or 114) -116 and 9 additional hours in courses numbered 135 or above including at least one course numbered 300 or above.

MATHEMATICS COURSES

**101 College Algebra**
- 3 cr.
  - Algebraic expressions, equations and inequalities. Algebraic, exponential, and logarithmic functions and graphs. Simultaneous equations and inequalities. Credit is not allowed for both 101 and 104.

**104 Calculus with College Algebra and Trigonometry I**
- 4 cr.
  - Initial topics of 115 with topics from 101 and trigonometry integrated as needed. Credit is not allowed for both 101 and 104.

**111 Calculus for Non-Science Students**
- 3 cr.
  - Limits, continuity, differentiation of algebraic, exponential, and logarithmic functions. An introduction to integration. Credit is not allowed for both 111 and 115 or for both 111 and 114. Prerequisite: 101 or equivalent.

**114 Calculus with College Algebra and Trigonometry II**
- 4 cr.
  - Remaining topics of 115 with topics from 101 and trigonometry integrated as needed. Credit is not allowed for both 111 and 114 or for both 114 and 115. Prerequisite: 104.

**225 Introduction to Biostatistics**
- 3 cr.
  - Descriptive statistics, sampling distributions, confidence intervals, hypothesis testing, non-parametric methods, and correlation and regression methods. Credit is not allowed for both 125 and 225. Prerequisite: Evidence of college level algebra skills.

**310 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.

**320 Fundamentals of Statistics**
- 3 cr.
  - Applications of the definite integral, parametric equations, polar coordinates, sequences, and series. Prerequisites: 114 or 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. Prerequisites: 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. Prerequisite: 135 and 215.

**340 Problem Solving Seminar**
- 1 cr.
  - Solution and discussion of problems from the Putnam Examination and other sources. Prerequisite: Completion 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, compactness, and connectedness, normal and regular 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.
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

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 nine additional hours numbered 200 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 concepts. Emphasis is on using JavaScript for web interactivity and forms processing. Prerequisites: COSC 150 or QSMS 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 services, concepts and issues in electronic publishing, ethics and security issues. Prerequisite: COSC 030 or equivalent.

Additional B.S. Computer Science Requirements: 25 hours at the 300 level or above. Included must be 480W and at least one additional 9 hours at the 400 level or above.

Mathematics/science Requirements
B.A. 115-116 (Calculus I & II) and 135 (Discrete Mathematics)
B.S. At least 30 credits of mathematics and science
including Mathematics At least 15 credits including 115-116 (Calculus I & II) and 135 (Discrete Mathematics), and either 225 (Biostatistics) or 301. (Introduction to Probability and Statistics I)

Science: At least 12 credits in courses acceptable for a major in the science discipline chosen and including at least one sequence chosen from the three options: BIOL 111-113 & 112-114, or CHEM 121-122, or PHYS 211-212.

REQUIREMENTS FOR A MAJOR

The student may choose to pursue a major in computer science with a program leading to a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.). The B.A. program, which requires a minimum of 30 semester hours in computer science, allows a great deal of flexibility for persons interested in combining the major with a strong minor or double major in a non-science discipline. Within the B.A. track students can choose a sequence of elective courses leading to a concentration in Web System Development. The B.S. program, which requires a minimum of 40 semester hours in computer science, is recommended for students interested in scientific applications or study in computer science at the graduate level. Requirements for all majors are as follows:

Computer Science Core: 150 or 160, 215, 220, 300, and 325W (each with a grade of “C” or better)

Additional B.A. Computer Science Requirements: 15 additional hours at the 300 level or above (at least 6 of which must be taken at the 400 level). Students choosing the Web System Development concentration must include 401, 430, and 450 in their program.

THE McANULTY COLLEGE OF LIBERAL ARTS

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: 215.

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, arithmetic state machines, and digital integrated circuits. Prerequisites: 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. Prerequisites: 220.

325W Operating Systems and Computer Architecture 3 cr
Organizations 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, 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 graphs, 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 comparisons. Prerequisite: 300.

445W Systems Analysis and Software Design 3 cr
Methods and tools for the structuring 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-
DEPARTMENT OF MODERN LANGUAGES AND LITERATURES

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, are 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 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). Thus, 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.

DEPARTMENT OF MODERN LANGUAGES AND LITERATURES

Carla E. Lucente, Ph.D.

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REQUIREMENTS FOR THE MAJOR

The Department offers major programs in Spanish and Modern Languages. In addition, it offers a minor in French, German, Italian, as well as non-major courses 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 major, courses are required at the Department office.

Dual Degrees

B.A. in Education - A full 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 - This four-year program offers students a Bachelor of Arts in Spanish and Bachelor of Science in International Business. Students will obtain 144 credits (18 credits per semester) including internships in the United States and abroad.

490 Independent Field Study

Under the supervision and guidance of the instructor in the foreign countries and the permission of the Department chairperson.

495 Professional Language Internship

A paid or unpaid internship consisting of 100-120 hours of supervised work with permission of the Department chairperson.

French

101 Elementary French I

Fundamentals of oral and written French Weekly lab attendance.

102 Intermediate French II

Emphasis on the written and oral aspects of the language. Weekly lab attendance. Prerequisite French 101 or its equivalent.

115 French for Musicians

2 cr

202 Intermediate French II

4 cr

301 French Conversation and Composition

Prerequisite: 202

302 French Conversation and Composition

Prerequisite: 301

206 Intensive French Conversation and Composition

Prerequisite: 301

The equivalent of 301 and 302 fulfill the prerequisite for all courses above this level. Prerequisite French 202

302 or 306 in the prerequisite for all courses above this level.

321 Phonetics

Mechanics of phonation with comparative English-French application to phonemic analysis of French

325 Realism and Naturalism

Theories of the two movements in the latter part of the 19th Century

326 Existentialism

An overview of the philosophical aspects of the 20th Century

329 17th Century French Literature

Emphasis on 17th Century French prose and poetry. Will also include a play of Corneille, Racine, and Molière.

331 18th Century French Literature

An overview of the Salle des lumières.

493 The Theatre of the Absurd

5 cr

German

101 Elementary German I

Fundamentals of oral and written German Weekly lab attendance.

102 Elementary German II

Fundamentals of oral and written German Weekly lab attendance. Prerequisite German 101.

115 German for Musicians

2 cr

For majors in music

202 Intermediate German II

4 cr

An emphasis on the oral and written aspects of the language. Prerequisite German 102.

461 17th Century French Theatre

An overview of the theatre of the grand siècle. Emphasis on Corneille, Molière, and Racine.

468 19th Century Modern Period

Beginnings of the influence of the Revolution on French literature, through the literary movements of the Century.

471 20th Century French Theatre

From Jules Romains to Ionesco and the Theatre of the Absurd.

475 East and West in Film and Print

5 cr

480 Directed Readings

1-6 cr

Readings of literary texts under close faculty supervision, for majors only and only with written permission of the Department chairperson.

493 The Theatre of the Absurd

5 cr
### DEPARTMENT OF MODERN LANGUAGES AND LITERATURES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>01</td>
<td>German Conversation and Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>02</td>
<td>German Conversation and Composition II</td>
<td>3 cr</td>
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<tr>
<td>06</td>
<td>Intensive German Conversation and Composition II</td>
<td>6 cr</td>
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<tr>
<td>20</td>
<td>German Culture and Civilization</td>
<td>3 cr</td>
</tr>
<tr>
<td>60</td>
<td>German for Business</td>
<td>3 cr</td>
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<tr>
<td>19W</td>
<td>The European Union</td>
<td>3 cr</td>
</tr>
<tr>
<td>60</td>
<td>German Literature from the Middle Ages to the Baroque</td>
<td>3 cr</td>
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<tr>
<td>61</td>
<td>German Literature from the 18th Century to the 20th Century</td>
<td>3 cr</td>
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<tr>
<td>75</td>
<td>East and West in Film and Print</td>
<td>3 cr</td>
</tr>
<tr>
<td>01</td>
<td>Elementary Italian I</td>
<td>4 cr</td>
</tr>
<tr>
<td>02</td>
<td>Elementary Italian II</td>
<td>4 cr</td>
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<tr>
<td>199</td>
<td>Italian for Lawyers</td>
<td>2 cr</td>
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<tr>
<td>15</td>
<td>Italian for Musicians</td>
<td>2 cr</td>
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<tr>
<td>32</td>
<td>Intermediate Italian II</td>
<td>4 cr</td>
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<tr>
<td>36</td>
<td>Advanced Italian Conversation and Composition</td>
<td>6 cr</td>
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<tr>
<td>38W</td>
<td>Italian Culture and Society</td>
<td>3 cr</td>
</tr>
<tr>
<td>39W</td>
<td>Italy and the European Union</td>
<td>3 cr</td>
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<tr>
<td>314/315</td>
<td>Individual Study</td>
<td>Var cr</td>
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<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>400W</td>
<td>Italian Cinema</td>
<td>3 cr</td>
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<tr>
<td>401W</td>
<td>Contemporary Italian Cinema</td>
<td>3 cr</td>
</tr>
<tr>
<td>419W</td>
<td>The European Union</td>
<td>3 cr</td>
</tr>
<tr>
<td>301</td>
<td>Japanese Conversation and Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>302</td>
<td>Japanese Conversation and Composition II</td>
<td>3 cr</td>
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<tr>
<td>306</td>
<td>Intensive Spanish Conversation and Composition</td>
<td>6 cr</td>
</tr>
<tr>
<td>302 or 306</td>
<td>is a prerequisite for all courses above this level</td>
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<tr>
<td>310W</td>
<td>Spanish Culture and Society</td>
<td>3 cr</td>
</tr>
<tr>
<td>311W</td>
<td>Latin American Culture and Society</td>
<td>3 cr</td>
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<tr>
<td>317</td>
<td>Modern Tradition Post Modern Turn</td>
<td>3 cr</td>
</tr>
<tr>
<td>322</td>
<td>The Nineteenth Century Novel</td>
<td>3 cr</td>
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<tr>
<td>324</td>
<td>The Generation of 98</td>
<td>3 cr</td>
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<tr>
<td>325</td>
<td>Don Juan as a World Literary Figure</td>
<td>3 cr</td>
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<tr>
<td>326</td>
<td>Contemporary Spanish-American Fiction</td>
<td>3 cr</td>
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<tr>
<td>327</td>
<td>Spanish Culture and Civilization</td>
<td>3 cr</td>
</tr>
<tr>
<td>328</td>
<td>Modern Spanish Theatre</td>
<td>3 cr</td>
</tr>
<tr>
<td>329</td>
<td>Revolt and Change Spanish-American Literature</td>
<td>3 cr</td>
</tr>
<tr>
<td>330</td>
<td>Theatre of the Golden Age</td>
<td>3 cr</td>
</tr>
<tr>
<td>360</td>
<td>Spanish for Business</td>
<td>3 cr</td>
</tr>
<tr>
<td>361</td>
<td>Medical Spanish</td>
<td>2 cr</td>
</tr>
<tr>
<td>362</td>
<td>Spanish for Lawyers</td>
<td>2 cr</td>
</tr>
<tr>
<td>399W</td>
<td>Spain and the European Union</td>
<td>3 cr</td>
</tr>
<tr>
<td>400W</td>
<td>Spanish Cinema</td>
<td>3 cr</td>
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<tr>
<td>401</td>
<td>Spanish Literature from the Cid through the Siglo de Oro</td>
<td>3 cr</td>
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<tr>
<td>402</td>
<td>Spanish Literature from the 18th Century to the Present</td>
<td>3 cr</td>
</tr>
<tr>
<td>419W</td>
<td>The European Union</td>
<td>3 cr</td>
</tr>
<tr>
<td>453</td>
<td>Trends in Latin American Literature</td>
<td>3 cr</td>
</tr>
<tr>
<td>460</td>
<td>The Quixote</td>
<td>3 cr</td>
</tr>
<tr>
<td>461</td>
<td>Spanish Literature since the Civil War</td>
<td>3 cr</td>
</tr>
<tr>
<td>462</td>
<td>Avant-Garde Spanish-American Theatre</td>
<td>3 cr</td>
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<tr>
<td>463</td>
<td>Lorca and the Generation of 1927</td>
<td>3 cr</td>
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<tr>
<td>464</td>
<td>The Literature of the Siglo de Oro</td>
<td>3 cr</td>
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<tr>
<td>465</td>
<td>Literature of Spanish Romanticism</td>
<td>3 cr</td>
</tr>
<tr>
<td>466</td>
<td>The Age of Enlightenment</td>
<td>3 cr</td>
</tr>
<tr>
<td>467</td>
<td>Advanced Spanish Grammar</td>
<td>3 cr</td>
</tr>
<tr>
<td>468</td>
<td>Women's Voices in Hispanic Literature</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
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, CD-ROM, DVD, and more. Development of titles for such diverse avenues of distribution requires graphic, 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, this introductory course explores cultural diversity and accessibility issues and the impact of interface design, color, typography upon those 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 216 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 solid 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 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.

COSC 103 JavaScript Programming 3 cr
Students use JavaScript as a basis for understanding object-based 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...

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 make two and three dimensional models come to life.

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, this introductory course explores cultural diversity and accessibility issues and the impact of interface design, color, typography upon those 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 216 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 solid 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 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.

COSC 103 JavaScript Programming 3 cr
Students use JavaScript as a basis for understanding object-based 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...
DEPARTMENT OF PHILOSOPHY

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

Introductory Courses

Core 105 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. This course is required for all students in the university. It counts as the first course for the major and minor in philosophy.

Core 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.

Core 107 Medical Ethics 3 cr

Ethical questions that arise in medical care and research are examined. Possible topics include: doctor/patient relation, informed consent, and euthanasia.

Core 108 Business Ethics 3 cr

Ethical questions which relate to business are examined, in theory and in practice.

Core 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.

Core 200 Introduction to Phenomenology 3 cr

The phenomenological method originated by Husserl will be explored. Possible topics may include intentionality, 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 philosophical perspective.

214 Philosophy of Sex 3 cr

This course provides an introduction to some of the basic themes and texts, both traditional and contemporary, related to the philosophical study of sexuality.

219 Introduction to Christian Thought 3 cr

This course studies the meaning of the Incarnation of Christ and other basic Christian symbols. It analyzes these in relation to the nature of religious knowledge, the problem of evil in biblical experience, and phenomenology of the holy.

220 Philosophy of Death and Dying 3 cr

This course provides an introduction to traditional and contemporary themes and texts related to this topic. In asking how human beings can be happy in the face of death, it emphasizes the art of living.

255 Philosophy of Technology 3 cr

This course examines philosophically how our lives are shaped by technology and the relation of technology to science, art, and politics.

260 Philosophy of Law 3 cr

This course includes a study of major legal traditions and considers topics such as: justice, ethics and law, legal reasoning, and philosophical issues in evidence and procedure.

DEPARTMENT OF PHILOSOPHY

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 encouraged 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.

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 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 freehand drawing to digitally composed pieces, fusions of graphics and text, industrial graphic design, and advertising.

Two multimedia electives (300 or 400 level)
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, Plutarch, Kant, Hegel, Nietzsche, Heidegger, and Adorno.

ADVANCED COURSES are designed for majors, minors, and other serious students of philosophy. Prerequisites: at least one 100 or 200-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 pre-registration. 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 the light of Aquinas’s psychology, epistemology, and theory of apperception, and will cover topics such as love, will, affectivity, and emotion.

423 Aristotel Philosophy of Action 3 cr
This course emphasizes an analysis of Aristotle’s various discussions of Praxis in both his theoretical and practical writings.

424 Adorno’s Aesthetic Theory 3 cr
This course explores in great detail one of the most dynamic and influential texts in philosophy of art and art theory, Adorno’s Aesthetic Theory.

DEPARTMENT OF POLITICAL SCIENCE

434 Senior Honors Seminar - Hermeneutics 3 cr
This course focuses on one of the most outstanding exponents of hermeneutics and a master of hermeneutic prose, 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 theses.

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, debt 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.

210 The Politics of Public Finance 3 cr
This course is an introduction to the politics and mechanics of the budgeting and appropriating processes. Thus course examines the key actors, institutional procedures, actor strategies, and policy products in these areas, considered at the federal, state and local levels of governance.

235 Mass Media and Politics 3 cr
Studies 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
Examines 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 government responds 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 16th century; 318 considers theorists from the late 16th to the late 19th centuries.

319 Government and Politics of Eastern Europe 3 cr
An examination of the political and cultural challenges in democratization and market economy transition.

321 Government and Politics of the Independent States 3 cr
An examination of the political and cultural challenges in democratization and market economy transition.

322 Government and Politics of Russia 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 PHILOSOPHY

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.

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120 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.

122 Saint Thomas Aquinas Treatise on Man 3 cr
Original texts will be read and discussed in the light of Aquinas’ psychology, epistemology, and theory of interpretation, and will cover topics such as love, will, affectivity, and emotion.

23 Aristotle Philosophy of Action 3 cr
This course emphasizes an analysis of Aristotle’s various discussions of Praxis in both his theoretical and practical writings.

24 Adorno’s Aesthetic Theory 3 cr
This course explores in great detail one of the most dynamic and influential texts in philosophy of art and art theory, Adorno’s Aesthetic Theory.

DEPARTMENT OF POLITICAL SCIENCE

Chairperson
Charles T. Rubin, Ph.D.

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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.

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DEPARTMENT OF POLITICAL SCIENCE

Chairperson
Charles T. Rubin, Ph.D.

Political Science studies the ideas, institutions, behavior, and goals of human collective life. Political science attempts to understand the political life and how it is a necessary part of the study of human existence, since politics is an expression of our deepest human concerns. It examines how and why government responds to trade, investment, debt 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 and mechanisms of the budgeting and appropriating processes. This course examines the key actors, institutional procedures, actor strategies, and policy products in these areas, considered at the federal, state, and local levels of governance.

235 Mass Media and Politics 3 cr
Studies the role the media play in politics and the impact of the media on politics.

THE McANULTY COLLEGE OF LIBERAL ARTS

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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.

10 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.

120 Introduction to Political Economy 3 cr
An introduction to government, politics, culture, and economic policy in Europe and Japan.

124 International Relations 3 cr
A study of politics between states including sovereignty, balance of power, war, and economies.

125 American Foreign Policy 3 cr
A study of American foreign policy since World War II.

126 Elections, Campaigns, and Voting Behavior 3 cr
Examine the characteristics of political beliefs and participation.

129 American Political Thought 3 cr
Examination of diverse perspectives on American political thinking.

122 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 16th century, 318 considers theorists from the late 16th 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, ethnicity, 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.

408 Theory of Comparative Government 3 cr
Analyzes current theories of power, the state, social movements, and democracy. Focuses primarily on countries other than the United States.

412 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.

419 Ethnicity Politics and Policy 3 cr
Investigates ethnic identity, ethnic political movements and parties, ethnic conflict and genocide, and conflict resolution policies. Focuses primarily on countries other than the United States.

420 Contemporary Political Thought 3 cr
A study of the central controversies in political thought during the 20th century.

422 American Defense Policy 3 cr
Studies the institutions, policies, and decision making of the American defense establishment. Permission of instructor required.

424 Women and Politics 3 cr
Examines the political socialization and behavior of women in the U.S., and the public policies particularly affecting or affected by women. Permission of instructor required.

426 American Politics and Policy 3 cr
This course studies the political environment for public policy analysis in the United States at the federal level. Permission of instructor required.

427 Quantitative Analysis 3 cr
Examines quantitative research methods for the analysis of political phenomena.

430 Internship in Practical Politics 4 cr
A work experience in government offices. Permission of department required.

436 Advanced Seminar 3 cr
An in-depth consideration of selected topics in the discipline. Open to seniors and advanced juniors only. Permission of instructor required.

450 Workshop-International Studies 3 cr
Democratization, cultural conflict, weapons proliferation, economic development, and international organizations in the third world. Permission of instructor required.

499 Directed Readings in Political Science 1-3 cr
An opportunity for selected students to engage in independent study and research. Permission of instructor required.

THE McANULTY COLLEGE OF LIBERAL ARTS

DEPARTMENT OF PSYCHOLOGY

Chairperson
Russell Walsh, Ph.D.

The undergraduate program of the Department of Psychology is designed to: 1) introduce students to the fundamental concepts, issues, and interest areas of psychology understood as a natural science; 2) to help students critically evaluate this manner of understanding psychology and to show them how these concepts, issues, and interest areas may be reformulated when psychology is understood as a human science; 3) to prepare professionally oriented students for advanced study and for careers in the human services. To these ends, the department offers a wide variety of courses, some of which explore issues from a natural science perspective, some from a human science perspective, and all from a historical perspective. While the Department believes that psychology understood as a human science is the most viable means of doing psychology, it realizes its responsibility to expose students to other approaches.

