DIRECTORY

ADDRESS—Duquesne University,
600 Forbes Avenue, Pittsburgh, Pa. 15282
Telephone Call specific number (see following)
for other offices, call 396-6000
ADMISSION—Dean of Domestic Admissions
and International Affairs
Administration Building, First Floor
Telephone (412) 396-5000
(800) 436-0990 (Outside of 412 Area Code)
ADVISORS:
College of Liberal Arts
College Hall, Room 212
Telephone (412) 396-6389/90
Division of Continuing Education
Rockwell Hall, Room 210
Telephone (412) 396-5034
School of Business Administration
Rockwell Hall, Room 705
Telephone (412) 396-6277/5034
School of Education, Canevin Hall, Room 213
Telephone (412) 396-5713
Rangos School of Health Sciences
Health Sciences Bldg., Room 302
Telephone (412) 396-6652
School of Music, Room 302
Telephone (412) 396-6081
School of Natural and Environmental Sciences
212/312 Bayer Learning Center
Telephone (412) 396-6212/6081
School of Nursing, College Hall, Sixth Floor
Telephone (412) 396-5046/5555
School of Pharmacy,
Mellon Hall of Science, Room 4105
Telephone (412) 396-6308
Reserve Officer Training Program (ROTC)
Rockwell Hall, Room 100
Telephone (412) 396-6664/6655/6666
BOOKSTORE—Duquesne Union, Second Floor
Telephone (412) 434-6626
CAMPUS MINISTRY—
Administration Building, First Floor
Telephone (412) 396-6020/5015
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) 396-6395/6587/6388
COMMUTER AFFAIRS—
117 Duquesne Union
Telephone (412) 396-6660
COMPREHENSIVE STUDENT ADVISMENT—
Administration Building, Third Floor
Telephone (412) 396-5007
CONTINUING EDUCATION—
Rockwell Hall, Second Floor
Telephone (412) 396-5034
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—
Duquesne Union, Third Floor
Telephone (412) 396-6651
GOVERNMENTAL AFFAIRS—
School of Business Administration, Administration Building, Fifth Floor
Telephone (412) 396-5080
HEALTH SERVICE—
Duquesne Towers, Second Floor
Telephone (412) 396-6191
IDENTIFICATION CARDS—
Duquesne Union, Second Floor
Telephone (412) 396-6191
INFORMATION CENTER—For University Events,
Duquesne Union, Third Floor
Telephone (412) 396-6632/6213
INTERNATIONAL EDUCATION ADVISOR—
School of Education Career Center
Telephone (412) 396-6123
LEARNING SKILLS PROGRAM—
Administration Building, Ground Floor
Telephone (412) 396-6661/6636
PSYCHOLOGY CLINIC—
Rockwell Hall, Ninth Floor
Telephone (412) 396-6665
PUBLIC AFFAIRS—
Fisher Hall, Second Floor
Telephone (412) 396-6050
PUBLIC SAFETY—Public Safety Building
Telephone (412) 396-4002
For Emergency, call (412) 396-4347
REGISTRAR—For Transcripts and Records
Administration Building, Ground Floor
Telephone (412) 396-6213 (Transcripts)
396-6212 (General Office)
RESIDENCE LIFE—Assumption Hall, Ground Floor
Telephone (412) 396-6655/5028
STUDENT ACCOUNTS—
Administration Building, Room 208
Telephone (412) 396-6585
STUDENT HEALTH INSURANCE—
Administration Building, Room 212
Telephone (412) 396-6677
UNIVERSITY COUNSELING CENTER—
Administration Building, Third Floor
Telephone (412) 396-6204/6208

Duquesne University
PITTSBURGH, PENNSYLVANIA

Undergraduate Catalog
1997-1998
As the educational process from admission through graduation, requires continuing review and appropriate approval by University officials, the provisions of this catalog are to be considered directive in character. The University, therefore, reserves the right to change requirements and regulations contained herein, including fees, tuition, and board and room, and to determine whether an individual has satisfactorily met the requirements for admission or graduation.

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 policies, scholarship and loan programs and athletic or other University-sponsored programs.

This is a commitment by the University in accordance with its religious values and applicable federal, state and local laws and regulations. Nothing herein, however, should be interpreted as a waiver by the University of its own Constitutional and legal rights based upon its religious affiliation. The person responsible for coordinating its efforts under this policy is Dr. Judith Griggs, Affirmative Action Officer, ground floor, Administration Building, university extension 6661.

SECURITY STATISTICS, POLICIES AND PROCEDURES
In accordance with the College and University Security Information Act (Pennsylvania Act 73 of 1988) and the U.S. Student Right to Know and Security Act (PC 101-542), information regarding Duquesne University’s crime statistics, security policies and procedures is available in the Administration Office.

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

Published annually by Duquesne University, 600 Forbes Avenue, Pittsburgh, PA 15282.
Academic Calendars
Fall 1997 — Summer 1998

FALL SEMESTER — 1997
Classes Begin August 25 (Monday)
Labor Day Holiday September 1 (Monday)
All Saints Day November 1 (Saturday)
Holy Day Thanksgiving Holiday November 24-29 (Monday-Saturday)
Immaculate Conception Holy Day December 8 (Monday)
Monday Class December 9 (Tuesday)
Schedule Followed Reading Day December 8 (Monday)
Final Exams December 10-16 (Wednesday-Tuesday)
Commencement December 18 (Thursday)

SPRING SEMESTER — 1998
Classes Begin January 8 (Thursday)
Martin Luther King Holiday January 19 (Monday)
Spring Break March 9-14 (Monday-Saturday)
Easter Holiday April 9-13 (Thursday-Monday)
(Offices closed Thursday, April 9 Friday, April 10)
Monday Class April 14 (Tuesday)
Schedule Followed Final Exams April 30 - May 6 (Thursday-Wednesday)
Final Exams May 9 (Saturday)
Commencement May 9 (Saturday)

SUMMER SEMESTER — 1998
Summer Term Begins May 11 (Monday)
Ascension Holy Day May 21 (Thursday)
Memorial Day Holiday May 25 (Monday)
Independence Day July 3 (Friday)
Holiday Observed End of 12 week term July 31 (Friday)
Assumption Holy Day August 15 (Saturday)

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The provisions of this catalog are to be considered directive in character. The University reserves the right to make any changes that seem necessary or desirable, including fees, tuition and room and board. Faculty listings contained in this catalog are current as of Spring 1997.

Please refer to the current schedule of classes booklet for detailed academic calendar dates and deadlines.
Part I: General Information

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

Today Duquesne University is a progressive educational facility which has more than tripled from its early 12.5 acres to its present, self-enclosed 40-acre campus overlooking the city of Pittsburgh. Duquesne was cited by USA Today as having the safest campus in Pennsylvania and one of the safest 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, four parking garages, a multi-purposed recreation center, a Victorian campus throughway, a theater/classroom complex, a new Arthur J. Rooney Football/Soccer Field in the center of campus, 28 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 more than 9,200 students in nine schools of study, including the College and Graduate School of Liberal Arts (1878), and the Schools of Law (1911), Business Administration (1913), Pharmacy (1925), Music (1926), Education (1929), Nursing (1937), Health Sciences (1990), School of Natural and Environmental Sciences (1994) and the Division of Continuing Education. Duquesne's nine 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, has always included service to peoples 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 from 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 the multiple traditions and mores of societies is an invaluable element in the educational process. In a world that is growing ever smaller, it is imperative that Duquesne reach out to peoples of different cultures to afford them the opportunity to acquire educational experiences not otherwise available to them. Interaction among international and American faculty and students will enrich all and enhance their ability to be better citizens of our shared world.

Duquesne University asserts its commitment to develop and maintain programs, services and practices which promote and express respect for persons of diverse cultures and backgrounds and which provide educational bridges linking the peoples of 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-enclosed 40-acre site.

Long noted as one of the world's great corporate centers, Pittsburgh combines the features of urban living with many of the charms and personal characteristics of a close-knit small town. One of the largest corporate headquarters centers in the U.S., Pittsburgh was also shown, in a recent 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 are performing in theoldt Heinz Hall for the Performing Arts and the Benedum Center. The theatre groups can choose from productions of the Pittsburgh Public Theatre, local college drama departments and programs, and a wide variety of summer and afternoon 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, Steel Museum, the Conservatory Aviary, a spectacular view of the city and its surroundings, as The Pittsburgh Zoo, Carnegie Museum of Art and Festival, three prestigious events which draw audiences of the Pittsburgh Public Theatre, local college and university faculties and staff.

**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, Development, and Public Affairs. Adjoining the building is the University Chapel, which offers daily Masses.

**A J Palumbo Center** dedicated in 1988, is the home of the Duquesne Dukes basketball team. In addition to the Duke's 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, 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 a 280-student capacity, the facility has its own recreation area, and offers both single and double occupancy rooms. The facility includes a front desk area equipped with security cameras and ID card readers and each student room has access to the campus computer mainframe.

**The Bayer Learning Center** is Duquesne's latest classroom building. With 18 multimedia classrooms, it is the most advanced classroom 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.

Each classroom has whiteboards, projection screens and an overhead projector permanently available. Faculty in each classroom have complete control over VCRs, laserdisc players, slide projectors, video cameras and CD-ROM players from a single control device. Students can electronically ask questions to professors without moving from their seat, observe a lecture presented at another location through live wireless learning technology and save lectures on disks.

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

**College Hall,** a six-story classroom and office building dedicated in 1970, is the seat of the College of Liberal Arts and the Graduate School of Liberal Arts, housing the majority of their individual departments and faculties. The School of Nursing is located on the sixth floor. Special instructional facilities include a Writing/Computer Laboratory, an interactive Language Laboratory, nursing laboratories, and lecture halls.

**Des Places Communications Center,** dedicated in 1982, houses the Department of Communication and the production and broadcasting studios of WDUQ-FM, a full member station of National Public Radio (NPR) named in honor of the founder of the Holy Ghost Congregation, the center also features a journalism laboratory, a fully equipped color television studio, a simulation laboratory, an instructional photo laboratory, seminar rooms, and a graphics classroom.

**The Duquesne Towers,** a 17-story, air-conditioned double-tower residence for 1,200 men and women featuring separate housing wings, was dedicated in 1997. The facility features a full-size indoor swimming pool with a sun deck, offices of the Residence Life Division, an office of Campus Ministry, the Campus Health Services area, a main student lounge and smaller lounges on each floor, telephones, central computer, and a resident dining hall with a 2,500 student capacity. The facility includes a front desk area equipped with security cameras and ID card readers and each student room has access to the campus computer mainframe.

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


**The G & G Building** houses the Physical Plant Office.

**Health Sciences Building,** dedicated in 1991, resulted from the renovation of the old Gymnasium. The four-story building is the home of the John G. Rangos, Sr School of Health Sciences with its departments of athletic training, health management systems, occupational therapy, physical therapy, physician assistant and speech-language pathology. The building provides faculty and staff offices and teaching and research laboratories. The fourth floor includes the Allegheny General/Duquesne University Sports Medicine Institute, Anatomy Research and Teaching Laboratory, and Multimedia Room. The Sports Medicine Institute treats a vast array of clinical problems of the neuro-muscular-skeletal systems with services provided by physicians, physical therapists, athletic trainers, and occupational therapists. The Multimedia Room was designed to meet various educational needs of the students. By using a multimedia approach, the learning of many subjects can be enhanced.

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

**Laval House** houses the Spartan Vocation Office.

**The Duquesne University Gymberg Library,** dedicated in 1979, is a modern, attractive five-story structure. Housed in over 100,000 square feet of space is a collection of over 559,353 volumes, more than 5,703 journal titles, and an extensive microprint, audovisual and CD-ROM collection.

The library also contains a number of special collections, including the Rabbi Herman Halpern Collection on Medieval Christian and Jewish intellectual and religious thought, the Silverman Center Collection of world literature in phenomenology, the Justice Michael A. Musmanno Collection, and the John Cardinal Wright Collection of the Cardinal's personal papers, sermons and correspondence.
ACCREDITATION AND AFFILIATION

With seating capacity for approximately 1,000 patrons, including graduate study carrels, the Library is a highly functional facility. The Library has installed an integrated online system that permits access to information from the card catalog as well as a number of databases loaded on the system or in different locations worldwide. Access is available from the campus network or from remote sites at any hour of the day, every day.

McCloskey Field, dedicated in the mid-1970s, and renovated in 1988, is the center for outdoor intramural activity. The field now is made up of artificial turf and is surrounded by a practice track used by the University track team. Other athletic facilities include three tennis courts, two outdoor basketball courts, one of which is converted for street hockey in the winter months.

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, chemistry, physics, and the School of Pharmacy. Designed by one of the world's most distinguished 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 175 each, well-equipped laboratories, and a science computer laboratory.

The Music School, dedicated in 1967, has over 80 pianos, five organs, and over 300 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 throughout the year. The student body is divided into two groups, the quartet and the string orchestra, which perform regularly throughout the year. The building includes a large recital hall, a medium-sized recital hall, and a small practice room.

Rockwell Hall, dedicated in 1958, is a 10-story structure which houses the School of Business Administration and whose skyline connects downtown Pittsburgh with Duquesne's campus. The building has been almost totally remodeled in recent years. Rockwell Hall also houses a student lounge/ vending machine area, Rockwell Express (Burger King and Pizza Hut), three modern computer laboratories of the Division of Continuing Education, Career Services Center, Psychology Clinic, Printing and Graphics Department, the Mailing Center, the Mills Complex, ROTC, University Press, and University Purchasing Department.

Arthur J. Rooney Athletic Field is a multi-purpose field named in honor of Arthur J. Rooney, former owner of the Pittsburgh Steelers and Duquesne graduate. The facility provides a home for Duquesne University football, soccer, and lacrosse. The field, which is equipped with lights and a special astroturf surface, is also the site of numerous intramural activities.

St. Ann's Living-Learning Center, dedicated in 1964, is a seven-story residence hall which houses approximately 500 freshmen and upperclassmen. The women and men are housed on separate floors of the building, allowing for privacy. The facility includes a front desk area equipped with security cameras and ID card readers, laundry machines, a recreational lounge, a chapel, computer labs, and vending machines. Each student room has access to the campus computer mainframe.

St. Martin's Living-Learning Center is a floor residence hall which houses approximately 500 freshmen and upperclassmen. The women and men are housed on separate floors of the building, allowing for privacy. The facility includes a front desk area equipped with security cameras and ID card readers, laundry machines, 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 grotto.

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
Catholic College Coordinating Council
College Entrance Examination Board
Council for Advancement and Support of Education
Council of Independent Colleges and Universities
Middle States Association of Collegiate Registrars and Officers of Admission
National Association of College Admission Counselors
National Association of College and University Business Officers
National Association of Foreign Student Administrators
National Association of Student Personnel Administrators

Pennsylvania State College of Business Administration

Pennsylvania Association of Colleges and Universities
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 Council of Higher Education

College of Liberal Arts

Membership
American Association for Higher Education
American Association of Colleges for the State and Local History
American Conference of Academic Deans
American Historical Association
American Society of Journalism School Administrators
Association of American Colleges
Association of Colleges

Organization of American Historians

A. J. Palumbo School of Business Administration

Membership
American Assembly of Collegiate Schools of Business
Accreditation Council
Membership
Middle Atlantic Association of Colleges of Business Administration

School of Education

Accreditation
Middle States Association of Colleges and Schools
Pennsylvania Department of Education

Membership
American Association of Colleges for 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

Rangos School of Health Sciences

Accreditation
The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the American Health Information Management Association (AHIMA) Council on Accreditation. Select graduates will be eligible for the national certification examination to become a Registered Record Administrator (RRA). The Accreditation Council for Occupational Therapy Education.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the Joint Review Committee on Physical Therapy Education.


The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the American Academy of Family Physicians, the American Academy of Pediatrics, the American Academy of Preventive Medicine, the American College of Surgeons, the Association of付款 Assistants, the American College of Surgeons, and the Association of Student Assistants.

Council on Academic Accreditationformerly the Educational Standards Board in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (Initial review pending)

Membership
Association of Schools of Allied Health Professions
Association of University Programs in Health Administration (AUPHA)

School of Music

Accreditation
National Association of Schools of Music
National Association for Music Therapy
Pennsylvania Department of Education

Membership
American Association for Music Therapy
PerCUSsive Arts Society
Music Industry Conference
Pennsylvania Alliance for Arts Education
Pennsylvania College of Choral Association
Association for Supervision & Curriculum Development
Pennsylvania Governor's Commission of Music Clubs
Association of Pennsylvania Orchestras
College Music Society
Center for Black Music
American Music Center
National Opera Association
Pennsylvania Music Educators Association
Pennsylvania Arts Coalition

GENERAL INFORMATION

National Association of Student Financial Aid Administrators
Pennsylvania Association of Catholic College Admission Officers

Pennsylvania Association of Colleges and Universities

Pennsylvania Association of Student Financial Aid Administrators

Pittsburgh Council of Higher Education

College of Liberal Arts

Membership
American Association for Higher Education
American Association of Colleges for the State and Local History
American Conference of Academic Deans
American Historical Association
American Society of Journalism School Administrators
Association of American Colleges
Association of Colleges

Organization of American Historians

A. J. Palumbo School of Business Administration

Membership
American Assembly of Collegiate Schools of Business
Accreditation Council
Membership
Middle Atlantic Association of Colleges of Business Administration

School of Education

Accreditation
Middle States Association of Colleges and Schools
Pennsylvania Department of Education

Membership
American Association of Colleges for 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

Rangos School of Health Sciences

Accreditation
The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the National Athletic Trainers' Association Professional Education Committee.

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. Select graduates will be eligible for the national certification examination to become a Registered Record Administrator (RRA). The Accreditation Council for Occupational Therapy Education.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the Joint Review Committee on Physical Therapy Education.


The Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the American Academy of Family Physicians, the American Academy of Pediatrics, the American Academy of Preventive Medicine, the American College of Surgeons, the Association of Physician Assistants, the American College of Surgeons, and the Association of Physician Assistants.

Council on Academic Accreditationformerly the Educational Standards Board in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (Initial review pending)

Membership
Association of Schools of Allied Health Professions
Association of University Programs in Health Administration (AUPHA)

School of Music

Accreditation
National Association of Schools of Music
National Association for Music Therapy
Pennsylvania Department of Education

Membership
American Association for Music Therapy
PerCUSsive Arts Society
Music Industry Conference
Pennsylvania Alliance for Arts Education
Pennsylvania College of Choral Association
Association for Supervision & Curriculum Development
Pennsylvania Governor's Commission of Music Clubs
Association of Pennsylvania Orchestras
College Music Society
Center for Black Music
American Music Center
National Opera Association
Pennsylvania Music Educators Association
Pennsylvania Arts Coalition
School of Natural and Environmental Sciences
Accreditation
American Chemical Society
Membership
Alliance for Environmental Education
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

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

Division of Continuing Education
Membership
American Association for Paralegal Education
American Council on Higher Education
Continuing Education Association of Pennsylvania
National Academic Advising Association
North American Association of Summer Sessions
Approval
American Bar Association
Paralegal Institute

Evening Study
Duquesne University offers evening classes for full and part-time students each semester and during the Summer Session. The following undergraduate degrees are able to be completed through evening study.

College of Liberal Arts
Bachelor of Science in Computer Science Applications Corporation, Scientific
Bachelor of Arts in Corporate Communication
Bachelor of Arts in Mathematics
Bachelor of Arts in Psychology

School of Business Administration
Bachelor of Science in Business Administration
Concentrations: Accounting, Management, Management Information Systems, Marketing

School of Nursing
Bachelor of Science in Nursing
(for current RN's only)

Division of Continuing Education
Bachelor of Science in Professional Studies
The Bachelor of Science in Professional Studies is designed for adult students who seek flexibility in a bachelor's degree program. Students are provided the opportunity to customize plans of study to meet personal and professional goals. A strong foundation in both business and the liberal arts allows students to 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 business and/or liberal arts subjects.

For additional information regarding evening study, please contact the Division of Continuing Education, 210 Rockwell Hall or call 396-5600

Summer Sessions
Many undergraduate and graduate courses are offered each summer in most areas. They are open to qualified Duquesne students and to those from other colleges and universities.

The sessions vary in length, begin in May and run through mid-August. For additional information regarding Summer Sessions, or to request a Summer Schedule of Classes, please contact the Office of Summer Programs, 216 Rockwell Hall, at 396-6232 or 1-800-283-3853

Center for Communications and Information Technology
The Center for Communications and Information Technology provides support for the computing and information technology needs of the University's instructional, research, academic and administrative programs. The Center reports to the Provost and Academic Vice President and consists of three functional units: Advanced Technology, Educational Technology, and Institutional Technology.

The Advanced Technology group reports to the Executive Director of the Center. Its mission is to develop innovative uses of current and emerging technologies to improve the quality of education and administrative productivity at Duquesne. It is the responsibility of this group to assure that the University remains competitive by taking advantage of innovations in research, academic, and administrative productivity.

The Educational Technology group has as its mission to provide technology and services in support of the academic and research needs of the faculty and students of Duquesne, and works closely with the University's Educational Technology Committee to develop strategic plans and directions. Lead by the Director of Educational Technology, the group is responsible for services in several areas. General training on standard software and Internet services, as well as specialized training for faculty on use of technology in support of teaching and research, is regularly offered. Through the New Media Center, the group provides support for the University's World Wide Web campus information services and works closely with faculty on educational software development. The group also staffs and operates the Faculty Development Studio, located in Canevin Hall, which houses consultants and high-end multimedia development hardware and software. The Media Distribution Center is another service operated by Educational Technology which allows faculty to schedule media presentations (videos, laser discs, satellite downlinks) in one of the 28 multi-media classrooms on campus. The group operates a computer store, The Campus Computer Connection, which is a campus reseller for several service and software companies and a Technology Services office located in the Hall, which houses consultants and high-end multimedia development hardware and software.

The Institutional Technology group, reporting to the Director of Institutional Technology, provides support to the University in four major areas: Administrative Programming Services supports the business offices of the University through software development and support of the DATATEL software suite as well as custom software development. Registration, Admissions, Financial Aid and financial record keeping are some of the many supported business services. Technical Services provides hardware, software, and network support to the growing number of residence halls, office, laboratory, and classroom computers, including Macintosh, Windows, and Unix systems. Operation and Systems Services operates the University's data center, supporting corporate servers which include DEC Alpha systems, Unix and LAN servers. Help Desk Services is a single point of contact for calls from the campus community. Technology questions, scheduling, and repairs, and registration and support for training and seminars are all handled by the Help Desk.

In 1995 CCIT was recognized by the National Science Foundation with an honorable mention for excellence in Campus Networking and by the New Media Centers by being selected as a New Media Center Institution. More information on all CCIT services can be obtained by calling 396-HELP or by consulting the CCIT World Wide Web pages at http://www.duq.edu
Part II: Admission and Financial Aid

Admission

OFFICE OF ADMISSIONS

The Office of Domestic Admissions is located on the first floor of the Administration Building. Telephine (412) 396-6220, 396-6221, 396-6222 (800) 456-0590 (Outside of 412 Area Code) Fax (412) 396-5644

Office hours Monday through Friday from 8:30 A.M. to 4:30 P.M.

E-MAIL admissions@duq2.cc.duq.edu

POLICY

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

ADMISSION REQUIREMENTS

1. A candidate should have been graduated from an approved secondary school in the upper three-fifths of the class and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school must submit a High School Equivalent Diploma issued by their state department of education.

2. High School curriculum must include 16 units distributed as follows: four units in English, eight units in any combination from the area of social studies, language, mathematics, and science, and four elective units for which the secondary school offers credit toward graduation. In specific instances, and at the discretion of the Committee on Admissions, the genuine equivalent of these requirements may be accepted in lieu of the precise requirements specified (Note: Candidates planning to enroll in pharmacy or pre-health programs, or as science or mathematics majors should have completed a minimum of seven units in mathematics and science).

3. Scores in accordance with the standards adhered to by the University must be presented for the required College Entrance Examination Board Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT) (Note: for admission to the School of Music, an audition is required).