REQUIREMENTS FOR THE MAJOR

The Psychology major involves 30 credits. There are 5 required courses—Introduction to Psychology (Psych 103), Systematic Psychology (Psych 220), Introduction to Existential-Phenomenological Psychology (Psych 230W), Psychology of Personality (Psych 326W), and Philosophical Roots of Psychology (Phil 213). Psychology of Personality and Introduction to Existential-Phenomenological Psychology are designated as writing-intensive courses. Majors who wish to pursue graduate study in psychology are strongly advised to take six additional credits, e.g., learning theory, physiological psychology, and experimental research, through cross registration at other universities. Finally, it is recommended that majors enroll in a hospital or community practicum for credit, or do volunteer work in a neighborhood clinic. Three credits earned in practicum count toward the 27 required psychology credits. An additional three credits in practicum may be earned above and beyond the required minimum of 27. A minimum of 15 credits in psychology exclusive of practicum must be taken at Duquesne University for the major. Prospective majors should consult their advisors concerning the procedure for declaring a major.

REQUIREMENTS FOR THE MINOR

Requirements for a minor are Psych 103, 225, 328, and any two of the following: 226, 340, 352, 361. (Other courses may be taken for the minor with the permission of the department head.) A minimum of nine credits in psychology must be taken at Duquesne University for the minor.

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 Existential Phenomenological Psychology 3 cr
Introduction to a human-science alternative to psychology as a natural science. Prerequisite for 356 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 Judaeo 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
Theoretical and empirical explorations of aesthetic experience.
DEPARTMENT OF SOCIOLOGY

400 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 required. Repeatable once.

DEPARTMENT OF SOCIOLOGY

Chairperson
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 psychology 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 a five-year program which leads to both a BA in sociology and an MA in Social and Public Policy. Qualifying students may apply in their third year for this program. The fourth year curriculum overlaps the two programs as these courses count for both undergraduate and graduate credit. The MA degree is then completed during the fifth year. Leaving Duquesne with two degrees in social science can provide students with a significant advantage on the job market, or a rapid track toward a Ph D.

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

THE McANULTY COLLEGE OF LIBERAL ARTS

MAJORS may choose one of two areas of concentration: Criminal Justice or Social Justice & Policy. Students may also choose to major in Sociology without a concentration. In this case, they may choose the remaining fifteen credits from any of the Department's course offerings (with the exception of 450 and 451—see below).

Courses within the major should be scheduled in consultation with the student's faculty mentor. In addition, the major must complete Math 125 Fundamental of Statistics, offered by the Department of Mathematics and Computer Science.

This course may also apply to your University Core requirement.

Credits earned in 450/451 Fieldwork I and II will not count toward the thirty-four required credits, unless the student is pursuing the Social Policy concentration. If the student is pursuing the Social Policy concentration, then six credits of Fieldwork will count.

CONCENTRATIONS IN THE MAJOR

Social Justice & Policy

This concentration is designed for the student who is interested in applying sociological theory and research to an understanding of social policy and its applications. It prepares the student for advanced study or careers in such areas as urban planning, local government, human services, and gerontology. The student may be interested in applying to Duquesne's Graduate Center for Social and Public Policy. The successful applicant may apply six credits of 400/500 level courses toward the Master's degree.

Required courses:

- 101 Survey of Sociology
- 400W/500W Social Policy and Practice
- 409/509 Correctional Policy and Practice
- 456W Senior Seminar Criminal Justice

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:

- 101 Introduction to Criminal Justice
- 105 Introduction to Peace and Justice
- 301W Contemporary Sociological Theory
- 314 The American Judicial System
- 321 White Collar and Corporate Crime
- 369 Race, Gender and Crime
- 456W Senior Seminar Criminal Justice

The remaining twelve credits must 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, which 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 to 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 in Gerontology, the student must complete 101 Survey of Sociology and five of the following courses:

- 209 Biology of Aging
- 206 Social Problems and Social Policy
- 207 Sociology of Health and Illness
- 208 Racial and Ethnic Groups
- 301W Contemporary Sociological Theory
- 409/509 Correctional Policy and Practice
- 415/515 Health, Illness and Social Policy
- 416/516 Minorities and Public Policy

Note: The above courses may be taken only during the student's senior year.

Criminal Justice

This program provides the student with the opportunity to develop knowledge and skills in preparation for advanced study or for career pursuits in areas including probation, parole, law enforcement, investigation, corrections and research.

Required courses:

- 101 Survey of Sociology
- 105 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

The remaining six credits may be selected from any of the following:

- 404/504 Social Ecology and Political Culture
- 405/508 Population
- 409/509 Correctional Policy and Practice
- 415/515 Health, Illness and Social Policy
- 416/516 Minorities and Public Policy

Specializations and concentrations are available in the following areas:

- Gerontology
- Social Policy
- Correctional Policy and Practice
THE GOETT ENDOWED SCHOLARSHIP

At the end of each academic year, the Sociology Department awards a merit scholarship to an outstanding sociology major. The amount of the award varies from year to year. The criteria for merit are scholarship, service and leadership, and commitment to sociology. Interested students are required to apply between January 15 and April 20. Details on eligibility and procedures may be secured from the Sociology Department office or by visiting the department website at www.sociology.duq.edu

THE SOCIOLOGY CLUB

Sociology majors are invited to join the Sociology Club of Duquesne University. The Club meets regularly through the year to enhance the culture of our major on campus, and schedules special events such as the annual “Professional Day” and field trips to sites of sociological interest. The requirements for membership are as follows:

- The student must be in a sociology course.
- A minimum of 2.00 GPA
- A genuine interest in Sociology

ALPHA KAPPA DELTA

Sociology majors who meet the following requirements may be invited to join the Delta Chapter (Pennsylvania) of Alpha Kappa Delta, International Honorary Sociology Society. Each semester the files of sociology majors are reviewed and invitations sent to eligible students. The student must be at least a junior with a cumulative GPA of 3.00, a 3.00 QPA in sociology, and a minimum of twelve credits in sociology.

COURSE DESCRIPTIONS

101 Survey of Sociology

An introduction to the basic concepts, processes, and institutions which are the subject matter of sociology as an academic discipline. Required for all Sociology Majors

102 Introduction to Criminal Justice

An introduction to the criminal justice system, including police, courts, and community-based corrections. Required for the Criminal Justice Concentration

104 Cultural Anthropology

An introduction to a major sub-field of Anthropology which explores the origins, development and diversity of human cultures

105 Introduction to Peace and Justice

An introduction to conceptual, practical, and spiritual dimensions of peace and justice. Peace and justice are treated as the by-products of intra-psychic, interpersonal, situational, organizational, regional, national, and global conflict

200W Classical Sociological Theory

An intensive review of basic sociological principles and a study of selected classical theories and schools of thought. Prerequisite 101. Required for all Sociology Majors

201 Sociological Methods I

A discussion and application of the techniques and research procedures used in sociological research. Prerequisite 101. Required for all Sociology Majors

202 Sociological Methods II

A study of quantitative research methods used in social science. Emphasis is placed on the application and interpretation of statistics using computerized statistical packages such as SPSS. Prerequisites 101 and 201. It is highly recommended that MATH 125, Fundamentals of Statistics be completed before taking this course. Required for all Sociology Majors. All students must be concurrently enrolled in SOC 202L

202L Sociological Methods II Lab

This lab provides guided computer training in data set construction and analysis. Prerequisites 101 and 201 and concurrent enrollment in SOC 202

203 Sociology of Aging

An examination of the social and cultural forces that impact the process of aging and the statuses and roles of the aged in human societies

205 Person and Society

A study of the person’s interaction with societal groups, organizations and institutions. Prerequisite 101

206 Social Problems and Social Policy

A study of major social problems in American contemporary society, including poverty, violence, and environmental issues. Required for students in the Social Policy Concentration

207 Sociology of Health and Illness

What social and cultural factors affect the health of human populations? This study examines the social organizations and social processes related to well-being and sickness in various societies. Prerequisite 101

208 Racial and Ethnic Groups

A comprehensive survey of roles performed and problems faced by racial and ethnic groups. Prerequisite 101

209 Social Stratification

The class system, with a primary focus on the U.S. Prerequisite 101

210 Sociology of Sex and Gender

The study of how conceptions of masculinity and femininity are influenced by social institutions, how gender shapes the self, behavior and social relationships, and the characteristics of gender inequality. Prerequisite 101

211 Social Deviance

A study of the forms and consequences of social deviance and law. Prerequisites 101 or 103

212 Drugs and Society

Drug use as a socially constructed deviant activity. The political, practical, and personal effects of substance use on society and individuals

213 Criminology

A study of sociological explanations of criminal behavior. Prerequisite 101

214 Helping Process

An analysis of the helping relationship, both as a formal professional intervention and as an informal response to anyone in need. Knowledge of the techniques of helping and their application are among the goals of the course

215 Mass Media and Society

The study of the role of mass media in contemporary societies by examining the social, economic, political, and cultural contexts within which they operate. Prerequisite 101

216 Delinquency and Society

The nature of juvenile delinquency. Theories regarding the causes of juvenile delinquency. Evaluation of policies designed to lessen juvenile delinquency. Prerequisite 101 or 103

217 Social Movements

A study of sociological theories of social movements, exploration of contemporary examples. Prerequisite 101

218 Treatment and Community Corrections

Community and institutional rehabilitative programs are considered in terms of treatment methods used and their effectiveness. Prerequisite 103

225 Family Systems

A study of the family institution and its interaction with other community institutions

264 Police and Society

The occupation of policing, an analysis of the role of police in the community, and an examination of critical issues in law enforcement. Prerequisite 103

300W History of Social Thought

An introduction to Western thought which predates the formal discipline of Sociology and an examination of the social context which led to the development of these ideas. Prerequisite 101 or permission of the Department. This course OR 301W is required of all Sociology Majors

301W Contemporary Sociological Theory

A study of selected contemporary theories and schools of thought. Prerequisite 101. This course OR 300 is required of all Sociology Majors

310 The Law and The Juvenile Offender

A survey of those aspects of the legal system that relate to the identification, processing, and rehabilitation of the juvenile offender. Prerequisite 103

311 The Law and The Adult Offender

The legal procedure from arrest through sentencing emphasizing applicable state statutes and U.S. Supreme Court cases. Prerequisite 103

314 The American Judicial System

Development of local, state and federal court systems, the operation of these courts, and the issues in administration and case law. Prerequisite 103

315 Socialization and the Life Span

An examination of the socialization process throughout life, with a particular focus on the adult years. A study of stability and change in statuses and roles of age groups. Prerequisite 101

318 Sociology of the City

This course provides an overview of the patterns, problems and persistence of cities. We study the relationships between cities and society, including how this relationship has changed as societies have developed. Prerequisite 101

320W Organizations

A critical examination of organizations in contemporary society. Emphasis is placed on the sociological interpretations and critical/analytical understandings of contemporary social organization. Prerequisite 101 or 103
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 lifelong education including some emphasis 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 and constitutional changes, migratory patterns, social institutions and political mobilization. Contemporary problems and issues are evaluated within this context. Prerequisite 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. Prerequisite 101 and senior standing

450/451 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 for 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 21 completed credits in the major. Required for Sociology Majors with a Criminal Justice concentration SENIORS AND MAJORS ONLY

496 Special Topics 3 cr
These courses cover new and noteworthy topics of sociological interest. Prerequisite 101

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 203. In addition, four courses in Art History including ARTHY 111, 112, and 332

REQUIREMENTS FOR THE MINOR
Five courses in Studio Art, including FINAR 101 and 103

101 Design I 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.

120 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 analyses of compositions. An introduction to graphic art principles is included.

130 Painting I 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.

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

230 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

235 Introduction to Computer Art 3 cr
Students will be engaged in expression 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 developing theory regarding computer generated art and design will be studied, and students will be encouraged to analyze their own content, decisions, and techniques. Prerequisites 101 or 103

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. Prerequisites 103 and 235

316 Intaglio Printmaking 3 cr
This course provides students with the opportunity to explore printmaking media such as woodcut and lino cut. Prerequisite 101 or 103

317 Lithography 3 cr
The planographic medium of lithography is explored in this printmaking course. Prerequisites 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 205 recommended)
DEPARTMENT OF THEOLOGY

DEPARTMENT OF THEOLOGY
Chairperson
James P. Hanagan, 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, 1 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 or 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 are courses introducing students to specific areas or questions in theological studies.

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.

230 The Church 3 cr
The major influences that have shaped the Christian community, and how they provide insights for contemporary church and society.

315 Prophetic Literature of The Old Testament 3 cr
A study of classical Israelite prophecies which was characterized by sharp protests 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.

322 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 is required.

494 Directed Readings 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.

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.

274 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.

331 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
concepts as expressed in significant worlds in film and literature

375 Special Topics in Theology 3 cr
An opportunity to pursue a particular interest of professor and students

473/573 Spiritual Theology 3 cr
A study of the theological dimension of Christian spirituality, in its major historical manifestations

494 Directed Readings in Religious and Theological Topics 1-3 cr
Independent Study Department permission required

498 Seminar in Theology 3 cr
A critical analysis of selected topics in theology or of selected works by outstanding theologians, restricted to theology majors in their final year Department permission required

ETICAL STUDIES

245 God, Money, and Power 3 cr
A study of the religious and ethical meaning of wealth and power in human life, both personally and socially

248 Religion and Ecology 3 cr
A study of the relation of the human to the rest of the earth community and the role religion has played in defining it

351 Sexuality, Sex, and Morality 3 cr
An analysis of the nature of sex and sexuality in Christian thought, the relevance of these concepts for contemporary moral life

353 Health Care Ethics 3 cr
A study of practical and theoretical issues in the ethics of health care

356 Special Topics in Ethics 1-3 cr
An opportunity to pursue a particular interest of professor and students

441/541 Foundations of Moral Theology 3 cr
A study of the principles of moral conduct based on the New Testament and on the teachings of the Church

447/547 Special Issues in Health Care Ethics 3 cr
An advanced course exploring selected theoretical and practical concerns in health care ethics and applied issues. Prerequisite: 353 or 546

449/549 War and Peace in Christian Perspective 3 cr
An analysis of Christian teaching of the moral permissibility of using violence and participation in war from biblical times to the present

WORLD LITERATURES PROGRAM
Coordinator
Wallace S. Watson, Ph.D.

This program is offered jointly by the Departments of Classics, English, and Modern Languages and Literatures. It is designed to give the student an awareness of the historical and cultural frameworks in which the literatures of classical Greece and Rome, Europe (both Great Britain and the continent), Asia, Africa, and the Americas have evolved, their influences upon each other, and an in-depth understanding of selected major literary works from these cultures

REQUIREMENTS FOR THE MAJOR
24 credits. These must include 490 Topics in World Literature, at least 6 additional credits selected from the World Literature Core courses listed below, and 15 credits from qualifying courses in Classics, English, and Modern Languages and Literatures — including at least one course from each of these departments.

The program must include at least one course studying literature in its original language other than English. (For appropriate language prerequisites, see listings for Classics and Modern Languages and Literatures.)

Course selections for the major should be made on the basis of a coherent plan of study, and approved in advance by the World Literatures Coordinator

REQUIREMENTS FOR THE MINOR
15 credits. These must include 6 credits from the Core. The remaining 9 credits must be selected from qualifying courses in at least two of the participating departments

CORE COURSES
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

Bayer School of Natural and Environmental Sciences

Administration
Dean: David W. Seybert, Ph.D.

HISTORY
The School was created in 1994 as a result of the division of the Departments of Biological Sciences, Chemistry, and Biochemistry, and Physics from the former College of Liberal Arts and Sciences. In 1995, the School was named in honor of the Bayer Corporation, which chose to support the School for its outstanding accomplishments in both the natural and environmental sciences. The School offers undergraduate and graduate programs and includes the Center for Environmental Research and Education.

DEGREES
The Bayer School of Natural and Environmental Sciences (BSNES) offers Bachelor of Science degrees in Biological Sciences, Biochemistry, Chemistry, Environmental 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.

GRADUATION 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

Th e 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 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 programs.

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 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 programs.

QPA

Students must maintain a quality point average (QPA) of 2.00 or better to remain enrolled in the School.

BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

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 a student's admission 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 in the minor for graduation. Refer to Departmental listing for specific minor requirements.

Sequential Courses

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

BSNES Temporary Transfers (Summer Classes)

No course taken by a student in the BSNES as a Temporary Transfer at another institution may count 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, (s)he 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 should be approved by the student's academic advisor prior to taking a course. If the student has not yet reached 60 credits, (s)he may take the class at a two-year college.

CLEP and Advanced Placement

(Refer to page 9 of the Undergraduate Catalog)

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.

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 the degree requirements in the major department, as well as admission requirements of the law school of their choice.

Liberal Arts Engineering

Students who intend to prepare for a career in engineering may enter a 3-2 binary program that Duquesne University maintains with Case Western Reserve University in Cleveland, Ohio, and the University of Pittsburgh. Under the guidance of a faculty mentor, students will follow a three-year program at Duquesne University, then enter an engineering program at Case Western Reserve University or the University of Pittsburgh. Upon completion of the program at Case Western Reserve University or the University of Pittsburgh, students will be awarded the B.A. and B.S. degrees in their respective fields.

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 that provides 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...
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/MS and the Master of Science degree programs offer a unique five-year Bachelor of Science in biology, chemistry, or physics and a Master of Science in education joint degree program.

Students enroll in the BS/MS in the Departments of Biological Sciences, Chemistry, and Environmental Science 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/MS and by meeting all department and School 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 Student Advisor.

THREE-YEAR BACHELOR'S DEGREE

For more information contact the Office of Admissions or the Dean's Office.

MAJORS

Biochemistry

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 Selzer, Ph D

Assistant Professors

David J Lampe, Ph D

Lisa Ludvico, Ph D

Jana Patton-Vogt, 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 an introduction to the principles, methods, and applications of biology.

The Biology Department is committed to providing a curriculum that is designed to meet the needs of students interested in a variety of career paths. Majors in Biological Sciences are required to complete 38 credits in Biology, including 12 credits of required courses and 26 credits of electives.

DEPARTMENT OF BIOLOGICAL SCIENCES

Chairperson

Richard P Elmon, Ph D

Professors

Peter Castric, Ph D

Richard P Elmon, Ph D

John F Stolz, Ph D

Steven Thomas, Ph D

REQUIREMENTS FOR THE BS IN BIOLOGICAL SCIENCES

Biology Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Total 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>
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<tr>
<td>Biology II</td>
<td>4 cr</td>
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<tr>
<td>Biology II Lab</td>
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<tr>
<td>Cell and Molecular Biology</td>
<td>3 cr</td>
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<tr>
<td>Genetics</td>
<td>3 cr</td>
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<td>Microbiology</td>
<td>3 cr</td>
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<tr>
<td>Physiology</td>
<td>3 cr</td>
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<td>Organismal concentration</td>
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<tr>
<td>Microbiology</td>
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<tr>
<td>Lab I Experimental</td>
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<td>Lab II, III or IV</td>
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<tr>
<td>Biology Electives</td>
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<tr>
<td>Courses in CONCENTRATIONS</td>
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<td>General Genetics</td>
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<td>Microbial Genetics</td>
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<td>General Microbiology Immunology</td>
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<td>Physiology</td>
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<td>Microbial Physiology</td>
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<td>Comparative and Environmental Physiology</td>
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<td>Endocrinology</td>
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<td>ORGANISMS pick one</td>
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<td>Microbial Ecology</td>
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<td>Plant Biology</td>
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<td>ELECTIVES</td>
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<tr>
<td>May be chosen from courses listed above, other departmental courses, Biochemistry (CHEM 401), under-graduate research</td>
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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.

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 & recitation.

201 Biology of Microbes

2 cr

Examination of microbes as to what they are, how they grow, when they may be controlled, what their relationships to other living things are, why 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, animal virology are presented. This course is required for Health Sciences students only.

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 knowledge with exposure to pathophysiological conditions and clinical applications. The focus during this first semester is on body organization, movement and control mechanisms. 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 procedures. 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. Prerequisites: C or better in 207/208. Lecture

210 Anatomy and Physiology Laboratory 1 cr
Continuation of 208. Prerequisite: 209 (or concurrent registration). Laboratory

MAJOR COURSES

All courses for majors are also open to non-majors, providing that individual course prerequisites/background expectations are satisfied.