4. Early Decision Students who desire Duquesne University as their first choice for college should consider the Early Decision plan. This plan requires that the student apply by November 15 of her/his senior year. The student is notified of the decision by December 15, and is required to send her/his non-refundable deposit within two weeks. This offers the candidate the advantage of knowing of the admissions decision early in her/his senior year.

5. Early Action Program This program holds a deadline date of December 1 and allows the student to receive a decision during her senior year; in advance of the normal response dates.

APPLICATION—NEW FIRST-YEAR STUDENTS

Applications should be addressed to the Director of Domestic 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 $45 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 15 of their senior year.

7. Early Decision Deadline (for students who have Duquesne as their first College choice) is November 15. Notification will be by December 15. If accepted under the Early Decision Plan, commuting students are asked to submit a non-refundable tuition deposit of $200 within two weeks, resident students are asked to submit a $500 non-refundable deposit, within two weeks.

8. Notification of decisions for regular admission begins once Early Decision applicants have been notified. If accepted, students are asked to submit a non-refundable tuition deposit of $200 for commuters or $500 for resident students by May 1 of their senior year.

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/HONORS ADMISSION

Although the University believes that most students profit from four years in the secondary school, the Early Admission/Honors Admission plan is open to outstanding students. This is a plan whereby unusually able and mature candidates who have completed less than four years of a secondary school program may apply for consideration to begin college after their junior year. The high school diploma is awarded following successful completion of their freshman year in college. An interview is required.

Further details may be obtained by telephoning or writing to the Admissions Office.

APPLICATION—OTHER CATEGORIES

It is the responsibility of persons who apply for entrance to Duquesne University to indicate their desire to be considered for admission as senior to junior 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 prior to deadline dates.

ADMISSION OF UNDERGRADUATE INTERNATIONAL STUDENTS

Application Criteria

Duquesne University welcomes applications from qualified international students interested in entry as either freshmen or transfer applicants.

Eligibility criteria for application as a first-year freshman student include

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 freshmen-level applicants plus successful completion of some post-secondary study at a recognized institution of higher education, in the applicant's home country or another country, including the U.S. Students who submit scores on the Test of English as a Foreign Language (TOEFL) which are current to within one year and greater than 600 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 an as-needed or semi-intensive basis.

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

NOTE: Undergraduate applicants who have completed one year or more of successful postsecondary study in the United States or who submit acceptable scores (current to within one year) on the Test of English Language Proficiency may be considered for admission.

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 semi-intensive English as a Second Language Program (ESLP), qualified undergraduate applicants may be accepted to academic degree programs conditionally upon completion of English language requirements.

Eligibility criteria for application as a transfer student, include the above criteria for freshmen-level applicants plus successful completion of some post-secondary study at a recognized institution of higher education in the applicant's home country or 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 International Application Form,

b) Completed Duquesne University Affidavit of Support Form along with required accompanying financial resource certifications. (NOTE: Limited scholarships are available for 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 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 alien students. However, no immigration documents can be issued until all application materials, including financial resources, have been received. In order to complete the application, applicants must submit all required materials by the deadline date.

Students who submit scores on the Test of English as a Foreign Language (TOEFL) which are current to within one year and greater than 600 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 an as-needed or semi-intensive basis.

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

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

Applicants To English as a Second Language Program

The same application procedures detailed above may also be used by international students interested in applying only for English language study in the Duquesne University English as a Second Language Program (ESLP). The ESLP is open to qualified international students interested in studying only English on either a short- or long-term, non-degree, certificate of completion basis. A fuller description of the English as a Second Language Program is found on page 38.

Additional Information on International Student Applications

Please direct all inquiries and requests for additional information and application materials to the Director, Office of International Affairs, Duquesne University, 601 Duquesne Union, Pittsburgh, Pennsylvania 15282-1606. U.S.A. Telephone 412-396-6113 FAX 412-396-5178 E-MAIL: oia@duq.cc.duq.edu

POST-GRADUATES

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

A Post-graduate student must submit a Post-graduate application to the Division of Continuing Education if the Bachelor's degree was received from an institution other than Duquesne. Proof of degree is required either by an official transcript or a certificate of graduation.

RE-ADMISSION

Any student who withdraws from the University must apply for readmission 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 of admission or readmission is being made, once the application has been submitted to the Admissions Office.

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 school a description of the courses which appear on the transcript. The student should contact the Advisement Office of his school for placement and curriculum planning following a reasonable period for transcript review.

The College of Liberal Arts, the School of Natural and Environmental Sciences, and School of Education award a 60 semester hours of credit to accepted transfer applicants who have an Associate Degree in Arts from a regionally accredited two-year institution.

Students transferring from a regionally accredited institution must present academic records which show an overall average of C (2.0 on a 4.0 quality point system). Only credits will transfer, not grades.

Persons seeking admission to the University as transfer students from a state approved college which does not have regional accreditation must have attained a cumulative average of 3.0 based on a 4.0 quality point system. In addition, such prospective students must take the College Entrance Examination Board tests and attain the appropriate scores.

An interview is highly recommended for all transfer students and will be required of those students whom the Admissions Office notifies personally.

TEMPORARY TRANSFERS

Temporary Transfers are students who are enrolled in another college or university but who desire to enroll at Duquesne for one semester.

No Temporary Transfer Student will be granted admission without formal application and an official transcript or permission from an official at the University at which the student is enrolled. A Temporary Transfer Student must re-apply if he/she should desire to take a course or courses at Duquesne University beyond one semester.

Students shall be permitted to register for more than two semesters without making arrangements to become a permanent transfer.

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 their course selections approved by their academic advisor.

Graduates and other former students, including any who withdrew from the University, must obtain re-admittance before they may register for summer classes.

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 admissions application and registration form for the summer session 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.

The Early Admission Honors Program

Outstanding students who desire a true academic challenge may begin their university studies 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 Honors Program must be in the top ten percent of their class with a grade point average of 3.5 or above. A minimum 1100 SAT score or 26 ACT score is necessary for admission. An essay and one interview is also required. Written approval from the applicant's high school principal must be provided. Applicants under the age of 18 residing on campus must have parental permission. Students entering the Early Admission Honors Program will be given priority consideration for the Integrated Honors Program.

Advanced Credit Honors Initiative

High school juniors and seniors who wish to take university courses may do so at Duquesne if they fill the requirements set forth by the Duquesne University Office of Admissions.

Students must have no lower than a 3.0 grade point average. A letter of recommendation from a high school counselor must accompany their application.

Students enrolled in the program receive university credit for courses taken. Classes will be offered at reduced tuition rates.

Students who maintain a 3.0 grade point average while at Duquesne will be given guaranteed admission to full time studies at the university when application is made. Due to limited enrollment in select 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)

Most of the prominent universities in the United States have developed policies for the International Baccalaureate. Duquesne University awards up to 30 academic credits to a student completing the diploma with a score of 30 or above and honor scores in three higher end subjects. I B Higher Level scores of 5, 6 or 7 will be accepted to a maximum of 30 semester hours. I B Subsidiary level scores of 6 or 7 will be accepted in foreign languages to a maximum of six semester hours per language. No credit will be given for other subsidiary level courses.

Advanced Placement

Students who have followed the College Entrance Examination Board college level program in secondary schools and have performed successfully 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 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 Examination Programs — Subject and General. Any of these examinations may be taken at Duquesne’s University Counseling Center or at any CLEP Center. Additional information regarding test dates, applications and sample test questions is available from the University Counseling Center, 308 Administration Building, phone (412) 396-6104/6108.

Students should double check with the College 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.

Integrated Honors Program

For the highly-qualified, motivated and committed student who is searching for challenge and enrichment in a college education, Duquesne University offers the Integrated Honors Program (IHP)
Established in 1984 with the help of a grant from the National Endowment for the Humanities, the IHP provides academically-gifted students with a depth and breadth of experience appropriate to their exceptional abilities.

About the Integrated Honors Program
All students entering Duquesne University must take a number of basic courses in the liberal arts and sciences. These courses constitute the University Core Curriculum. The IHP is the honors track of the University Core and is intended for students who want the challenge of an accelerated learning experience. The IHP is open to qualified students from the College as well as from the professional schools.

IHP Features
- Faculty who are dedicated to good teaching, who are well-known scholars in their fields, and who possess a breadth of interest beyond their individual specialties because learning is a life-long adventure.
- A set of courses that focus on our essential human heritage and on the major ideas and issues forming the background and direction of modern life.
- Small classes to allow for close interaction between students and teachers and to encourage individual initiative as well as collaborative learning.
- Special housing in a Duquesne University Living-Learning Center to provide an environment conducive to intellectual dialogue and intensive study.

IHP Curriculum
The Integrated Honors Program consists of six foundation courses (18 credits) in the humanities and social sciences and six additional courses (18-20 credits) chosen from prescribed areas in the liberal arts and sciences. The IHP substitutes for the University Core Curriculum. IHP students in the College of Liberal Arts and School of Natural and Environmental Sciences who complete the 36-credit IHP curriculum are exempt from other arts and sciences area requirements except for the foreign language proficiency.

Financial Aid
Financial aid is defined as scholarships, grants, loans, and part-time employment awarded to help meet the cost of education. Cost 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 1st 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 Scholarship/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 students undergraduate programs provided (1) student is full-time, (2) maintains minimum cumulative GPA 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 GPA indicated
  - Chancellor's Award 3.50
  - Strub Merit Award 3.00
  - Presidential Merit 3.00
  - Parish Scholarship 3.00
  - Provost Award 3.00
  - Laval Merit Award 2.75
- Available to renewal students only - with cumulative GPA indicated
  - Founder's Award 3.00
  - President's Scholarship 3.00 & need
  - Laval Grant 2.75 & need
  - Parish Grant 2.75 & need
  - *If funds are available new applicants with minimum 30 credits earned at Duquesne, with 300 cumulative GPA and need will be considered

Scholarships/ROTC Assistance
- Assistance toward room and board costs for ROTC Scholarship winners are available with re-application, minimum 300 cumulative GPA, on-campus residence and ROTC award.

Auxiliary Grant
- Grant funds awarded to incoming freshmen with remaining need after utilizing all aid resources available. Renewable with minimum cumulative GPA of 2.50, and continued need for funds after utilizing other aid sources available.

Liz & John E. Murray, Jr Scholarship
- Every 4 years Dr & Mrs Murray will fund a scholarship to an incoming freshman student. Student will receive funds through gift sources to cover 30 credits of tuition and fees, room and board and a book allowance.

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

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

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

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

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

OTHER SOURCES OF AID

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

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

Federal Stafford Loans
- Requires completion of FAFSA and Stafford Loan application. Renewal forms are normally mailed directly to students, and new applications can be requested through most banks and lending institutions. Available to students who enroll at least half-time. Interest rates vary. Loan limits vary with academic level.

Aid forms provided by the Federal Stafford Loan Application. Available to independent students only. Can apply for this loan using the Federal Stafford Loan Application.

Dental Plus Loans
- Available to parents of dependent undergraduate students. Loan application may be obtained through most banks and lending institutions. Interest rates vary. Maximum loan amount is based on the cost of education minus all financial aid.

Health Education Assistance Loan (HEAL)
- Available only to fourth and fifth year Pharmacy students. Available to independent students only. Can apply for this loan using the Financial Aid Office. Interest rates vary. Maximum loan amount is based on the cost of education minus all financial aid.

University Discounts
- The following discounts are available to students meeting the requirements indicated. Discount will be at base 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 10% discount on tuition is extended to graduates of Catholic High Schools in the Diocese of Pittsburgh who enroll as full-time students in the fall immediately following graduation. Available only to students receiving no other University awards including, but not limited to, scholarships, grants, tuition remission and other discounts. Renewal requires continuous full-time enrollment during the academic years following initial enrollment. Re-application through the Financial Aid Office, and no other University funded awards.

Clergy/Religious
- Members of University-recognized Christian and Jewish Religious, who have been ordained or professed, may be eligible to receive a 50% discount.
Li Col Dan Conn Scholarship Need based Member of parish in Diocese of Pittsburgh
McG Conley Scholarship Need based Child of member or member of Our Lady of Grace Parish Must apply through parish and Duquesne
Delladottis Scholarship Need based
Duchene Scholarship Based on need and academics Preference to children of Alpha Epsilon then Alpha Tau Omega Brothers Third preference to male member of Duquesne University Social Fraternity
Eberly Family Trust Based on need and superior academic achievement Preference to Fayette, Greene, Washington and Westmoreland counties in that order
Eckerdale Scholarship Need based
Dempner Fielider Scholarship Education student Normally based on need
Ferry Scholarship Based on need and academics Glad Scholarship Based on need and minimum 30 QPA Enrollment in School of Natural & Environmental Sciences with preference to Biochemistry majors and then Chemistry majors
Guttman Scholarship Need based
William Hart Scholarship Need based
Hessburg Scholarship Based on need and minimum 2.5 QPA Enrollment in College of Liberal Arts Hungarian Heritage Scholarship Based on need and academics Enrollment in College of Liberal Arts Order of preference students from Hungary, students studying in Hungary, students studying Hungarian, students of Hungarian heritage, any needy and worthy student
Hunkele Scholarship For seminarians of the Roman Catholic Diocese of Pittsburgh
Munroe Hyman Scholarship Need based Selection by member of Hyman Family Foundation
Kate M Kelley Scholarship Need based
Kerschegel Scholarship Need based Residents of Allegheny County
Frank K. Schmiedler Scholarship Need based
John Kocak, Jr Scholarship Need based Enrollment in School of Business Order of preference Senior or Junior Accounting Major from McKeesport Senior or Junior Accounting Major from Bethel Park, any deserving student in Business
Kaznow Scholarship Based on need and academics Juniors and Seniors with math or physics major
Krupp Scholarship Based on need and academics
Linn Scholarship Need based
Loftus Scholarship Need based
Margotti Scholarship Need based
Marone Scholarship Need based. Enrollment in College of Liberal Arts QPA between 2.6 and 2.9
McAnulty Scholarships (2) Both need based One fund restricted to residents of Allegheny and Beaver Counties
McDonough Scholarship Based on need and academics
McGrath Scholarship Need based
Theodore Meyers Scholarship Need based First preference to child of member of Graphic Arts International Union - Local 24 - Pittsburgh
Mengillo Award Need based
Marshall Family Scholarship Need based
Panca Memorial Scholarship Need based Order of preference (1) Marital Status - single parent, child of single parent, married, other, (2) sex - female, male (3) Race - African American, other US Government minorities, other
Rahdke Scholarship Need based 3 awards per year
Allan Reynolds Scholarship Need based
Sammons Family Scholarship Need based
Sorority of Tri-State area - Pennsylvania, Ohio, West Virginia
Jerry Smith II Need based, average grades
Spring Hill Foundation Wayne County residents with preference to children of employees or residents of Sterling Township 2.6 QPA needed for renewal
Marie Staller Scholarship Need based
Tassler Scholarship Need based
Very Scholarship Based on need and academics
Thomas Winschel Scholarship Based on need and academics
Joseph A. Young Scholarship Need based Preference to members of St Aloysius Parish, Pittsburgh

The following are awarded by financial aid and outside representatives

Colecca Scholarship Based on Academics Juniors and Seniors in College of Liberal Arts or School of Natural and Environmental Sciences with specific majors
Daly Scholarship Based on need and academics Residents of Butler County
DIUSSO Scholarships Based on need and activities Apply through SGA Office by April 1
Eberhardt Memorial Fund Need based, need and academics and activities
Theodore Engleman Scholarship Need based
Merle E. Gilland Scholarship Based on need and academics
USX Good Fellowship Scholarship For children of USX employees with minimum 2.5 QPA

Student Life
Bartlow Scholarship Based on need, academics and service Sophomores and Juniors in Business

Goodwin Memorial Scholarship Based on academics Pharmacy students
Hogan Scholarship Need based
Harry McCloskey Memorial Award based on academics, character and volunteer activity
Vira Henz Travel Award Female students selected on the basis of academic achievement and interest in intercultural or international relations

College of Liberal Arts

Carroll Scholarship Based on academics and creative writing Apply through English Department
Charters Scholarship Based on recommendations of English Department Chair Juniors and Seniors in English
Kukacka Scholarship Based on need and academics Communications majors
Laurita Scholarship Based on need and academics Incoming freshmen, non-renewable Journalism majors
C.S. McCarthy Scholarship Need based Juniors and Seniors majoring in Journalism
Waltman Rush Scholarship Through Journalism Preference to senior majoring in advertising, journalism, public relations or radio/television Need is not a factor

School of Business Administration

** = Application/Information available from Admissions Office, 705 Rockwell Hall
Accounting Scholarships Based on need and academics Juniors and Seniors majoring in accounting Apply by October 1 Applications available from Accounting faculty

Alumni Association Scholarship Awarded annually to qualified Business student(s)**

Glen Benson Scholarship Based on need and academics (3.5 QPA) Sophomore, Junior or Senior Business Students**

Consolidation Coal Company Scholarship for Information Technology $1,500 to student majoring in Information Technology, with 30 QPA and senior standing by fall of award year Final determination based on essay**

deBima Scholarship For needy and worthy junior accounting majors 3.25 QPA Selected by committee**

Duquesne African American Accounting Scholarship African American accounting majors who maintain a 3.0 QPA Application and information available from Director of the African American Accounting Scholar’s Program

Miltic Scholarship Based on need and merit minimum 2.75 QPA**
FINANCIAL AID

School of Natural & Environmental Sciences
Chemistry Department Scholarship For chemistry majors

School of Nursing
Bekian Scholarship Based on need and academics
Hauser Scholarship Male student, based on need
Migdonro Tomnus Award Based on need RN student returning to earn B.S. in Nursing

Committee Miller Scholarship Based on recommendation of Dean

H. Schreiber Scholarship Based on need, character and potential for leadership Selected by committee

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

Beaver County Pharmaceutical Association Grant and Aid Fund Revolving loan fund for two Pharmacy students who are residents of Beaver County

Samuel W. Curtis Loan To provide assistance for Pharmacy students

Chabon Loan To provide assistance for Pharmacy students

Diploma Scholarship Awarded by the Graduate Chapter of Phi Delta Chi in memory of Joel F. LaPointe. Three annual awards of $200 to one fraternity brother in each of the three professional years

Must have demonstrated academic achievement and active participation in the functions of the Fraternity

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

Clement Eddy Goodwin Scholarship In memory of Clinton Eddy Goodwin. Candidates must be a declared Pharmacy major, possess a minimum of 30 QPA, and demonstrate interest in community pharmacy practice

Manzione Scholarship For students entering the first years of the curriculum Based on need and academics

School of Music
Alfred d'Aurche Scholarship Based on need and academics

Barry Scholarship - Music Recommended by Dean

Hunter Memorial Award Based upon musical and scholarly excellence

Lowelle Scholarship Trumpet player Need based

Monard Scholarship Need based, academics secondary

Music Therapy Scholarship Music Therapy students

Putnam Lioner Fund Based upon musical and scholarly excellence

Purcell Trombone Scholarship Based on talent and promise of jazz trombone student

Rothschild Scholarship Based upon musical and scholarly excellence

Riley Piano Award One award per semester for piano excellence

Recroto Scholarship Woodwind major Based on academics

Mattie & Eddie Shimer Students studying brass instruments

Veitch Scholastic Award Cello student, minimum 30 QPA

Womens Advisory Scholarship Full time student, minimum 30 QPA

Other Awards Contact Dean's Office for information

- Presser Scholarship, Loyal Christian Benefit Association Award, Polish Arts League Scholarship, Music School Scholarships

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

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

Tau Alumni Chapter of Lambda Kappa Sigma - Rose Manzounze Scholarship In memory of Rose Manzounze, P'49 Financial awards for members in the last years of the Pharmacy program Based on financial need and participation in the organization

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

WARDON Scholarship Women's Organization of the National Association of Retail Drugists offers annual scholarships for pharmacy study The award amount is determined by established need and academic achievement of the applicant Apply directly to WARDON by June 1

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

Geraldine (Mua) Furgueuie Scholarship In memory of Geraldine (Mua) Furgueul, P'30 Provides scholarships for needy and deserving female students in the School of Pharmacy

Rosemane Bevacqua Scholarship In memory of Rosemane Bevacqua, P'55 Provides scholarships for needy and deserving Pharmacy students

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

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

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

Cona E. Craven, Norma Wells, Mary Connolly Lestonington Educational Grants Awards annually to members of good standing of Lambda Kappa Sigma, enrolled in B.S. in Pharmacy and Doctor of Pharmacy Programs Must rank in upper half of her class and present evidence of financial need Application information from School of Pharmacy
FINANCIAL AID

registration and scholastic policies

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 his or her permanent address a month before classes begin, thus enabling the student or parent to make payment by mail. Final registration for students who have neither preregistered for classes nor concluded financial arrangements is held just before the opening of classes.

The financial obligation for class places reserved is 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. Students requiring a change of class schedule, to change class times or to add or to drop a class, are permitted to do so during the periods of Pre-registration, Final Registration, and Late Registration. Change of class schedule is not permitted after the close of Pre-registration.

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

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

CROSS-REGISTRATION

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 College
University of Pittsburgh

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

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 cross-registration, the approval of the dean or designated individual from the home college or university must be obtained prior to registration.

The student's advisor or dean is responsible for assuring the student's eligibility for the course in which s/he intends to enroll.

Full credit and grade 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 or for purposes of participation in student activities, insurance programs, etc.) They do receive library privileges at the host institution and may purchase course tests at the host bookstore.

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

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

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

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

Procedures

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

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

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

LATE REGISTRATION

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

RECORDS AND REPORTS

SEMIEREST 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 obligation to the University.

TRANSCRIPTS

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

To obtain additional copies of academic records, students must write to the Registrar requesting transcripts for themselves or for mailing to other institutions and agencies. All official transcripts issued by the Office of the Registrar may bear the signature of the Registrar and the embossed seal of the Office of the Registrar. 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 respects the student's personal information and academic record as a matter of confidence between the student and the University. The contents of either may be revealed only in accordance with the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380, Section 438, as amended).

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

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

Academic Policies

POLICIES

ACADEMIC ADMISSION

Every student attending the University is assigned an academic advisor. It is the student's responsibility to know the advisor's name.

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

AUDITING COURSES

Regularly enrolled Duquesne students are permitted to audit courses. In addition, non-degree students from the general community who would like to audit courses for personal enrichment and who are not matriculated for 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 Division of Continuing Education to complete a brief application form. Admission is granted on a space available basis by consulting the Office of the Registrar and the individual schools Fees for auditing are uniform for all students.

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

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

1) No courses in the School of Law are available for audits, 2) No clinical courses in the School of Nursing and pharmacy can be audited, 3) The Rangos School of Health Sciences will not allow clinical courses or those courses in the professional phase of the curriculum (the last two years of all RSHS majors) to be audited by non-majors, 4) In the College of Liberal Arts and the School of Natural and Environmental Sciences, courses in humanities and social sciences can be audited, but communications and sciences 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, however, to make changes or cancel courses in the academic schedule because of insufficient enrollment or for any other equally valid reason.

CLASS ATTENDANCE

Regular class attendance is considered essential for maximum educational advantage and is strongly encouraged. The responsibility for all course materials rests wholly with the student. Students 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 obligations owed by the student to the University. The student should supply any required written verifications as soon as possible.

The student must submit work assigned and take the examination in the course at the specified time. If work is not submitted or an examination is not taken at the scheduled time, the policy is to assign a zero for that part of the course. An accumulation of zero grades could result in a final grade of 'F'. If a student is absent for a significant reason, the instructor is responsible for notifying the office of the appropriate school advisor. The student should supply any required written verifications as soon as possible.

The student must submit work assigned and take the examination in the course at the specified time. If work is not submitted or an examination is not taken at the scheduled time, the policy is to assign a zero for that part of the course. An accumulation of zero grades could result in a final grade of 'F'. If a student is absent for a significant reason, the instructor is responsible for notifying the office of the appropriate school advisor. The student should supply any required written verifications as soon as possible.