111 Biology I Cells, Genetics, Development 4 cr
Study of living systems at the molecular, cellular, and multicellular levels. An introduction to cell chemistry, cell structure and function, energetics, inheritance, reproduction and development. This course and Biology II provide basic information and concepts necessary to understanding living systems and their interrelationships. Must be taken with 113 Lecture.

112 Biology II Diversity, Ecology, Evolution 4 cr
This course is an introduction to the scientific study of living systems at the organismal, community, and ecosystem levels by surveying diversity in the five kingdoms, ecology and evolution. 111 is not a prerequisite to 112. Must be taken with 114 Lecture.

131 Genetics 3 cr
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

132 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.

135W 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 homoeostasis in health and disease. Prerequisite: BIOL 212 or permission of the instructor. Lecture.

136 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. Prerequisite: BIOL 212 or permission of the instructor. Lecture.

139 General Microbiology 3 cr
Survey of the microbial world, metabolism, biosynthesis, regulation, growth, structure, and function. Also included is an introduction to the fundamentals of immunity and virology. Recommended for students majoring in biology and pre-baccalaureate students. Prerequisite: BIOL 212 Lecture.

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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 lab course sequence 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 research), characteristics 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. Prerequisites: 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 and 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 spectrum of skills and understandings that contemporary physiological research encompasses. Prerequisites: 315 or 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: BIOL 370W Laboratory and recitation.

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. Prerequisite: 1-4 credits of 416H and application and acceptance into the honors program in Biology.
441H Honors Research 1-4 cr
Laboratory research under the direction of a faculty mentor leading to a written honors thesis (BIOL 413H, Honors Thesis) and a presentation of the thesis research. Prerequisite 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 on 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, immunology, antigen-antibody reactions, immunogenetics, immunopathology, and immunodeficiencies. Prerequisite BIOL 212 or permission of the instructor. Lecture

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 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.

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 wastewater 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, 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 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 the 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 course in microbiology, CHEM 222 or 222H 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 signals 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, mostrotriphosphatase pathway, dacylglycerol pathway, protein kinases and growth factors. Prerequisites BIOL 212 and permission of the instructor. Lecture

475 Neurobiology 3 cr
This course will survey topics found in the science of neurobiology. Neurobiology is the study of the nervous system, its development, its function and its diseases. Topics will include evolution and development of the nervous system, electrophysiology of neurons, human neuroanatomy, anatomy and function of the sensory systems and molecular genetics of the nervous system. The focus of the course is on how a scientist discovers the inner workings of the brain. A vast array of living organisms have brains. Science has shown that the study of “simple” brains can tell us a great deal about how all brains function, including human brains. As such, in this class, we will study aspects of the neurobiology of many different organisms. Prerequisites BIOL 212 or permission of instructor.

480 Readings in Biology I 1 cr
Discussion and critical evaluation by faculty and students of significant papers from the recent research literature

481 Readings in Biology II 1 cr
Discussion and critical evaluation by faculty and students of significant papers from the recent research literature

490 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.

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.

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457W 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

475 Neurobiology 3 cr
This course will survey topics found in the science of neurobiology. Neurobiology is the study of the nervous system, its development, its function and its diseases. Topics will include evolution and development of the nervous system, electrophysiology of neurons, human neuroanatomy, anatomy and function of the sensory systems and molecular genetics of the nervous system. The focus of the course is on how a scientist discovers the inner workings of the brain. A vast array of living organisms have brains. Science has shown that the study of "simple" brains can tell us a great deal about how all brains function, including human brains. As such, in this class, we will study aspects of the neurobiology of many different organisms. Prerequisites BIOL 212 or permission of instructor.

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Discussion and critical evaluation by faculty and students of significant papers from the recent research literature

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DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

REQUIREMENTS FOR THE CHEMISTRY AND BIOCHEMISTRY MAJORS

All students must take 121, 122, 203L, 204, 211, 212L, 308, 311, 322, 401, 402, 403, 425, 475 Biology 111/113, 112/114, Mathematics 115, 116

Chemistry Major

B.A. Chemistry 120 cr All students must take 211, 212, 211L, 212L, 311, 322, 401, 402 Physics 201, 202

B.S. Chemistry 126 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, 275, Math 215, 225, Physics 211, 212 and four environmental science electives

Biochemistry Major

B.A. Biochemistry 121 cr All students must take Chem 211, 212, 211L, 212L, 311, 322, 401, 402 and Physics 201, 202, and Math 225

B.S. Biochemistry 128 cr All students must take Chem 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, 503, 504, 534, 540, 548, 581, 582, 585, 586, 587 Course descriptions for 500 level courses on web at www.science.du.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. Physical 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 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 chemical equilibrium are introduced with relevant biological and environmental examples A discovery-based approach format is used in the laboratory. The Chem Placement Exam is required Prerequisite for 122H 121 Lecture, three hours, laboratory, three hours, recitation, two hours

131, 132 Fundamentals of Chemistry 5 cr each This course covers the fundamental principles of inorganic chemistry, organic chemistry, and biochemistry in an integrated two semester sequence The first part of the course deals with basic chemical concepts, including stoichiometry, the periodic table, equilibrium, structure and bonding, and acid-base chemistry. The next part of the course provides a survey of the chemical properties of the principal functional groups of organic chemistry, including alcohols, aldehydes, ketones, carboxylic acids and carboxylic acid 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. This course does not serve as a prerequisite for CHEM 211, 212. Prerequisite for 133 121, 122 and/or 211L, 212L, 211HL and/or 212HL, 211H and/or 212H must be taken prior to or concurrent with 211H and/or 212H. Prerequisite for 211H 211L, 212L Lab, four hours

211L, 212L Organic Chemistry Lab 1 cr each This lab exposes students to basic synthetic and purification techniques used in organic chemistry. Both macroscale and microscale equipment are used. Emphasis is placed on the efficient and safe use of laboratory equipment. Prerequisite for 211H 211H Lecture, four hours

211, 212L Organic Chemistry Lab 1 cr each This lab exposes students to basic synthetic and purification techniques used in organic chemistry. Both macroscale and microscale equipment are used. Prerequisite for 211H 211H Lecture, four hours

211H, 212H Honors Organic Chemistry 3 cr each Students are given a firm foundation in the fundamentals of the structure and reactivity of organic compounds with the use of relevant biological examples

211, 212L Organic Chemistry Lab 1 cr each Students cover the same techniques as the 211L, 212L labs. Prerequisite for 211H and/or 212H is that students must have completed the basic laboratory techniques covered in the Chemistry 121, 122 labs. Students will receive credit for 211H and/or 212H. Prerequisite for 211H 211L, 212L, 211HL, 212HL, 211H and/or 212H must be taken prior to or concurrent with 211H and/or 212H Lab. Laboratory, three hours

230L Research Laboratory Techniques 1 cr This lab emphasizes the refinement of quantitative analytical wet and dry method techniques and the application of basic statistical methods of data analysis. Prerequisite for 230, 231 Laboratory, four hours

275 Environmental Chemistry 3 cr Provides students with training in correlation, interpretation, and analysis of related topics and issues involved in environmental chemistry including aquatic, atmospheric, and geochemical interactions They will receive experience in environmental chemical sampling, modeling and testing methods. Prerequisite for 275 211, 212, 211H and 212H. Laboratory, four hours

311 Inorganic Chemistry 3 cr A survey of the basic principles required for understanding inorganic chemistry including atomic and molecular structure, crystal structure, metallic bonding, and coordination compounds. Prerequisite for 211H Lecture, four hours

321, 322 Physical Chemistry 4 cr each A study of the structure and properties of the various states of matter, thermodynamics, kinetics, and an introduction to quantum chemistry. Prerequisites for 321, 322, 321 Lecture, four hours.
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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 project 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 Hal, Ph.D

Associate Professors
Barbara M. Manner, Ph.D
Monica S. Sonu, Ph.D

Assistant Professors
Scott Cohen, Ph.D
Simonetta Fritelli, Ph.D

Instructor
Anna D'Eramo, B.S.

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 modern physics approaches with other sciences and disciplines. The Department also is 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 in order to enhance his/her background and understanding of modern physics.

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, 320, 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.

Extralepartmental 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 (of 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, 482L, SPRG 103, and at least 10 credits from the following courses: PHYS 301, 329, 330, 350, 361, 372, 402, 474, and 482.

Extralepartmental Science and Mathematics Requirements
Chemistry 121, 122 or Biology 111/113, 112/114, Mathematics 115, 116, and 215

REQUIREMENTS FOR THE MINOR
The minor consists of 12 hours in General Analytical Physics (211, 212, 213) and eight credits of upper division physics at the 300 level and above. 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 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 of Science and Engineering Core requirements, each Binary Engineering student is required to complete the following courses: PHYS 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 in order to enhance his/her background and understanding of modern physics.

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114, Mathematics 115, 116, 215, 301, and 315, Computer Science 160 or (an approved substitute) and 308

PHYSICS COURSES

167 Technology and Society  1 cr

The objectives of the course are to make the student aware of the dependence of society on technological advancements, the influence technology has on many fields of human endeavor, the advantages derived from technology, and the interaction between technology and society from various society perspectives.

170 Acoustics  3 cr

A course which presents the physical principles underlying the production, propagation, and perception of sound. Examples of the principles are drawn mostly from the world of musical sound. No mathematical preparation beyond high school algebra is necessary.

200 Essential Physics  4 cr

A laboratory course designed especially for Pharmacy students to provide a basic knowledge of Physics and its relationship to pharmaceutical science. Topics normally covered include mechanics, properties of matter, heat and thermodynamics, basic electricity, wave motion, and light, and selected topics in modern physics. In addition to being introduced to the physical concepts, the student will also be instructed in the analytical approach to problem solving that is essential to both the physical and pharmaceutical sciences. Prerequisite: A good knowledge of high-school algebra and trigonometry is required. Lecture, four hours; Laboratory, two hours; Recitation, one hour (Note: Students preparing for a medical degree program must take Physics 201, 202 or Physics 211, 212 Physics students concentrating in Nuclear Pharmacy are encouraged to complete Physics 201 and 202.)

201, 202 Physics for the Life Sciences I and II 4 cr each

Designed to give the student a basic knowledge 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: A good knowledge of high-school algebra and trigonometry is required. Prerequisite: 202. 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 the permission of the instructor. Prerequisite for 212 211 Lecture, three 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. Prerequisites 213, 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: 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 202, or 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 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 includes 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. Prerequisite 329 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 studied. We will also address certain elementary problems involving the Schrodinger wave equation, which occurs in quantum mechanics. In addition, we will include other important theoretical topics, such as sensor 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
also discuss the Henon 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. This course may include the Special and General Theories of Relativity, an introduction to quantum mechanics, the concept of 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. Prerequisite 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 geometric structure of 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 Theories 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.

487/587 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
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 mountain formation. 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 non-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, the concept 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 no geologic or scientific background, and is open to all students within the University. It is also suitable for completion of non-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 represented. 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 non-core science requirements for students in the College of Liberal Arts and as an earth science course for School of Education students.

PHYS 211 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 may 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 non-core science requirements for students in the College of Liberal Arts and as an earth science course for School of Education students.

PHYS 212 Environmental Hydrogeology 2 cr
This course introduces students to the fundamentals of geologic materials and sols 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
Affiliated Faculty Professors
H M. Kingston, Ph D, Department of Chemistry and Biochemistry
Associate Professors
Barbara M. Manner, Ph D, Department of Physics
Kyle W. Selzer, 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 BS 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 policy-making, 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, and the student's progress is closely monitored with developing interest. Undergraduates are 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 BS IN ENVIRONMENTAL SCIENCE

Foundational Science Requirements Total credits 55
CHEM 121 General Chemistry I Lab 5 cr
CHEM 122 General Chemistry II Lab 5 cr
CHEM 211 Organic Chemistry I 3 cr
CHEM 211L Organic Chemistry I Lab 1 cr
CHEM 212 Organic Chemistry II 3 cr
CHEM 212L Organic Chemistry II Lab 1 cr
CHEM 230L Research Lab Tech 1 cr
CHEM 421 Analytical Chemistry 3 cr
BIOI 111/113 Biology I Lab 4 cr
BIOI 114/112 Biology II Lab 4 cr
BIOI 212 Cell/Molecular Biology 3 cr
MATH 115 Calculus I 3 cr
MATH 116 Calculus II 4 cr
MATH 225 Intro to Biostatistics 3 cr
MATH 323W Applied Stats with Regression 3 cr
PHYS 211 Gen Analytical Physics I 4 cr
PHYS 212 Gen Analytical Physics II 4 cr

Major 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 Toxicology 3 cr
ESM 496 Survey of Environmental Technologies 3 cr
MAJOR COURSES

444/544 Public Policy and Environmental Politics

3 cr
An introduction to the political process that generates environmental laws and regulations, seeking to answer the question, "What is good environmental policy?" Real world case studies, supplemented by guest speakers, will cover controversial national and international policy issues. The focus will be on the role science plays in the policy process, and on the sources of conflict among political and policy actors, including elected officials, bureaucrats, legislators, and interest groups.

451 Foundations of Energy and the Environment

3 cr
The course provides students with an appreciation and understanding of the fundamental and theoretical background and concepts in environmental science. The impact of population growth on ecosystems, fossil and nuclear energy, resources and resource management, and population and risk assessment are among the topics to be discussed. The course will also deal with such issues as global warming, deforestation, biodiversity, and ozone depletion. This course provides a foundation for integrating other courses.

452 Environmental Chemistry

3 cr
The course provides students with an appreciation and understanding of the fundamental and theoretical background and concepts in environmental chemistry. Students will learn environmental testing methods and gain the knowledge necessary for critical evaluation of fundamental aspects of testing procedures and data derived from environmental testing. Prerequisites: Chemistry 121, 122 Mathematics 115.

462/662 Enhanced Microwave Chemistry

3 cr
This course teaches fundamental and advanced concepts of microwave sample preparation with emphasis on the understanding and predicting behavior in the microwave environment. Microwave decomposition procedures for botanical, environmental, chemical, geological, aqueous and other sample types are also discussed and demonstrated. Prerequisites: Chemistry 121, 122 Mathematics 115.

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.

470/670 Environmental Toxicology

3 cr
The course is designed to examine the toxic effects of air, water and soil pollutants on humans and the environment. Practical applications and environmental problems are presented, using specific pollutants, such as pesticides, heavy metals, organic solvents, and polycyclic aromatic hydrocarbons. Extrapolation of toxicological data from animals to humans is presented. The effects of environmental legislation and hazard evaluation of environmental toxicants are emphasized. Prerequisites: Biology 111/113, 112/114.

491/591 Environmental Hydrogeochemistry

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, makes 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 area utilize to obtain samples from the Three Rivers. Prerequisites: Biology 111/113, 112/114.

495/595 Environmental Biotechnology

3 cr
This course looks at microbial biodegradative 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 in remediation. Emission control technology for air, water, and solid waste management will be covered including physical and chemical processes, biological methods, stabilization and land disposal 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.

497/597 Applied and Environmental Microbiology

3 cr
This course takes an in-depth look at microbial bio-geochemical 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, and the role of humans as impactors. The interactions of pollutants and ecosystems, deforestation, loss of species richnes, biomarkers, 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, organuonal, 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.
A. J. Palumbo School of Business Administration

Department of Business Administration

James C. Stalder, B.S.

William D. Presutti, Jr., Ph.D.

History

The A. J. Palumbo School of Business Administration was established in 1913 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 business 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 Antonio J. Palumbo, an accomplished business professional, the school adopted its current name, the 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.

Driven by its Mission, the School of Business Administration has established the following key guiding principles:

- Appreciating that business education must be dynamic and continuously upgrade the curriculum to meet the rapidly changing needs of the students and the workplace.
- Continuing our commitment to outstanding faculty performance, both in developing business knowledge (research) and in delivering that knowledge (teaching).

- Ensuring the maximum use of technology by heavily integrating information technology into all course content and delivery, while providing state-of-the-art facilities equipped with the most sophisticated software.
- Espousing ethics as a central characteristic of organizations that are successful over the long-term and promote a commitment to high standards and values among the Duquesne community.
- Recognizing that the business environment is unmistakably global, cultivating expanded opportunities for international study in distinguished foreign universities.
- Strongly encouraging students to study abroad in order to develop a more global perspective.
- Continuously evolve a Mission Statement for our School that optimally guides our commitments to our various customer groups – students, parents, employers, benefactors, alumni and the community.

The unending search for new and better ways to serve our students is a hallmark of the culture of our School of Business. Whether it is revising a program, renovating a facility, expanding the integration of technology, or creating a stronger international focus, the goal is continuous improvement and contemporary relevance.

The leaders of the 21st century must understand the complex global issues facing modern organizations and be proficient in the use and interpretation of data generated by the most up-to-date technology. They must maintain an interdisciplinary approach to problem solving and develop strong communication skills. It is the mission of the A. J. Palumbo School of Business to prepare our students to meet these challenges.

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 18.

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.

- Dual Degree Programs with College of Liberal Arts
- Dual Degree Program with the Mylan School of Pharmacy
- Dual Degree Program with the College of Nursing
- Dual Degree Program with the College of Music
- Dual Degree Program with the College of Education
- Dual Degree Program with the College of Arts, Humanities, and Social Sciences
- Dual Degree Program with the College of Architecture and Urban Planning
- Dual Degree Program with the College of Engineering
- Dual Degree Program with the College of Health Sciences
- Dual Degree Program with the College of Information Technology
- Dual Degree Program with the College of Business Administration
- Dual Degree Program with the College of Health Sciences
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 models 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 renovated Technology Center on the sixth floor of its facility in Rockwell Hall. This complex features a sophisticated Investment Center that provides online real-time connectivity to all the major financial markets, three technology-rich classroom learning centers that provide access to Enterprise 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 interests of members:

The American Marketing Association members at Duquesne University interact with the Pittsburgh professional chapter on a regular basis to organize seminars featuring successful marketing executives, workshops, career forums, and networking events. The AMA is dedicated to furnishing the profession and developing students’ careers.

Beta Alpha Psi is the local honorary scholarship society of the School. Its membership is limited to juniors and seniors in the School of Business who have attained Q A P A s of 3.25 or better.

Beta Gamma Sigma is the international honorary accounting fraternity. Less than 15% of eligible schools accredited by AACSB International-The Association to Advance Collegiate Schools of Business have achieved active status. The fraternity sponsors professional growth and development programs, as well as community and University service activities.

The Accounting students learn about career opportunities in accounting, as well as other business fields. Membership is open to all School of Business students.

The Dean’s Student Advisory Council consists of student leaders in the School who meet on a regular basis with the Dean to discuss School matters.

Delta Sigma Pi, a national professional business fraternity, is represented by Theta Rho chapter. The fraternity makes substantial contributions to the University community through its many service activities.

Duquesne Association for Information Technology (DAIT) is a student association dedicated to promoting knowledge in the information technology field. The organization is open to all Duquesne University students, faculty and staff.

Duquesne Supply Chain Council (DSCC) is a student organization for Supply Chain Management majors that provides opportunities for students to gain real-world experences, network with industry professionals 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.

Phi Chi Theta, a national professional business fraternity, organized to promote the cause of higher business education and training for all individuals, is represented by the Gamma Upsilon Collegiate Chapter.

Pi Sigma Epsilon - Delta Chi Chapter is the national, professional, coeducational fraternity in marketing, sales, and communications affiliated with Sales and Marketing Executives International and the Pittsburgh SME chapter.

ADVISORY BOARDS

Ten separate Advisory Boards, comprised of high-ranking business professionals, serve the School of Business. These business executives, representing the various disciplines within the School, offer advice and counsel on matters of curriculum development, promotion, assessment, intern and employment opportunities and other matters of concern to students, faculty and the business community as a whole.

ACADEMIC PROGRAMS


Recommended programs of study for specific disciplines 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. Their proposed curriculum choices must, of course, include the University requirements and Business Administration Core requirements as indicated in the illustrations set forth in this catalog. Students are strongly encouraged to include additional course work in speech/communications and in advanced writing in their programs.

Programs for certification in accounting make the program very rigid, this is dealt with in the section describing the accounting curriculum on the following pages.

Students’ concentrations should be based upon career objectives and constitute a broad and flexible educational process. Students are also encouraged to tailor cross-disciplinary educational programs to meet their individual needs. Career advice should be sought from many and varied sources in the University, but especially faculty. Each student is assigned a faculty mentor prior to his or her junior year. Course suggestions and degree requirements for all major areas of concentration can be obtained from the Academic Advisement Office.