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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

1. Full-time Student A student with an academic schedule of at least 12 credits is considered a full-time student. With this status a student is entitled to the benefits of various activities. A student may not change status during the semester without the permission of the academic advisor and the Dean of the student's school.

2. Part-time Student Anyone who carries under 12 credits is regarded as a part-time student.

3. Post-graduate Student A person who has completed a baccalaureate degree and is seeking additional undergraduate credits.

COURSE EXAMINATIONS

Unit examinations are given on the dates announced by the instructor at the beginning of each semester. Grades for these are obtained from the instructor.

Final examinations are given at the end of each semester and summer session. No student is excused from taking the final examination.

CREDIT BY EXAMINATION

Examinations for recognition of proficiency in a subject, and for course credit, as authorized by the College or a particular School of the University, are available to currently enrolled students who by previous experience or exposure have acquired mastery of the knowledge in certain courses. An application fee of $300 is charged for each course credit. Application forms may be obtained from the Office of the Registrar.

Since policies vary among the Schools, students who feel they may qualify for credit by examination should consult the Dean of the School in which they are enrolled for specific information about courses open to this examination procedure.

UNDERGRADUATE GRADING SYSTEM

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Quality Points Per Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>Excellent</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>Very Good</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>Satisfactory</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td></td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td></td>
<td>1.7</td>
</tr>
<tr>
<td>D</td>
<td>Lowest passing grade</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failure (Course must be repeated for credit)</td>
<td>0.0</td>
</tr>
<tr>
<td>X</td>
<td>Used to indicate that although student continued to appear on rosters, student never attended classes</td>
<td>0.0</td>
</tr>
<tr>
<td>N</td>
<td>Not Passing (Course must be repeated for credit)</td>
<td>0.0</td>
</tr>
<tr>
<td>LG</td>
<td>Late Grade (Used to indicate that grade was not reported by faculty in time for the semester grade report sent to student)</td>
<td>0.0</td>
</tr>
<tr>
<td>H</td>
<td>Honors (Used in some courses where scaled grading is inappropriate. Indicates completion of course work with credits earned and with honors but without quality points and is independent of the Quality Point System)</td>
<td>4.0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete (A temporary grade given by an instructor when neither passing nor failing grade can be determined because of incomplete course work. Unless a convincing explanation of extenuating circumstances, acceptable to the instructor, is presented at the time of the missed examination or required assignment is made up by the date specified in the Academic Calendar, the I becomes a permanent F grade)</td>
<td>0.0</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory (Course must be repeated for credit)</td>
<td>4.0</td>
</tr>
<tr>
<td>P</td>
<td>Pass (May be used in some courses where scaled grading is inappropriate. Indicates satisfactory completion of course work with credits earned but without quality points and is independent of the Quality Point System)</td>
<td>4.0</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory—Failure (Used in Pass/Fail elected courses and is independent of the Quality Point System, course must be repeated for credit)</td>
<td>0.0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal (Used on a Student's permanent record to indicate termination of attendance in courses under conditions of official withdrawal) (See catalog and Schedule of Courses for Withdrawal from a course and Withdrawal and Termination of Attendance)</td>
<td>0.0</td>
</tr>
</tbody>
</table>

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 grade values will be used in grading course work and rating academic performance of the students in their class courses.

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.)

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>
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<tr>
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<tbody>
<tr>
<td>A</td>
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<td>D</td>
<td>1.0</td>
</tr>
<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. An authorized request to repeat a course must be obtained from the advisor before registering in the repeat course. All grades are retained on the permanent academic record. The result of the final attempt in a repeated course is, however, the student's status in the course with regard to attempted credits, earned credits, and the completion of requirements.

Retrogradation, a corollary of the repeat credit rule under which a student may earn credit once only for a course, prescribes that a student may not move 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 a 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 by 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 175 to 199 QPA (Letter of warning may be sent by appropriate Dean)
Probation 150 to 174 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 150 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 185 to 199 QPA (Letter or warning may be sent by appropriate Dean)
Probation 175 to 184 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 185 QPA (Readmission may be permitted on recommendation of the appropriate Committee on Student Standing)

For students who have attempted 61 or more credits and who have a QPA of between 185 and 199 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

REGISTRATION AND SCHOLASTIC POLICIES

Schedule of Courses for Withdrawal from a course All grades are retained on the permanent academic record.

record to indicate termination of attendance in courses under conditions of official withdrawal) (See catalog and Schedule of Courses for Withdrawal from a course and Withdrawal and Termination of Attendance)
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 Committee on Student Standing. Students subject to the jurisdiction of the appropriate Committee on Student Standing, in accordance with the established guidelines who are permitted to re-enroll on a full-time basis but continue participation in noncurricular and extra-curricular 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 Athletics 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 GPA at all times in order to be academically eligible to compete in inter-collegiate competition. GPAs for student athletes are calculated at the end of each semester."

ACADEMIC COORDINATOR OF INTERCOLLEGIATE ATHLETICS

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

DEAN’S LIST

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

GRADUATE COURSES FOR UNDERGRADUATE CREDIT

Qualified seniors may be permitted to register in certain graduate courses at the 500 level for under-graduate 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 satisfactorily 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 selectively 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 in all except Pharmacy which requires 164 credits and Nursing which requires 125 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 GPA 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.

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

HONORS

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

Cum Laude—Quality Point Average of 3.50 to 3.74

Magna Cum Laude—Quality Point Average of 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 preregistration. It is the advisor’s responsibility to effect the change.

WITHDRAWAL FROM A COURSE

First semester freshmen may withdraw from courses with the approval of an advisor up to the period of final examinations and receive a grade of “W” by processing the proper form.

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

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

A student who is not granted approval of the request and withdraws from the course unofficially will receive a “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 1997-98 term only, unless otherwise indicated.

TUITION
RATE 1 (Arts, Business, Education, Nursing, Spiritan Division)
Full-time Undergraduate Tuition (12-18 cr)
University Services Fee
Total
Per-credit
Undergraduate Tuition
University Services Fee
Total

RATE 2 (Natural and Environmental Sciences, Pre-Pharmacy)
Full-time Undergraduate Tuition (12-18 cr)
University Services Fee
Total
Per-credit
Undergraduate Tuition
University Services Fee
Total

RATE 3 (Health Sciences)
Full-time Undergraduate Tuition (12-18 cr)
University Services Fee
Total
Per-credit
Undergraduate Tuition
University Services Fee
Total

RATE 4 (B S in Pharmacy, Year 5)
Full-time Undergraduate Tuition (12-18 cr) (Year 5)
University Services Fee
Total
Per-credit
Undergraduate Tuition
University Services Fee
Total

RATE 5 (Music)
Full-time Undergraduate Tuition (12-18 cr)
University Services Fee
Total
Per-credit
Undergraduate Tuition
University Services Fee
Total

RATE 6 (Pharm D., Years 3-4)
Full-time Undergraduate Tuition (12-18 cr)
University Services Fee
Total

PER-CREDIT
Undergraduate Tuition
University Services Fee
Total

FEES
Application (non-refundable) $4500
Matriculation Deposit (non-refundable) $2000
Residence Hall Pre-Payment (non-refundable) $3000
Change of Schedule $500
Credit by Examination $500
Orientation (New Students) $1250
Late Registration $250

desision Correction Fee $150
Continuing Registration Fee $100

Undergraduate Pharmacy Student Activities (for Third, Fourth, Fifth, and Sixth Year Students) $400

University Services Fee $37 per credit

LABORATORY FEES
English Language Placement Testing (ESL) $300

Laboratory fees apply to the 1997-1998 academic year

Laboratory fees apply to the 1997-1998 academic year
*English Language Placement Testing (ESL) fee is a one-time fee
**Laboratory Breakage Fee
One breakage card per semester will cover laboratory breakage in Chemistry

GRADUATION FEES
Thesis Binding Fee—Doctoral Dissertation $113.50
Thesis Binding Fee—Master Thesis $103.50

SUMMER TUITION
Summer tuition is calculated on a per credit basis. See page 26 for the rate that applies to the school in which you are enrolled

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

Upon officially withdrawing from the University, a student receives remission of part of the tuition charged for the semester or session in accordance with the Tuition Remission Schedule. The amount of the remission is added to payments, and a refund is made upon request where a credit balance is created on the student's 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. Once assignments are made on a first-come, first-serve basis, there is no remission for additional room and board expenses.

If a student returns to his/her housing immediately upon receipt of their withdrawal notice, the University will refund 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.

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

TUITION 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.

ROOM AND BOARD—WITHDRAWAL AND REFUND

The Office of Residence Life Housing Agreement shall be refunded with the exception of the $300.00 room reservation fee which is not refundable.

- Student is obligated to pay to the University education fees and board fees for the entire Academic Year. There will be no exceptions to this obligation except as follows:
  - If the student decides not to live in the Living Learning Centers and so notifies the Assistant Director of Residence Life IN WRITING BEFORE CLASSES BEGIN, the student will be released from obligations under this Housing Agreement. All amounts which the student has previously paid pursuant to the University's Housing Agreement shall be refunded with the exception of $300.00 non-refundable room reservation fee and $100.00 penalty.
  - If the student notifies the Assistant Director of Residence Life after classes begin that the student has decided to move out of the Living Learning Centers or ceases to be a student of the University, the obligation to pay the room fees shall continue for the remainder of the Academic Term and the University will refund to the student an amount equal to 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.
  - Prior to the end of the Fall semester, students will be permitted to cancel their room reservation for the Spring semester by completing a Spring Release Form. This Spring Release Form cancellation will result in a $500.00 penalty.
  - Spring Release Forms available in Assumption Hall must be completed prior to the end of the Fall semester.

STUDENT FINANCING PROGRAM

The University offers a 10-month payment plan through Tuition Management Systems (TMS). The basics of the program are:

1) The parent pays TMS $125.00 to enroll in the plan. Enrollment must be completed prior to August 8th.
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.

CASHING CHECKS

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

BAD CHECKS

It is the policy of the University to charge bad checks to the student who cashes them regardless of the maker. A $5.00 service charge will be assessed on all checks returned from a bank for lack of funds. Payment of registration or room and board with an NSF check will result in cancellation of the registration.

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.
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 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 opportunities to participate in a variety of experiences with fellow students, faculty members and administration. It 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, Commuter Affairs, University Counseling Center, Duquesne Union, Financial Aid, Freshman Development and Special Student Services, Greek Life, Health Service, Judicial Affairs, Residence Life, and Student Activities. Several of these Departments are briefly described below. Additional information may be obtained directly from each Department and through the Student Handbook and Code of Student Rights, Responsibilities and Conduct.

ATHLETICS
The Duquesne University Department of Athletics sponsors 20 NCAA Division I sports including baseball, men's and women's basketball, volleyball, men's and women's cross country, football (Division I-AA), men's golf, women's lacrosse (beginning Spring 1997) rifle (co-ed), men's and women's soccer, men's and women's swimming and diving, men's and women's tennis, women's indoor and outdoor track, women's volleyball, and wrestling. In addition, cheerleading, men's crew, hockey, and men's indoor and outdoor track are offered as club sports. Duquesne University believes in and promotes the concept of student athlete, evidenced by an Academic Senate resolution. The Department of Athletics 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, cardio-vacuular 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. PAT bus schedules are available. Bus passes are sold in the Information Center of the Union.

Off-Campus Housing Information Up-to-date listings are maintained of rooms, apartments and “roommate needed” situations. Area maps and 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 396-6600. 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 upperclassmen who serve as advisors and provide resources for new commuters. C.A.’s plan activities, provide information, and supply encouragement.

Other Services Include Suggestions/Complaints, Commuter Update, distribution of Student Directory and Student Handbook to commuter students.

The Office is located in the Duquesne Union, Room 315. Office hours are extended during the Fall and Spring semesters when the Office is open Monday through Thursday, 8:30 a.m. - 5:30 p.m. and Friday until 4:30 p.m. For further information call 396-6600.

OFFICE OF STUDENT ACTIVITIES
The Office of Student Activities coordinates the programs, services and facilities of the Duquesne Union, provides programming and administrative support for all recognized student organizations, publishes the Fall and Spring Semester Activities Calendars, and coordinates the Duquesne University Volunteer Mentor 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, provides leadership training 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, and program 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 the responsibilities to the University and the community. Legal technicalities 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 each of the four (4) Living Learning Centers 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 total University education. The purpose of the Office of Residence 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. All students living on campus are further required to take a University meal plan. Housing Agreement terms are effective for the entire academic year, with room and board rates being determined on an annual basis. Additional information regarding programs, policies and regulations for the Living Learning Centers is included in the Residence Life Handbook.

OFFICE OF FRESHMAN DEVELOPMENT AND SPECIAL STUDENT SERVICES

STUDENTS WITH DISABILITIES:
The Office of Freshman Development and Special Student Services also provides services to all University students with disabilities. Services such as classroom relocation, specialized testing accommodations, note-taking, removal of physical barriers, and other accommodations can be arranged through the office on an individual basis. The office assists students in communicating their needs to faculty members, physical plant, and the University community, and in connecting with campus resources.

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

OFFICE OF GREEK LIFE
The Office of Greek Life promotes the growth and development of students who choose to affiliate with Greek Organizations and seeks to promote the Greek System as an integral and productive part of the institution.

To accomplish this mission, the Office promotes the noble ideals of academic excellence, leadership, philanthropy, and moral development of students within the framework of the Duquesne University Mission Statement. If provides training and consulting in leadership development, group processes, and interpersonal skills, it sponsors educational and social programming, and promotes a sense of community inasmuch as these processes promote learning outside 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 an advisor.
ombudsman 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, securing 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 advisor regularly.

CAREER SERVICES CENTER
Students and graduates of Duquesne University have available to them the full services and programs of the Career Services Center. Persons with uncertain or changing vocational goals may seek career planning through personal contact with the professional staff and use of the career resources. Early use of this service is encouraged.

The individual with well-defined career goals may seek employment assistance and advice, including resume preparation, interview and job search techniques, job referrals and credential services. The graduating student may also be interested in campus interviews with visiting employers.

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 Career Services 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 full-time 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 and professional examinations (CLEP, MAT, GRE, LSAT, GMAT, PRAXIS, etc.) is also available.

Please contact the University Counseling Center at 396-6204/6208 for any additional 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 Emergency Room at Mercy Hospital. 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, 396-1650/1652.

Eligibility
All full-time registered students. Cost of treatment or diagnostic procedures by non-University physicians, clinics or hospitals must be assumed by 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 and is priced lower than individual health insurance policies. Inquiries about health insurance should be directed to Genny Hughes (396-6677).

NOTE: 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 396-4747. They will provide assistance and will contact Paramedics, Health Service and the Crisis Coordinator as needed.

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 seek to promote knowledge of the heritage and growth of 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 1st floor of the Gumberg Library. Phone: 396-6562.

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 arranging 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.

LEARNING SKILLS CENTER
The Learning Skills Center is an auxiliary academic service whose primary charge is the intellectual development of students. Services are provided in coordination with academic offices of the University.

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

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

THE PSYCHOLOGY CLINIC
The Psychology Clinic offers initial evaluation, psychological assessment, and brief and long-term psychotherapy services to the general public, as well as to members of the Duquesne University community. Advanced Ph.D. students in the Psychology Department provide all services under the direct supervision of clinical faculty. Fees are set according to each client's income and ability to pay. The Clinic is open Monday through Friday from 8:30 a.m. to 4:30 p.m. Some evening appointments are also available. Persons interested in scheduling an appointment should call 396-6562. An intake session will be scheduled as rapidly as possible.

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 imple-
menting Living Learning Center policies and procedures. All resident students are automatically members of Residence Hall Association and are encouraged to attend meetings, functions, etc., sponsored by the group.

It is the aim of the Residence Hall Association to serve as a link between the resident students and the administration. Aside from the council activities, representatives of the Residence Hall Association serve on university committees.

**INTERFRATERNITY ASSOCIATION**

The purpose of the Interfraternity Association is to develop and maintain fraternity life and interfraternity relations at a high level of accomplishment. The Interfraternity Association is lead by the Interfraternity Council (IFC) which serves as the governing and regulatory body for its 9 member social fraternities. The IFC promotes superior scholarship and social and moral development. It represents the fraternities to the administration, faculty, and student body. The IFC regulates all Men's Greek Activities including Rush, Pledge Education, Carnaval, Greek Week, Intramural Sports, and social events and serves as a forum for the airing of constructive proposals for the improvement of the fraternity system.

**PANHELLENIC ASSOCIATION**

The purpose of the Panhellenic Association is to develop and maintain sorority life and inter-sorority relations at a high level of accomplishment. The Panhellenic Association is governed by the Panhel-lenic Council which serves as the governing and regulatory body for its 8 member social sororities. The Panhellenic promotes superior scholarship, and social and moral development. It represents the sororities to the administration, faculty, and student body. The Panhellenic regulates all Greek Women's activities including Rush, Pledge Education, Carnaval, Greek Week, social events, and others. It serves as a forum for the airing of constructive proposals for the improvement of the sorority system.

**STUDENT ORGANIZATIONS**

**E. STUDENT ORGANIZATIONS**

**GENERAL**

There are more than 100 student organizations at Duquesne. Some serve the needs of specific interest groups, others relate directly to major areas of study, and some honor academic achievement. Many are formed to meet social, service or religious needs and interests.

The Office of Student Activities provides administrative and programming support for all recognized student organizations. Any student group wishing to apply for official University recognition must initiate this process through the Office of Student Activities. Recognized organizations must also annually update their registration.

**HONOR SOCIETIES**

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

**PROFESSIONAL AND DEPARTMENTAL ORGANIZATIONS**

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

**DUQUESNE PROGRAM COUNCIL**

The Duquesne Program Council (DPC) is the major student programming organization of the University. It provides social, recreational, educational and cultural activities for the entire University. The DPC, directed by students, is comprised of several committees which present such events as concerts, dances, art exhibits, lectures 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 individuals 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.

**FRATERNITIES AND SORORITIES**

Fraternities and Sororities are organizations composed of college men and women who have joined together for friendship, comradeship, and activities. They sponsor and promote social, athletic, service, and academic events. Many of these organizations belong to the Interfraternity Council or Panhellenic Council.

**PERFORMANCE GROUPS**

**TAMBURITZANS**

The Duquesne University Tamburitzans were founded in 1937 at the University and are the first university-based performing folk ensemble in the United States. The group takes its name from the tamburitza family of stringed instruments indigenous to the folk cultures of Southeastern Europe.

**STUDENT ORGANIZATIONS**

**PROGRAMS — STUDENT ORGANIZATIONS**

The group exists for the dual purposes of preserving and perpetuating the Eastern European cultural heritage in the United States while offering scholarships to students who are academically sound and who possess talents in the performing arts. Each year the Tamburitzans search for new talent to fill vacancies in the ensemble. Applicants do not necessarily need a specific background in the folk arts. Performing experience in a band or orchestra, singing in a chorus, or taking lessons in tap, ballet or jazz dance may provide the skills needed to qualify for a scholarship in this unique ensemble.

The group performs 80 shows each year and travels extensively throughout the United States and Canada. Inquiries concerning auditions should be made in the fall prior to auditions which are held in February. For further information please contact the Tamburitzans office.

**THEATRE**

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

**MEDIA ORGANIZATIONS**

**WDSR**

WDSR (630 AM) 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 the student. 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 conduct and the University Judicial System. Copies are available in the Office of Student Activities, 305 Union.

**The Duquesne Duke**

The Duquesne Duke, the University's student newspaper, is written and edited by students. It is published on Thursdays during the academic year with the exceptions of examination periods and holidays. Membership is open to all students.

**The Duquesne Magazine**

This literary publication offers students the opportunity to submit writing, artwork, and photographs. It is published once a year.

**L'Esprit du Duc**

L'Esprit du Duc, 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.

**WDUQ Radio**

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

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

WDUQ reaches more than 100,000 listeners each week throughout southwestern Pennsylvania, and parts of Ohio, West Virginia and Maryland. WDUQ is the oldest public broadcasting station in Pittsburgh, on the air since 1949. WDUQ's offices and studios are in the Des Places Communications Center on the Duquesne campus. Tours are welcome and available on request.
Part VII: Campus Ministry

The Campus Ministry is deeply concerned with 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. For Catholic students, Eucharistic liturgies are celebrated daily, and the Sacrament of Reconciliation is scheduled regularly and by appointment. For all students, faculty and staff, whatever their faith, the Campus Ministers are available to help with spiritual direction, counseling, advice, or sympathetic listening, all in strict confidence. The Campus Ministry provides a listing of worship services of nearby churches and synagogues and referrals can be made to introduce the student to the various ministers or rabbis 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. All are invited to stop in the Campus Ministry Center in Towers Living/Learning Center or Room 102, Administration Building to offer suggestions for programs or services, or just to get acquainted with the Campus Ministry Staff.

The Campus Ministry sees itself at the service of all in an open, unstructured, nonthreatening relationship and invites the entire Duquesne Community to make use of its services.

Campus Ministry invites the participation of the entire campus community in religious, social, and community activities. Its main office is Room 102 on the first floor of the Administration Building, with additional offices in Duquesne Towers, St. Ann's, Assumption, and St. Martin's.

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:

1. Core courses encourage students to develop a universalism of vision, they assist students in building a foundation for professional studies, they encourage students to cultivate the habit of lifelong learning.

2. 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.

3. 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

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

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

2. 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.

3. 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 (131 or 135), Fundamentals of Statistics 125 cr or Biostatistics 225.

4. 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.

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

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

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

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

9. Biology 3 cr
   Evolution, inheritance, and the interrelation of energy, life and the physical environment provide the unifying themes of this course. Each of these is examined from multiple levels of organization — from the molecular to the biosphere — demonstrating the diversity of life within which the commonality of life is found.

10. Chemistry 3 cr
    The fundamental concepts of structure, bonding, properties and chemical reactivity are presented through lecture and classroom experimentation. The chemical dimensions of selected social issues of current importance in the areas of environmental chemistry, energy technology and food production are examined.
173 Physics
Through lecture and classroom demonstration, students investigate the fundamental notions of mechanics, motion, inertia, force, momentum and energy. Emphasis is placed on the great Newtonian synthesis of the 17th century. With this foundation, students are prepared to move on to topics chosen from among the following: properties of matter, heat and thermodynamics, electricity and magnetism, light and modern physics. This course introduces students to the analytical processes of the scientific method and also helps them recognize applications to the physics involved in everyday life.

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

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

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

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

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

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

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

187 Christian Understanding of the Human Person
An investigation into the question of “What does it mean to be human?” according to Judeo-Christian teaching, including the relationship of the human person to self, others, the world, and the Divine as the bases for humanness. Note: in general students will complete the Core requirements according to guidelines established by their respective schools and in consultation with their academic advisors.

PRE-HEALTH PROFESSIONS PROGRAM
The Pre-Health Professions Program is a University-wide program which focuses on the importance of both a scientific and liberal arts education. As a student in this program, you will be required to complete a humanities-based core curriculum as part of the University requirement. Pre-Health Professions Program students are required to declare a major. Provided that you have completed the Pre-Health Professions Core Curriculum, you can declare a major in any area. English, history, psychology, education, mathematics, biology and chemistry are a few of the more commonly chosen ones.

Preparation for your career in a health profession will begin in your freshman year. Thus, it is important for you to meet with the director and/or assistant director of the program upon entering Duquesne University to discuss your goals, interests, and concerns. At this meeting, we will help you develop a tentative four-year plan of courses, starting with the Pre-Health core curriculum.

Before you begin the application process to health professional schools, you must meet standard criteria in the following areas: overall grade point average, science grade point average, and admissions test score. You will also be evaluated by the health professional schools based upon letters of recommendation, an interview, types of courses taken, and institution of graduation. Duquesne’s Pre-Health Professions Program will provide you with guidance in achieving the necessary criteria.