PROGRAM FOR PROFESSIONAL DEVELOPMENT

All students in the School of Business Administration are required to participate in the following professional development program in order to complete their degree requirements.

FOUR YEAR SAMPLE PLAN (Effective September 2001)

FRESHMAN YEAR

University Core

101 Thinking and Writing

Across the Curriculum

102 Critical Thinking

3 cr

Imaginative Literature and

101 College Algebra

3 cr

Language

111 Calculus

3 cr

132 Basic Philosophical Questions

141 Social, Political and Economic Systems

3 cr

151 The Shaping of the Modern World

3 cr

161 The Arts and the Human Experience

2 cr

26 cr

116

A J PALUMBO SCHOOL OF BUSINESS ADMINISTRATION

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A J PALUMBO SCHOOL OF BUSINESS ADMINISTRATION

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A J PALUMBO SCHOOL OF BUSINESS ADMINISTRATION

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A J PALUMBO SCHOOL OF BUSINESS ADMINISTRATION
## A J Palumbo School of Business Administration

### Business Core
- 182 Information Systems I 3 cr
- 183 Information Systems II 3 cr
- 103 Introduction to Business 1 cr

### Major Area of Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Major Area of Concentration</td>
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### TOTAL Credits
31 CR

### Electives

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<tbody>
<tr>
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<tr>
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<td>Non-Business Elective</td>
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### TOTAL Credits
30 CR

### University Core
- 281 Quantitative Analysis I 3 cr
- 284 Quantitative Analysis II 3 cr
- 214 Financial Accounting 3 cr
- 215 Managerial Accounting 3 cr

### Core Science Requirements (Sophomore Year)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>182 Human Morality OR</td>
<td>3 cr</td>
</tr>
<tr>
<td>183 Judaism, Christianity and Islam OR</td>
<td>3 cr</td>
</tr>
<tr>
<td>184 Ethics to the Bible OR</td>
<td>3 cr</td>
</tr>
<tr>
<td>185 Religions East/West OR</td>
<td>3 cr</td>
</tr>
<tr>
<td>186 Roman Catholic Heritage OR</td>
<td>3 cr</td>
</tr>
<tr>
<td>187 Christian Understanding of the Human Person</td>
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### TOTAL Credits
12 cr

### Core Science Requirement

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<tbody>
<tr>
<td>3 Jr. Biology</td>
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<tr>
<td>3 Jr. Chemistry</td>
<td>3 cr</td>
</tr>
<tr>
<td>3 Jr. Physics</td>
<td>3 cr</td>
</tr>
<tr>
<td>3 Jr. Earth Science</td>
<td>3 cr</td>
</tr>
<tr>
<td>179 SPTF Chemistry, Culture, and Environment</td>
<td>25 cr</td>
</tr>
</tbody>
</table>

### TOTAL Credits
173 CR

### Business Core
- 342 Global Economic Perspectives 3 cr
- 331 Business Finance 3 cr
- 361 Introduction to Management 3 cr
- 371 Introduction to Marketing 3 cr
- 367 Total Quality and Operations Management 3 cr
- 368 Business Ethics/Communications 3 cr

### Major Area of Concentration

<table>
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<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>Major Area of Concentration</td>
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<td>Major Area of Concentration</td>
<td>3 cr</td>
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### TOTAL Credits
119 CR

### Business Load

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Strategic Management</td>
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</tr>
<tr>
<td>Culture Requirement</td>
<td>6 cr</td>
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</tbody>
</table>

### Academic Regulations

**ACADEMIC REGULATIONS**

Students may normally carry 15 credits in one semester. A schedule of more than 15 credits must be approved by the Advancement Office. Students on academic probation may not take more than 12 credits in the summer sessions, 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.

### PREREQUISITES — UPPER LEVEL BUSINESS COURSES

In addition to any specific prerequisites that are listed in the course descriptions, all freshman and sophomore required business courses must be completed before the student may enroll for upper level business courses, that is, those business courses numbered in the 300s and 400s. The student must also have completed 60 credits or more.

### GENERAL BUSINESS COURSES

Two one-credit course offerings, 103 Introduction to Business and 300 Career Strategies, are required for all students enrolled in the School of Business Administration. The Business Administration Internship is strongly recommended for all who qualify.

### 103 Introduction to Business

1 cr

Introduction to Business provides an overview of the curriculum offerings and organization of the School of Business Administration. In addition to detailing the School’s areas of concentration, the course will introduce the student to the School’s advisement process, student organizations, study abroad opportunities, and career services. Current business concepts and trends will be discussed. The student will be expected to use technology as a communication medium throughout the course.

### 300 Career Strategies

1 cr

Career Strategies is intended to help students identify their strengths and interests and develop the skills they will need in order to successfully launch their careers. Students will learn about conducting a personal inventory, the art of networking, creating resumes and cover letters that are effective. They will also learn how to research a company or an industry and, how to use the Internet in their job search and how to make the best impression during an interview. It is expected that students will develop skills that will support their professional development throughout their careers.

### 401 Business Administration Internship

3 cr

This internship provides the student with professional work experience in an organizational environment. Internships must be approved in advance by a faculty sponsor and are available to students in all business concentrations. Grading is Pass-Fail. Prerequisites: Junior standing, six credits completed in major, an overall GPA of 2.5 or better, and completion of at least 15 credits at Duquesne University.
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, 411, 412, 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 QSMS 481, 485 and Finance 355.

Students should contact an academic advisor or a member of the accounting faculty for further information.

COURSE PREREQUISITES - see p 119

214 Financial Accounting 3 cr

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 entities. Prerequisite: QSMS 102.

215 Managerial Accounting 3 cr

Provides an introduction to cost concepts, product costing systems, budgeting systems, and the development of accounting data for internal managerial decision. Prerequisite Accounting 214.

216 Accounting Information Systems 3 cr

Develops a sound understanding of the practices and procedures used to process accounting information. Emphasis is placed on computerized information systems. Prerequisite: Accounting 214.

311, 312 Intermediate Accounting 3 cr each

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. Prerequisites: Accounting 214 and 215.

314 Advanced Accounting 3 cr

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. Prerequisites: Accounting 311 and 312.

315 Cost Accounting 3 cr

Introduces students to 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. Prerequisite: Accounting 215.

411 Auditing 3 cr

Addresses standards and procedures employed by auditors in the examination of financial statements for the purpose of rendering an opinion. Students will use and evaluate case problems to demonstrate the application of the principles studied. Prerequisite Accounting 312.

412 Introductory Income Tax Accounting 3 cr

A study of basic tax regulations and procedures affecting individuals, and to a lesser extent, business entities. Topics include returns, rates, exemptions, income, deductions, sales and exchanges of assets, and credits. Prerequisite: Accounting 214.

414 Corporate and Partnership Taxation 3 cr

Acquaints the student with the principles of taxation as applied to corporations, shareholders, partnerships, and partners. Prerequisite: Accounting 412.

419 Seminar in Accounting 3 cr

Designed to develop a student's ability in technical expression, deeper understanding of accounting theory, and acquaint the student with contemporary accounting problems and literature. Prerequisite: Accounting 314.

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.

COURSE PREREQUISITES - see p 119

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. Economics provides a logical way of looking at problems and is 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 economic conditions and provides excellent preparation for graduate study 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 Econometrics 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, 302, 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

216 Accounting Information Systems 3 cr

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 completing three accounting courses (ACCTG 216, 311 and 315) and three Information Technology courses (QSMS 481, 485 and 485). In addition, students must choose one of the three following accounting electives (ACCTG 312, 411 or 411) and one of the Information Technology electives (QSMS 385, 484 and 486).

216 Accounting Information Systems 3 cr

216 Accounting Information Systems 3 cr

311 Intermediate Accounting I 3 cr

311 Intermediate Accounting I 3 cr

315 Cost Accounting 3 cr

See Accounting Curriculum

481 Systems Analysis and Design 3 cr

See IT Curriculum

482 Database Management 3 cr

See IT Curriculum

485 Systems Quality Assurance and Control 3 cr

See IT Curriculum

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. Economics provides a logical way of looking at problems and is 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 economic conditions and provides excellent preparation for graduate study 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 Econometrics 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, 302, 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

216 Elements of Economics 3 cr

An introductory course that provides an understanding of how a free market economic system works, of the forces which affect the level, composition, and distribution of the output of the economy, and the economics of current issues. Not counted toward a degree in the School of Business Administration.

201 Principles of Microeconomics 3 cr

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 different conditions ranging from perfect competition to monopoly. Prerequisites MATH 101 or knowledge of algebra.

202 Principles of Macroeconomics 3 cr

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. Prerequisites: ECON 201.

301 Intermediate Microeconomics 3 cr

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. Prerequisites: ECON 201 with a C or better, MATH 111 or 115.

324 Comparative Economic Systems 3 cr

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. Prerequisites: ECON 201 and 202.

328 Urban Land Economics 3 cr

A study of the economic forces that influence business and residential location in a metropolitan area.
specific areas of study include transportation, housing, poverty, and the urban public sector. Prerequisites: ECON 201 or 202.

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, financial intermediation, etc. Prerequisites: ECON 202 with a C or better, MATH 111 or 115.

342 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 tools 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: QSMIS 284, or MATH 125, 225, or 301.

384 Forecasting 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 conclusively 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.

420 Labor Economics 3 cr
Analyses the principles of wage and employment determination 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. Prerequisite: 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, monetarist versus Keynesian models, 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.

442 International Economics 3 cr
Covers international trade theory and international monetary economics. Topics discussed include the classical and neoclassical theory of comparative advantage, balance of trade, balance of payments, customs union theory, commercial policy, theory of foreign exchange markets, history of the international monetary system, and fixed versus flexible exchange rates. Prerequisites: ECON 201 and 202.

451 Government Expenditure Policy 3 cr
This is the first 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 public expenditures. 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.

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.

461 Business Economics 3 cr
Business Economics focuses on the formation and qualitative analysis of business decisions. In this course, the student learns to model business phenomena and to qualitatively predict behavior on the basis of those models. Students will take real-world business and economic problems from sources such as The Wall Street Journal, and construct models to describe the cases, analyze the models, and construct business recommendations on the basis of the model results. The course equally emphasizes mathematical modeling of business phenomena and the interpretation of models and results in terminology common to non-economists. Prerequisites: ECON 301 with a C or better.

462 Business, Government and Society 3 cr
Business, Government and Society is an applications-oriented course examining the relationship between the market sector and government policy. The course will address social regulation, traditional economic subjects, and economic deregulation, and selected topics. Prerequisites: ECON 461 with a C or better.

480 Economics Senior Seminar 3 cr
The purpose of this course is to sharpen the student's independent research skills utilizing all of the concepts, tools, and techniques learned throughout the course. The student completes an independent research project culminating in both a formal written paper and an oral research presentation to the economics faculty.

501 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.

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: Finance 333, 432, 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.

COURSE PREREQUISITES - see p. 119

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 relationship between risk and return. Prerequisites: ECON 201, 202, Accounting 124, 215 and QSMIS 281 and 284.

331 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, QSMIS 281 and 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, financial intermediation, etc. Prerequisites: ECON 201 and 202.

334 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
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

335 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

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 to the types of information necessary to the decision-making process of the investor. Prerequisite Finance 331

337 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

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 points of view 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 evaluation 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 extending both short and long term credit. Comprehensive financial statement analysis methods are stressed in the course. Students will augment their financial statement analysis with industry considerations, qualitative parameters and various loan structures. Financial concepts will also 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. Prerequisite Finance 331

437 Information Systems II 3 cr
Provides the student with an overview of the theory and implementation of today's information systems. The student will develop an understanding of information system theory and study the flow of information through the organization to learn how managers at different levels use information as a strategic resource. Database applications as they relate to the organization are emphasized. Prerequisite QSMIS 182

438 Information Processing with Programming 3 cr
Presents structured and object-oriented programming techniques. The scope of the course ranges from an introduction to the programming process, data comparison, control break logic, sorting, and table handling methods through file creation and file processing techniques. Prerequisites QSMIS 183, COSC 101 or 150

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 arguments 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 of 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 Computer Programming C++ in their freshman or sophomore year.

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.
practice at rigorously analyzing e-business strategies and their implementations. Prerequisite: QMSIS 484

487 Advanced Application Development 3 cr
The course provides a fundamental knowledge 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: QMSIS 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: QMSIS 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 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 445, 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 social, cultural, 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
This course is offered to a number of universities and programs abroad opportunities with a number of universities 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

437 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 countries, 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 on the prospects for long-term economic development are 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. Student 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 analysis, money and financial institutions, futures and options, personal financial planning, 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 market, currencies, futures, options, and derivatives.

For a concentration in Investment Management, students will take: Finance 330, 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
460 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

461 Entrepreneurship and Small Business Management 3 cr
Deals with the overall management of the 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

462 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 expatriates, employee benefits including social security, workers’ and unemployment compensation, medical, retirement, costing out benefits, flexible benefits, managed care, and cost containment. Prerequisites Management 361 and Management 364

463 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. Student teams design and conduct a mini-training program. Prerequisite Management 364

464 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 to 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 the Academic Advisor to register. Prerequisites: Management 361

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 years Bachelor's/JD, 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

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 of activities and the context (internal and external) in which managers work to discharge their responsibilities effectively.

362 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.

363 International Management 3 cr
A study of multinational companies' structures, 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

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' structures, 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, interview, performance appraisal, group dynamics, group problem solving, team effectiveness, managing conflict, and the management of change. Prerequisite Management 361

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. Prerequisites: Management 361

494 Business Consulting 3 cr
Business Consulting is an interactive course in which student teams of two or three provide extensive management counseling to a Pittsburgh area small business owner. This course is open to students in all concentrations in the School of Business. Prerequisite: Approval of the instructor.

499 Strategic Management 3 cr
Strategic Management, the "capstone" course of the undergraduate business curriculum, utilizes top-level, comprehensive organizational case studies as the primary tool to provide an interactive educational experience. Strategic Management provides students with the opportunity to (1) improve the systems skills needed to integrate knowledge from all the functional areas of business, (2) build the cognitive skills needed to diagnose strategic organizational problems competently, (3) develop the imaginative skills needed to brainstorm possibilities and find creative solutions, (4) sharpen the interpersonal skills needed to work effectively in group settings, and (5) strengthen the persuasive skills needed to communicate effectively and successfully defend their decisions in both oral and written forms. Prerequisites: Senior standing (90 credit hours) Accounting 215, Finance 331, Marketing 371 and Management 361

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 years Bachelor's/JD, 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

251 Business Law 3 cr
An introductory course exploring the nature of law, its sources, and its relation to society, government and business. The course focuses on the traditional business law topics - property, contracts, torts, agency, business organizations and government regulations.

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, ethics, discharge and remedies. Prerequisite: Law 251
MARKETING CURRICULUM

The Marketing program is designed for students seeking careers in marketing or sales with industrial or consumer goods companies, service organizations, retailers, health-care institutions, and not-for-profit organizations. The program provides an understanding of the role of marketing in organizations, develops skills in applying fundamental marketing concepts, explores consumer behavior and product development, and introduces basic marketing research techniques. An emphasis on case studies utilizing oral presentations and written reports helps develop the necessary communication skills to succeed in the marketing field.

For a concentration in Marketing, students will take the following courses: Marketing 373, 374, 375, 476, 477, 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 develop a knowledge base regarding the following marketing concepts: consumer expectations, complaint behavior, measures of customer satisfaction, relationship marketing, services, competitive 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. Prerequisite: 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, such as railroads, airlines, and trucking companies. The course will emphasize the economic aspects of the transportation industry, including costs, governmental regulation, and world economic factors. Prerequisites: Economics 301, 302, and 375.

473 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 product, distribution, promotion, and pricing policies. The course will focus on the salesforce, recruitment, and selection and ethical considerations. Prerequisite: Marketing 371.

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, warehousing, and just-in-time purchasing. Prerequisites: Marketing 371 and 375.

475 Consumer Behavior 3 cr
Encourages students 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 consumer). Segmentation, positioning, and marketing mix strategies are discussed in relation to consumer behavior theories. The course is designed to provide the student with an understanding of the marketing process and its impact on consumer behavior. 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. Prerequisites: Marketing 371 and 375.

477 Strategic Marketing Planning 3 cr
Designed to enable the student to apply acquired marketing knowledge and expertise to real world opportunities. The course is designed to provide students with an understanding of the marketing process and its impact on consumer behavior. Prerequisites: Marketing 371.

478 Industrial Marketing 3 cr
Focuses on the marketing of industrial products and services. The course will emphasize 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 sectors. The course will emphasize the importance of retail management in today's competitive environment. Prerequisites: Marketing 371.

354 Commercial Transactions 3 cr
Study of the provisions of the Uniform Commercial Code (UCC) with reference to the nature and legality of the sale of goods, warranties, nature and kinds of commercial paper, negotiability, methods of transfer and secured transactions. Prerequisite: Law 251.

355 Law of Business Organizations 3 cr
A course which focuses on various laws pertaining to the creation and termination of corporations, franchises, partnerships, agencies and other business entities. Prerequisite: Law 251.

357 Real Estate Law 3 cr
A survey of the principles of real property law and their application to the transfer of property rights. Topics include real estate applications of contract and agency law, and the legal relationships among buyers and sellers, landlords and tenants, and buyers and lenders. Prerequisite: Law 251.

454 The Law of International Commercial Transactions 3 cr
Provides an understanding of the basic principles of international commercial law and their application to foreign countries. Prerequisite: Law 251.

456 Legal Aspects of Human Resource Management 3 cr
A survey course of state and federal laws that influence the legal environment of personnel and human resource management. Prerequisite: Management 364 and Law 251.

463 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 understanding international strategic marketing planning. Prerequisite: Marketing 371.

353 Information Systems 3 cr
See Information Technology Curriculum.

381 Statistical Analysis 3 cr
See Information Technology Curriculum.

384 Quantitative Methods 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.

470 Quantitative Methods II 3 cr
See Information Technology Curriculum.
Coverage includes basic descriptive statistics, the concepts of probability and specific distributions, and inferential statistics. Prerequisites: QSMIS 182 and Mathematics 111.

470 Legal Environment of Sports Management and Marketing
This course will cover regulation in the sports industry including NCAA regulations, collective bargaining, and codes of industry conduct. In addition, royalty, rights and licensing issues will be covered. Prerequisite QSMIS 281.

471 Special Topics in Sports
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 not-for-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

376 Sports Marketing and Promotion
This course will provide an intensive evaluation of marketing techniques and promotional strategy. In addition, the topical coverage will include the market mix, new product strategy and services, interactive promotion, event marketing and value-added marketing. Prerequisite: Marketing 371.

377 Sports Management
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.

A J PALUMBO SCHOOL OF BUSINESS ADMINISTRATION
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. Seymannski, 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, 1936, elementary education, 1937, guidance, 1932, school administration, 1932, special education, 1946, reading specialist and reading supervision, 1969, school psychology, 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.

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 Cognates for Early Childhood and Elementary Education students or Academic Major for Secondary Education students. The Student Standing Committee may accept a limited number of candidates for admission to the certification program who do not meet the minimum GPA, if exceptional circumstances justify admission.

SCHOOL OF EDUCATION

PROGRAMS

The School of Education offers undergraduate programs approved by the Pennsylvania Department of Education for the preparation of Early Childhood, Elementary and Secondary Education (English, English/Communications, Spanish, Latin, Mathematics, Citizenship, Social Sciences, and Science) teachers.

Special Education

The Leading Teacher Program (LTP) is based on a curricular infusion model that provides all education majors with significant preparation in adapting instruction to meet the needs of students with learning and behavior challenges. This model reflects best practice in collaborative partnerships and the knowledge and competencies necessary for teaching students with disabilities in the nation’s schools. This preparation is transcribed as special education course credits (EDLTD) in Foundations and in each of the three certification programs. Students interested in adding certification in special education may enroll in a one-year Master of Education LTP in Special Education if they are graduates of the Duquesne University baccalaureate LTP program in Early Childhood, Elementary, or Secondary Education and hold an Instructional I teaching certificate. The Leading Teacher Program meets the standards of excellence for the practice of teaching in the nation’s schools.

Other Certification

Teacher candidates must comply with all Pennsylvania Department of Education requirements and must be taught for the preparation of Early Childhood, Elementary and Secondary Education students. The Student Standing Committee may accept a limited number of candidates for admission to the certification program who do not meet the minimum GPA, if exceptional circumstances justify admission.