The core courses are as follows:

- English
- Logic (recommended)
- Chemistry with laboratory
- Organic Chemistry with laboratory
- Biology with laboratory
- Physics with laboratory
- Calculus
- Psychology
- Advanced Writing (recommended)

ENGLISH AS A SECOND LANGUAGE (ESL) PROGRAM
The ESL Program (ESLP) is open to 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.
The McAnulty College of Liberal Arts

Administration
Dean
Constance D. Ramirez, Ph.D.
Associate Dean
G. Evan Stoddard, Ph.D.

HISTORY
In 1876 the Fathers of the Congregation of the Holy Ghost and the Immaculate Heart of Mary established a College of Arts and Letters which was incorporated in 1882 as Pittsburgh Catholic College of the Holy Ghost with authority to grant degrees in the arts and sciences. In 1911 the College and University Council of the Commonwealth of Pennsylvania extended the charter to university status and title, Duquesne University.

PHILOSOPHY AND OBJECTIVES
Duquesne University believes that education is concerned with the human person as a whole—mind, body and soul. It believes that each individual has the obligation to self, society, and God to develop potential to the fullest. In this commitment, the McAnulty College of Liberal Arts sets its objectives and forms its curricula. The objectives of the College are:

1. To provide a solid foundation for lifelong learning
2. To develop an awareness of the methodologies and epistemologies of the major areas of knowledge so that evaluations and judgements may be valid
3. To assist in the growth of self-knowledge and the development of a philosophy of life
4. To assist in the understanding of one's relation to God, to society, and to nature
5. To perfect that skill in the use of standard English necessary to clear, coherent expression of one's thoughts, hopes, and ideals
6. To cultivate a background for the learned professions and for scholarly pursuits

DEGREES
The College confers two undergraduate degrees, Bachelor of Arts (B.A.) and Bachelor of Science (B.S.). Students who complete the major in classics, communication, English, history, modern languages and literatures, philosophy, political science, psychology, sociology or theology receive the B.A. degree. Students majoring in mathematics or computer sciences can follow a curriculum leading to either a B.A. or B.S. degree.

GRADUATION REQUIREMENTS
To receive the Degrees of Bachelor of Arts or Bachelor of Science in the College of Liberal Arts, 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
- University Writing Intensive Requirement
- College General Requirements, as described below.

Major program (see departmental listings)
Minor program (see departmental listings)
An overall cumulative quality point average of 2.0, a minimum cumulative quality point average of 2.0 in both the major and in the minor.
Removal of I and F grades both in the major and department in and required courses
Pre-registration (on form SRI) for B.A. or B.S. degree in major 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:

Modern or Classical Language: proficiency at the 202 level
Math/Science: (mathematics, computer science, biology, chemistry, physics) 3 cr
Social Sciences: (politics, society, sociology, psychology) 6 cr
History/Literature 6 cr
Philosophy/Theology 6 cr
Communication 3 cr
Courses taken in major or minor programs may also be used to satisfy the College General Requirements.

COLLEGE ACADEMIC POLICIES
Effective catalog
Degree requirements are those stipulated in the catalog of the year in which a student matriculates. The student is responsible for knowing the requirements for the degree. Requirements may be changed without notice or obligation. This catalog has been prepared on the best information available as of Spring 1996.
Major requirements are those stipulated in the catalog of the year in which a student declares the major.

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 advisors.

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 11

University-Level Courses Taken While in High School
University-level courses taken by entering freshmen 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
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.

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 Gronology (Department of Sociology). Several of these are offered in conjunction with the Division of Continuing Education.

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

COOPERATIVE EDUCATION PROGRAM
The Cooperative Education Program is a service to students seeking expanded education through work experience and to employers seeking temporary pre-professional staff with the ultimate objective of early identification of the best available college educated talent for permanent assignment.

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 and Mathematics) and 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.

BACHELOR-MASTER’S PROGRAM
A student who has completed all requirements and a total of 90 credits with a 3.5 average may apply for the bachelor/master’s program. After successful completion of the master’s program, the student will receive the bachelor’s degree from the College of Liberal Arts. Further information is available from the Graduate School of Liberal Arts.

JOINT B A (M B 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.

BACHELOR/PROFESSIONAL SCHOOL
A student who has completed 90 credits with a 3.5 overall average and satisfied all undergraduate curricular 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 from another school 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.

THREE-YEAR BACHELOR’S DEGREE
For more information contact the Office of Admissions or the Dean's Office.

Course Descriptions

ART HISTORY
Director
Madeline C. Archer, Ph.D

Survey and period courses in the history of western 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 literacy beyond that of the role of the visual arts in Western 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
A History major with a concentration in Art History is available. Consult the History Department listing for requirements.

REQUIREMENTS FOR THE MINOR
The minor consists of 15 credits, nine of which must be above the 100-level.

111 History of Art
Ancient to Medieval World
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
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
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
An overview of American architecture, painting, sculpture and decorative arts.

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

312 Late Medieval Art
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
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
An examination of the major movements of the nineteenth century in Europe and America, with special emphasis on the political and economic aspects that determined Modernism in Europe from 1879 to 1890.

332 Art of the Twentieth Century
An examination of the major American and European artists and movements of the early twentieth 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
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
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
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 twentieth century.

398 Art and Society
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
Permission of Department

DEPARTMENT OF CLASSICS
Chairperson
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 existence set in perspective distant enough from one's own to expand significantly the understanding and appreciation of humanity's aspirations, failures, and occasional triumphs.

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

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

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

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

All courses in Greek or Latin at the 200 level or above apply to the Classical Civilization Major.

REQUIREMENTS FOR THE MINORS

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

ORIGINAL LANGUAGE COURSES

101, 102 Basic Latin I and II 4 cr each
103, 104 Basic Greek I and II 4 cr each
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)

203, 204 Introduction to Greek Readings I and II 3 cr each

Selections of major classical Greek author(s)

207, 208 Biblical and Patristic Greek 3 cr each

Selections from biblical and Christian Greek literature

211, 212 Survey of Sanskrit Literature 3 cr each

Selected readings from major Sanskrit texts

The following will be taught as Latin or Greek courses or, for those students who are qualified as combination Latin and Greek courses:

Each course will cover an individual author or group of authors or a genre. Each course may be repeated as long as a different author or work is read.

301 Pre-Fifth Century 3 cr
The Iliad, the Odyssey, the Homeric Hymns, Hesiod, Pindar and Greek lyric poetry

302 Fifth Century 3 cr
Herodotus, Thucydides, Aeschylus, Sophocles, Euripides, and Aristophanes

303 Fourth Century 3 cr
Greek orators, Plato, Aristotle, Xenophon and Menander

304 Alexandrian Period 3 cr
Apollonius Rhodius, Theocritus, Callimachus and the lesser Alexandrian authors

305 Roman Republic 3 cr
Plautus, Terence, Cicero, Lucretius, Catullus, Caesar and Sallust

306 Augustan Literature 3 cr
Livy, Vergil, Horace, Ovid, Propertius and Tibullus

307 Imperial Literature 3 cr
Seneca, Lucan, Petronius, Martial, Plutarch, Tacitus, Juvenal, Pliny the Younger, Suetonius, Apuleius and Lucan

308 Post Classical Literature 3 cr
Post classical, medieval, renaissance and neo-Latin authors

309 Studies in Genre 3 cr
Selected genre of Greek and/or Latin literature

400 Independent Readings and Research 3 cr

500 Independent Readings and Research 3 cr

CLASSICS COURSES IN ENGLISH

(NO GREK OR LATIN REQUIRED)

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

122 Etymology 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 myth on 20th century French, German, Italian, English and American literature

233 Ancient Satire 3 cr
Investigation of the satirical element with reference to the works of Lucian, Lucretius, Horace, Pericles, Martial, and Juvenal

242 Ancient Law 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

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

244 Hellenistic History 3 cr
Examination of Hellenistic history from the death of Alexander until the accession of Octavian and the establishment of the Roman Principate

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

247 History of the Roman Principate 3 cr
A survey of the Roman imperial structure from Augustus to the death of Commodus

248 History of the Late Roman Empire 3 cr
A study of the influences of Graeco-Roman civilization on later cultural life

250 Seminar Topics variable

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 Age, Geometric, the development of Vase Paintings, The Etruscans, etc.

DEPARTMENT OF COMMUNICATION

Chairperson Ronald C. Arnett, Ph.D.

DEFINITION OF THE DISCIPLINE

Communication is both an ancient and extraordinary contemporary discipline—from classical Greek culture to what has been called the "Communication Century".

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 from interpersonal, organizational, intercultural, advanced technologic and media environments.

The "comprehensive" nature of our communication program introduces the student to organizational communication (profit and not-for-profit) media, journalism, public relations and advertising career options.

The Des Places Communication Center serves as the focal point for departmental activities. The center's resources, in addition to classroom space for courses dealing with relational and public communication issues, include two writing/word processing computer laboratories, a research laboratory, an instructional photo laboratory, seminar rooms, a performance room, a television production studio, and the studios of public radio station WDUQ.

DEPARTMENT OBJECTIVES

Major Our department is unique, a leader in a national trend toward "comprehensive" communication departments. All areas of communication are represented within one department. Communication Ethics is the departmental keynote.

The Department of Communication consists of three different majors with optional areas of emphasis or concentration available (1) Major in Communication Studies with optional emphases in Organizational/Professional Communications, Rhetoric and Argumentation, and Human Communication, (2) Major in Media Studies, and (3) Major in Journalism with optional emphases in Print Journalism, News Production and Management. Advertising, Public Relations and Broadcast Journalism. This comprehensive communication program provides students with a wide arena of course options, taught by nationally known faculty.
DEPARTMENT OF COMMUNICATION

THE McANULTY COLLEGE OF LIBERAL ARTS

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

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

REQUIREMENTS FOR THE MAJOR
A minimum of 30 credits in communication is required (To encourage a broad liberal education, the maximum allowable credits in the department is 45). Students design, in consultation with their advisor, a Plan of Study that is coherent and balanced.

"Coherence" is provided by following the requirements of one of the degree programs listed below; "Balance" is achieved by taking a range of courses representing different perspectives, levels, and types. In order to facilitate this goal, five core courses are required of all majors.

COMM 201 Human Communication and Society
COMM 210 Mass Communication and Society
COMM 301W History of Communication
COMM 407 Intercultural Communication
COMM 494W Communication Ethics

Students are also encouraged to take an internship and, if eligible, to consider writing an Undergraduate Honor's Thesis.

SPECIFIC REQUIREMENTS BY DEGREE

I. Major in Communication Studies

A. Five core courses 15 hours

B. Minimum of one course from each of:
   - Media Institutions
   - Media Audiences
   - Media Messages

C. Specialization dependent on advising:
   - Journalism
   - Advertising
   - Broadcast Journalism

II. Major in Media Studies

A. Five core courses 15 hours

B. Minimum of one course from each of:
   - Journalism
   - Advertising
   - Broadcast Journalism

C. Specialization dependent on advising:
   - Print Journalism
   - News Production and Management
   - Production
   - Broadcast Journalism

III. Major in Journalism

A. Five core courses 15 hours

B. COMM 211W News Writing & Reporting I

C. Specialization dependent on advising:
   - Print Journalism
   - News Production and Management
   - Production
   - Broadcast Journalism

REQUIREMENTS FOR THE MINOR

Required

- 38 Hours minimum

COMM 494W Communication Ethics (3 hours) with two of the following core courses (6 hours)

COMM 201 Human Communication and Society
COMM 210 Mass Communication and Society
COMM 301W History of Communication
COMM 407 Intercultural Communication

Minor Concentration:

Nine hours dependent upon advising in the areas of:

- Communication Studies
- Media Studies
- Journalism

UNDERGRADUATE CURRICULUM

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

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

120 Acquisition of Communicative Behavior 3 cr
Focuses on the acquisition of verbal and nonverbal communication from infancy through childhood with emphasis on the comparative analysis of theories of communication development.

122 Phonetics 3 cr
Approaches the English language through the study of sound for speech sounds as systematized by the International Phonetic Association.

145 Audio Production I 3 cr
Investigates the types of recording equipment, microphones, and sound systems needed for production and offered in conjunction with the School of Music.

146 Audio Production II 3 cr
Investigates advanced aspects of audio production offered in conjunction with the School of Music.

151 Voice and Diction 3 cr
Trains students in the voice and diction skills required of professionals.

177 Language for Journalists 0 cr
Designed to teach students the basic rules of English grammar.

182 Photographic Imaging 3 cr
Introduces students to the use of photography as a medium of communication.

201 Human Communication and Society (Core) 3 cr
Human communication and society 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.

213 Introduction to Small Group Communication 3 cr
Develops communication skills in group and organizational relationships.

214 Introduction to World Wide Web Publishing 3 cr
Familiarizes students with digital on-line publica-

215W Media Design and Script Writing 3 cr
Introduces the theory, process, and techniques of designing and writing for corporate media.

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
Investigates current issues and the world's trouble spots.

271W News Writing & Reporting I 3 cr
Teaches the fundamentals of news reporting and writing.

282 Color Photography 3 cr
Investigates 35 mm slide photography and its application to audio visual production.

285W Television Criticism 3 cr
This is a genre critique course from both journalistic and academic perspectives.

301W History of Communication (Core) 3 cr
The history of communication surveys the ancient traditions of rhetoric and public communication through the rise of mediated and mass delivery systems.

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

308 Nonverbal Communication 3 cr
Examines nonverbal communication in human interaction.

333 Advertising and PR Campaigns 3 cr
Uses case study method to develop an understanding of the principles and practices of contemporary advertising and public relations.

340 Video Production ENG 3 cr
Introduces electronic news gathering and electronic fields production as remote location video production techniques.

351 Radio and Television Announcing 3 cr
Applies principles of effective speaking to broadcasting.

355 Acting for the Camera 3 cr
An introduction to the art of acting.

367 Radio-TV Principles & Writing 3 cr
Applies writing principles and practices for radio and television news in a lecture-laboratory course.
DEPARTMENT OF COMMUNICATION

368 Media Management and Economics 3 cr
This course introduces students to the basic management operations of a contemporary electronic media facility and the economic parameters of the U.S. media industries.

369 Media Programming 3 cr
This course introduces the students to various programming strategies in the electronic media.

370 Media Promotion 3 cr
Using marketing theory, media principles and promotion techniques, the student will develop the ability to write and produce effective on-air and external communications for an electronic media outlet.

371W News Writing & Reporting II 3 cr
Teaches advanced writing of news stories, such as business, government, and court stories, and introduces students to in-depth, analytical coverage of public issues.

373W Editing for Print 3 cr
Teaches editing and presentation of the written word for the print news media in a lecture-lab course.

382 Advanced Photojournalism 3 cr
Investigates advanced black and white photography techniques.

402 Argumentation and Debate 3 cr
Applies the principles and methods of critical deliberation to a significant contemporary social issue.

405/505 Multimedia Advertising & Public Relations 3 cr
This course is designed to both introduce students to the use of the World Wide Web in advertising and PR strategies and to teach the techniques for the development of commercial advertising sites and public relations vehicles.

407/507 Intercultural Communication (Core) 3 cr
Intercultural communication exposes the student to the importance of communication among and between politically, culturally, and ethnically diverse people as a bridge to understanding an increasingly multi-cultural world.

411W/511 Rhetorical Criticism 3 cr
Examines critical methods and approaches to the study and analysis of rhetorical acts, movements, and speeches.

412/512 Literary Journalism 3 cr
Although this course will look at writers from other countries, its focus will be on American literary journalism.

414/514 Rhetoric of Religion 3 cr
The aim of this course is to introduce how the rhetoric of religious symbols influence and enrich our daily living.

417/517 Multinational Communication 3 cr
Focuses on the similarities and differences in the way people from different nations think, act and negotiate.

418/518 Communication and Conflict 3 cr
Examines the role of communication in managing and regulating interpersonal and organizational conflict.

419/519 Mass Communication & Everyday Life 3 cr
Course examines theories and research in the field of mass media (notably television) and society.

421/521 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
Designed for students of exposition, discussion, persuasion, and argumentation, who must support assertions with evidence and defend judgments with probable cause in the many aspects of public communication.

427/527 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.

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

431/531 Computer Graphic Design 3 cr
This course uses computer-based desktop-publishing software to create various forms of visual communication while weaving into overall class understanding, the theories of page design, color and iconic symbolism.

432/532 Media Production & Graphic Design 3 cr
Examines the print communication of business, industry, professional, and non-profit organizations.

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

434 Media and Society 3 cr
An overview and analysis of the relationship between sport and media entities and industries.

435 Media Sports Relations 3 cr
An examination and practical application of the public relations, publicity, media coordination, and event organization and management skills necessary for success in the sports industry.

436/536 Marketing Communication 3 cr
Emphasizes promotion area of the marketing mix, including advertising, sales promotion, public relations, and personal selling.

437 Media Sales 3 cr
This course explains the multi-faceted dimension of sales within contemporary business environments — with special emphasis on the tools for media sales.

441 Interactive Video 3 cr
Investigates interactive video as a medium that goes beyond linear media.

445W/554 Interpersonal Communication 3 cr
Examines communication between individuals in the context of a variety of human relationships.

453/555 Small Group Communication 3 cr
Topics may include group formation, structure, decision-making, norms and roles, status, errors in decision-making, interaction models, conflict, and methods of doing research in and about small groups.

456/515 Organizational Communication 3 cr
Examines and functions of communication in organizations.

457/557 Communication, Science, and Revolution 3 cr
Examines how communicative beliefs built upon assumptions common to science and revolution influenced the "modern" world's understanding of communication.

458/558 Communication and Imagination 3 cr
Examines how the triumph of beliefs dominated by "imagination" over beliefs dominated by "science" has changed our understanding of communication.

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

471 Advanced Public Affairs Reporting 3 cr
Teaches interpretive reporting of urban affairs in a lecture-laboratory course.

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

473/573 Feature Writing 3 cr
Teaches feature article writing for the general and specialized print publication.

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

475/575 Communication Research Methods 3 cr
This course 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
Designed for all persons working for a college newspaper, this course conducts formal critiques of The Duquesne Duke and other college media.

481 Practicum in Debate 1-6 cr
Designed for students on the University Debate Team. Meeting times will be used for critiques of practice performances, sharing of evidence, construction and analysis of arguments and interpretations.

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

484/584 Health Communication 3 cr
Examines communication theory and research as it relates to the health care context.

490/590 Special Topic 1-3 cr
Discusses professional problems and advancements in the field of Communication.

493 Multi-Media Production 3 cr
Provides practical based experience to advanced production students and prepares professional-level production environment to students nearing graduation.

494W/594 Communication Ethics (Core) 3 cr
Communication ethics explores theoretical and practical issues in the exploration of ethical options and decisions in relational, organizational and media contexts.

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

497 Special Project 1-6 cr
Students in this course 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/learning experience of study (assignment and performance) in areas such as media, marketing, editorial, human resources, and public relations.

499 Undergraduate Honor's Thesis 3 cr
Proposal submitted by student approved by thesis advisor and Chair of Department.
REQUIRED COURSES FOR THE MAJOR

These courses will explore approaches to literary texts (and other forms of cultural expression such as films) with specific reference to a body of theoretical discourse that is explored systematically and critically. At pre-registration each semester, the Department will post a list of courses that meet this requirement.

Three additional elective courses offered by the English Department

REQUIREMENTS FOR THE MINOR

Eighteen credit hours in English above the 100-level are required for the English minor. No more than six hours in English may be taken at the 200-level. English minors will concentrate their studies in one of the following:

a) Any two courses from the following:
   English 201, 202, 205, 206, 210, 211
   These courses are designed to introduce students to the literature of particular historical periods while emphasizing the development of analytical and English translations of representative Asian and African literature

b) Advanced courses offered by the English Department to make up the required number.
   These courses should be taken in one of the areas of emphasis indicated above. One advanced course from another area may be substituted.
   Note: English majors and minors may elect to enroll in a Senior Seminar if space is available.

HONORS PROGRAM

Students interested in pursuing Honors in English should consult with the Department.

COURSES

201 English Literature Survey I — Through the Eighteenth Century 3 cr

202 English Literature Survey II — Nineteenth and Twentieth Centuries 3 cr

203 Advanced Writing 3 cr

205 American Literature Survey I — Beginnings to 1865 3 cr

206 American Literature Survey II — After 1865 3 cr

207 The Novel 3 cr

208 Poetry 3 cr

209 Drama 3 cr

308 Applied Linguistics 3 cr

370, 371, 372, 373, 374, 375, 376, 377, 378

Special Studies in English, American, or World Literature 3 cr ea

Note: English majors and minors must fulfill the following minimum requirements.

a. Any two courses from the following:
   English 201, 202, 205, 206, 210, 211

b. Five 400-level courses (which may include the American Literature Survey I and II) must be fulfilled by the end of the sophomore year.

DEPARTMENT OF ENGLISH

Chairperson
Ronald C. Arnett, Ph.D.

The English Department offers a variety of courses in English literature, major literary figures and works, writing, both creative and practical, theory and criticism, genre studies, film studies, thematic studies, linguistics, special topics. A degree in English provides a foundation for graduate work and the liberal preparation sought by the worlds of business and law.

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

REQUIREMENTS FOR THE MAJOR

Thirty credit hours in English above the 100-level are required for the English major. No more than twelve hours in English may be taken at the 200-level. Additionally, English majors must fulfill the following minimum requirements:

a. Any two courses from the following:
   English 201, 202, 205, 206, 210, 211
   These courses are designed to introduce students to the literature of particular historical periods while emphasizing the development of analytical and writing skills essential to the study of literature. Under ordinary circumstances, this requirement must be fulfilled by the end of the sophomore year.

b. Five 400-level courses (which may include the Senior Seminar specified below) as follows:
   The remainder of the English courses are divided into areas of emphasis, divided into areas of emphasis. During a four-year period, each course from each area will be offered at least once.

   Special Topics in any historical period deal with major writers, major themes of the particular period, or important themes of the particular period. Detailed course descriptions are available in the English Department.

   Senior Seminars deal with topics similar to those above in a seminar format and are open only to English majors and minors (if space is available). Detailed course descriptions are available in the English Department.

   Medieval Studies
   400 Senior Seminar Medieval English Literature 3 cr
   402 Chaucer 3 cr
   A study of The Canterbury Tales and minor poems
   410 Medieval Special Topics 3 cr

Sixteenth/Seventeenth Century Studies

411 Senior Seminar Sixteenth/Seventeenth Century English Literature 3 cr

415 Milton 3 cr
   A survey of Milton and his times. A close scrutiny of the major poems, Paradise Lost and Samson Agonistes.

416 Seventeenth Century English Literature 3 cr
   Survey of drama, prose, and poetry to 1660.

419 Sixteenth/Seventeenth Century Special Topics

Shakespeare Studies

412 Shakespeare I 3 cr
   Comedies and romances

418 Shakespeare II 3 cr
   Histories and tragedies

EIGHTEENTH CENTURY STUDIES

420 Senior Seminar Eighteenth-Century English Literature 3 cr

425 Restoration Literature, 1660-1740 3 cr
   Dryden and his contemporaries. Particular emphasis on satire, drama, and criticism.

424 English Classicism 3 cr
   Neo-classical literature from the Restoration to the death of Pope, focusing primarily on Swift and Pope.

428 Late Eighteenth Century English Literature 3 cr
   Johnson and his circle, the development of the novel, the aesthetic movement.

429 Eighteenth Century Special Topics 3 cr

NINETEENTH CENTURY STUDIES

430 Senior Seminar Nineteenth Century English Literature 3 cr

435 English Romantic Literature 3 cr
   The aesthetic, moral, political, and literary aspects of English Romanticism focusing on Wordsworth, Coleridge, Byron, Shelley, and Keats.

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

439 Nineteenth Century Special Topics 3 cr

American Studies

440 Senior Seminar Earlier American Literature 3 cr
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 pursuit 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.)
- 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.

**requirements for a minor**

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

**MATHEMATICS COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>102</td>
<td>Trigonometry</td>
<td>1</td>
</tr>
<tr>
<td>105</td>
<td>College Algebra and Trigonometry</td>
<td>4</td>
</tr>
<tr>
<td>111</td>
<td>Calculus for Non-science Students</td>
<td>3</td>
</tr>
<tr>
<td>115</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>116</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>125</td>
<td>Fundamentals of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>215</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>225</td>
<td>Introduction to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>300W</td>
<td>Foundations of Higher Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>301</td>
<td>Introduction to Probability and Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>302W</td>
<td>Introduction to Probability and Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>306</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>308</td>
<td>Numerical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>311</td>
<td>Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>325W</td>
<td>Applied Statistics with Regression</td>
<td>2</td>
</tr>
<tr>
<td>320W</td>
<td>Topology</td>
<td>3</td>
</tr>
<tr>
<td>341W</td>
<td>Advanced Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>342W</td>
<td>Advanced Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>415W</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>420W</td>
<td>Introduction to Complex Variables</td>
<td>3</td>
</tr>
<tr>
<td>425W</td>
<td>Experimental Design</td>
<td>2</td>
</tr>
<tr>
<td>491-99</td>
<td>Selected Topics of Mathematics</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**THE MCGILL UNIVERSITY OF LIBERAL ARTS**

**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 a number of programming languages including Ada, C, Fortran, Lisp, Modula-2, Pascal, and Prolog, and operating systems including Unix, VMS, and DOS/Windows. Offerings provide opportunities for students seeking courses in other disciplines as well as comprehensive programs leading to a major or minor in computer science.

**REQUIREMENTS FOR A MAJOR**

The student may choose to pursue a major in computer science with a program leading to a Bachelor of Science (B.S.) or a Bachelor of Arts (B.A.). The B.A. program, which requires a minimum of 32 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. The B.S. program, which requires a minimum of 39 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, 210, 220, 250, 300, 325W, and 350W (each with a grade of "C" or better required).

Additional B.A. Computer Science Requirements:
- At least 12 additional hours at the 300-level or above (at least 6 of which must be taken at the 400-level).
- Additional B.S. Computer Science Requirements:
  - At least 18 additional hours at the 300-level or above (at least 9 of which must be taken at the 400-level).

Mathematics Support Courses (B.A. and B.S.):
- 115-116 (Calculus I & II)
- Additional B.S. Support Courses: Physics 419 (Intro to Microcomputers) and at least two mathematics courses selected from 300W (Foundations of Higher Mathematics), 311 (Intro to Probability and Statistics), or 306 Linear Algebra.

**REQUIREMENTS FOR A MINOR**

A minimum of 17 hours in computer science is required for a minor. All programs must include Computer Science 150, 210, 220, 250, 300, and three additional hours numbered 300 and above.

**COMPUTER SCIENCE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Elements of Computer Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>150, 210, 220, 250, 300</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

A survey of topics necessary for basic computer literacy includes laboratory exercises. Credit is not given to computer science majors or minors.
401 Data Base Management Systems 3 cr
The use, design, and implementation of data base 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 expert systems, and applications. Prerequisite 300

418 Formal Languages and Automata 3 cr
Formal languages and their relation to automata. The Chomsky language hierarchy, recognition of languages by automata, Turing machines, decidability, and applications. Prerequisite 300

425 Computer Graphics 3 cr
Geometric generation of two- and three-dimensional graphics. Scan conversion, geometric transformation, clipping, interaction, curves and surfaces, and animation. Prerequisite 300

435 Theory of Programming Languages 3 cr
Syntactic and semantic issues in program 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

480W Senior Project 1-3 cr
An individual or group project involving a significant component, documentation, and written report on a topic of current interest in computer science. Prerequisites: Senior status and 300

491-499 Selected Topics in Computer Science 1-3 cr
Topics selected in consultation with the advisor. Prerequisite Consent of the department chairperson

DEPARTMENT OF MODERN LANGUAGES AND LITERATURES
Chairperson
Carla E. Lucente, Ph D

The Department of Modern Languages and Literatures offers courses in Chinese, French, German, Italian, Japanese, and Spanish. The four language skills (reading, writing, speaking, and oral comprehension), are emphasized at all levels. Fluency in the active use of the language is emphasized. Courses beyond conversation and composition stress literary studies in which the student is systematically introduced to the literature and culture of the groups whose language he/she is studying.

Courses are also offered in linguistics, language for business, language for medical, and language for musicians. A certificate in International Business and also in written and oral translation, internships here and abroad can be obtained.

All courses at the 300 and 400 levels are conducted in the target language. All students prior to enrollment in this first language course are required to take the language placement test. It is recommended that students who must fulfill language requirements begin these courses in their freshman year.

Majors and minors are urged to spend a summer, a semester, or a year abroad. Further information may be obtained in the department office. It is also recommended that majors in the department include a course in the culture of the country of the language in which they specialize as well as one course in another language other than their major.

A maximum of 12 transfer credits will be accepted towards 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.

REQUIREMENTS FOR THE MAJOR

The Department offers a major program in Spanish. In addition, it offers a minor in Russian. 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 103, 104, 201, or its equivalent. Prerequisite at the 201 level is the prerequisite to all courses numbered 301 and above.

The major program in Modern Languages and Literatures consists of a minimum of 27 credits at the 300-level and above. Majors and minors should consult with the department concerning required courses.

REQUIREMENTS FOR THE MINOR

The minor program consists of a minimum of 12 semester hours at the 300-level and above. As for the certificates, inquire at the department office.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>330 French Prose of the 19th Century</td>
<td>3 cr</td>
<td>Fundamentals of oral and written German Weekly lab attendance</td>
</tr>
<tr>
<td>331 18th Century French Literature</td>
<td>3 cr</td>
<td>An overview of the <em>Ségle des lumières</em></td>
</tr>
<tr>
<td>332 Voltaire and His Age</td>
<td>3 cr</td>
<td>For majors in music</td>
</tr>
<tr>
<td>360 French for Business</td>
<td>3 cr</td>
<td>Spoken and written language of business French</td>
</tr>
<tr>
<td>460 French Culture and Civilization</td>
<td>3 cr</td>
<td>The major cultural and socio-political movements of France through its literary works</td>
</tr>
<tr>
<td>462 From the Chanson de Roland through 18th Century</td>
<td>3 cr</td>
<td>An overview of the theatre of the 18th century Emphasis on Corneille, Molère, and Racine</td>
</tr>
<tr>
<td>463 19th Century Modern Period</td>
<td>3 cr</td>
<td>Literary Survey I</td>
</tr>
<tr>
<td>464 17th Century French Theatre</td>
<td>3 cr</td>
<td>An overview of the drama of the 17th century Emphasis on Corneille, Molère, and Racine</td>
</tr>
<tr>
<td>465 18th Century French Theatre</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>466 19th Century French Poetry</td>
<td>3 cr</td>
<td>The major poetic movements of the 19th century Romanticism, Symbolism, with a special emphasis on Baudelaire</td>
</tr>
<tr>
<td>467 19th Century French Novel</td>
<td>3 cr</td>
<td>Selected novels from the 19th century, from Romanticism to Naturalism</td>
</tr>
<tr>
<td>468 19th Century French Theatre</td>
<td>3 cr</td>
<td>An overview of the major dramatists of the century including Marivaux, Voltaire, and Beaumarchais</td>
</tr>
<tr>
<td>469 20th Century French Poetry</td>
<td>3 cr</td>
<td>Ambivalence of modern French poetry after Baudelaire</td>
</tr>
<tr>
<td>470 20th Century French Novel</td>
<td>3 cr</td>
<td>A study of the major works, authors, and movement of the 20th Century</td>
</tr>
<tr>
<td>471 20th Century French Theatre</td>
<td>3 cr</td>
<td>From Jules Romains to Ionesco and the Theatre of the Absurd.</td>
</tr>
<tr>
<td>472 Sartre and Camus</td>
<td>3 cr</td>
<td>Direct Reading: Reading of literary texts under close faculty supervision, for majors only and only with written permission of the Department chairperson</td>
</tr>
<tr>
<td>470 Directed Readings</td>
<td>1-6 cr</td>
<td>Direct Reading: Reading of literary texts under close faculty supervision, for majors only and only with written permission of the Department chairperson</td>
</tr>
<tr>
<td>102 Elementary German II</td>
<td>4 cr</td>
<td>Fundamentals of oral and written German Weekly lab attendance</td>
</tr>
<tr>
<td>115 German for Musicians</td>
<td>2 cr</td>
<td>For majors in music</td>
</tr>
<tr>
<td>202 Intermediate German II</td>
<td>4 cr</td>
<td>An emphasis on the oral and written aspects of the language Prerequisite German 102</td>
</tr>
<tr>
<td>239, 240 Readings in Modern German Authors</td>
<td>3 cr</td>
<td>Each of the major works, authors, and movement of the 19th century</td>
</tr>
<tr>
<td>301 German Conversation and Composition I</td>
<td>3 cr</td>
<td>For majors in music</td>
</tr>
<tr>
<td>302 German Conversation and Composition II</td>
<td>3 cr</td>
<td>Spoken and written language of business German</td>
</tr>
<tr>
<td>306 Intensive German Conversation and Composition</td>
<td>6 cr</td>
<td>The major cultural and socio-political movements of France through its literary works</td>
</tr>
<tr>
<td>320 German Culture and Civilization</td>
<td>3 cr</td>
<td>With written permission of the Department chairperson</td>
</tr>
<tr>
<td>324 Popular Tradition in German Literature</td>
<td>3 cr</td>
<td>An overview of the 18th century Emphasis on Marivaux, Voltaire, and Beaumarchais</td>
</tr>
<tr>
<td>329 Introduction to German Poetry</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>330 Modern German Prose</td>
<td>3 cr</td>
<td>For majors in music</td>
</tr>
<tr>
<td>331 Modern German Theatre</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>360 German for Business</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>460 German Literature from the Middle Ages to the Baroque</td>
<td>3 cr</td>
<td>For majors in music</td>
</tr>
<tr>
<td>461 German Literature from the 18th Century to the 20th Century</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>462 Advanced German Stylistics</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>464 German Romantic Literature</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>466 Modern German Prose</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>467 Age of Goethe</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>468 Goethe's Faust</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>470 Literature of the Enlightenment</td>
<td>3 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>101 Elementary German I</td>
<td>4 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>102 Elementary Spanish II</td>
<td>4 cr</td>
<td>French literature, through the literary movements of the century</td>
</tr>
<tr>
<td>107 Medical Spanish</td>
<td>2 cr</td>
<td>Pre-requisite: Spanish 102</td>
</tr>
<tr>
<td>120 Intensive Spanish</td>
<td>6 cr</td>
<td>For majors in music</td>
</tr>
<tr>
<td>122 The Nineteenth Century Novel</td>
<td>3 cr</td>
<td>Exams the realist, naturalist, and regionalist novel</td>
</tr>
<tr>
<td>127 Spanish Culture and Civilization</td>
<td>3 cr</td>
<td>Major works of Spain's turn of the century authors in their aesthetic and historical contents</td>
</tr>
<tr>
<td>128 Spanish American Fiction</td>
<td>3 cr</td>
<td>A study of the major cultural and socio-political movements of Spain through its literary works</td>
</tr>
<tr>
<td>129 Revolt and Change Spanish American Literature</td>
<td>3 cr</td>
<td>Major works of protest in modern Spanish-American Literature</td>
</tr>
<tr>
<td>130 Theatre of the Gold Age</td>
<td>3 cr</td>
<td>Major works of protest in modern Spanish-American Literature</td>
</tr>
<tr>
<td>131 Medical Spanish</td>
<td>2 cr</td>
<td>Major works of protest in modern Spanish-American Literature</td>
</tr>
<tr>
<td>132 Current Spanish Literature</td>
<td>2 cr</td>
<td>Major works of protest in modern Spanish-American Literature</td>
</tr>
<tr>
<td>133 Spanish for Business</td>
<td>3 cr</td>
<td>Major works of protest in modern Spanish-American Literature</td>
</tr>
</tbody>
</table>
DEPARTMENT OF PHILOSOPHY

Philosophy is at the heart of a liberal education. Philosophical reflection encourages human beings to seek the truth and to examine the moral foundations of their thought and action. The general program in philosophy introduces students to philosophical thinking, both past and present, and provides a discipline for asking the basic questions of human life. Courses encourage concentration on original major texts from Plato through the medieval and modern periods of philosophy, up to the present, contemporary continental philosophy is a specialty. Philosophy fosters the ability to read with understanding, to think logically, to argue rationally, and to evaluate positions critically. Majors have distinguished themselves in careers in philosophy, law, business, and in the priesthood.

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

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.

103 Ethics 3 cr

The course provides an introduction to important ethical theories, past and present, and some of their applications to concrete issues

104 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 inference.

106 Medical Ethics 3 cr

Ethical questions that arise in medical care and research are examined. Possible topics include patient-provider relations, informed consent, and euthanasia

107 Business Ethics 3 cr

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

108 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

204 Literature and Philosophy 3 cr

This course explores philosophical themes in selected works of literature

212 Political Philosophy 3 cr

Fundamental political questions are explored through readings from some classical but mainly from contemporary sources. The link between philosophy and practical political themes is emphasized as much as possible

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

220 Philosophy of Death and Living 3 cr

This course provides an introduction to the basic concepts and principal ideas of Christian philosophy, with an emphasis on the method of the system of Saint Thomas Aquinas. Prerequisite PHIL 201 or instructor's permission

255 Philosophy of Technology 3 cr

This course explains 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.

270 American Philosophy 3 cr

This course covers some main figures in American pragmatism, including both classical (e.g., James, Dewey) and recent (e.g., Quine, Putnam, and Rorty)

280 Oriental Philosophy 3 cr

This course provides an introduction to Oriental thought through the study of traditions such as Confucianism, Taoism, Buddhism, and Hinduism

290 Concentrated Philosophical Readings 3 cr

This is a private tutorial arranged with an individual instructor. It is intended for a student who needs to concentrate on a philosophical topic which is not offered in a regular course

HISTORICAL COURSES are designed for majors, minors and serious students of philosophy. Prerequisites at least two 100-level or 200-level courses or instructor's permission

300 Ancient Philosophy 3 cr

This course spans the beginnings of philosophy in Greece, from the PreSocratics to Plotinus, with readings taken primarily from Plato and Aristotle

301 Medieval Philosophy 3 cr

This course presents the broad range of issues, approaches, and theories which characterize the major Christian, Jewish, and Islamic philosophical thinking of this period. Prerequisite PHIL 300 or instructor's permission

302 Early Modern Philosophy 3 cr

This course presents the broad range of issues, approaches, and theories which characterize the major Christian, Jewish, and Islamic philosophical thinking of this period. Prerequisite PHIL 300 or instructor's permission

304 Later Modern Philosophy 3 cr

This course presents the broad range of issues, approaches, and theories which characterize the major Christian, Jewish, and Islamic philosophical thinking of this period. Prerequisite PHIL 300 or instructor's permission

ADVANCED COURSES are designed for majors, minors and 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 preregistration. The following are a small sample from courses taught recently.

404 Plato's Republic 3 cr

This course concentrates on Plato's text, with a consideration of various interpretations

408 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

420 The Philosophy of Saint Augustine 3 cr

The early dialogues and the Confessions will be discussed. Possible topics include 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' philosophy, epistemology, and theory of knowledge, and will cover topics such as love, will, affectivity, and emotion

460 Introduction to Phenomenology 3 cr

The phenomenological method originated by Husserl will be explored. Possible topics may include intentionality, signs, and meaning
DEPARTMENT OF POLITICAL SCIENCE

Chairperson
Patricia Dunham, Ph D

Political Science studies the ideas, institutions, behavior, values, and goals of human collective life. The department stresses that understanding political life is a necessary part of the study of human existence, since politics is an expression of our deepest human concerns, e.g. for justice and order. Empirical and normative methods of understanding political life will lead students to an appreciation for subjects such as sources of conflict in international and domestic politics, similarities and differences among political structures and goals worldwide, debates about political ideals over the centuries, and United States' political institutions and public law.

Political Science majors go on to law school and careers in law, government and administrative work at the local, state and national levels, jobs in private industry, finance, or the media, and continued studies at the graduate level.

REQUIREMENTS FOR THE MAJOR

Thirty semester hours are required, not more than six of which can be at the 100-level. These credits must include 105, 208 or 209, 245, 317 or 318, and 427 or 436.

A student transferring from Duquesne or 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, not 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.

DEPARTMENT OF POLITICAL SCIENCE
DEPARTMENT OF PSYCHOLOGY

THE McANULTY COLLEGE OF LIBERAL ARTS

453 Psychology of Gender 3 cr
This course explores men's and women's existence as gendered beings. The theoretical as well as existential dimensions of gender are thematized, and the biological, social, and personal contexts will be discussed.

457 Independent Studies 3 cr
A tutorial course for an exceptional student who wishes to pursue a particular study with a faculty member. For majors only, usually those intending graduate study, advance coursework completed Permission of faculty member and department head required.

490 Special Topic 3 cr
A visiting professor presents his/her specialty, or a regular faculty member presents highly specialized studies or an experimental course. Repeatable. Prerequisites vary with instructor. Permission of department head for non-majors.

REQUIREMENTS FOR THE MAJOR
A minimum of 33 semester hours is required for the major. These must include 101 Survey of Sociology, 200 Classical Sociological Theory, 201 Sociological Methods I, 202 Sociological Methods II, EITHER 300 History of Social Thought OR 301W Contemporary Sociological Theory, and 455W OR 456W Senior Seminar. Majors must also choose one of two areas of emphasis: Social Change and Social Structure or Criminal Justice.

REQUIREMENTS FOR THE MINOR
A minimum of 15 credits must be selected from any courses in the emphasis. Prerequisite to all courses is introduction to Psychology (3 cr). The remaining 15 credits must be selected from the following courses within the Criminal Justice emphasis:

DEPARTMENT OF SOCIOLOGY
Chairperson
Douglas Harper, Ph.D.

The Sociology Department concentrates on both intellectual and pre-professional training. Majors and other students are introduced to the discipline, build critical thinking skills and develop intellectual and socially conscious values. Our curriculum allows majors to concentrate in either of two areas, Social Change and Social Structure or Criminal Justice.

THE McANULTY COLLEGE OF LIBERAL ARTS
COURSE DESCRIPTIONS

Unless otherwise indicated, all are 3 credit courses.

101 Survey of Sociology 3 cr
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.

103 Introduction to Criminal Justice 3 cr
An introduction to the criminal justice system, including police, courts, correctional facilities, and community based corrections. Required for the Criminal Justice Emphasis.

104 Cultural Anthropology 3 cr
An introduction to a major subfield of Anthropology which explores the origins, development and diversity of human cultures.

200 Classical Sociological Theory 3 cr
An intensive review of basic sociological principles, and a study of selected classical theories and schools of thought. Required for ALL Sociology Majors.

201 Sociological Methods I 3 cr
A discussion and application of the techniques used in sociological research. Required for ALL Sociology Majors.

202 Sociological Methods II 3 cr
A study of the construction and application of techniques for data analysis in social research. Specific attention is given to computer uses in the social sciences. Required for ALL Sociology Majors.

203 Social Gerontology 3 cr
An examination of the social and cultural forces which impact the process of aging and the statuses and roles of the aged in human societies.

205 Person and Society 3 cr
A study of the person's interaction with societal groups, organizations, and institutions. Required for ALL Sociology Majors.

206 Sociology of Social Problems 3 cr
A study of the major social problems apparent in American contemporary society. Examples of the problems which may be analyzed include poverty, violence, and environmental declines.

207 Sociology of Health and Illness 3 cr
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. Required for ALL Sociology Majors.

209 Racial and Ethnic Groups 3 cr
A comprehensive survey of roles performed and problems faced by racial and ethnic groups. Prerequisite: 101

209 Social Stratification 3 cr
An examination of who gets what and why, with a primary focus on the American setting. Prerequisite: 101

210 Sociology of Sex and Gender 3 cr
A study of the social and cultural contexts within which gender shapes the self, behavior, and social relationships, and the characteristics of gender inequality. Prerequisite: 103.

211 Social Deviance 3 cr
A study of the forms and consequences of social deviance and law. Prerequisite: 101 or 103.

212 Drugs and Society 3 cr
The political, practical, and personal effects of substance use on society and individuals. Also considered are control and treatment of this problem.

213 Criminology 3 cr
A study of sociological explanations of criminality, correlates, causation, and criminogenic conditions. Prerequisite: 103.

215 Mass Media and Society 3 cr
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 3 cr
A study of the phenomenon, theories and causation of juvenile delinquency. Prerequisite: 101 or 103.

217 Social Movements 3 cr
A study of sociological theories of social movements and an exploration of a number of contemporary protest movements and sociocultural movements. Prerequisite: 101.

218 Treatment and Rehabilitation 3 cr
Community and institutional rehabilitative programs are considered in terms of treatment methods, and their effectiveness. Prerequisite: 103.

225 Family Systems 3 cr
A study of the family institution and its interaction with other community institutions.

264 Police and Society 3 cr
An analysis of the role of police in the community, and some of the critical issues in law enforcement. Prerequisite: 103.

308 History of Social Thought 3 cr
An introduction to the ideas of Western thought which predate 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.

310W Contemporary Sociological Theory 3 cr
A study of selected contemporary theories and schools of thought. Prerequisite: 101. This course OR 300 is required of ALL Sociology Majors.

313 Special Topics Institutions 3 cr
An in-depth examination of the structure and consequences of enduring social patterns and social relationships which comprise specific institutions such as religion, the family, education, medicine, and health. Prerequisite: 101.

315 Sociology of Mental Health and Illness 3 cr
An examination of the incidence and prevalence of indicators of mental health and illness and an in-depth scrutiny of the history, social construction, and underlying issues of mental health and illness. Prerequisite: 101.

316 The Law and The Juvenile Offender 3 cr
A survey of those aspects of the legal system that relate to the identification, processing, and rehabilitation of the juvenile offender. Prerequisite: 103.

317 The Law and The Adult Offender 3 cr
The legal procedures from arrest through sentencing, emphasizing applicable state statutes and U.S. Supreme Court cases. Prerequisite: 103.

318 The American Judicial System 3 cr
Development of local, state and federal court systems, the operation of these courts, and issues in administration and case law. Prerequisite: 103.

319 Socialization and The Life Span 3 cr
An examination of the socialization process throughout life with a particular focus on the adult years. A study of stability and change in statuses, roles, and self-image among age-groups. Prerequisite: 101.

320 Social and Cultural Change 3 cr
An analysis of the perspectives, directions, processes, consequences, and mechanisms of social and cultural change. Prerequisite: 101.

321 Population and The Environment 3 cr
An analysis of population dynamics and theories, and the impact of demographic structures on the earth's ecology and natural resources. Prerequisite: 101.

323 Sociology of The City 3 cr
An analysis of urban life and its impact on social relations. Prerequisite: 101.

325 Community Corrections 3 cr
Study of community corrections agencies and programs for criminal offenders, including probation, intermediate sanctions, and parole. Prerequisite: 103.

326 Police Organization and Management 3 cr
Principles of organization, management, and supervisory techniques applied to law enforcement agencies. Prerequisite: 103.

329 Women and Crime 3 cr
The nature and extent of crime committed by women, the processing of women in the criminal justice system, and the theories of crime applied to female offenders. Also considered are women as victims of crime as well as opportunities for women as employees of the criminal justice system. Prerequisite: 103.

Cultural anthropology courses are cross-listed with the Graduate Center for Social and Public Policy.

401/501 Complex Organizations 3 cr
The aim of this course is to give students a survey of the sociological approaches to the study of organizations. A chronological perspective is used at the outset, focusing on scientific management, human relations, Weberian and other perspectives. Major attention is given to current sociological approaches - environment, technology, power, control and culture as they impact upon organizations. Prerequisites: 101 and senior standing.

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.

409/509 Punishment and Corrections 3 cr
This course covers the corrections systems in this country, including probation, parole, community corrections, jail and prison. How and by whom these agencies and facilities are administered and organized is examined. The system is studied from the perspective of parole and correctional officers as well as how the system impacts upon offenders. Prerequisites: 101 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. Students are involved in library and field research on the outcomes (identifiable or probable) of current or proposed policy responses to such health and illness issues. Prerequisites: 101 and senior standing.