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 beginning 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

Domain II: Becoming a Curriculum Designer

Domain III: Becoming an Expert in School Context

Domain IV: Becoming a Master Practitioner

Domain V: Becoming an Instructional Leader

Additional learning experiences that reflect the themes of leadership, diversity, and technology are infused throughout the Leading Teacher Program.

LEADERSHIP

Leadership is an advocate, creating learning environments that demonstrate sensitivity, acknowledging students of all abilities and valuing human differences.

Technology

Technology 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 Cognate, Academic Major, Foundations of the Leading Teacher Program and the Professional Educator Certification Track. The students 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 theology. Generally, thirty-nine credits of general education are completed during the first two years of study for Early Childhood and Elementary majors. There are slight variations 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/Fol/Econ Systems, Shaping of the Modern World, Arts and the
Human Experience, Historical Geography or Human Geography and Geography Education, Core Chemistry, Core Physics, Core Earth Science, Basic Philosophical Questions and Core Theology

Academic Cognate/Academic Major Students enrolled in the Early Childhood and Elementary certification tracks are required to pursue a 15 credit academic cognate to enhance their knowledge base and competency in a specific academic area. Cognates are available in the following disciplines: Mathematics, Computer Science, Science, Social Sciences and History, English and Communications, and Foreign Languages.

Students enrolled in a Secondary Education certification track utilize elective credits to build the academic major required for certification in the Commonwealth of Pennsylvania. The academic component includes at least 36 credit hours in the specific content area.

Foundations of The Leading Teacher Program Students are introduced to The Leading Teacher Program and the teaching profession through learning experiences built around the five domains of learning and the three themes. One-credit courses in special education and technology are infused into the Foundations of The Leading Teacher Program. The course content is taught concurrently with the Foundations courses in an integrated format. At the conclusion of the Foundations portion of the Leading Teacher Program, aspiring teachers must demonstrate their readiness to be accepted into one of the three Professional Educator Certification Tracks (Early Childhood, Elementary, or Secondary).

The following course of study is required of all education majors:

### Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDLTF 101</td>
<td>Orientation to the LTP</td>
<td>2</td>
</tr>
<tr>
<td>EDLTF 101</td>
<td>Instructional Technology I</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 181</td>
<td>Context of the Teaching Profession</td>
<td>3</td>
</tr>
<tr>
<td>EDLTF 102</td>
<td>Instructional Technology II</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 102</td>
<td>Historical &amp; Legal Foundations of Special Education</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 192</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 182</td>
<td>Cohort Experience</td>
<td>0</td>
</tr>
</tbody>
</table>

### Semester 2

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>EDLTF 181, 182, 281, 282, 282</td>
<td>Cohort Experience</td>
<td>0</td>
</tr>
<tr>
<td>EDLTF 201</td>
<td>Ed Psych I, Learning, Development &amp; Motivation</td>
<td>3</td>
</tr>
<tr>
<td>EDLTF 201</td>
<td>Characteristics of Persons w/ Disabilities</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 291</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 281</td>
<td>Cohort Experience</td>
<td>0</td>
</tr>
</tbody>
</table>

### Semester 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDLTF 202W</td>
<td>Ed Psych II Classroom, Leadership, Assessment &amp; Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDLTF 202</td>
<td>Critical Issues in Spec Ed</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 292</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDLTF 282</td>
<td>Cohort Experience</td>
<td>0</td>
</tr>
</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 tutorial 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** 2 cr Orients aspiring teachers to the organizational structure, 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 102 Instructional Technology I** 1 cr Introduces the aspiring teacher to the skills required for modeling and demonstrating technologies for the classroom. Competencies center on the use of technology to communicate and interact with peers and colleagues and include an orientation to personal computers and the campus network, electronic mail, word processing, graphics presentation, and the use of the Internet for exploration and research.

**EDLTF 181, 182, 281, 282, 282** Cohort Experience 0 cr Aspiring teachers will participate in regularly scheduled cohort meetings. The cohort experience provides opportunities for communication and mentoring with faculty and fellow students. Activities are designed to facilitate reflection on personal and interpersonal development and progress through the Leading Teacher Program.

**EDLTF 102 Context of the Teaching Profession** 3 cr Focuses learning on the history of schooling, as a function of society, the political interests of the state in the education of its citizens, and the legal dimension of education. The course is designed to afford aspiring teachers learning opportunities to understand the organizational culture of the professional career they are contemplating.

**EDLTF 102 Instructional Technology II** 1 cr 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 World Wide Web and incorporated into classroom-ready instructional materials.

**EDLTF 102 Historical & Legal Foundations of Special Education** 1 cr 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 practices 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 192 Field Experience** 1 cr Provides an opportunity for students to reflect critically on their developing knowledge base and their practical experiences. This experience is designed to foster personal as well as professional growth. Emphasis of this first field experience is urban context.

**EDLTF 201W Ed Psych I** 

**Learning, Development & Motivation** 3 cr Provides opportunities for students to reflect critically on their developing knowledge base and their practical experiences. This experience is designed to foster personal as well as professional growth. Emphasis of this first field experience is urban context.

**EDLTF 202W Ed Psych II Classroom, Leadership, Assessment & Evaluation** 3 cr 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)

**EDLTD 202 Critical Issues in Special Ed** 1 cr 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.

**Professional Educator Certification Track** Students must apply for acceptance to the Professional Educator Certification Track before scheduling coursework. Specialized courses provide preparation in teaching techniques and methods required for specific fields of concentration — early childhood, elementary, or secondary education. To provide students with the most relevant professional training, curriculum requirements and/or prerequisite requirements are subject to change by the Pennsylvania Department of Education or the faculty at any time. Changes may affect students’ programs of study.

**CERTIFICATION TRACKS IN THE LEADING TEACHER PROGRAM**

**EARLY CHILDHOOD EDUCATION** The Leading Teacher Program (LTP) in Early Childhood Education is designed to prepare leading teachers for early childhood classrooms and child care settings. 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 our nation’s schools. 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 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 certification 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.

### Course Descriptions - Early Childhood Education

**EDLTC 201 Orientation to Early Childhood Education** 3 cr
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** 3 cr
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** 7 cr
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.

Module 1 focuses on N-3 student learning outcomes and the knowledge base that beginning leading teachers must have in order to facilitate learning in N-3 classrooms.

Module 2 is delivered in school settings, or in similar organizations, such as local literacy support agencies, the School of Education Reading Clinic, and the Saturday tutorial services offered through the University Learning Skills Center for urban students. In this module, students compare local instructional practices in literacy with regional and national initiatives, and teach individuals, small groups, or whole classes. The focus is on instructional planning, instructional practice, and formative evaluation.

Module 3 addresses the service of reading, language arts, and related literature to all aspects of pre-school and primary years education including the relationships of literacy to other areas of the school curriculum. Thematic instruction, projects, and interdisciplinary activities are referenced to scholarly research. Students will be linked through technology to regional, national, and international schools and to expert practitioners found in local school districts.

**EDLTC 301 Literacy Field Work** 1 cr
Students will apply knowledge of literacy, school mathematics, how children learn mathematics, and mathematical pedagogy in an N-3 school setting.

**EDLTD 335 Numeracy Academic Adaptations** 1 cr
Students will focus on adaptations in numeracy assessment, curriculum, and instructional strategies for students with learning differences.

**EDLTC 491 Educated Citizenry Field Work** 1 cr
Students will demonstrate the application of inquiry skills, planning and implementation of integrated investigations, and classroom teaching skills in schools, museums, and other educational facilities.

**EDLTC 430 Educated Citizenry Academic Adaptations** 1 cr
Students will focus on adaptations in science, social studies, and the performing arts, specifically in mathematics, curriculum, and instructional strategies for students with learning differences.

**EDLTD 402 Senior Seminar** 3 cr
Senior Seminar is an opportunity for Leading Teachers to review issues in teaching in early childhood settings and to present their Leading Teacher platforms.

**EDLTC 492 Student Teaching** 6 cr
Student teaching is a fifteen-week experience shared between an approved primary elementary (K-3) classroom setting and a NAECY accredited preschool under the direct supervision of a cooperating teacher and a University supervisor.

**EDLTC 493 Student Teaching - Early Childhood** 12 cr
Student teaching is a ten-week experience in Early Childhood and a ten-week experience in Elementary or Secondary Education or International. This course is for students who will complete the requirements in two certification areas. Registration is concurrent with 493 in another program.

**Elementary Education**

The Leading Teacher Program (LTP) in Elementary Education is designed to prepare leading teachers for elementary school classrooms in our nation’s schools.
SCHOOL OF EDUCATION

EDLTE 330 Literacy Academic Adaptations 1 cr

Students will develop knowledge of:

- Multiple representations of mathematical concepts, procedures, and processes
- Ways to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formality

EDLTE 392 Numeracy Field Work 1 cr

Students will focus on adaptations in science, social studies, and the performing arts in grades N-8 and their impact on individuals and communities. The first third of the semester will concentrate on developing inquiry skills. The second third of the semester will focus on doing an investigation with emphasis on integrated content. The last third of the semester will concentrate on a large research project.

EDLTE 491 Educated Citizenry Field Work 1 cr

Students will demonstrate the application of inquiry skills, planning and implementation of integrated investigations, and classroom teaching skills in schools, museums, and other educational facilities.

EDLTE 430 Educated Citizenry Academic Adaptations 1 cr

Students will focus on adaptations in science, social studies, and the performing arts, specifically in assessment, curriculum, and instructional strategies for students with learning differences.

EDLTE 402 Senior Seminar 3 cr

Senior Seminar is an opportunity for Leading Teacher candidates to review issues in teaching in the elementary school and to present their Leading Teacher platform.

EDLTE 492 Student Teaching - Elementary 12 cr

Student teaching is a fifteen-week experience in an approved elementary school or middle school under the direct supervision of a cooperating teacher and a University supervisor.

EDLTE 493 Student Teaching - Secondary 6 cr

Student teaching is a fifteen-week experience in Elementary and a ten-week experience in Early Childhood, Secondary Education or International. This course is for students who will complete the requirements in two certification areas. Registration is concurrent with 493 in another program.

SECONDARY EDUCATION

The Secondary Education major prepares students to teach in the middle schools, junior high schools, and senior high schools of Pennsylvania. It combines professional education with an academic major in English, English/Communications, Foreign Language (Spanish or Latin), Mathematics, Citizenship (History, Geography, Political Science and Economics), Social Sciences (Psychology, Anthropology, and Sociology) and Science.

Students interested in a science major will participate in a science program that results in a Bachelor’s degree in one of the sciences and a Master’s of Science Degree in Education. This program will typically take five academic years and a summer to complete.
The School of Education provides opportunities to become certified in French and German. Special arrangements must be made with an advisor.

Secondary majors complete a minimum of 124 credit hours. The General Education Core (36 credits) and the Foundations of the Leading Teacher Program (19 credits) are completed in years 1 and 2 (see semester 1-2-3-4). Elective credits are used to build the academic major required by Pennsylvania. Details of course sequences are provided in the description of the Foundations of the Leading Teacher Program.

In semesters 5-6, secondary majors take the appropriate methods class (listed below), courses in print materials and computer-based instruction, and a course, Adaptive Strategies for Inclusive Programs. Academic coursework continues through semesters 5-6. A one (1)-credit field experience is required during semesters 5-6. Secondary majors typically study teach (12 credits) after completing the requirements below.

The following course of study is required for secondary education majors during semesters 5-8:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EDLTS 336 Teaching Mathematics Gr 5-8</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Examines mathematical concepts and skills taught in grades 5-8, teaching strategies and methods that foster reasoning and mathematical thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDLTS 341 Teaching Secondary Mathematics</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Explores methods, strategies, and content of secondary mathematics with emphasis on problem solving and technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDLTS 342 Teaching Secondary Science</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Explores methods, strategies, and content of secondary science, with emphasis on discovery, inquiry, and technology</td>
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<td></td>
</tr>
<tr>
<td><strong>EDLTS 343 Teaching Secondary English and Communication</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>EDLTS 345 Teaching Secondary Foreign Languages</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>EDLTS 346 Teaching Secondary Social Studies</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>EDLTS 345 Teaching Secondary Inclusive Programs</strong></td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

**Course Descriptions — Secondary Education**

**EDLTS 336 Teaching Mathematics Gr 5-8**

3 cr
Examine mathematical concepts and skills taught in grades 5-8, teaching strategies and methods that foster reasoning and mathematical thinking.

**EDLTS 341 Teaching Secondary Mathematics**

3 cr
Explore methods, strategies, and content of secondary mathematics with emphasis on problem solving and technology.

**EDLTS 342 Teaching Secondary Science**

3 cr
Explore methods, strategies and content of secondary science, with emphasis on discovery, inquiry, and technology.

**EDLTS 343 Teaching Secondary English and Communication**

3 cr
Examine various ways to teach grammar, language, and composition, provides opportunity for students to review the basics of grammar and composition and to develop lessons for teaching at the secondary level and in special education.

**EDLTS 345 Teaching Secondary Foreign Languages**

3 cr
Explore a variety of approaches for teaching foreign languages (K-12), grammar, structure, verbal exercises, and literature germane to the specific language to be taught will be discussed.

**EDLTS 346 Teaching Secondary Social Studies**

3 cr
This is a competency-based experience for social studies/history majors that develops evaluation skills, knowledge of curricula, media and technological experiences, and methods, expands planning and questioning skills.

**EDLTS 345 Teaching Secondary Inclusive Programs**

3 cr
Explore the range of services needed for students with learning and behavior challenges in secondary education programs. Students will develop skills in the process of selecting adaptations in content area instruction, and in teaching effective study skills and learning strategies across the curriculum. The process of planning for transition to adult life will be investigated, as will strategies for facilitation of effective social skill development. Applications of computer and assistive technology for students with challenges will be addressed.

**EDLTS 349, 392, 491 Field Experience**

1 cr
Continue the opportunities for students to reflect critically on their developing knowledge base and practical experiences. These seminars are designed to foster personal and professional growth in preparation for student teaching and entry into the teaching profession.

**EDLTS 480 Senior Leadership Seminar**

3 cr
An elective experience in which seniors engage in an in-depth investigation or pursue a special project related to their leadership development. Requires sponsorship by an instructor and approval of the Chairman.

**EDLTS 492 Student Teaching — Secondary 12 cr**

Student teaching is a 15-week experience in an approved secondary school under the direct supervision of a cooperating teacher and a University supervisor.

**EDLTS 493 Student Teaching — Secondary 6 cr**

Student teaching in secondary education for students who wish to complete requirements in two certification areas. The student teaching experience is two, ten-week assignments. Registration is concurrent with EDLTS 493, EDLTE 493 or International Study.

**EDLTS 301 Instructional Technology I Text-Based Instruction**

3 cr
Examines the design, integration, and evaluation of text-based printed and graphics materials including content-specific handouts, student workbooks, and lesson study guides. In addition, students prepare comprehensive curriculum-based lessons using a variety of commonly accepted instructional technologies, including digitized resources found on the Internet. These resources will be firmly grounded in accepted academic standards and assessment. Upon completion of the course, approved materials are uploaded to the School of Education server for access by practicing teachers.

**EDLTS 302 Instructional Technology II Visual-Based Instruction**

3 cr
Examines methods, strategies and content of secondary social studies/history majors that develops evaluation skills, knowledge of curricula, media and technological experiences, and methods, expands planning and questioning skills.

**EDLTS 345 Adaptive Strategies for Secondary Inclusive Programs**

3 cr
Explores the range of services needed for students with learning and behavior challenges in secondary education programs. Students will develop skills in the process of selecting adaptations in content area instruction, and in teaching effective study skills and learning strategies across the curriculum. The process of planning for transition to adult life will be investigated, as will strategies for facilitation of effective social skill development. Applications of computer and assistive technology for students with challenges will be addressed.

**EDLTS 303 Instructional Technology V Web-Based Instruction (Elective)**

3 cr
Completes the journey into Instructional Technology with an examination of the design and implementation of Web-Based instruction. Students compose a personal home page and several phototype course web pages supporting different academic disciplines (internal (student-made) and external (Internet-ready) links to the Web are incorporated into the pages after considerable research of content materials. Upon completion of the course, approved web pages are uploaded to the School of Education server for access by practicing teachers.

**INTERNATIONAL STUDY IN EDUCATION**

The School of Education offers opportunities for students to earn credits toward a degree while traveling and studying in international settings. There are three categories of international study: 1-6 week summer courses, 10 week student teaching placements, and seminars abroad. Summer courses are held in England and Europe, China, Costa Rica, Israel, Belize and Italy. Ten weeks of student teaching can be completed in Ireland, England, Puerto Rico and Spain. Seminars abroad can be arranged in Ireland. For the most up-to-date information on opportunities to study abroad, contact the Office of International Studies in the School of Education.

**DUAL DEGREE PROGRAMS**

BS Education and B.S/B.A Mathematics

The School of Education and the College of Liberal Arts (Department of Mathematics) has approved a program of studies leading to a B.S in Education and a B.A or B.S in Mathematics. The program provides an option for students seeking to be certified on the secondary level in mathematics while completing a Bachelor’s degree in mathematics. It is a rigorous program, which requires that the student maintain a minimum grade point average of 3.0 in general education courses, 2.0 in mathematics courses, and a 3.0 in Foundations of the Leading Teacher Program and the Professional Educator Certification Program. The program can be completed in 4 academic years and one summer session. Students wishing to graduate with two Bachelor’s degrees (B.S in Education and B.A in Mathematics) would register simultaneously in the School of Education and the College of Liberal Arts and would be assigned an advisor from each school. Requirements for teacher certification in Pennsylvania as specified in the catalog must be met to receive a School recommendation for state certification. Similar programs with dual Bachelor degrees include:

- BS Education and BA English
- BS Education and BA Communications
- BS Education and BA Spanish
- BS Education and BA Latin

Similar dual degree programs with Bachelor and Master degrees include:

- BS Science and MS Education
- BS Athletic Training and MS Education
- BS Physical Therapy and MS 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:

- Completion of all course work with a cumulative grade point average of a minimum of 3.0
- Successful completion of student teaching
- Completion of all requirements for the Bachelor of Science in Education degree
- Completion of the application for certification
- Recommendation of the Dean of the School of Education
- Successful completion of Praxis tests as required by the Pennsylvania Department of Education.

Note: Praxis scores are valid for a period of five years; however, the Pennsylvania Department of Education may choose to increase the passing scores. Students must meet the criterion score in effect on the date of application for certification.

The requirements for certification are established by the Pennsylvania Department of Education. Students must meet the requirements established by the state at the time of application for certification.

DUAL CERTIFICATION
Through advisement, a student may complete requirements in two certification areas, such as Elementary/Early Childhood or Elementary/Secondary. Such programs require additional coursework to meet standards promulgated by the Pennsylvania Department of Education. Ten weeks of student teaching in both areas is required after all coursework is completed.

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 of 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 are available to undergraduates in the School of Education and are presented at the annual Honors Day Convocation. Students should consult the School of Education Handbook for details.

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.

ADMISSION
Students who wish to major in music should apply through the Office of Admissions. Following is an interview and audition should be scheduled through the Administration of Music Enrollment. Specific audition requirements are mailed to auditionees. The audition consists of solo performance before a committee, a written theory exam, an individual aural test and a piano placement exam. Students requesting scholarship assistance should apply through Financial Aid. Taped performances can be evaluated, but the audition process is not completed entirely until the testing has been done. Students receive written confirmation of their status from the Office of Admissions.

It would be helpful for prospective music majors to have a background in theory, piano and certain instrumental skills prior to entrance. If deficiencies exist in any of these areas, prerequisite courses may be required at the discretion of the audition committee. Visits to classes and personal interviews with the applied music staff are encouraged strongly and may be arranged by calling (412) 396-5064.

DEGREES
Undergraduate music students enroll in one of four degree programs: The Bachelor of Music degree, the Bachelor of Music in Music Technology degree, the Bachelor of Science in Music Education degree, or the Bachelor of Science in Music Therapy degree. Students planning performance careers, whether in concert, symphony orchestra, or opera enroll in the Bachelor of Music program. Students interested in teaching in a private studio situation or at the college level, as well as preparing for a career in music ministry, also enroll in this program. Students planning music technology careers, whether in sound recording, electronic composition, or electronic performance enroll in the Bachelor of Science in Music Technology program. Students anticipating a career in school music teaching enroll in the Bachelor of Science in Music Education program, prospective music therapists enroll in the Bachelor of Science in Music Therapy program. Students enrolled in other schools and colleges in the University also study in the School of Music in recognition of the importance of arts education to the full development of each individual. Music courses designed for general students are available.