416/516 Minorities and Public Policy 3 cr
The historical evolution of American public policy toward minorities is examined. This includes the legal/constitutional changes, migratory patterns, social institutions and political mobilization. Contemporary problems and issues are evaluated within this context. Prerequisites: 101 and senior standing.

NOTE: The courses listed below are NOT cross-listed with the Graduate Center for Social and Public Policy.

450/451 Fieldwork I, II (6 credits for 450, 6 credits for 451) Internship in a number of different settings. 225 hours in placement are required for 6 credits. Prerequisites: Majors must have 21 completed credits in the Major.

**SENIORS AND MAJORS OR GERONTOLOGY CERTIFICATE STUDENTS ONLY**

**Credits do not count toward the 33 required for the major.**
STUDIO ART

Director
Madeline C. Archer, Ph D

A B A in Studio Art is offered as a component of a liberal arts degree.

REQUIREMENTS FOR THE MAJOR:
Ten courses in Studio Art, including FINAR 101, 103, 120, and 130. In addition, four courses in Art History including ARTHY 111, 112, and 332.

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

101 Design I
103 Drawing
130 Painting I
Prerequisite 101 or 103
203 Figure Drawing
Prerequisite 102
230 Advanced Painting
Prerequisites 101 or 103 and 130
235 Introduction to Computer Art
Prerequisite 101 or 103
245 Computer Graphic Design
Prerequisites 103 and 235
315 Relief Printmaking
Prerequisite 101 or 103
316 Intaglio Printmaking
Prerequisite 101 or 103
317 Lithography
Prerequisite 101 or 103
320 Watercolor Painting
Prerequisites 103 and 130
330 Oil Painting
Prerequisites 101 or 103 and 130
350 Illustration Methods and Techniques
Prerequisites 101, 103 (120 and 203 recommended)
360 Sculpture I
Prerequisites 101 and 120
365 Advanced Sculpture
Prerequisites 101, 120 and 360
375. Computer Assisted Illustration
Prerequisites 101, 103, 203, 350
385 Photography
Prerequisite 101
415 Natural History Illustration
Prerequisites 103, 130, 350 (245 and 320 recommended)
416 Medical and Scientific Illustration
Prerequisites 103, 203, 235, 350 and 375
425. Advanced Computer Imaging
Prerequisites 101, 103, 235, 350
435 Advanced Computer Graphics
Prerequisites 101, 120, 235 and 245
445 Introduction to Multimedia
Prerequisites 101, 120, 235 and 245
475, 476, 477, 478 Special Topics in Computer Assisted Design and Imaging
Prerequisite As indicated for special topic Permission of Department required
405 Independent study
Permission of Department required Minimum of eighteen credits of Studio Art completed
410 Studio Art Internship
Permission of Department required Minimum of eighteen credits of Studio Art completed

DEPARTMENT OF THEOLOGY
Chairperson
Rev. Sean Kealy, C S Sp

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).

324 The Johannine Literature
3 cr
A study of Gospel, Letters and the Book of Revelation as a component of contemporary scholarship.

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 to three years. Approval of participants by core staff required.

493 Directed Readings in Biblical Studies
1-3 cr
Independent Study Department permission required.

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. Every number of the courses indicates the level of the approach.

200 These are courses introducing students to particular areas or questions in theology.
200 These courses explore subject matter in greater depth and specificity than do courses at the 200-level.
200 In these selected topics are dealt with at a more advanced level, independent research is required.

BIBLICAL STUDIES:

213 The Old Testament
3 cr
A presentation of the Old Testament writings in the context of their culture, literary modes, theologies, and themes.

214 The New Testament
3 cr
A presentation of the books of the New Testament, including their literary makeup, historical origins and theological content.

311 The Torah
3 cr
A study of the first five books of the Bible in the light of their historical, literary and theological features.

313 Archaeology and The Bible
3 cr
An illumination through archaeology of the historical setting, the cultural background, and the events described in the Bible.

315 Prophetic Literature of the Old Testament
3 cr
A study of classical Israelite propheticism which was characterized by sharp 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 study of the letters traditionally attributed to Paul (including Hebrews).

317 The Wisdom Literature of the Old Testament
3 cr
A critical study of the writings which treat both the practical search for happiness and the more speculative quest for meaning in life.

321 The Gospel Literature
3 cr
A critical study of the four Gospels in the light of contemporary scholarship.

324 The Johannine Literature
3 cr
A study of Gospel, Letters and the Book of Revelation as a component of contemporary scholarship.

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
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Six weeks of supervised participation in an archaeological excavation in the Ancient Near East. Offered every two to three years. Approval of participants by core staff required.

493 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.

230 The Church
3 cr
An examination of the Church, and how it provides insights for contemporary church and society.

232 Faith and Atheism
3 cr
An examination of the claims which atheists make against faith and the response made by believers to these arguments.

235 Christian Worship
3 cr
An experience-based study of how ritual functions in human life, leading to a survey of how worship has both expressed and formed the Christian tradition.

242 Love in Theological Thought
3 cr
A study of family love, friendship, and romantic love and their relationship to God's love.

258 Catholicism
3 cr
The spirit, beliefs and practices of Roman Catholicism, and the issues confronting it today.

274 Beginnings of Christianity
3 cr
A study of the origins, development, and major events in the life of the early Christian church.

280 Religious Experience
3 cr
How the Divine is sensed and responded to in various geographical, cultural, and chronological contexts.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judaism</td>
<td>3 cr</td>
<td>The faith, beliefs, and practices of Jewish life over the centuries and today</td>
</tr>
<tr>
<td>Marriage</td>
<td>3 cr</td>
<td>An examination of conjugal love as the basis for marriage as a Christian sacrament</td>
</tr>
<tr>
<td>The Church in The Modern World</td>
<td>3 cr</td>
<td>How the Christian community is a prophetic presence in secular society and a community which affirms and sustains human dignity and values</td>
</tr>
<tr>
<td>Theology of The Sacraments</td>
<td>3 cr</td>
<td>The seven sacraments as rituals and symbols in the growth of the life of Christians</td>
</tr>
<tr>
<td>Women and Christianity</td>
<td>3 cr</td>
<td>From the Bible to the churches today, with special attention to contemporary roles and spirituality</td>
</tr>
<tr>
<td>Religion in The United States</td>
<td>3 cr</td>
<td>The role played by religion in American society and culture, with special attention to historical developments and contemporary trends</td>
</tr>
<tr>
<td>Religious Themes in Literature and Film</td>
<td>3 cr</td>
<td>An exploration of religious experience and religious concepts as expressed in significant worlds in film and literature</td>
</tr>
<tr>
<td>Special Topics in Theology</td>
<td>3 cr</td>
<td>An opportunity to pursue a particular interest of professor and students</td>
</tr>
<tr>
<td>Spiritual Theology</td>
<td>3 cr</td>
<td>A study of the theological dimension of Christian spirituality, in its major historical manifestations</td>
</tr>
<tr>
<td>Directed Readings in Religion and Theological Topics</td>
<td>1-3 cr</td>
<td>Independent Study Department permission required</td>
</tr>
<tr>
<td>Seminar in Theology</td>
<td>3 cr</td>
<td>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</td>
</tr>
<tr>
<td>Health Care Ethics</td>
<td>3 cr</td>
<td>A study of practical and theoretical issues in the ethics of health care</td>
</tr>
<tr>
<td>Special Topics in Ethics</td>
<td>1-3 cr</td>
<td>An opportunity to pursue a particular interest of professor and students</td>
</tr>
<tr>
<td>Foundations of Moral Theology</td>
<td>3 cr</td>
<td>A study of the principles of moral conduct based on the New Testament and on the teachings of the Church</td>
</tr>
<tr>
<td>Special Issues in Health Care Ethics</td>
<td>3 cr</td>
<td>An advanced course exploring selected theoretical and practical concerns in health care ethics and applied issues (Prerequisite 353 or 546)</td>
</tr>
<tr>
<td>War and Peace in Christian Perspective</td>
<td>3 cr</td>
<td>An analysis of Christian teaching of the moral permissibility of using violence and participation in war from biblical times to the present</td>
</tr>
<tr>
<td>Directed Readings in Christian Ethics</td>
<td>1-3 cr</td>
<td>Independent Study Department permission required</td>
</tr>
</tbody>
</table>

**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**

- 210 Readings in Western Literature 1 3 cr
- A thematic survey of non-British literature through the Renaissance

- 211 Readings of Western Literature II 3 cr
- A thematic survey of non-British literature from the Renaissance onwards

- 215 Non-Western Literature 3 cr
- English translations of representative Asian and African literature

- 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

- 495 Directed Readings in Christian Ethics 1-3 cr
- Independent Study Department permission required

**WORLD LITERATURE 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 understanding 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)

- 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

- 246 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

- 490 Topics of 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 the other world literature sponsoring departments (Classics 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

DEGREES

The Bayer School of Natural and Environmental Sciences (BSNES) offers Bachelor of Science degrees in Biological Sciences, Biochemistry, Chemistry, Microbiology, and Physics, as well as a Bachelor of Arts degree in Physics for those students enrolled in the Binary Engineering program. Science majors may apply for the Pre-Health Profession Program, the BS in Chemistry/Master of Science in Environmental Science and Management, the BA/Physics/B.S. Engineering binary engineering program in cooperation with Case Western Reserve University or the University of Pittsburgh or the BS in Biology, Chemistry or Physics/Master of Science in Education.

GRADUATION REQUIREMENTS

To receive a 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.
- Thinking and Writing Across the Curriculum (3 cr).
- Imaginative Literature and Critical Writing (3 cr).
- Problem Solving and Creative Math (WAIVE).
- Core Science (Biochemistry or Physics) (WAIVE).
- Core Theology (Select one of six courses) (3 cr).
- Basic Philosophical Questions (3 cr).
- The Arts and the Human Experience (3 cr).
- Social, Political, and Economic Systems (3 cr).
- The Shaping of the Modern World (3 cr).
- General Requirements as described below.
- Language (6 cr) proficiency at the 202-level (must include literature).
- Social Sciences (6 cr) (2 disciplines must be represented).
- Political Science (3 cr).
- Philosophy/Theology (6 cr) (must include Philosophy).
- Major program (refer to departmental requirements).
- An overall minimum cumulative quality point average of 2.00.
- Removal of I and F grades both in the major department and in the required courses.
- Pre-registration (on form SRI) for B S / BA degree in major 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.

ACADEMIC POLICIES

Effective Catalog

Academic policies and degree requirements are those stipulated in the catalog of the year in which the student matriculates. The student is responsible for knowing the requirements for the degree. Requirements may be changed without notice or obligation. Major requirements are those stipulated in the catalog of the year in which the student declares the major.

QPA

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

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 15 credits.

Residence Requirement

The last thirty credits must be taken in residence at Duquesne University.

Majors

A major may be declared at the time of 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 2.00 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 of courses for which it is a prerequisite already 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 course description 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 faculty mentor. 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 11 of the Undergraduate Catalog.

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:

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 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. Degree in Physics from Duquesne and the B.S. Degree from the School of Engineering.

For details, consult with the faculty mentor for the Binary program in Engineering in the Physics Department.

BACHELOR-MASTER'S PROGRAM IN CHEMISTRY AND ENVIRONMENTAL SCIENCE AND MANAGEMENT

For students planning careers as environmental professionals, the School offers a unique, five-year program providing a bachelor of science degree in chemistry and management.

Students who wish to complete the joint BS/MS program will follow the curriculum for chemistry majors in the Bayer School of Natural and Environmental Sciences. They may begin course work in the environmental sciences in the third year. The bachelor of science in chemistry 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 BSNES and the School of Education 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 BSNES in the Departments of Biological Sciences, Chemistry and Biochemistry, or Physics and apply to the Graduate School of Education in their junior year. Students who wish to seek certification in General Science take additional courses beyond the requirements in one of the natural science disciplines. The Bachelor of Science degree is generally awarded in the senior
DEPARTMENT OF BIOLOGICAL SCIENCES

Biology is the study of mechanisms and principles governing living systems. Based upon chemistry, physics and mathematics, knowledge of biology is an essential element in a liberal education. Through lectures, seminars, laboratories, and participation in research projects, the Department of Biological Sciences at Duquesne University provides not only insight into this vast and exciting area, but intellectual enrichment, as well as preparation for professional careers.

Students majoring in biology develop a course of study suited to their long term goals. They are assisted in their course selections each semester by biology department faculty mentors. The Health Professions Program advisor counsels students as they progress through their curriculum and apply for admission to health-related professional schools. Course selections of students wishing to pursue graduate training, or the many and diverse biotechnological research career opportunities in industry, government or universities, are guided by the Microbiology Major and Biological Sciences Major faculty mentors.

Requirements for the Major

The Department of Biological Sciences offers the Bachelor of Science in Biological Sciences and an American Society of Microbiology approved Bachelor of Science in Microbiology. Of the credits required for graduation from Duquesne University, majors in biological sciences are required to complete the 27 credit hour biology core, 10 credit hours of electives, and 31 credits in corequisite science/math courses. Students majoring in microbiology are required to complete the 24 credit hour microbiology core, 12 credit hours of electives, and 35 credit hours in corequisite science/math courses. By completing this course sequence, a student also completes a biochemistry minor.

Course objectives are met through lectures, laboratory experiments and exercises, field work, participation in professional organizations, weekly seminars, and research. Students are encouraged to become involved in undergraduate research projects with faculty.

Requirements for the BS in Biological Sciences

All students must complete a 27 credit hour core consisting of the following courses:

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<tr>
<td>BIOL 374</td>
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Requirements for the BS in Microbiology

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DEPARTMENT OF BIOLOGICAL SCIENCES

Science/Math corequisites for the BS in Microbiology are:

CHEM 121 General Chemistry I 4 cr
CHEM 122 General Chemistry II 4 cr
CHEM 205 Organic Chemistry I 4 cr
CHEM 206 Organic Chemistry II 4 cr
CHEM 401 Biochemistry 4 cr
MATH 115 Calculus I 4 cr
MATH 225 Statistics 3 cr
PHYS 201 General Physics I 4 cr
PHYS 202 General Physics II 4 cr

REQUIREMENTS FOR THE MINOR

The department offers two minor programs:

1. Professional Minor which consists of 121, 122, 123, 124 and a minimum of 12 credits selected from the department's major courses numbered 200 or above. Individual course prerequisites must be met.
2. Academic Minor which consists of 121, 122, 123, 124 and a minimum of 12 credits selected from the department's courses numbered 200-395. Courses which are open to either majors or non-majors may be selected. Individual course prerequisites must be met.

NON-MAJOR COURSES (not for Biology major credit)

101 Introduction to Life Processes 2 cr
201 Biology of Microbes 2 cr
202 Biology of Microbes Laboratory 1 cr
203 Introductory Microbiology 3 cr
204 Introductory Microbiology Laboratory 1 cr
207 Anatomy and Physiology I Laboratory 1 cr

MAJOR COURSES

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

121 Biology I Diversity, Ecology, Evolution 3 cr
122 Biology II Cells, Genetics, Development 3 cr
111 Cell Chemistry 3 cr

208 Anatomy and Physiology I Laboratory 1 cr
Laboratory includes examination of the macro and gross anatomy of the body, physiological experiments, and exposure to certain basic clinically important measurements and techniques. Prerequisite 207 (or concurrent registration). Laboratory Continuation of 208 Preferred but not required. Lecture.

210 Anatomy and Physiology II Laboratory 1 cr
Continuation of 208 Laboratory

220 Sex and Sexuality 3 cr
Consideration of sex and reproduction as universal biological functions and special emphasis on physiological and psychological aspects of human sexuality. This course also aims to examine sexual functioning, behavior, and therapy. Lecture.

BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

340 Evolution 3 cr
This course begins with classical morphological methods of studying evolution including the way of phenomena and cellular analyses. The course ends with a detailed introduction to molecular methods of evolutionary study including DNA sequence alignment, phylogenetic tree construction, and the evolution of the genome. A one day field trip to collect fossils and an assignment to visit the Carnegie Museum of Natural History and assignments using the computer lab are required as a part of this course. Prerequisite 311

370 Lab I Experimental Biology 2 cr
This junior level lab course sequence is designed to provide students with a multidisciplinary lab that reflects the the integration among different disciplines in the broad areas of cellular and molecular biology. The semester emphasizes techniques and approaches in the molecular, biochemical, and cellular biology of organisms from bacteria to mammals. Included are an introduction to research skills (i.e., computer use, library resources), characterizations and manipulations of cellular macromolecules including proteins and nucleic acids, and microscopy. Laboratory Prerequisites 211, 213

371 Lab II Cell and Molecular Biology 2 cr
The second semester continues to build on BIOL 370 through investigative labs in cellular and molecular biology (i.e., experimental embryology, genetic mapping, constructing transgenic organisms) and includes a capstone lab mini-project for the last portion of the semester. Laboratory Prerequisite 370

372 Lab III Cell and Systems Physiology 2 cr
The second semester continues to build on BIOL 370 through investigative labs in cardiovascular/respiratory physiology, muscle and neurophysiology, and endocrinology. Experiments in many cases employ MacLab hardware and Apple Macintosh computers for data acquisition. The course is laboratory project based. Laboratory Prerequisite 370

373 Lab IV Microbiology 2 cr
The second semester continues to build on BIOL 370 through investigative labs in microbial physiology, ecology and genetics. This laboratory also examines culture, and microbial techniques used in microbiology and experimental techniques. The laboratory is laboratory project based. Laboratory Prerequisite 370

395 Special Topics - Biology 1-3 cr
Treatment of topics of current or special interest in biology. Lecture, laboratory or combinations

396 Special Topics - Microbiology 1-3 cr
Treatment of topics of current or special interest in microbiology. Lecture, laboratory or combinations
DEPARTMENT OF BIOLOGICAL SCIENCES

399, 399 Undergraduate Research 3-3 cr
Opportunity for selected students to work in the laboratory on research problems under the direction of a faculty member. Registration by permission of instructor. Laboratory.

400 Biotechnology Laboratory Techniques 3 cr
A course to familiarize the student with a variety of biological and biochemical techniques useful in such areas as medical and industrial biotechnology, science education, and biological research. The extraction, assay, and chemical analysis of a bacterial enzyme will be carried out. Purification of this enzyme by non-reverse chromatography and gel filtration will be done. Physical analysis of this enzyme using polyacrylamide gel electrophoresis (of native and denatured protein) as well as electrophoretic and electrofocusing will be carried out. Prerequisite: organic chemistry or permission of the instructor. Lecture and laboratory.

402 Research Skills 3 cr
Students are familiarized with a variety of contemporary computer-based skills that are essential to any investigator. Students will be actively involved in laboratory projects that will advance their intermediate level proficiency in using various common software packages, photographic and electronic slide making, electronic image capturing and manipulation, computer network skills, nucleic acid sequence analysis, library skills, electronic reference searching, and research techniques. Personal reference database establishment and management techniques, and scientific writing skills. Prerequisite: permission of the instructor. Lecture and laboratory.

403 Techniques in Light and Electron Microscopy 3 cr
This course includes an introduction to light microscopy (phase, differential interference contrast, brightfield, darkfield, and fluorescence microscopy), transmission electron microscopy and scanning electron microscopy. It covers specimen preparation (fixation, embedding, sectioning, photography and darkroom techniques) and is designed to prepare students for research at the molecular level. Prerequisite: permission of the instructor. Lecture and laboratory.

407 Recombinant DNA Techniques 3 cr
This course provides a broad hands-on introduction to contemporary techniques in molecular biology. Students will learn how to perform standard techniques such as DNA isolation, restriction enzyme digestion, DNA ligation, transformation, and colony screening, and how to use these tools to perform genetic experiments. Prerequisites: 121, 122, 123, 124 and concurrent registration in 444 Lecture and laboratory.

410 Vertebrate Microstructure 4 cr
A study of tissue and organ structure and the relationship of that structure to function. Prerequisites: 121, 122, 123, 124 and permission of the instructor. Lecture and laboratory.

412 Natural History of Animal Viruses 3 cr
Provides an introduction to animal viruses as etiological agents of disease. Emphasis will be placed on the pathogenesis and epidemiology of virus infections and diseases of humans as well as selected diseases of veterinary significance. Prerequisites: permission of the instructor. Lecture.

421 Cell Culture and Virology Lab 2 cr
This laboratory course covers cell culture techniques, propagation and assays for virus, detection of virus antigens and utilization of virus-specific antibodies. Prerequisite: permission of the instructor. Laboratory.

424 Immunology 3 cr
A course in the fundamental mechanisms of the immune system with applications in basic research, medicine and public health. Topics include the mechanisms of induction, regulation, and expression of the cellular and humoral immune response, immune mechanisms, antigen-antibody reactions, immunogenetics, hypersensitivity, and immunopathology. Prerequisite: permission of the instructor. Laboratory.

425 Molecular Virology 3 cr
This course is a study of the molecular biology of animal viruses. Major emphasis is placed on virus structure and morphology, virus replication and interaction with the host cell, and molecular genetics. Prerequisites: permission of the instructor. Lecture and/or biology. Lecture.

426 Pathogen 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: a course in microbiology or permission of the instructor. Lecture and/or laboratory.

427 Microbial Ecology 3 cr
In this course, the interaction of microorganisms, primarily bacteria, with each other, plants, animals and fungi, and the environment will be explored. Topics such as photosynthesis, biogeochemical cycling, energy metabolism, microbial evolution, and the role of microorganisms in the biosphere will be examined. Prerequisites: 219, 213, and CHEM 222, or permission of the instructor. Lecture.

429 Microbial Physiology 3 cr
This course is a study of microbial carbon metabolism, biosynthesis, metabolic regulation, and cellular structure. Emphasis is placed on the role of microorganisms in the biosphere. Prerequisites: organic chemistry or permission of the instructor. Lecture and laboratory.

430 Advanced Principles of Virology 3 cr
This course is designed to provide students with an in-depth understanding of contemporary mammalian virology. In addition to the study of viral biology, the course will include a study of virology methods, the immune system and its interactions with viruses, and the application of virology in the study of infectious diseases. Prerequisites: 121, 122, 123, 124 and permission of the instructor. Lecture.

440 Research 1-3 cr
Opportunity for selected students to work in the laboratory on research problems under the direction of a faculty member. Registration by permission of instructor. Laboratory.

441 Plant Pathology 3 cr
This course covers the diversity of physiological mechanisms that different animals employ, including the high level of physiological and biochemical adaptation and specialization found in animals that live in diverse and challenging environments, or that possess other exceptional physiological abilities. Prerequisite: an animal-based physiology course or permission of the instructor. Lecture.

442 Cardiovascular & Respiratory Pathology Laboratory 1 cr
The primary objectives of this laboratory are 1) to familiarize students with a variety of techniques and analytical instruments used by researchers and clinicians alike to quantify and assess cardiovascular and respiratory system function, and 2) to enhance the student's ability to analyze and meaningfully interpret cardiovascular and respiratory system data through laboratory experiments supplemented by interactive computer simulations. Prerequisite: an animal-based physiology course or permission of the instructor. Lecture.

443 Insect Physiology and Endocrinology 2 cr
The laboratory experiments include a number of advanced analytical methodologies such as gas chromatography, high performance liquid chromatography, spectroscopy, and immunocytochemistry. Prerequisite: concurrent enrollment in 442 Laboratory.

444 Plant Biology 3 cr
An in-depth examination of plant biochemistry, genetics, development and physiology. Emphasis will be placed upon the presentation of current research problems and findings in plant biology. Prerequisite: permission of the instructor. Lecture.

450 Comparative Animal Physiology 3 cr
This course focuses on the diversity of physiological mechanisms that different animals employ, including the high level of physiological and biochemical adaptation and specialization found in animals that live in diverse and challenging environments, or that possess other exceptional physiological abilities. Prerequisite: an animal-based physiology course or permission of the instructor. Lecture.