The curriculum is enhanced by the vital cultural life in the City of Pittsburgh, which is consistently ranked one of America's most livable cities. The proximity of the Mary Pappert School of Music to the city frequently brings cultural events to the campus. Workshops, master classes, and special performances are often presented by visiting artists who have included: Birgit Nilsson, Wynton Marsalis, Pat Metheny, John Mack, Rebecca Pennys, Barry Green. Eliot Fisk, Thomas Newman, Joseph Schwantner, and

MARY PAPPERT SCHOOL OF MUSIC

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 in 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 an education for the 21st century, rooted in the traditions of historical thought.

MARY PAPPERT SCHOOL OF MUSIC

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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 and the Children's Festival Choir. 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 McKee Stewart Concerts, and others.

**MUSIC SCHOOL TECHNOLOGY**

New technologies offer today's performers and composers myriad opportunities to develop their musical ideas and stretch them to the limits of the imagination. Effective competition in the music fields of today and tomorrow requires strong musical skills linked with both ability and artistry in the use of electronic media.

Duquesne offers a unique program which blends a strong traditional music education with practical artistic experiences in all phases of music 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.

**FACILITIES**

The Mary Pappert School of Music is now counted among a highly select group of prestigious schools of music that are officially designated as "All Steakhouse Schools." The 68 new Steinway pianos are part of the school's performance halls and rehearsal rooms as well as the teaching and practice studios. Piano majors practice in specially designated rooms that contain grand pianos, other practice rooms are supplied with studio upright pianos. Two-manual Harpsichords are available for practice and recitals. Organ students have access to two Moeller organs and a Fascher organ, an electronic organ, a three-manual Moeller organ, and a Fascher tracker organ.

Two pipe organs by Kilgen and Tellers and a Rodgers electronic theater organ on campus are available for recitals. Organ students are provided with practice rooms. Many orchestral and band instruments are available for instrumental classes.

In addition, the Mary Pappert School of Music is ranked among the top four universities in the country offering guitar and electric bass performance degrees. This designation has made possible a Fender Musical Instrument Grant that provides the latest Fender guitar amplifiers, bass amplifiers, guitars, bases, and sound systems throughout the music school for students and faculty use. This grant is renewed every year providing the latest gear for the students of the Mary Pappert School of Music and designates the school as an "All Fender Institution." Since 2000, Mary and Eddy Shiner Practice Rooms - a suite of acoustically enhanced practice rooms has been constructed in the lower level of the school, providing individual as well as small group rehearsal space in comfortable and attractive surroundings. These rooms were made possible by the generous gifts of donors who wished to honor the work of Mary and Eddy Shiner, renowned performers and teachers in trumpet and trombone who taught many Duquesne students.

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**MARY PAPPERT SCHOOL OF MUSIC**

**The Duquesne University Recording Complex**


**Keyboard Lab**

A keyboard/computer lab housing 17 Macintosh Mac DVX workstations, each equipped with 17 Yamaha clavionovas, printers, Yamaha hardware communications, system, Mark of the Unicorn's Fast Lane MIDI interfaces, Free Style, Code's Finale, Pracitca Musica, Music Lessons, Fiber-optic Internet connections.

**The Music Technology Center**

A multipurpose learning facility containing seventeen G4 Power Mac workstations A/V and CD-ROM, Macromound Director, Multimedia capabilities with scanners and digital audio stations, eighteen Korg full blown Trinity workstations, Korg GEC-16 stereo communication system, Moog Rogue, Mark of the Unicorn's MIDI express, Performer, Code's Finale, G-Vox guitar software, Fender guitars/amps/basses and PA equipment for student sign-out.

**STUDENT ORGANIZATIONS**

A chapter of the national music organization Mu Phi Epsilon contributes substantially to the students' professional and social development.

Full semester of student teaching spanning grades K-12 prepares students to teach both vocal and instrumental music at all age levels. Permanent certification is awarded after completion of 24 post-graduate credits and three successful years of teaching within a six year period.

**CURRICULUM**

Students complete 137 credits distributed in the areas of music, professional education and general education. These include 28 credits of core musicianship classes, plus electives, conducting, computers, applied music and ensembles, voice, piano, guitar and classes in all families of instruments. Students may request the applied music teacher of their choice. All students learn the use of the up-to-date technology in state of the art computer and piano labs.

Professional education classes include Education Psychology and five sequential semesters of methods classes based on the National Standards for Music Education. These provide an introduction to several specialized methodologies, including Kodaly, Orff, Dalcroze and Music Learning Theory as well as traditional approaches to teaching.

Clinical experiences begin during the first year and continue throughout the program, culminating in a full semester of student teaching spanning grades two and three.
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 society and culture. These include the 27 credits of the university core curriculum.

**MUSIC EDUCATION CERTIFICATION**

Students completing the course work in music education receive both a B.S. or M.Ed. and are recommended for certification to the PA Department of Education. Upon successful completion of the Praxis Exam, graduates may receive the Instructional Level I – Music, K-12 certificate.

Selection of students for this program depends upon completion of admissions and audition processes and interviews. 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 is available to those with B.M. degrees 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 process and an interview with the department chair. Candidates must demonstrate leadership qualities, excellent communication skills, critical thinking and analytical abilities, and a genuine interest in a service-oriented profession.

**Course Requirements**

- **Postgraduate Certification**
  - Admission
  - Core courses
  - Electives
  - Clinical Practicum

**Curriculum**

Students complete 32 credits in areas of music, music therapy, human sciences, and general education. Music courses include 24 credits of core music classes, such as music therapy, music literature, and music business courses. The curriculum also includes a 2-credit course focusing on the Alexander Technique, which provides an introduction to the Alexander Technique in which students examine body 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 techniques are based on an understanding of human anatomy which promotes ease and freedom of movement, balance, flexibility, and coordination.

**Pedagogy Lab for Performance Majors**

- 2 cr
- Intermediate Piano class: Class piano instruction in intermediate techniques of playing, harmonization, theory, score reading, jazz chording, and transposition utilizing MIDI piano lab equipped with music workstations. Emphasis is placed on intermediate literature and harmonization patterns. Students are expected to expose available materials for teaching and proper curriculum techniques will be discussed for ensembles, development of graded musical items, and the business of music instruction.
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 on-site 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 repertoire in the original languages.

Chamber Music 1-2 cr
Study and performance of all types of chamber music for various instrumental combinations including electronic.

MUSICSHIP I 110, 112 Musicship I and II 4 cr each
These courses comprise the first two semesters of the seven-semester Musicship sequence. This sequence integrates many areas of learning within music, including history and literature, solfage, 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 interrelationships 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.

113, 114 Musicship III and IV 4 cr each
These courses continue work in all areas started in Musicship I and II. These semesters focus on the music of the late Baroque, Classical, and Romantic eras. Work in harmony, counterpoint, form, solfage, 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: Musicship I and II.

115, 116 Musicship V and VI 4 cr each
These courses continue work in all areas started in Musicship 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, solfage, aural comprehension, composition, keyboard skills, and improvisation is tied to the structures encountered in the covered historical eras. In 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: Musicship I through IV.

117 Musicship VII 4 credits
Musicship 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: Musicship VI.

121, 122 Dalcoro Eurhythms I & II 2 cr each
Experiencing, analyzing, and creatively manipulating the metric/structural and the expressive/interpretative components of music through rhythmic movement, ear-training, and improvisation.

235 20th Century Techniques 2 cr
A survey of the melodic, harmonic, and contrapuntal resources employed by composers in the twentieth century. Readings, analysis and short creative projects will be assigned.

254 Music from 1950 - Present 2 cr
The evolution of music since World War II. Topics include serialism, aleatory music, minimalism, electronic music, pop influences, neo-romanticism, and performance art.

336 19th Century Counterpoint 2 cr
A study of contrapuntal technique of the period of J.S. Bach. Contents include lectures, written assignments, listening and analysis.

340 Orchestration 2 cr
A study of the basic problems of scoring for individual instruments, particularly orchestral choirs, the entire orchestra, and unique instrumental combinations. Analysis of the techniques of orchestration of selected composers of the 18th, 19th, and 20th centuries.

351 Composition 2-3 cr
A course in musical composition.

CONDUCTING

370 Conducting I 2 cr
An introduction to basic instrumental and choral conducting techniques with emphasis on the proper conducting posture, the preparatory gesture, the release, basic patterns and styles, use of the baton, and development of the left hand. Course also will include instruction in score reading, analysis, and preparation, with emphasis on the standard literature. Course time will be divided equally between lecture-demonstrations and practical conducting experience in a laboratory setting.

371 Conducting II 2 cr
Instruction and application of intermediate and advanced instrumental and choral conducting techniques with emphasis on subdivision, accent and syncopation, subito dynamic change, tempo alteration, tenuto and fermata, asymmetrical meters, supermetrics, and specialized techniques for conducting recitative, contemporary music, and musical theater. Course will include score analysis and preparation, as well as techniques and methods while focusing on the standard literature. Class time will be divided equally between lecture-demonstrations and practical conducting experience in a laboratory setting.

MUSIC EDUCATION

091, 092 Fundamentals of Piano I, II 2 cr each
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 I but 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 each
This course teaches fundamental techniques of singing, including posture, breathing, tone, diction, expression and style. Repertoire includes folksongs, art songs and multicultural songs sung in solo, unison, duets and small ensembles. Students study 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
253 Music Ed Methods II 2 cr
A continuation of MEM I, with emphasis on the general music class from grades 9-12. The course emphasizes the selection and laboratory conducting of choral repertoire appropriate for various grades and proficiency levels of students.

254 Music Ed Methods III 3 cr
This course advances the sequence of the National Standards, developing tracks 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.

256 Music Ed Methods IV 3 cr
This course is the final course in the MEM sequence. Its structure parallels that of previous semesters, and completes the study of grades 5-6. Study of inclusion and assessment techniques appropriate for these grades are included. The song anthology is expanded.

258 Music Ed Methods V 3 cr
This course is the final course in the MEM sequence. Its structure parallels that of previous semesters, and completes the study of grades 9-12. Includes the fourth hour of 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. Orff 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 grades 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 grades and proficiency levels of students.

361 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.

366W Children's Choir Lab 1 cr
This course provides field and clinical experience in conjunction with the Children's Festival Choir, 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 students. Percussion 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.

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 4-12 instrumental music program in a selected school with a qualified cooperating teacher.

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.

511 Jazz History 2 cr
A study of the origin, development, and styles of jazz and its ramifications with an emphasis on recorded music as well as scores.

516 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.

530 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. 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.

609W Music Therapy In Context 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.

612W Directed Study 2 cr
Student selects Music Therapy topic.

615 Piano Improvisation I 2 cr
Piano Improvisation I is open to all Music Education and Music Therapy majors. In this course students will learn basic improvisation skills and how to utilize improvisation in today's classroom and therapeutic settings.

631 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 accomplishment, right hand techniques, fretboard visualization, sight reading, basic improvisational tools, introduction to chord voicing, rhythmic studies, and an increased awareness of music interpretation.

632 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.
MARY PAPPERT SCHOOL OF MUSIC

374W Music and Movement for the Exceptional Person 3 cr
This course is experiential 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, solos, 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 church systems, children’s choirs, instruments in workshop, contracts, cantor systems, worship commissions, etc.

820 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, Armenian 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 chant as prayer and current liturgical application.

431 432 Organ Improvisation 2 cr each
A practical application of the basic tools of improvisation including harmonization 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 their 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 both acoustically and electrically. 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 III.

240 Advanced Audio Production 2 cr
Students gain experience in CEDAR (Computer Enhanced Digital Audio Restoration) techniques for the purpose of soundtrack restoration. Advanced digital techniques and digital signal processing are covered. Prerequisite Post Production.

301 Post Production & Mastering 2 cr
This course is designed to give hands-on experience with various post production and mastering tools. Proper procedures in formatting and preparing projects for cassette or CD production are covered. Sony 1630 operation and mastering is covered. Prerequisite Audio IV.

131 Applied Audio 2 cr
Directed individual study in Audio.

420 Sound Recording Technology Internship 1-4 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 search engines, Excel, Word, and Power Point are an integrated part of this course.

105 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
Introduction to composition that focuses on the fundamentals of 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)

209 Music Technology III 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)

296 Music Technology IV 2 cr
Sampling, digital sound design and editing, SMPTE 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 Technology 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 analysis of acoustic and electronic performances and study of technical exercises, students will learn to control the nuance of performance on electronic instruments. Prerequisites Computers for Musician 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 the 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 of 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)

365 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
420 Music Technology Internship 1-4 cr
Students will be provided an opportunity to work as an assistant at a corporation or business related to the field of music technology.

GENERAL

090 Seminar 0 cr
Registration for Seminar is required of all undergraduate Music majors during most semesters of full-time enrollment. Course matriculation guarantees availability for master classes, recitals, student club meetings, and guest lectures held during the Tuesday and Thursday “common hour” periods.

170 Enjoyment of Music 3 cr
This course leads to an understanding of how music’s basic elements, melody, harmony, rhythm and form, are used to communicate the composer’s expressive intent. Designed for majors and non-music majors. No prerequisites.

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 with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective programs.

SCHOOL OF NURSING

School Of Nursing

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Comprehensive Student Advisor
Karen Bova

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.

In the Fall of 1982, a new baccalaureate nursing program, also leading to the degree of Bachelor of Science in Nursing, was instituted and was specifically designed to meet the educational and professional needs of the registered nurse. A second degree option was initiated in August 1991. This program is designed for students who hold a baccalaureate degree in a discipline other than nursing.

In 1986, the Graduate Nursing Program was opened to offer the Master of Science in Nursing. The areas of specialization offered are: Nursing Administration, with population-based care in both acute care and ambulatory care settings, and the dual MSN/MBA degree. Nursing Education, and Advanced Practice Nurse-Family Nurse Practitioner.

In Fall, 1994 the Graduate Nursing Program expanded to include study for the Doctor of Philosophy (Ph D) in Nursing.

To date, more than 3000 students have graduated from Duquesne’s School of Nursing.
PROGRAM PURPOSES AND OUTCOMES
The purpose of the School of Nursing is to provide professional education for students pursuing a bachelor of science degree in nursing, a master of science degree 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, on 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. Demonstrate 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 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 increased responsibility and to undertake graduate study.

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, PA 15282.

The specific entrance requirements for admission are:

1. The applicant's high school curriculum must include a minimum of 16 units distributed as follows:
   - English: 4 years required
   - Social Studies: 4 years recommended
   - Math & Science: 8 years recommended
   - Science: 4 years required
   - Language: 2 years recommended
   - One additional year is also required in Business, Psychology, Sociology, and Communications

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 and high school quality point average and testing results.

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 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, or illegal act associated with substance abuse(s) may be disqualified from licensure and reclusion as an RN in Pennsylvania (PA) by the 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 admission School of Nursing requirements include evidence of physical and emotional health adequacy 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:
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 1 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 also 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 the BSN, the student can earn the MSN degree at Duquesne part-time in an additional 2 years. The Miller Analogues Test (MAT), a required admission test for the MSN program, is waived for students who have met all graduate admissions 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.

• High school diploma or equivalent
• Graduation from an accredited associate degree or diploma nursing program (3.0 GPA minimum)
• Verification of current licensure as a registered professional nurse
• Associate degree or diploma transcript
• Current or past clinical experience in nursing
• Verification of active required malpractice insurance prior to clinical practicum
• Personal interview with the RN - BSN / MSN coordinator in the School of Nursing
• Compliance with the Standards of Personal Conduct Policy
• Evidence of physical and emotional health adequate to meet the demands of the program as indicated above.

SCHOOL OF NURSING

SECON D DEGREE STUDENTS

The Second Degree-B S N / M S N 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 affirm a commitment to the adult learner. The 76-credit accelerated portion of the curriculum comprising the nursing major courses is offered over an 18-month consecutive period beginning in the summer of each year.

While pursuing the BSN degree, the Second Degree student has the unique opportunity to complete 21 credits of graduate coursework while earning the BSN degree. Comparable MSN nursing courses are taken in lieu of specified undergraduate nursing classes. After completing the BSN, students who wish to continue their education and earn the MSN degree, may elect to proceed with advanced standing into Duquesne’s MSN program or transfer MSN credits elsewhere. The Miller Analogues Test (MAT), a required admission test for the MSN Program, 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-B S N / M S N Track should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, PA 15282.

• Graduation from a baccalaureate program in another discipline
• Personal interview with the coordinator of the Second Degree Track within the School of Nursing
• Compliance with the Standards of Personal Conduct Policy
• 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.

1. Students must submit to the appropriate advisor in the School of Nursing, Undergraduate Program, both the catalog description of course(s) they wish to take and the summer session schedule. This request will be evaluated for course equivalency and appropriateness.

2. Ordinarily, a student who has acquired 60 or more credits may not receive advanced standing for courses taken at accredited community or two-year colleges. Students deserving waivers of this policy must obtain the permission of the Undergraduate Student Services Committee of the School of Nursing.

3. A candidate for the Bachelor’s degree must complete a minimum of 30 credits (exclusive of challenge credits) toward the degree at Duquesne University.

4. Students are responsible for earning a minimum of a C grade, or its equivalent, if they expect to receive advanced standing. Students must arrange to have an official copy of the transcript of grades earned at the institution in which they are a temporary transfer sent to the appropriate advisor in the School of Nursing in order to receive advanced standing. This transcript must be sent immediately upon completion of the course. Credit can only be given once for courses that are repeated.

ADDITIONAL EXPENSES* AND REQUIREMENTS

Student Liability Insurance (Professional) (annually) $12.00

Uniforms, identification pin, shoes $150.00

Transportation to and from clinical agencies (weekly) $5.00

School of Nursing pin, upon graduation (if desired) cost varies

Physical examinations, diagnostic procedures, and immunizations

1st year $200.00

2nd-4th year $100.00

NCLEX Diagnostic Examination $30.00-60.00

*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.

Provision and periodic physical examinations, immunizations, and laboratory testing 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 / $6,000,000.
professional coverage. Seniors will be required to apply for Act 33/44 clearance for a small fee prior to their pediatric clinical experience.

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 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 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 25.

Kappa Alpha Beta, an undergraduate nursing sorority of Chi Eta Phi, Inc., was established in 1996. The purpose of this organization is to increase minority students in nursing and to foster continuing education. 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.

**Graduate Requirements**

General University requirements for graduation are in the Academic Policies section of this catalog. In addition, specific School of Nursing requirements are:

1. Completion of 126 credits and all clinical practicum courses.
2. A minimum cumulative overall quality point average of 25.
3. Completion of the required curriculum plan.
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. The student is advised of any additional requirements for graduation based on curriculum changes. The responsibility for fulfilling degree requirements rests with the student.

**SCHOOL OF NURSING**

**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 J. Behan Award
- Mary Tobin Gold Medal for General Excellence in Nursing
- Ruth Johnson Gold Medal for General Excellence in Nursing
- Faculty Award
- Lanza Award for Excellence in Nursing Practice in the Home Care Setting
- Air Force Leadership in Nursing Award
- Community Health Education Project Award
- Sigma Theta Tau International, Epsilon Phi Chapter Award
- Marna C. Miller Award for Excellence in Medical-Surgical Nursing
- Army Nurse Corps and the National Student Nurses’ Association Spirit of Nursing Award
- Student Leadership Award

**Sophomore**

**Junior**

**Senior**

**Freshman**

**TOTAL = 126 credits**

*University Core Courses
SCHOOL OF NURSING

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.

A student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstances is 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.

2. Health Requirements

All School of Nursing students are required to conform to the health requirements of the School of Nursing.

3. All students are expected to follow Standards of Professional Conduct & Standards of Safe Clinical Practice. Failure to abide may result in the student's dismissal from the nursing program. Students are expected to abide by the policies and procedures of the undergraduate nursing program.

Curriculum Standards

To progress to and remain in the upper division nursing practice courses, a minimum cumulative GPA of 2.5 is required. A minimum C grade is also required in all nursing and non-nursing courses in the plan of study.

Students are ordinarily permitted to repeat courses in which D and F grades were received. 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.

Students will not be allowed to repeat any nursing courses in which D or F grades were received or to progress in the School of Nursing without the approval of the Undergraduate Student Standing Committee.

Students must repeat both the theory and clinical components of any nursing course that is repeated, regardless of the final theory or clinical grade for the original course.

The students are encouraged to seek regular advice from their comprehensive academic advisor and to keep a record of credits earned and the calculated averages. The School assumes no responsibility for such errors appearing in students' records which may prevent the student from graduating.

The School of Nursing faculty reserves the right to withdraw any student from the nursing major who, in its opinion, has not progressed satisfactorily in nursing practice even though the quality point average meets required standards.

The faculty of the School of Nursing also reserves the right to make any changes in curriculum that seem necessary or desirable.

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. Health care delivery systems and processes are introduced. Professional nursing is explored from a historical perspective as it relates to present and emerging roles. The role of the nurse is examined in the context of a profession. Professional nursing practice is explored from ethical and legal perspectives. Effective study skills and test-taking strategies are examined that are helpful to the student's progress through the nursing program. Career development exploration is initiated and strategies are identified to enable the student to work toward career goals.

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 capacities 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, and 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. Nursing theory is introduced as a guide for ways of knowing. The course will provide a survey of nursing theories and their impact on nursing. The concept of nursing as an academic discipline and human science profession according to the philosophy and conceptual framework of the School of Nursing will be introduced. Students are expected to have basic computer literacy skills and will learn how to utilize information retrieval systems, such as nursing and medical data bases, and informational Internet resources.

N204 Lifespan Issues 4 cr

This course builds upon the major concepts of person, environment, health, and nursing. The student will explore human development from conception through death. Emphasis is placed on an individual's psychological, cognitive, psychosocial and spiritual development within the context of the family, society and culture. This course provides the basis for students to assess and therapeutically interact with persons of various developmental stages. Health promotion and illness prevention practices are explored relative to each age group throughout the life continuum. Students will participate in a variety of community experiences with persons of varying developmental stages.

N208 Conceptual Foundations of Nursing Practice 4 cr

This course introduces the student to specific concepts and theories specific to the practice of professional nursing. Concepts specific to the promotion of health and prevention of illness in all clients 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 judgements and take actions based on reason. Home health nursing, community based care, and cultural care will be introduced. Psychosocial 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 integrity 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 a 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 assessment 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 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. A 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 nursing role 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 and human sciences, health assessment, conceptual foundations of nursing practice, and nursing technologies required to practice professional nursing. The opportunity is provided to apply the nursing process to the care of the adult client/family experiencing a chronic illness in a variety of adult health care settings. Complex concepts relevant to the integrity of biological, psychosocial, spiritual, and environmental health will be presented. 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 integrity of biological, psychosocial, spiritual, and environmental health 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 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. The uniqueness of the person’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.

N304 Junior Synthesis Seminar 1 cr
This course builds on previously learned knowledge and human sciences, health assessment, conceptual foundations of nursing practice, and nursing technologies required to practice professional nursing. The opportunity is provided to apply the nursing process to the care of the adult client/family experiencing a chronic illness in a variety of adult health care settings. Complex concepts relevant to the integrity of biological, psychosocial, spiritual, and environmental health will be presented. 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 to provide a systematic 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 health care 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 health services for special populations will be explored. Outcomes such as cost, access, and quality will be considered. The impact of health policy will be addressed.

N312 Pathology 4 cr
This theory 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 normality. The student will study the molecular, cellular, and histological deviations from homeostasis and the mechanisms that disrupt that optimal state will also be explored.

N315 The Research Process 3 cr
This course focuses on the role of the professional nurse in the research process. 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 Childbearing Family 5 cr
The focus of the course is on health promotion with the family as it relates to childbearing 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. Changing 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. Concepts of loss, grief, maternal and paternal role identity, body image, and self-esteem are explored relative to the childbearing family. Changing 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. General concepts of cultural care and sensitivity, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. Norms and alterations in health 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 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 groups. Emphasis is placed on bridging the gap between research and practice.

N404 Concepts and Issues of Professional Nursing 4 cr
This course provides students 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. Concepts of loss, grief, maternal and paternal role identity, body image, and self-esteem are explored relative to the childbearing 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. 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.
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. RN's take N414-55 RN Role Practicum for 2 credits.

N406 Sensor 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 operating 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
NOTE: Not all nursing electives are offered each semester.

299 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 upon 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 gift they bring to the nursing situation when spiritual needs are recognized and shared with the client.

397 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.

399 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 needs 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.

411 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.

427 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.

499 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 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 PHARMACY MISSION AND GOALS

The mission of the School of Pharmacy and the Graduate School of Pharmaceutical Sciences is to prepare students for lifelong learning and careers in the profession of pharmacy. The programs are outcome competency-based and emphasize 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 0-6 Pharm D program of study. The minimum academic requirements for continuance into the four-year professional phase are:

1) Completion of the preprofessional course requirements.
2) Minimum cumulative grade point average of 2.50 and no grade lower than "C" in each of the required courses in the preprofessional curriculum.

Qualified external transfer students may be admitted into the Pharm D program of study, with placement contingent on an evaluation of completed prior course work.

Advanced standing credit for professional course work must be evaluated by the appropriate School of Pharmacy faculty member. The evaluation must be completed before the start of the first professional year of the curriculum.

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 800-533-3606, 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.

DOCTOR OF PHARMACY PREPROFESSIONAL PHARMACY CURRICULUM

Duquesne University
Course Requirements
Introduction to Pharmacy Practice (PHPRC 101) 1
Biology I and II (111, 113 and 112, 114) 8
General Chemistry I and II (121 and 122) 10
Organic Chemistry I and II (211 and 212) 8
Calculus I (115) 4

Professional Pharmacy Calculations (PHCEU 363) 2
Writing and Critical Thinking (102) 3

Imaginative Literature & Critical Writing (102) 3
Theology (Core) 3
Basic Philosophical Questions (132) 3
Shaping of the Modern World (151) 3
Arts and the Human Experience (161) 3
Elements of Economics (121) 3
Computer/Info Literacy (103) 1

Public Speaking (102) 3
Psychology (103) 3
Sociology (101) or Political Science 3

Non-Duquesne University
Sem
(Transfer) Course Requirements
General Biology with Laboratory 8
General Chemistry with Laboratory 8
English Composition and Literature 3
Calculus (for science or math majors) 4
Religious Studies 3
Philosophy 3
Modern U.S. European or World History 3
Music or Art Appreciation 3
Economics 3

Non-Duquesne University
Sem
Community Service 6

PROFESSIONAL PHARMACY CURRICULUM

First Professional Year
Biochemistry I and II 9
Human Physical and Pathology 6

Second Professional Year
Immunology and Clinical Microbiology 9
Pharmaceutical Principles and Drug Delivery Systems I and II 6
Pharmaceutical Principles Lab I and II 2
Pharmaceutical and Biomedical Statistics 2
Pharmacology Exam 2

Third Professional Year
Clinical and Drug Information Skills 1
Experiential Education I 34
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<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Hrs</th>
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<tr>
<td>Second Professional Year</td>
<td>Autonomic and Neuropharmacology</td>
<td>3</td>
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<td>Medicinal Chemistry</td>
<td>4</td>
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<td>Biopharmaceutics</td>
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<td>Biopharmaceutics / Pharmaceutical Analysis Lab</td>
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<td>Pharmaceutical and Biomedical Analysis</td>
<td>3</td>
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<td></td>
<td>Clinical Skills I and II</td>
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<td>Drug Literature Evaluation</td>
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<td>Pharmacokinetics</td>
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<td></td>
<td>American Health Care System</td>
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<td></td>
<td>Biomedical Sciences and Therapeutics I (CNS/ Psych/ Neuro)</td>
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<td>Experiential Education II</td>
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<td></td>
<td>Biomedical Sciences and Therapeutics V (Chemotherapy and Infectious Diseases)</td>
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<td>Third Professional Year</td>
<td>Biomedical Sciences and Therapeutics II (Inflammation / Pain / Rheumatology / Gastrointestinal Diseases / Pediatrics / Geriatrics)</td>
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<td>Biomedical Sciences and Therapeutics III (Cardiovascular / Renal)</td>
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<td>Biomedical Sciences &amp; Therapeutics VI (Hematology / Oncology / Transplant / Pulmonary)</td>
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<td>Physical Assessment</td>
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<td>Self Care</td>
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<td>Pharmacy Management Concepts</td>
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<td>Advanced Law and Ethics Applications</td>
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<td>Clinical Pharmacokinetics / Advanced Parenteral Therapy With Lab</td>
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<td>Therapeutics Case Studies</td>
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<td>Management Theory and Applications</td>
<td>3</td>
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<td>Professional Elective</td>
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<td>Fourth Professional Year</td>
<td>Experiential Education III, IV, VI, VII</td>
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<td>Professional Electives</td>
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<td>Optional Professional and/or General Electives</td>
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<td>For Geriatric Concentration</td>
<td>3</td>
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<td>Selected Topics in Geriatrics</td>
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<td></td>
<td>Pharmacy in Long Term Care</td>
<td>3</td>
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<td></td>
<td>Advanced Therapeutic Cases in Geriatrics</td>
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<td>Elective Experiential Education</td>
<td>11</td>
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</tbody>
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Courses in the College of Liberal Arts and the other Schools of the University may be approved as electives.

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/ University. The faculty of the Mylan School of Pharmacy and the Graduate School of Pharmaceutical Sciences reserve the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs as necessary.
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 instill 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 be 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.

SCHOOL OF HEALTH SCIENCES

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 opt to 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 maximally utilize 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/MBA 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 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. Dissertation and thesis topics are diverse and consistent with faculty experience. For further information, please contact James V. Ward, M.D.D., M.S.Ed., Office of the Dean at (412) 396-5534 or wardy@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.

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 (CBF/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 are also 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 HHS/ Pre-Health Professions Program.

Inter-School Majors and Minors

Students interested in pursuing an inter-school major or minor within the McAnulty 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 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 in 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 waiting position, he/she should 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 reactivate their applications for another year.

Changes in Admissions/Enrollment Status

An offer of acceptance into a particular RSHS program (e.g., athletic training), class level (i.e., as a third-year student), or academic year (i.e., Fall 2004) is only valid for that respective program, class level, or academic year.

Students who are granted approval to change programs, class levels 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 by 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 July 1.
3. All qualified students whose applications are submitted by January 10 of their senior year will be reviewed for scholarship consideration.

The University will consider all qualified candidates and will provide a decision letter by April 1.

Volunteer experience in the field to which they are applying is not required for the admission of freshmen applicants, but it is 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.

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.

University-Level Courses Taken While in High School

University-level courses taken 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 education.
2. The grades are "C" or better.

ADMISSION OF 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 July 1.
2. Students may transfer into any program at any level, based upon their credentials, courses completed at other institution(s), courses yet to be completed prior to entry into the professional phase, and space availability in the desired program.

Prospective internal transfer, transfer, and second degree candidates should carefully investigate the financial implications of entering any RSHS program.

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 in the RSHS Office of the Dean for an Internal Transfer Application.
   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...
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 handled by the Offices of Domestic Admissions and International Affairs.

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 RHSHS STUDENTS

Pre-Professional Phase

Students in their first year within the pre-professional phase will also need to meet program requirements for entry into the professional phase (e.g., CPR, physical examination and immunizations).

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 professional orientation program(s) by their respective departments.

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 require students to carry and earn specific credit loads and GPA's. 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 the appropriate credit level for their financial needs.

The University makes the following distinctions in regard to undergraduate student classification for financial aid— all based on credit level:

- Freshman: 0-29 credits completed
- Sophomore: 30-59 credits completed
- Junior: 60-89 credits completed
- Senior: 90 or more credits completed

THE RHSHS, HOWEVER, CLASSIFIES STUDENTS BY CLASS LEVEL (i.e., as a second-year student), rather than credit level. In regard to financial eligibility, it is common for transfer and second degree students to financially be considered by the University under one classification (i.e., as a junior), but academically considered by the RHSHS under another classification (i.e., as a second-year student within a RHSHS program). For example, if a student has 64 credits completed upon matriculation to the RHSHS, but has all his/her science courses left to complete, he/she may have been admitted into the second year of the program rather than the junior year. His/her credit level might indicate that he/she may have been admitted into the second year of the program rather than the junior year. His/her credit level might indicate that he/she may have been admitted into the second year of the program rather than the junior year. His/her credit level might indicate that he/she may have been admitted into the second year of the program rather than the junior year. Students should carefully investigate any financial implications involved in such a situation.

Summer Course Work

Students should be aware that while aid may be available for summer course work, use of aid during the summer may simply reduce aid that would normally be available during the fall and spring semesters. Students should carefully investigate any financial implications resulting from required or elected summer course work.

Internal Transfer, Transfer and Second Degree Students

All transfer and second degree candidates should carefully investigate the financial implications involved with matriculating into the RHSHS, these students enter any of the RHSHS programs as undergraduate, except for occupational therapy candidates who have already earned a bachelor's degree. If students have a degree, typically they do not qualify for standard undergraduate financial aid.

Graduate Students

Students are strongly advised to consult with the Office of Financial Aid regarding their eligibility for aid as graduate students, particularly in light of the high credit loads and summer course work involved in the professional phase.

SCHOOL OF HEALTH SCIENCES

PROGRAM AND CURRICULUM INFORMATION

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 Rangos 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 on a regular basis with their Faculty Mentor and/or Academic Advisor for specific information regarding academic policies pertaining to their respective program.

The following interdisciplinary courses may be required by some of the programs:

**HTLS 315/315L & 315/315L Anatomy** 5 crs

This course is designed to provide Athletic Training and Occupational Therapy students with a relatively broad picture of human anatomy with a 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 a laboratory component. The laboratory component is required. During laboratory sessions, students will be directed in the dissection and study of human cadavers. An effort will be made to assist the participants in the course to utilize the information presented in both lecture and laboratory sessions to solve clinically relevant questions. Prerequisites: BIOL 111/113, 207/208, 209/210, or permission of the instructor.

**HTLS 320/320L & 470/470L Anatomy I** 5 crs

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. Lecture sessions will present, for the purpose of discussion, information pertaining to the organization of various peripheral systems, how the components of the peripheral systems relate to each other in specific regions of the body, and information pertaining to various anatomic topics related to the contents of the major cavities of the human body. The laboratory provides the students the unique and indispensable opportunity to study human anatomy by dissecting human cadavers. The students, with the guidance of faculty, are responsible for dissecting the laboratory specimens. An effort will be made to assist the participants in the course to utilize the information presented in both lecture and laboratory sessions to solve clinically relevant questions. Prerequisites: HTLS 320/320L or 470/470L, or permission of the instructor.

**HTLS 330/480 Physiology I** 4 crs

This course presents the normal functions of the human body, with additional emphasis on histologic organization and histophysiologic mechanisms. Tissues and their functions are highlighted at all levels of structural organization, from cells to organ systems. Topics in this first part of a two-course sequence range from the structure and function of cells and tissues, to the highly complex regulatory networks that control these function. Prerequisites: BIOL 111/113, 112/114, CHEM 121, 122 or 131, 132, or permission of the instructor.

**HTLS 331/481 Physiology II** 4 crs

This course continues the presentation of normal functions of the human body, with additional emphasis on histologic organization and histophysiologic mechanisms. Pertinent examples of pharmacologic and pathophysiologic mechanisms are used to reinforce concepts of normal physiologic function. Topics in this second part of a two-course sequence include all of the major
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
3 crs
Therapeutic considerations in all aspects of multicultural diversity and implications for health care 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 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.

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 420/520 Topics in Pharmacology
3 crs
This course is designed to provide students with information regarding indications, contraindications, side effects, drug-drug and drug-food interactions of medications utilized in health care. Prerequisites: CHEM 121 or 131, HLTSC 315/315L, or 515/515L, or 320/320L or 470/470L, 321/321L, or 471/471L.

HLTSC 425/525 & 525/525L Therapeutic Modalities
4 crs
This course is designed to introduce the student to the theory and practical application of the various physical agents and electrotherapeutic modalities they will encounter in a clinical setting. Prerequisite: PHYS 201.

HLTSC 430/530 Principles of Research
2 crs
Introduces students to each phase of the research process. Discussions focus on the design, conduct, analysis and interpretation of clinical research studies. Prerequisite: MATH 225.

SCHOOL OF HEALTH SCIENCES

HLTSC 431W Research Seminar 1 cr
Overview of qualitative, evaluative, and single-subject research proposal development research methods. Corequisite: HLTSC 430.

HLTSC 437/438 Functional Kinesiology/ Biomechanics Lab 3 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 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

SCHOOL OF HEALTH SCIENCES

Sports Medicine is a popular general term that refers to the care and services necessary to maintain overall health and performance of athletes and those who are physically active. Certified Athletic Trainers play a major role in the field of sports medicine. In 1991, the profession of athletic training was recognized as an allied health profession by the American Medical Association (AMA); however, athletic trainers have been providing care and services for athletes and other physically active individuals for more than 50 years.

The responsibilities of the athletic trainer are prevention of injury and/or illness, recognition, evaluation, assessment, immediate care for injuries or illnesses, treatment, rehabilitation, and reconditioning. Organization and administration, professional development and responsibility, and ethical responsibilities are core of the certified athletic trainer. Students must acquire 50 hours of guided observation/practical experience as part of the course requirements. Corequisites: BIOL 207/208.

ATHTR 201 Essential Concepts & Techniques in Athletic Training 3 crs
This course provides 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/rehabilitation, health care administration, and professional development/responsibilities.

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. Students will complete 30 hours of guided observation/practical experience as part of the course requirements. Prerequisites: HLTSC 315/315L, 420, 520, or permissison of the instructor.

ATHTR 209/210 Functional Kinesiology/Rehabilitation Techniques in Athletic Training 2 crs
This course is a continuation of Medical Sciences I. Prerequisites: CHEM 121 or 131, HLTSC 315/315L, or 515/515L, or 320/320L or 470/470L, or 330, or HLTSC 431W Research Seminar, or permission of the instructor.

ATHTR 303 Art & Science of Athletic Training II 3 crs
This course is designed to provide students with work, and physical and reconditioning plans for athletes and physically active individuals. Prerequisites: HLTSC 315/315L, 425, ATHTR 302.

ATHTR 315 Clinical Practicum in Athletic Training I 2 crs
This practicum incorporates a didactic course (one day a week) along with the clinical experiences the student encounters in a high school or collegiate setting. The didactic coursework will include functional anatomy/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 minors. 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...
This course provides students with comprehensive information on the essential nutrients, their physiological effects on the body, and the methods by which those nutrients may influence the performance of a physically active individual. Information on eating disorders, weight management, special dietary considerations, and ergogenic aids also is discussed. A comprehensive dietary analysis and nutrition and exercise plan is included as part of the course requirements. Prerequisites: CHEM 131, ATHTR 407W

ATHTR 411 Advanced Clinical Practicum in Athletic Training 3 crs
During this practicum, students receive experiences in high school, college, professional, or sports medicine clinic settings. Students are responsible for the total 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 preparation for the NATA/BOC examination, professional development, and advanced psychomotor skills such as casting, splinting, and suture removal. Prerequisites: ATHTR 303, 306, 316, HLTSC 425

ATHTR 412 Organization & Administration in Athletic Training 3 crs
This course provides students with information that will enhance his/her ability to function effectively as a professional Athletic Trainer and to enhance his/her 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 coverage 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 Athletie Training 2 crs
This course is designed to expose students to a wide variety of health sciences, business administration, and information technology. Health sciences aid communication with other medical professionals and in understanding the patient perspective. 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-related settings, including 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/PREHEALTH** gives future physicians technology 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) 396-6602.

**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
This course covers 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 information technology that 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
The purpose of this course is to introduce students to the various organizations and entities that comprise the healthcare delivery system.
This course introduces the student to the hardware and software systems of a computer 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 cr
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 cr
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 350/550 Introduction to Health Information Management 3 cr
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 cr
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: QSMIS 183

HLTMS 366 Health Management Systems Laboratory 2 cr
This hands-on course will introduce students to accessing and the use of health information systems in the environment.

HLTMS 425/525 Healthcare Human Resource Management 3 cr
This course reviews the human resource process and ancillary topics such as compensation and benefits, unions, negotiations, and conflict.

DEPARTMENT OF OCCUPATIONAL THERAPY (OT)

Chair: Patricia A. Crist, Ph.D., OTR/L, FAOTA

Occupational therapy is a person-centered, self-determined approach to the provision of services to people with functional limitations. Occupational therapists work with individuals to identify their strengths and weaknesses and to develop activities that are meaningful and satisfying. The goal of occupational therapy is to help people achieve their maximum potential in all aspects of their lives.

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 RSHS at (412) 396-6652.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

OCCTH 305/505 Foundations & Concepts of Occupational Therapy 3 cr
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 cr

OCCTH 337/536 Human Motion & Movement 4 cr
Analysis of movement using motor learning, motor control, motor development, kinesiological theories, and applied principles that contribute to functional human motion. Prerequisites: HLTMS 315/515L or 515/515L, OCCTH 305/505, 310/510.