455 Cardiovascular & Respiratory Pathology 3 cr
This advanced course provides students with an in-depth understanding of contemporary mammalian cardiovascular and respiratory system biology. Topics covered include cardiovascular, respiratory, and integrative physiology. Prerequisites: 121, 122, 123, 124, and permission of the instructor. Laboratory.

456 Cardiovascular & Respiratory Physiology Laboratory 1 cr
The primary objectives of this laboratory are 1) to familiarize students with a variety of techniques and analytical instruments used by researchers and clinicians alike to quantify and assess cardiovascular and respiratory system function, and 2) to enhance the student's ability to analyze and meaningfully interpret cardiovascular and respiratory system data through laboratory experiments supplemented by interactive computer simulations. Prerequisite: an animal-based physiology course or permission of the instructor. Lecture.

457 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 appli-
culation of modern techniques of cellular and molecular biology to answer central questions of reproductive physiology will be explored in more detail. Prerequisites 315 or comparable and permission of the instructor Lecture

460 Endocrinology 3 cr
This advanced integrative physiology course investigates the role of the endocrine system in communication and regulation of body activities. Topics include homeostasis, reflex arcs, hormone synthesis, hormone action and signal transduction, hypothalamic/pituitary axis, regulation of salt, mineral, and water balances, regulation of energy metabolism, reproduction, growth, and development. This course is appropriate for biology and biochemistry majors interested in physiology, as well as pre-health sciences majors. Prerequisites: 211, 213, and permission of the instructor.

467 Molecular Genetics 3 cr
An advanced course in molecular genetics, content will vary from year to year but will include topics in gene regulation, gene expression, and genome structure and function in both prokaryotes and eukaryotes. This course is open to biology seniors who have had BIOL 311 with permission of the instructor. Biochemistry majors who have completed CHEM 524 may take this course with permission of the instructor.

468 Human Genetics 3 cr
This course is an advanced, current survey of molecular aspects of the genetics of humans, with an emphasis on diagnosis and genetic analysis of diseases. Topics covered include strategies for mapping and identifying the underlying molecular basis for genetic diseases, gene therapy, epidemiology, mutation, the organization of the human genome, human population genetics, the genetic basis of cancer, genetics of the immune system, and the human genome project. Prerequisite: 311.

469 Signal Transduction 3 cr
This advanced cell biology course addresses the question of how the messages from various chemical signaling molecules are "translated" 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, ionotrop Trpophosphate receptors, GPCRs, signal transduction pathway, protein kinases and growth factors. Prerequisites: 211, 213, and permission of the instructor.

475 Neurobiology Laboratory Techniques 2 cr
An introductory laboratory course with emphasis on techniques employed to gather data from vertebrate and invertebrate sensory cells, interneurons, motor neurons, and muscle fibers. Students will learn intra- and extracellular recording methodology, neuron culture, and histochemical methods. Data acquisition using lab hardware and Apple Macintosh computer. Completion of or concurrent registration in 475 is required. Prerequisite permission of the instructor. Laboratory

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

481 Readings in Cell and Systems Physiology 1 cr
Discussion and critical evaluation by faculty and students of significant papers from the recent research literature.

482 Readings in Microbiology 1 cr
Discussion and critical evaluation by faculty and students of significant papers from the recent research literature.

480 Seminar 1 cr
Students attend and participate in weekly departmental research presentations and demonstrations by biological scientists from the Department of Biological Sciences and from other universities.

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

476 Neurobiology Laboratory Techniques 2 cr
An introductory laboratory course with emphasis on techniques employed to gather data from vertebrate and invertebrate sensory cells, interneurons, motor neurons, and muscle fibers. Students will learn intra- and extracellular recording methodology, neuron culture, and histochemical methods. Data acquisition using lab hardware and Apple Macintosh computer. Completion of or concurrent registration in 475 is required. Prerequisite permission of the instructor. Laboratory

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

481 Readings in Cell and Systems Physiology 1 cr
Discussion and critical evaluation by faculty and students of significant papers from the recent research literature.

482 Readings in Microbiology 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 and from other universities.

REQUIREMENTS FOR THE CHEMISTRY PROGRAM

311, 312 General Chemistry 4 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 physical and chemical properties in a qualitative manner, and the laboratory portion of the second semester illustrates the principles of ionic equilibria including qualitative inorganic analysis. Prerequisite for 121, 122, 131, or equivalent for 111, 112, or 113.122 General Chemistry and 311.

311, 312 General Chemistry 2 cr each
This course introduces students to the basic concepts of chemistry and offers selected applications of mathematics pertinent to General Chemistry Lecture, three hours.

121, 122 General Chemistry 4 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 physical and chemical properties in a qualitative manner, and the laboratory portion of the second semester illustrates the principles of ionic equilibria including qualitative inorganic analysis. Prerequisite for 121, 122, 131, or equivalent for 111, 112, or 113.122 General Chemistry and 311.

311, 312 General Chemistry 2 cr each
This course introduces students to the basic concepts of chemistry and offers selected applications of mathematics pertinent to General Chemistry Lecture, three hours.

121, 122 General Chemistry 4 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 physical and chemical properties in a qualitative manner, and the laboratory portion of the second semester illustrates the principles of ionic equilibria including qualitative inorganic analysis. Prerequisite for 121, 122, 131, or equivalent for 111, 112, or 113.122 General Chemistry and 311.
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 151: high school algebra or its equivalent, as evidenced by satisfactory performance on a math placement examination. Prerequisite for 152: 121 Lecture, four hours, laboratory, three hours.

211, 212. Organic Chemistry 3 cr each. Students are given a firm foundation in the fundamentals of the structure and reactivity of organic compounds. Emphasis is on the basic mechanistic principles of the reactions and the strategies used to synthesize organic compounds. The use of NMR and IR spectroscopy to identify organic compounds is also emphasized. Prerequisite: 122 for 211, 211 and 212 must be taken prior to or concurrent with 212L. Laboratory, three hours.

211L, 212L. Organic Chemistry Lab 1 cr each. This lab exposes students to basic synthetic and purification techniques used in organic chemistry. Both microscale and macroscopic equipment are used. The student acquires a knowledge of the various wet methods of qualitative organic analysis. This lab also teaches the students how to generate and interpret IR and NMR spectra. Prerequisite: 211L for 212L. 211 must be taken prior to or concurrent with 211L. 212 must be taken prior to or concurrent with 212L. Laboratory, four hours.

221L, 222L. Organic Chemistry Lab 1 cr each. This course teaches students basic synthetic and purification techniques in organic chemistry. In 221L, students are taught various wet methods of qualitative organic analysis. This course also exposes students to basic synthetic and purification techniques used in organic chemistry. Both microscale and macroscopic equipment are used. The student acquires a knowledge of the various wet methods of qualitative organic analysis. This lab also teaches the students how to generate and interpret IR and NMR spectra. Prerequisite: 221L for 222L. 211 must be taken prior to or concurrent with 221L. 212 must be taken prior to or concurrent with 222L. Laboratory, four hours.

221L, 222L. Organic Chemistry Lab 1 cr each. This course teaches students basic synthetic and purification techniques in organic chemistry. In 221L, students are taught various wet methods of qualitative organic analysis. This course also exposes students to basic synthetic and purification techniques used in organic chemistry. Both microscale and macroscopic equipment are used. The student acquires a knowledge of the various wet methods of qualitative organic analysis. This lab also teaches the students how to generate and interpret IR and NMR spectra. Prerequisite: 221L for 222L. 211 must be taken prior to or concurrent with 221L. 212 must be taken prior to or concurrent with 222L. Laboratory, six hours.

321, 322. Physical Chemistry 3 cr each. A study of the structure and properties of the various states of matter, thermodynamics, thermodynamics, chemistry, kinetics, and an introduction to quantum chemistry. Prerequisites: Physics 202 or 201, Chemistry 122, Mathematics 116 Lecture, four hours.

323, 324. Physical Chemistry Laboratory 1 cr each. Laboratory portion of Chemistry 321, 322, four hours.

DEPARTMENT OF PHYSICS

Chairperson
K. Thomas R. Davis, Ph.D.

Professors
Shih-Chia Chang, Ph.D.
K. Thomas R. Davis, Ph.D.
Rev. J. Clifton Hill, Ph.D.

Associate Professors
Barbara M. Manner, Ph.D.
Reginald A. Noy, M.Sc.

Instructor
Anna D. Emra, Ph.D.

401 General Chemistry I 3 cr. An introduction to modern biochemistry at the molecular level. This course includes discussion of the structure and function of proteins, the chemical mechanisms and regulation of enzyme catalysis, biochemical structure and function, the structure and metabolism of carbohydrates, and the bioenergetics of ATP synthesis and utilization. Prerequisite: 212 Lecture, four hours.

401L. Biochemistry Laboratory 1 cr. Students are introduced to the basic techniques of biochemistry, including protein assays, protein electrophoresis, gel filtration, and affinity chromatography. Western blotting, and enzyme assay, purification, and kinetic analysis. 401 must be taken prior to or concurrent with 401L Lecture, four hours.

402 General Chemistry II 3 cr. This course is a continuation of CHEM 401. The course covers an overview of the metabolic transformations of fatty acids and the complex lipids, amino acids and the purine and pyrimidine nucleotides. The second half of the course offers a discussion of the molecular basis of genetics, including DNA and RNA metabolism, protein biosynthesis, and an introduction to the biochemical basis of recombinant DNA methodology. Prerequisite: 401 Lecture, four hours.

421 Analytical Chemistry 4 cr. Theoretical and practical training in modern methods in chemical analysis with emphasis on instrumental methods. Prerequisite: 321 Lecture, three hours, Laboratory, eight hours.

422 Inorganic Chemistry 4 cr. A survey of the basic principles required for understanding inorganic chemistry including atomic and molecular structure, crystal structure, nonaqueous solvents and coordination compounds. Prerequisite: 322 Lecture, three hours, Laboratory, four hours.

490 Undergraduate Research. Maximum 2 cr. Selected students work on a research problem under the direction of a staff member.

BAYER SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

The program in the Department of Physics is primarily aimed at providing today's students with a fundamental background in traditional physics as well as an understanding of the interrelationships with other sciences and disciplines. The Department is also aware that in today's changing world, there must be a suitably flexible program that will best fit the graduate for the challenges faced in the many professions that are based on the science of physics. Also, it is realized that there are many expanding paths to personal growth. The Department program, therefore, is structured to provide the essential background for students who will enter graduate school, as well as equipping students to successfully compete for the available positions in research institutions, government agencies or private corporations. Department policy calls for individual attention to student needs.

REQUIREMENTS FOR THE MAJOR

A minimum of 34 semester hours is required for a major. These credits must include: 211, 212, 301, 329, 330, 361, 372, 402, 403, 410, 471, 482, 474, 480, 484, or 485 may be substituted for 403 or 482 with departmental approval. It is strongly suggested that each major take 450.

410 Extramural Research. Chemistry 121, 122 or Biology 111, 112, Mathematics 115, 125, 215, 216, and 308, Computer Science 130 or an approved substitute, and two years of modern language. If a student takes both 201, 202 and 211, 212, credit will not be given for both.

REQUIREMENTS FOR THE MINOR

The minor consists of eight hours in the General Analytical Physics (211, 212) and 12 credits of upper division physics on the 200 and above level. The department will structure the minor program from the course offerings to fit, as nearly as possible, the needs and desires of the individual student.

REQUIREMENTS FOR BINARY ENGINEERING STUDENTS

In addition to those courses needed to fulfill the University and Bayer School of Natural and Environmental Sciences requirements, each Binary Engineering student is required to complete the following: Physics 211, 212, and 471, Chemistry 121 and 122, Mathematics 115, 116, 215, 216, 308, and Computer Science 150 or an approved substitute. Mathematics 306 is recommended, but not required. 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: Chemistry 221, 222, 321, and 322, Physics 301, 306, 329, 330, 350, 361, 372, 480, and 482. Selection of additional courses must be discussed with and approved by the Binary Engineering faculty mentor who serves as academic advisor to all Binary Engineering Students.

PHYSICS COURSES

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 Physics for Pharmacists 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: Mathematics 115 Lecture, four hours, Laboratory/Recitation, two hours (Note: Students preparing for a medical degree program must take Physics 201, 202, or Physics 211, 212. Pharmacy students concentrating in Pharmacology are encouraged to complete Physics 201 and 202.)

201, 202 General Physics 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. Prerequisite: Mathematics 105 or the equivalent. Students who have completed Mathematics 116 and pre-engineering students should take 211, 212 Lecture, four hours, Laboratory, two hours.

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 time, 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. It is also suitable for completion of non-
301 Thermodynamics 3 cr
This is an intermediate level course covering the fundamental principles of thermodynamics, kinetic theory and statistical mechanics. The following topics are included: temperature, thermodynamic systems, work, heat, the first and second laws of thermodynamics, ideal gases, entropy, Maxwell's equation, the kinetic theory of ideal gases, and the basic concept of statistical mechanics. Prerequisites: Mathematics 215

306 Applied Electromagnetics 3 cr
This course is designed to provide students with practical experience in the application of electromagnetic theory to real-world problems. Topics covered include the fundamentals of electricity and magnetism, the behavior of electromagnetic waves, and the use of these concepts for solving practical engineering problems. Prerequisite: Mathematics 215

329 Advanced Laboratory I 1 cr
This course provides students with hands-on experience in the design and execution of advanced laboratory experiments. Emphasis is placed on the development of skills in experimental design, data analysis, and scientific writing. Students will work in small teams to design and carry out experiments in areas such as quantum mechanics, thermodynamics, and electromagnetism. Prerequisite: Physics 230

330 Advanced Laboratory II 3 cr
A continuation of Advanced Laboratory I, this course includes advanced experimental design and data analysis. Students will work on projects related to current research topics in physics, such as photonics, quantum computing, and condensed-matter physics. Prerequisites: Physics 329 and consent of instructor

403 Applied Laser Optics 2 cr
This course provides an introduction to the principles of laser physics and the application of lasers in various fields, including medicine, materials science, and information technology. Prerequisite: Physics 329

430 Sensor Research 2 cr
This course introduces students to the principles of sensor design and their applications in various fields. Topics covered include sensor fundamentals, sensor materials and technologies, and applications in fields such as medicine, environmental monitoring, and materials science. Prerequisites: Physics 329 and consent of instructor

471 Modern Physics 3 cr
This course provides an introduction to the quantum theory of light, wave-particle duality, and the nature of the quantum world. Prerequisite: Physics 329

474, 480, 484, 485, 486 Special Topic Courses 1-3 cr
These courses are designed to provide advanced students with opportunities to explore cutting-edge research topics in physics. Prerequisite: consent of instructor

476 Shop Techniques Descriptions of these courses are available upon request.
480/580 Nonlinear Dynamics (Chaos) 3 cr
This course provides an introduction to the theory and applications of chaos. The topics presented include characteristics of dynamical systems and of maps and flows, sensitivity to initial conditions, studies of one-dimensional maps including fixed points, periodic orbits, bifurcation theory, the period-doubling cascade to chaos, universal scaling laws and the Feigenbaum constants, the relation of the critical orbit to the Schwartzian derivative, and the Newton Fixed Point Theorem. Then, the last part of the course is devoted to fractals, Julia Sets, and the Mandelbrot Set. If time permits we may study the Lyapunov exponents, the Lorenz attractor, and Hamiltonian Chaos Prerequisite Mathematics 215

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: 212, Mathematics 215

485 Relativistic Mechanics 3 cr
This course is an introduction to the Special and General Theories of Relativity. A list of topics which may be discussed are absolute space, Einsteinian Kinematics, Einsteinian Optics, space-time and four vectors, relativistic particle mechanics. Prerequisites: 212, Mathematics 215

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 Problems in Physics 1-4 cr
Special topics and problems in physics and related subjects suitable for independent work

488 Advanced Problems in Physics 1-4 cr
Problems of a more sophisticated nature

489 Problems in Health Physics 1-4 cr
Special topics and problems in health physics and related subjects suitable for independent work

492 Health Physics 2 cr
The objectives of this course are to familiarize the student with the various aspects of Health Physics and radiation protection, to introduce the student to that background material necessary to understand environmental radiation safety issues, and to provide a mechanism by which the student may apply the principles and practices of radiation protection. At the completion of the course, the student should have attained a level of working knowledge of radiation protection, its technique and reasoning, such that he may be able to apply this knowledge of the field to many real life and working situations

495 Field Studies 1-4 cr

EARTH SCIENCE COURSES

(Nota: 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, glaciation, 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 304 Environmental Earth Science 3 cr
Analysis of geologic aspects of man's environment with emphasis on geologic hazards and environmental impact of society's demand for water, minerals, and energy. Topics covered 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 491 Environmental and Hydrogeology 2 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. Geological 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.
The A J Palumbo School of Business Administration helps prepare students for careers in all types of organizations.

**A.J. Palumbo School Of Business Administration**

**Administration**

Dean
Thomas J. Murrin, B.S., D.M.S.

Associate Dean and Director of Undergraduate Studies
Thomas A. Pollack, Ph.D.

Associate Dean and Director of Graduate Studies
William D. Presutti, 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 education community. During the next six 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.

As a consequence of its Mission, the School of Business Administration sets for itself the following key objectives:

- Strive to be that Business School which understands clearly the critically important changes and challenges occurring in the business world and responds effectively by providing world-class training to help prepare students and others to contribute to the survival, competitiveness and long-term success of their organizations.

- Analyze relevant business, economic, political and other developments, domestically and overseas, to promote that understanding. Utilize not only our University's considerable resources, but also personnel and resources from elsewhere in academia, business, government and labor.

- Become leading practitioners of continuous world-class quality and productivity improvement by outstanding offerings and expert lecturers, resource-effective processes throughout the School, and innovative pedagogical improvements in the classroom utilizing the most state-of-the-art resources available.

- Provide insightful training in international business incorporating challenges from such countries as Japan and Germany and outstanding opportunities in such areas as Central and Eastern Europe, Central and South America and the Far East. Introduce leading-edge know-how by developing programs on relevant topics and addressing the need for lifelong learning experiences.

- Eschew ethics as a winning characteristic of organizations that are successful over the long-term and promote a commitment to high standards and values among the Duquesne community.

- Continuously evolve a Mission Statement for our School which optimally guides our commitments to our various customer groups — students, parents, employers, benefactors, alumni and the community. Concurrently contribute substantially to the overall Duquesne goal of becoming The Outstanding Catholic University in America.

- Fully benefit from the resources of existing Advisory Boards, the Dean's Student Advisory Council and the Executive Advisory Board to assist in the continuing development of the School and to improve the business and effectiveness of our business education.

**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 may be found on page eight).

Acceptance of all international students will be contingent upon the successful completion of the Duquesne University English Placement tests and any requirements set by the University. These may involve at least one semester or more of course work until such time as the student's English language sufficiently improves to take undergraduate classes.

Students transferring from a school of business that is accredited by the American Assembly of Collegiate Schools of Business must present an overall quality point average of 2.0 (on a 4.0 scale) or better. For other students, including those transferring from another school within the University, a quality point average of 2.5 or better overall and a grade of C or better in all mathematics and business courses are necessary.

Up to six credits of course work taken outside of the School of Business will be accepted for transfer credit. No more than 27 of those credits may consist of business courses. Exceptions will be made if the student is enrolled in a school with an established articulation agreement with Duquesne University. If exterminating circumstances exist, the student may petition the Student Standing Committee for further information. The student should consult an academic advisor.

**DEGREE**

The School of Business Administration grants the degree of Bachelor of Science in Business Administration. Description of advanced degrees are found in other publications available from the Graduate School of Business Administration.

**SECOND BACHELOR'S DEGREE**

Persons who have received a bachelor's degree from an approved college or university may be eligible to enter the program for a second bachelor's degree in Business Administration. A second degree candidate must meet all requirements of the School's degree program. A maximum of 30 credits must be completed in residency.

**THREE-YEAR BACHELOR'S J D**

A student who has completed 90 credits in the A J Palumbo School of Business Administration with a 3.5 or better overall average and who has satisfied all undergraduate curricular requirements may apply for a bachelor's degree after successful completion of the first year of academic work at Duquesne University School of Law. Students interested in this program should consult their advisors in their sophomore year to plan their program of study. Because of the restrictive nature of this program, it is not open to transfer students.

**EARLY ADMISSION TO MBA PROGRAMS**

The School of Business Administration provides an opportunity for students in the School who achieve the Dean's List to apply for early admission to the Master of Business Administration (MBA) program. Provided they receive a satisfactory score on the Graduate Management Admission Test, these students may apply to take certain MBA courses during their senior year. Dean's List students interested in this program should consult their advisors early in their junior year.

**EARLY ADMISSION TO MBA PROGRAMS—B S PHARMACY/ MBA**

The School of Business Administration and the School of Pharmacy have a cooperative program that allows qualified pharmacy students to apply for early admission to the MBA program. Pharmacy students interested in this program should consult their advisors.

**DUAL DEGREE PROGRAMS WITH COLLEGE OF LIBERAL ARTS**

The School of Business Administration and the College of Liberal Arts have developed a dual degree (BS/BA) option. Students interested in this program should consult the advisors in the School of Business Administration or in the College of Liberal Arts.

**BUSINESS CERTIFICATE PROGRAMS**

The School of Business Administration and the College of Liberal Arts, the School of Education and the School of Music have developed certificate programs for students interested in the program should consult the advisors in the School of Business Administration.

**HEALTH MANAGEMENT SYSTEMS**

The A J Palumbo School of Business Administration, in conjunction with the School of Health Sciences' Department of Health Information Sciences, offers a joint program in Health Management Systems for students interested in the application of information technology and business skills to the management of health care. The Health Management Systems program offers specialization tracks in Systems and Administration.

**SCHOOL CENTERS**

The School operates several independent Centers designed to provide students and faculty with an opportunity for professional development, as well as to provide services to the University and the community at large. Among the most active of the Business School's Centers are the following:

Center for Economic Education

The Center for Economic Education is charged with the responsibility of initiating and promoting economic education in the community at large. More specifically it develops and coordinates economic education...
The Beard Center for Leadership in Ethics

The mission of the Center for Leadership in Ethics is to accrete issues of ethical concern by promoting public discussion in an attempt to develop an overall awareness of ethical conduct and an increase in leadership standards for the organization. An important initiative in this mission is the Distinguished Speaker Series on Ethics. At these programs, prominent executives from the business community share their experiences and philosophy on ethical conduct. The Center also sponsors roundtable discussions during which business leaders, faculty and students express their views and answer questions.

Center for Technology Management

The mission of the Center for Technology Management is to help organizations cope more effectively with rapid, ongoing changes in technology and to use it as a key factor in building long term advantage. The Center conducts research in technology adoption, organization, management procedures, oversight, technology diffusion and technology transfer. The Center is also responsible for developing curricula and teaching programs for students as well as continuing education programs, forums and seminars for managers and executives.

The John E Connelly Center for Entrepreneurship and Emerging Enterprise

The John E Connelly Center for Entrepreneurship and Emerging Enterprise was designed to nurture and support the entrepreneurial spirit and emerging new enterprises in the Pittsburgh region. The Center is committed to providing world-class training to help prepare entrepreneurs and others to contribute to the survival, competitiveness and long-term success of their organizations. Through seminars sponsored by the Connelly Center, client organizations receive training in such areas as leadership, communications, program planning, feasibility studies, marketing strategies, financial planning, total quality management, international strategy and the management of technology.

SCHOOL OF BUSINESS ADMINISTRATION COMPUTER FACILITIES

The A. J. Palumbo School of Business Administration operates a Technology Center consisting of three large computer laboratories on the sixth floor of Rockwell Hall. The general purpose personal computer laboratory provides application software associated with the Business School curriculum. The Multimedia Laboratory serves as the School's classroom teaching laboratory and provides business as well as general multimedia software. The third laboratory serves our students primarily in the areas of network and database applications. All laboratories provide connectivity to the Internet.

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 furthering the profession and developing students' careers.