OCCTH 345/545 Occupational Performance Perspectives 3 cr
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 cr
With the guidance of a faculty member, a student may pursue an indepth study of a subject area or develop an individual project in an area of interest related to their professional goals. Prerequisites: Enrollment of the supervising faculty member and approval of the Department Chair.

OCCTH 411W/511W Clinical Reasoning & Fieldwork I 3 cr
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 345/545, 416/516, 435W/435L or 535W/535L.

OCCTH 412/512 Clinical Reasoning & Fieldwork II 3 cr
Transformation of didactic learning into clinical reasoning with a focus on further establishing therapeutic interactions, clinical observation, and intervention...
SCHOOL OF HEALTH SCIENCES

OCCTH 448/458 Medical Conditions in OT 4 crs
Overview of medical conditions typically seen in occupational therapy practice. Prerequisites OCCTH 315/315L or 515/515L, OCCTH 337/537, OCCTH 338/538

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 OCCTH 315/315L or 515/515L, OCCTH 305/305, 310/310, 315/315L, OCCTH 305/305, 310/310

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 420/420L or 520/520L, 425/425L or 525/525L, 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 IIA, 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 412/412L

OCCTH 561 Occupational Therapy Administration 3 crs
Introduction to the basic principles of organization and management of occupational therapy programs. Prerequisites OCCTH 412/412L, 420/420L or 520/520L, 430/430L

OCCTH 562 Leadership 2 crs
Analysis of leadership approaches in practice, management, and education. Prerequisites OCCTH 355, 556, 557

OCCTH 564 Special Topics 2 crs
Small group discussions of contemporary interventions. Prerequisite Permission of the instructor

SCHOOL OF HEALTH SCIENCES

OCCTH 565 Community & World Healthcare Issues 3 crs
Focus will be on community resources, health promotion, disease prevention, and future directions in national and international healthcare. Prerequisites OCCTH 412/412L, HLTSC 560/460/560

OCCTH 574W Fieldwork Proposal 1 cr
Students develop a proposal for a research project while on Level I Fieldwork. Prerequisites HLTSC 430/430, OCCTH 432W/532W, 541W

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

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

PHYTH 301 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 502 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 504 Exercise Physiology 3 crs
This course examines in detail the effect 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 508 Evaluation Methods 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. Topes to be included are the models of disabilment, bony and soft tissue palpation, vital

DEPARTMENT OF PHYSICAL THERAPY (PT)

Chair
Robert C. Morgan, Ph.D., PT

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DEPARTMENT OF PHYSICAL THERAPY (PT)

Chair
Robert C. Morgan, Ph.D., PT

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PHYSICAL THERAPY CURRICULUM

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COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

PHYTH 301 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.
This 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.

This course will introduce the student to the physiopathology of somatic/movement dysfunction of the upper quarter. General principles of musculoskeletal treatment, orthopedic manual therapy, and the application of therapeutic exercise and modalities in the treatment of upper quarter dysfunction will also be discussed. Prerequisite: PHYTH 547.

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 upper quarter. Prerequisite: PHYTH 508.

This is the third course in the PT sequence that will cover the 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 neurological disease/dysfunction and interpret results of clinical findings. Due to the nature of this course, the material from many previous classes will be reexamined. Prerequisite: PHYTH 508.

This course serves as a continuation of neuromotor 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 480, PHYTH 543, Corequisite: PHYTH 572.

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.

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 program planning based on those changes. Physical therapy issues with patients exhibiting common pathophysiological 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.

This course introduces the student preparing for a healthcare career to the role of educator through identification, analysis, synthesis, and application of the teaching-learning process.

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 effect of workplace and environmental variables that can be a causal or influential factor in the disablement process. Prerequisites: HLTSC 437/438.

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 pediatric topics will be addressed including special examination and intervention considerations for special diagnoses.

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.

This course will cover theories of motor control, motor development, and motor learning. This is the third course in the PT sequence that will serve to enhance and build up the evaluation skills of Evaluation Methods and Orthopedic Science. Prerequisite: PHYTH 547.

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 upper quarter. Prerequisite: PHYTH 508.

This course will serve to enhance and build upon the evaluation skills of Evaluation Methods and Orthopedic Science. The major emphasis will be on techniques to assess the lower quarter of the musculoskeletal system. Prerequisite: PHYTH 518.

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 relevant to a variety of clinical settings.

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: HLTSC 430/530.

This course will cover the theories of motor control, motor development, and motor learning. Different pediatric topics will be addressed including special examination and intervention considerations for special diagnoses.

This course will be designed to provide students with an in-depth understanding of normal and pathological 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.

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This course will serve to enhance and build upon the evaluation skills of Evaluation Methods and Orthopedic Science. The major emphasis will be on techniques to assess the lower quarter of the musculoskeletal system. Prerequisite: PHYTH 518.

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PHYSICIAN ASSISTANT 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

PHYS 40W Introduction to PA Profession
The history, role, practice scope and professional policies of the physician assistant are explored in lectures, literature and group discussion.

PHYS 401/402/520 Clinical Medicine I/II/III
Fundamental principles of disease, diagnosis, intervention and management are discussed (includes case-based laboratory).

PHYS 403 Clinical History Skills & Practice
The skills of communicating with the patient and documenting data are explored in the context of the medical history.

PHYS 406 Clinical Lab Methods
Indications, technique and interpretation of a variety of common clinical lab tests are discussed.

PHYS 409 Clinical Pharmacology
The mechanisms of actions of medications are discussed in correlation with specific disease processes.

PHYS 410 Applied Clinical Methods I/II
Cognitive understanding and technical performance of medical procedures are emphasized (includes laboratory).

PHYS 411/450/506 Clinical Seminar I/II/III
The integration of didactic sciences with patient problems is accomplished in case-based discussions.

PHYS 415 Pathophysiology
Principles of basic pathology and the mechanisms of the physiologic responses associated with selected human disease processes are discussed.

PHYS 418 Fundamentals of Pediatrics
Childhood diseases are discussed in-depth, including diagnosis, treatment, and prognosis (includes case-based laboratory).

PHYS 419 General Medical Topics
An ongoing introduction to medical issues is combined with discussion of related aspects of medicine, including genetics, human sexuality, public health and epidemiology, and medicolegal issues.

PHYS 420/421 History & Physical Examination I/II
A study of physical examination techniques of the adult patient including history-taking, integration of examination systems, patient assessment, and documentation (includes laboratory).

PHYS 515 Fundamentals of Surgery
Lecture series addresses preoperative, peroperative and postoperative patient care and management (includes case-based laboratory).

PHYS 524 Patient Counseling & Education
Emphasizes basic considerations and techniques needed for effective communication with patients regarding their health problems, with emphasis on enhancing patient compliance with medical therapy.

PHYS 525 Pathophysiology
Principles of basic pathology and the mechanisms of the physiologic responses associated with selected human disease processes are discussed.

PHYS 592-536 Clinical Externships I-VIII
A coordinated series of supervised clinical externship assignments in a wide variety of clinical areas.

PHYS 540 Master’s Research
An independent research project is completed with ongoing faculty support and recommendations.

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY (SLP)
Chair
Mikael D Z Kimelman, Ph.D

Speech and language disorders affect the way people produce and understand speech. These disorders may range from simple sound substitutions to not being able to use speech and language at all.

Speech-language pathologists are specialists in human communication, its development, and its disorders. They are professionally educated to evaluate and treat persons with communication problems.

To practice the profession of speech-language pathology, a master’s degree or a doctoral degree is required. Professionals must also hold a Certificate of Clinical Competence (CCC) from the American Speech-Language-Hearing Association in many states, must obtain a state license to practice.

Speech-language pathologists provide many specialized professional services which include stimulating language and communication in children who have developmental disabilities, helping people with articulation disorders learn proper production of speech sounds, assisting people with voice disorders to develop proper control of their vocal mechanisms, assisting people who stutter to increase their fluency and to cope with this disorder, assisting people with aphasia to relearn language and speech skills or compensate for their impairment, helping people with hearing impairments maximize their communication skills through signing, lip reading, or acoustic management, counseling people with speech and language disorders and their families to understand their disorder and to achieve optimal communication in education, social and vocational settings, and helping prevent communication disorders.

SCHOOL OF HEALTH SCIENCES

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

SLP 101 Introduction to Communication Science & Disorders
3 crs
This course offers a survey of the field of human communication sciences and disorders. Students will learn about normal and disordered communication across the life span.

SLP 205W Normal Speech & Language Development
3 crs
Students will learn about the stages of speech and language development in normal infants and children. Theories about semantic, syntactic, phonologic, and pragmatic development will be reviewed. Course content will prepare students to differentiate normal from disordered communication development. Prerequisite SLP 101, or permission of the instructor.

SLP 250 Anatomy & Physiology of Speech & Hearing
4 crs
This course will examine the anatomy of those parts of the human body which are involved in speech and hearing. Students will learn about anatomical structures pertinent to communication and its disorders. Prerequisites BIOL 207/208, SLP 101, or permission of the instructor.

SLP 310 Speech Science
4 crs
This course reviews the characteristics of sound as a physical phenomenon. Students will learn about the generation, transmission, and perception of speech. The acoustic characteristics and perceptual features of sounds and the feedback systems employed in the production of these sounds will be examined.

SLP 320 Phonetics
3 crs
In this course students will learn about the sound system of English. Students will learn to transcribe normal and disordered speech using the International Phonetic Alphabet (IPA), and will gain an appreciation for the role of transcription-based activities in the clinical management of clients.

SLP 350 Introduction to Observation & Clinical Procedures
3 crs
Preparation for clinical practice through lecture and guided clinical observations. Introduction to clinical process and basic clinical procedures. Completion of 25 ASHA observation hours. Prerequisites SLP 101, 205W, 250, 310, 320, or permission of the instructor.
The purpose of this course is to stimulate an appreciation for the nature 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 640 Speech-Language Pathology in the Clinical Setting 4 cr
This course will introduce principles of assessment for a variety of communication disorders encountered in the clinical setting. 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.

SLP 500 Independent Study 1-6 cr
Individually directed study in a special area of speech-language pathology. Prerequisite: Permission of the instructor.

SLP 520 Aural Rehabilitation 3 cr
This course will address 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 cr
This course focuses on motor speech disorders in adulthood. Neuroanatomical and neurophysiological mechanisms underlying motor speech disorders will be addressed. Students will develop knowledge of assessment, diagnosis, and treatment of motor speech disorders.

SLP 530 Aphasia 3 cr
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 distinguish and describe aspects of aphasia. A variety of approaches to the management of aphasia will be presented.

SLP 555 Language Disorders II 3 cr
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 cr
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 558 Management of Communication Disorders in Multicultural Populations 3 cr
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 services to cultural groups different from one's own.

Clinical Seminars
SLP 470 Clinical Seminar I 1 cr
SLP 471 Clinical Seminar II 1 cr
Seminars present a range of topics specific to the practice of speech-language pathology. Topics focus on aspects of communication disorders.

SLP 573 Speech-Language Pathology Seminar 2 cr
This seminar will focus on a wide variety of professional content including the management of disorders not addressed in traditional courses.

SLP 575 Capstone Seminar in Speech-Language Pathology 1 cr
This 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.

Clinic Series
SLP 440 Clinic I 2 cr
Prerequisite: Documentation of 25 hours of clinical observation.

SLP 441 Clinic II 2 cr
Prerequisite: SLP 440.

SLP 442 Clinic III 2 cr
Prerequisite: SLP 441.

SLP 443 Clinic IV 5 cr
Prerequisite: SLP 542.

SLP 444 Clinic V 5 cr
Prerequisite: SLP 543.

SLP 445 Clinic VI 3 cr
Prerequisite: SLP 544.

This clinic series offers the student a broad scope of clinical practicum experiences. At least the first 25 hours of clinic practicum experience will be gained under the direct supervision of Duquesne University personnel. Students will participate in clinical education activities in the Duquesne Speech-Language-
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 academic 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 plans.

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 Army Reserve 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)

PROFESSIONAL OFFICER COURSE (POC)

The Professional Officer course, taken during the cadet’s junior and senior years, concentrates on three 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: 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 base study of human behavior, human relationships, and professional ethics, the course emphasizes the similarities between the problems encountered in the military and civilian environment.

The first year of the senior year concentrates on selected elements of the U.S. government and national security process engaged in producing national strategy as well as various elements of U.S. military forces, doctrine, and employment capabilities. During the second term, the course concentrates on the strategic options available to the U.S. 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 training programs, interested students are encouraged to contact the Air Force ROTC Detachment at (412) 624-6396, or contact the Professor of Aerospace Studies, Air Force ROTC, University of Pittsburgh, 2925 Cathedral of Learning, Pittsburgh, PA 15260-0001. Alternatively, see our website at www.rotc.pitt.edu

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 U.S. 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 course includes an introduction to the history of air power with emphasis on the development of concepts and doctrine governing the employment of U.S. air power.

NAVAL RESERVE OFFICERS TRAINING CORPS (NROTC)

Naval Reserve Officers’ Training Corps (NROTC)

DEPARTMENT OF NAVAL SCIENCE

Captain J.R. Stapleford, USN
Office 4615 Forbes Ave
Phone (412) 268-5109

The Department of Naval Science was established 16 December 1987.

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 are 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 a nationwide competition before the start of the freshman year. A limited number of full scholarships may be awarded by the NROTC unit on campus. Midshipmen commissioned through the scholarship programs become officers in the Navy or Marine Corps and incur a four-year active duty obligation in a selected area of the naval service.

THREE-YEAR SCHOLARSHIPS

Three-year scholarships are available on a competitive basis to those qualifying college program (non-scholarship) NROTC students who have demonstrated leadership and academic excellence during their freshman year and are nominated for the scholarship by the Professor of Naval Science. Active duty obligation is four years upon commissioning.

TWO-YEAR SCHOLARSHIP PROGRAM

The two-year scholarship program provides the same benefits as the four-year program for a period of 20 months. Students must apply for this program no later than February of their sophomore year. Students selected for this program attend the Naval Science Institute during the summer before their junior year to complete required naval science course material. A paid summer training period is provided between the junior and senior years. Commissioning occurs upon a four-year active duty obligation upon graduation.

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 $200 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 programs) 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

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 (412-396-3034) 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 admission standard. Students are considered for admission according to one of the following criteria:

- Applicants with prior college course work must have a minimum cumulative QPA of 2.5 for full admission. Provisional admission is possible for students with a cumulative QPA less than 2.5, based upon the quality of the overall application.
- 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.

A) 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 or 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>101 Adult Transition Seminar</td>
<td>3</td>
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<tr>
<td>101 Thinking and Writing Across the Curriculum</td>
<td>3</td>
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<tr>
<td>101 College Algebra</td>
<td>3</td>
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<tr>
<td>101 Survey of Sociology</td>
<td>3</td>
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<tr>
<td>102 Imaginative Literature and Critical Writing</td>
<td>3</td>
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<tr>
<td>112 Art History</td>
<td>3</td>
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<tr>
<td>125 Fundamentals of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>132 Basic Philosophical Questions</td>
<td>3</td>
</tr>
<tr>
<td>151 Shaping of the Modern World</td>
<td>3</td>
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</tbody>
</table>

Professional Core Curriculum - 24 Total Credits

Professional requirements prepare students to meet the challenge of a wide range of professions through an appreciation of initiative 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>191 Computer Applications for the Professional I</td>
<td>3</td>
</tr>
<tr>
<td>192 Computer Applications for the Professional II</td>
<td>3</td>
</tr>
<tr>
<td>201 Accounting for the Professional I</td>
<td>3</td>
</tr>
<tr>
<td>202 Accounting for the Professional II</td>
<td>3</td>
</tr>
<tr>
<td>231 Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>232 Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>235W Understanding the Marketplace and Competition</td>
<td>3</td>
</tr>
<tr>
<td>247W Communication Ethics</td>
<td>3</td>
</tr>
<tr>
<td>454W Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>494 Communication Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Area III
Organizational Behavior - 18 Total Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>103 Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>370W Principles of Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>436 Theory and Practice of Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>491W Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>499W Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>499W Capstone Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Area IV
Computer Technology - 18 Total Credits

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>103 Introduction to Psychology</td>
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<tr>
<td>401 Managing Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>420 Databases as Productivity Tools for the Competitive Edge</td>
<td>3</td>
</tr>
<tr>
<td>495 Leadership Trends in Information Technology (Capstone)</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration, 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

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>101 Organizational Leadership</td>
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Concentration Area II
Professional Communication - 18 Total Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>201 Human Communication and Society</td>
<td>3</td>
</tr>
<tr>
<td>210 Mass Communication and Society</td>
<td>3</td>
</tr>
<tr>
<td>370W Writing for Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>427 Communication Management</td>
<td>3</td>
</tr>
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Concentration Area I
Organizational Leadership — 18 Total Credits

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Concentration Area II
Professional Communication - 18 Total Credits

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Concentration Area III
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Concentration Area IV
Computer Technology - 18 Total Credits

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</tbody>
</table>

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) 396-5600 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
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, 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>701</td>
<td>Leadership and Liberal Studies</td>
<td>3 Cr</td>
</tr>
<tr>
<td>702</td>
<td>Leadership and Liberal Studies</td>
<td>3 Cr</td>
</tr>
<tr>
<td>703</td>
<td>Leadership and Liberal Studies</td>
<td>3 Cr</td>
</tr>
<tr>
<td>790</td>
<td>Liberal Studies</td>
<td>3 Cr</td>
</tr>
<tr>
<td>710</td>
<td>Liberal Studies</td>
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### University Core Curriculum — 30 Total Credits

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</thead>
<tbody>
<tr>
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<td>3 Cr</td>
</tr>
<tr>
<td>731</td>
<td>The Shaping of the Contemporary World</td>
<td>3 Cr</td>
</tr>
<tr>
<td>732</td>
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<td>3 Cr</td>
</tr>
<tr>
<td>733</td>
<td>Comparative Political Systems</td>
<td>3 Cr</td>
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</tr>
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<td>Information Technologies for Modern Organizations</td>
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A Master of Science in Leadership and Business Ethics is also available.

### Evening Bachelors' Degrees

Several Bachelors' 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 this 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 BSPS 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.

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</table>

A Master of Science in Leadership and Business Ethics is also available.

### 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 to fully benefit from the wide variety of electives available.

### 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.

- **Information Technologies for Modern Organizations**: This six-course certificate will prepare you to increase the efficiency and competitiveness of your organization through workflow automation by using database software.
- **Modem Organizations**: This six-course certificate will prepare you to effectively manage your organization’s electronic resources.
- **Professional Certificate Programs**: This six-course certificate will prepare you to effectively manage your organization’s electronic resources.
- **Professional Development Programs**: This six-course certificate will prepare you to effectively manage your organization’s electronic resources.

### 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 or 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 Development at Duquesne University prepares professionals for career opportunities. The
Institute is the only program in the Pittsburgh area with the American Bar Association approval. A certificate in Paralegal Studies is awarded upon successful completion of ten courses. These include five core courses: Introduction to the Legal System and Paralegalism, Legal Research, Legal Writing and Case Analysis, Computer Assisted Legal Research, and Professional Responsibility. Students then may choose an area of specialization in Corporate Law, Civil Litigation, or Employee Benefit Plans. Classes are offered part-time in the evening or during an accelerated summer term.

A bachelor’s degree is required for admission to the Paralegal Institute. Exceptions to this policy are reviewed by the program coordinator. Students must maintain a 2.5 grade point average in order to earn the certificate. To obtain more information regarding program requirements and admission call (412) 396-1643.

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) 396-5366.

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 the student 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.

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*This information has been provided by the Office of the University Secretary
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D. Clark Edwards
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M.A., University of Missouri
Ph.D., University of New Mexico

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Ph.D., Columbia University

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Major Routes to the Duquesne Campus

Duquesne University is easily accessible by plane, bus, rail or car. The campus is a 10-minute walk from downtown, where both Greyhound and Trailways bus and Amtrak train stations are located. If you are arriving by plane, the Pittsburgh International Airport is located only 30 minutes from downtown Pittsburgh via bus, cab, rental car or limousine. For those arriving by car, major interstate and state routes lead to Duquesne from all points north, south, east and west. Interstate 79 runs north and south of the campus where it intersects with 279. From the east, the Pennsylvania Turnpike and state routes 22 and 30 intersect with 376. Both I-279 and 376 lead to downtown Pittsburgh.