Beta Alpha Phi is the local honorary scholastic society of the school. Its membership is limited to juniors and seniors in the Business School who have attained QPA's of 3.25 or better.

The Delta Chapter of Beta Gamma Sigma, a national honorary scholastic society, is represented by qualified students of the American Assembly of Collegiate Schools of Business, is established at Duquesne University. Membership in this honorary fraternity is limited to juniors in the top five percent of their class and seniors in the top ten percent of their class.

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.

The Financial Management Association is a student organization for those interested in careers in finance.

The International Business Association is a student organization for those with interest in careers in the area of international business.

The 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.

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

The Society for Human Resource Management is a student chapter of the national organization SHRM and is also affiliated with the Pittsburgh Personnel Association. The chapter is for students interested in careers in personnel/human resources or line management.

Beta Alpha Psi is the premier national honorary accounting fraternity. Less than 15% of the AACSB-accredited schools eligible for membership have achieved active status. The fraternity sponsors professional growth and development programs, as well as community and University service activities.

ADVOCACY BOARDS

Nine separate Advocacy 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, internship and employment opportunities and other matters of concern to students, faculty and the business community as a whole.

ACADEMIC PROGRAMS

The A. J. Palumbo School of Business Administration offers a variety of concentrations (major) from which to choose courses. The respective areas of concentration include Accounting, Finance, Human Resource Management, Information Technology, International Business, Logistics, Management, Marketing, and Strategic Marketing.

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 academic areas of concentration, and to consult with them when choosing junior and senior courses in any area of concentration. Their proposed curriculum choices must, of course, include the University requirements and the School of 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. Regulations 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. In addition to coursework in specific disciplines, students will be required to participate in programs for professional and personal development as outlined in the following section of the catalog. Career advice should be sought from many and varied sources in the University, but especially faculty. Course suggestions and degree requirements for all major areas of concentration can be obtained from the Academic Advisement Office.

PROGRAMS FOR PROFESSIONAL AND PERSONAL DEVELOPMENT

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

See General Business Courses (p. 95) for course descriptions and prerequisites.

Pre-Business Experience

This orientation program is designed to introduce business students to the broad context of a business education. The program serves as an "advance organizer" and exposes students to the concept of total quality management, the importance of ethical decision making and the realities of the global marketplace in a cooperative learning environment.

Students meet with the A. J. Palumbo School of Business faculty and administrative staff to develop personal relationships and to become acquainted with the organization of the School and the resources available. Participation in this program is required for graduation.

Junior/Senior Lecture Series

The purpose of this series of colloquia is to offer students the opportunity to meet and interact with government officials, corporate leaders and authors during the completion of the students' upper level courses. Students are exposed to current themes and critical topics in business. This series is coordinated with the Reading Program.

Attendance at these programs is required and students will participate in writing exercises pertaining to the lectures.

Reading Program

In order to broaden the students' knowledge of the business world, a comprehensive bibliography has been compiled by the faculty. Students are expected to complete outside readings in a variety of areas to complement their in-class studies. Completion of this program is required for graduation.

Foreign Language/Culture Requirement

Business organizations are becoming more global in scope, yet business students graduating from many American educational institutions still maintain a parochial perspective.

To bring an international cultural awareness to business education and to provide a valuable skill for our students, the School of Business Adminis-
tration requires six (6) credits of study in a conversational foreign language and culture. This requirement may be fulfilled at any time during the student's program of study.

**FOUR YEAR SAMPLE PLAN**
*Effective September 1993*

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>University Core</td>
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</tr>
<tr>
<td>101 Thinking and Writing Across the Curriculum</td>
<td>3 cr</td>
</tr>
<tr>
<td>102 Imaginative Literature and Critical Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>101 College Algebra</td>
<td>3 cr</td>
</tr>
<tr>
<td>111 Calculus</td>
<td>3 cr</td>
</tr>
<tr>
<td>132 Basic Philosophical Questions</td>
<td>3 cr</td>
</tr>
<tr>
<td>141 Social, Political and Economic Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>151 The Shaping of the Modern World</td>
<td>3 cr</td>
</tr>
<tr>
<td>161 The Arts and the Human Experience</td>
<td>3 cr</td>
</tr>
<tr>
<td>182 Business Core</td>
<td>24 cr</td>
</tr>
<tr>
<td>183 Information Systems I</td>
<td>3 cr</td>
</tr>
<tr>
<td>184 Information Systems II</td>
<td>3 cr</td>
</tr>
<tr>
<td>202 Sophomore Outside Reading Program</td>
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**Sophomore Year**

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<tbody>
<tr>
<td>University Core</td>
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<tr>
<td><em>Core Theology Requirement</em></td>
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<td><em>Core Science Requirement</em></td>
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<tr>
<td>Business Core</td>
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</tr>
<tr>
<td>281 Quantitative Analysis I</td>
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<td>284 Quantitative Analysis II</td>
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</tr>
<tr>
<td>214 Financial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>215 Managerial Accounting</td>
<td>3 cr</td>
</tr>
<tr>
<td>221 Principles of Economics I</td>
<td>3 cr</td>
</tr>
<tr>
<td>222 Principles of Economics II</td>
<td>3 cr</td>
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<tr>
<td>251 Business Law</td>
<td>3 cr</td>
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<tr>
<td>223 Global Economic Perspectives</td>
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<tr>
<td>203 Pre-Business Experience</td>
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<td>202 Outside Reading Program</td>
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<td><strong>TOTAL Credits</strong></td>
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**Junior Year**

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<tr>
<td>Business Core</td>
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<tr>
<td>331 Business Finance</td>
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</tr>
<tr>
<td>361 Introduction to Management</td>
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<tr>
<td>371 Introduction to Marketing</td>
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<tr>
<td>367 Total Quality and Operations Management</td>
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<tr>
<td>368 Business Ethics/Communications</td>
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<tr>
<td>302 Outside Reading Program</td>
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**Senior Year**

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<tr>
<th>Course</th>
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<td>Business Core</td>
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</tr>
<tr>
<td>499 Strategic Management</td>
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<tr>
<td><em>Foreign Language/Culture Requirement</em></td>
<td>6 cr</td>
</tr>
<tr>
<td>402 Outside Reading Program</td>
<td>NC cr</td>
</tr>
<tr>
<td>403 Senior Lecture Series</td>
<td>NC cr</td>
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<tr>
<td><strong>Major Area of Concentration</strong></td>
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<td>Major Area of Concentration</td>
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<tr>
<td><strong>Electives</strong></td>
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<td>Non-business Elective</td>
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<tr>
<td>Non-business Elective</td>
<td>3 cr</td>
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<tr>
<td>Elective</td>
<td>3 cr</td>
</tr>
<tr>
<td><strong>TOTAL Credits</strong></td>
<td>9 cr</td>
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**Academic Regulations**

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

**Effective Catalog**

Degree requirements are those stipulated in the catalog in the year in which a student begins matriculation. The student is responsible for knowing the requirements for the degree. Requirements may be changed without notice or obligation. This catalog has been prepared with the best information available as of February 1996.

**Class Attendance**

Regular class attendance in the School of Business Administration is strongly recommended for maximum educational advantage and, in some cases, may be required. The responsibility for all course material rests wholly with the student. It is the prerogative of each instructor to establish specific policies for attendance at examinations and class lectures, deadlines for reports, and other specific school or course requirements.

A student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstances is responsible for notifying his/her advisor. The student should supply a written verification as soon as possible. A student who is absent for cause is expected to complete all of the work in all courses. It is the student's responsibility to make up all assignments in all courses and to familiarize with any instructions which may have been given during the absence.

**Handicapped Students**

Handicapped students requiring special assistance are urged to notify the class instructor or his/her advisor before the first class.

**Enrollment in Business Courses by Students in Other Schools of the University**

Students enrolled in other schools in the University are welcome to take business courses provided they meet all prerequisites. Under no circumstances, however, may a student in another school take more than 27 credit hours in business courses in the College of Liberal Arts and the School of Education who wish to take business courses should follow the business certificate program or the dual degree option. Students should consult their advisors for further information.

**General Business Courses**

The following courses, with the exception of BUADM 401, Business Administration Internship, are required for all students enrolled in the School of Business Administration. The Business Administration Internship is strongly recommended for all who qualify.

- 202 Sophomore Outside Reading Program
- 203 Pre-Business Experience
- 302 Junior Outside Reading Program
- 303 Junior Lecture Series

**Prerequisites**

- Upper Level Business Courses
- Not for credit

Selected readings on general business topics will be assigned throughout the academic year. Students will be responsible for reporting on the content of the readings through examination and/or short papers. Prerequisites: Sophomore standing.

- 202 Sophomore Outside Reading Program
- Not for credit

This orientation program is designed to introduce business students to the broad context of a business education. Students are exposed to the concepts of total quality management, the importance of ethical decision making, the philosophy of co-operative learning, and the realities of the global marketplace. Prerequisite: Sophomore standing.

- 302 Junior Outside Reading Program
- Not for credit

The Junior Outside Reading Program attempts to broaden the students' knowledge of specific business topics. Students are expected to complete outside readings in a variety of areas to complement their in-class studies. Prerequisites: BUADM 202 and Junior standing.

- 303 Junior Lecture Series
- Not for credit

Designed to familiarize students with current themes and critical concerns in business. Speakers from specific disciplines discuss corporate policies and business issues in a regularly scheduled lecture series.

- 401 Business Administration Internship

This internship program 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 and an overall GPA of 2.5 or better, completion of at least 15 credits at Duquesne University.
402 Senior Outside Reading Program Not for credit
From recommendations provided by the Business School faculty, students are assigned outside readings to complement the Senior Lecture Series and expand their awareness of contemporary business issues Prerequisites BUADM 302 and Senior standing

403 Senior Lecture Series Not for credit
Features corporate leaders from top administrative posts and distinguished professionals from government and academia who focus on controversial and thought-provoking issues that affect the business community Prerequisites BUADM 303 and Senior standing

ACCOUNTING CURRICULUM
The accounting faculty requires that students concentrating in accounting take Accounting 216, 311, 312, 314, 315, 411, 412, and 414, as well as at least one of the following: Law 353, 354, 355, or 454. It is required that the student achieve a 2.5 average in Accounting 214, 215 before attempting Accounting 311. A minimum grade of C in 311 must be obtained before attempting 312.

Information Technology courses recommended for accounting students are 481 and 485 Finance 333 is also recommended for accounting students For further information, the student should consult an academic advisor

CPA Requirements
Students who desire to become certified public accountants in Pennsylvania and who have graduated from a four-year program in a college approved by the Pennsylvania Board of Education may sit for the CPA examination The degree program of the University is so approved
Graduates may sit for the CPA examination in other states, among which are New Jersey and New York

COURSE PREREQUISITES - see p 95

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 in decision making Students will develop a basic understanding of the external reporting requirements by study of financial statements, including the balance sheet, income statement, and statement of cash flows Prerequisites QMSIS 182

215 Managerial Accounting 3 cr
Provides an introduction to cost concepts, product costing systems, budgeting systems, and the development of accounting data for internal management decisions Prerequisites Accounting 214 and QMSIS 182

216 Accounting Practice and Systems 3 cr
Develops a sound understanding of the practices and procedures used to process accounting information Emphasis is placed on both manual and computerized information systems Prerequisites 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, 215, 216

314 Advanced Accounting 3 cr
Activities studied include partnerships, consolidations, foreign exchanges, governmental and nonprofit accounting Prerequisites Accounting 311, 312

315 Cost Accounting 3 cr
Addresses the use of accounting information for purposes of cost determination, cost control and cost analysis Topics include cost terminology, cost behavior, job order costing, process costing, cost allocations, and standard costing Prerequisites Accounting 213, 215

411 Auditing 3 cr
Standards and procedures employed by auditors in the examination of financial statements for the purpose of rendering an opinion are studied and evaluated Case problems are used to demonstrate the application of the principles studied Prerequisites 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 units Principle topics include returns, rates, exemptions, income, deductions, sales and exchanges of assets, and credits Prerequisites Accounting 214 and 215

414 Corporate and Partnership Taxation 3 cr
Acquaints the student with the principles of taxation as applied to corporations, shareholders, partners and partners Prerequisite Accounting 412

419 Seminar in Accounting 3 cr
Designed to develop a student's ability in technical expression, deepen understanding of accounting theory, and acquaint the student with contemporary accounting problems and literature Prerequisite Accounting 314

ECONOMICS CURRICULUM
The Economics curriculum is designed to give a broad understanding of the United States and international economies and to develop in students a capacity to think systematically about a wide range of social and economic problems An ability to think analytically and to write concisely are stressed in courses in Economics

COURSE PREREQUISITES - see p 95

121 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 of the economics of current economic issues Not counted toward a degree in the School of Business Administration

211 Principles of Economics I 3 cr
Microeconomics acquaints the student with the concepts and logical basis to economic reasoning, Emphasis is placed on understanding the behavior of households and firms under competitive and imperfectly competitive conditions in both output and resource markets

212 Principles of Economics II 3 cr
Macroeconomics is concerned with aggregate economic relationships These include theories of national income determination and the interactions among domestic and foreign economies Monetary and fiscal policies and their implications for inflation, unemployment, economic growth and foreign exchange are analyzed

223 Global Economic Perspectives 3 cr
Uses 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 Economics 221 and 222

321 National Income Analysis 3 cr
A conceptual analysis of national income theory, its tools, its basic principles and its social and economic significance Emphasis is placed on developing an understanding of the gross domestic product and its components, the national savings, and the national income accounting system Prerequisites Economics 221 and 222

322 Price and Production Economics 3 cr
An intensive study of the theory of demand, production, and costs among imperfectly competitive firms with an emphasis on the firm's decision-making process Prerequisites Economics 221 and 222

323 Money and Banking 3 cr
A study of the organization and management of government financial affairs and expenditures. Emphasis is placed on monetary theory, money, credit, and income determination. Prerequisites Economics 221 and 222
427 Theory of Economic Development 3 cr
Explores the nature of development and problems of measurement, theories of development, factors and forces affecting economic growth, different approaches to a higher standard of living, and problems of domestic and international stability Prerequisite Economics 221 or 222

429 Seminar in Economics 3 cr
Provides a vehicle for the advanced student to investigate separate subject areas in the field of Economic Theory The seminar procedure will stress written and oral reports Prerequisite Permission of the instructor

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 international monetary system, and fixed versus flexible exchange rates Prerequisites Economics 221 and 222

FINANCE CURRICULUM

Students who look forward to careers in finance may select a program of courses in any one of these areas securities and investments, corporate finance and financial analysis,

The professional designation of Chartered Financial Analyst (CFA) is used by those in the securities industry Suggested courses for students interested in working toward this designation are Finance 331, 335, 336, 337, 338, 339, and 433

Finance 333, 334, 335, 432, 434, and 437 are suggested for students whose career interests lean toward corporate financial analysis.

For students with an interest in Real Estate or Insurance, electives are offered in these areas.

Finance students are required to take Accounting 216 Accounting 311 and 312 are strongly recommended

COURSE PREREQUISITES - see p. 95

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, working capital management, cost of capital and the impact of inflation on the value of the firm Prerequisites Accounting 214 and 215, and QSMIS 281

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, the Savings and Loan crisis, financial intermediation, etc

333 Financial Management 3 cr
Provides a theoretical or conceptual framework through which financial managers can use to research decisions Focuses on fundamental choices and compromises involving risk and return Prerequisite Finance 331

334 Risk Management 3 cr
A study of the broad spectrum of risk exposures in business enterprises, 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 Business Financial Problems 3 cr
The aim of this course is to provide a vehicle in which the student can utilize material from previous courses to solve problems of a financial nature Using case studies, the student is expected to be able to identify problems, reach conclusions, recommend solutions, and identify implementation techniques

Prerequisites Finance 331 and 333

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 principles which underlie the securities traded and the types of information necessary to the decision-making process of the investor Prerequisite Finance 331

337 Investment Analysis 3 cr
Develops an understanding of the various types of portfolio investments Quantitative and descriptive approaches used in portfolio development and risk management are considered Techniques for measuring the effectiveness of the portfolio are illustrated Prerequisites Finance 331 and 336

338 Futures and Options 3 cr
Designed to develop an understanding of futures and 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 analyses

Prerequisites Finance 331 and 336

339 Fundamentals of Real Estate 3 cr
A study of the problems involved in financing residential and industrial real estate from the points of view of both owner and lender Prerequisite Finance 331

341 Real Estate Investment Analysis 3 cr
Emphasis is on the estimation and revenues/expense and risk/return relationships in investment valuation of realty and the effects of financing, income taxes, and equity selection upon investment profitability Prerequisite Real Estate 339

342 Credit Management 3 cr
Provides an understanding of the function of credit management Students will have the opportunity to integrate knowledge from financial sources with that of other disciplines to arrive at a logical, sound credit decision Prerequisite Finance 331

343 Financial Markets 3 cr
An extensive and intensive study of the marketplace within which the financial needs take place Financial institutional structures are emphasized as they act and interact when serving as sources or intermediaries and users of funds for both short-term and long-term capital Prerequisite Finance 331

344 Life Insurance 3 cr
Analyzes the various forms of life insurance and annuity contracts, with emphasis upon their functions as instruments of estate creation and administration Uses of insurance in connection with bank loan partners and key persons are explored Prerequisite Finance 331

345 Property and Liability Insurance 3 cr
A study of business and personal applications of casualty, fire, and liability coverages in the form of both insurance and bonding, including the fields of real estate, banking, life insurance, and liability, burglary, robbery and theft, automobile, credit and title insurance, fire and related lines, fidelity and surety bonding, and relevant aspects of inland and ocean marine Prerequisite Finance 331

346 Real Estate Valuation 3 cr
The principles and methods of appraising single-family homes The market approach, cost approach and gross-income multiplier approach are presented Prerequisite Finance 339

347 International Financial Management 3 cr
Provides a conceptual framework within which the key financial decisions of the multinational firm can be analyzed Emphasis is placed on working capital management, capital budgeting, cost of capital and financial structure, and evaluation and control of operations In addition, exchange risks and political risks are examined extensively Prerequisite Finance 331 Recommended prerequisite Economics 442

438 Property Management 3 cr
A survey course intended to provide an introduction to effective management, marketing and leasing techniques as they are applied to commercial real estate Prerequisites Real Estate 338 and Management 361

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

440 Urban Land Economics 3 cr
See Economics Curriculum

357 Real Estate Law 3 cr
See Pre-Law Curriculum

HUMAN RESOURCE MANAGEMENT CURRICULUM

The objective of the Human Resources Management curriculum is to provide students with the opportunity to acquire specialized knowledge and applicable skills necessary to function as professionals in Human Resources, Personnel, Labor Relations, Training and/or Compensation and Benefits.

For a concentration in Human Resource Management, students will take HRM 345, 346, 461, 466, 468, and Law 456, plus three of the following: HRM 445, 463, 466, 468 Management 346, 462, 463, 466, Internship 401, Field Study 494, and Economics 420 Non-business electives recommended for this concentration are English 383 or 385, History 472, Communications 102, 103, 202, 205, 304, 310, 402, 417 or 421, Psychology 103, 223, 226, 320, 328, 340, 361, 392, or 432, Sociology 101, 205, 208 or 218, Philosophy 105, 106 or 107, Theology 353

COURSE PREREQUISITES - see p. 95

364 Human Resource Management 3 cr
Explores human resource functions and services provided by an organization's Personnel/ Human Resources Department Among the topics covered are human resource planning and systems, job analysis, job evaluation, recruiting, selection, performance appraisal, compensation, benefits, training and development, career planning, attitude surveys, occupational safety and health, employee relations, labor unions, international personnel relations, and equal employment opportunity Prerequisite Management 361

365 Industrial Relations 3 cr
Provides a conceptual framework within which the key financial decisions of the multinational firm can be analyzed Emphasis is placed on working capital management, capital budgeting, cost of capital and financial structure, and evaluation and control of operations In addition, exchange risks and political risks are examined extensively Prerequisite Finance 331 Recommended prerequisite Economics 442

438 Property Management 3 cr
A survey course intended to provide an introduction to effective management, marketing and leasing techniques as they are applied to commercial real estate Prerequisites Real Estate 338 and Management 361

456 Legal Aspects of Human Resource Management 3 cr
See Pre-Law Curriculum

461 Human Relations and Teamwork 3 cr
An advanced, experiential Organization 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, listener...
183 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 strategy resource. Database applications as they relate to the organization are emphasized. Prerequisite: QMSIS 182

382 Information Technology with Programming 3 cr
Prerequisite: Those already have experience with 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 life processing techniques. Prerequisite: QMSIS 383

383 Human Computer Interaction 3 cr
Comprehensively addresses the issue of user-computer interfaces. The operator-system interaction is investigated from technical, cognitive, and social perspectives. Uses commercial design tools to analyze and design computer interfaces. Prerequisite: QMSIS 183

3844 Decision Support System 3 cr
The role of information systems in supporting management decision-making is analyzed. Students will have an opportunity to develop decision models to support the various levels of management. Types of decision support systems, tools ranging from spreadsheet through expert systems will be analyzed. Groupware applications are also discussed. Prerequisite: QMSIS 183

385 Computer Systems 3 cr
A detailed survey of current issues and technologies in business organizations. Covers technical aspects of operating systems, multi-media, Internet interface development, telecommunications and other emergent technologies. Prerequisite: QMSIS 183

386 Computer Simulation 3 cr
Provides an orientation to the design and implementation of simulation models as a means of studying the behavior of a system. The student is required to develop models and simulate for the purpose of management decision making. Popular simulation software is used to construct general purpose simulation models as well as financial system models. Prerequisite: QMSIS 183

481 Systems Analysis and Design 3 cr
A detailed study of all phases of the system life cycle with emphasis on structured analysis and design techniques. Case studies are used to generate detailed data flow diagrams. The issues involving conversion, testing, training, documenting, maintenance, and managing a system are addressed. Prerequisite: QMSIS 183

482 Database Management 3 cr
Focuses on the theory, derivation and development of the entity data model using entity relationship modeling and a commercial database management system. Emphasis is on the principles of data modeling, data organization and resource issues in database design. Prerequisite: QMSIS 382

483 MIS Project 3 cr
Students are expected to use and techniques learned in prior MIS courses to develop an information system using Computer-Aided Software Engineering products and foliate generation languages. Students design and implement a project chosen from the local business or university community. Students work in teams toward a solution. Prerequisites: QMSIS 481 and 482

484 Networks and Telecommunications 3 cr
Develops the student's understanding of the importance of an opens systems approach, such as OSI and contrasts it with several proprietary ones, like IBM's SNA and TCPI/IP. Using the OSI model as a base, students learn fundamentals of physical components, error detection and correction, line disciplines and network addressing. Special emphasis is placed on local area networks and connecting them to organizational networks. Prerequisite: QMSIS 385

485 EDG Audit and Control 3 cr
Prerequisite: Presents EDG auditing standards with a blend of systems concepts and applications. Techniques for testing computer programs, files, and processing systems are presented. Special attention is devoted to the particulars of auditing on-line, real-time systems. Case studies and generalized audit software are used to create a simulated audit environment. Prerequisite: QMSIS 183

INTERNATIONAL BUSINESS CURRICULUM

The International Business curriculum provides students with the skills necessary to compete in the international dimension of business activities. During the course of studies, students will develop an understanding of the internationally business and will increase their foreign language competence and understanding of other cultures as they relate to business operations.

For a concentration in International Business, students will take International Business 341, Finance 437, Economics 442, Marketing 443, and Law 484 plus three of the following: International Business 342, 444, 446, Management 445. Students must also take 12 hours of credit in a language. Students can request a waiver of the language requirement if: (1) They successfully pass the level test, (2) They successfully pass the level test, or (3) They study abroad and demonstrate proficiency through the 200-level of a language. (2) Students pay for an independent service to test for language proficiency. Students may request a waiver of the language requirement if: (3) They are native language speakers of a language other than English, (4) Students have taken language courses at another University and are able to pass the language proficiency test.

Prerequisites: University and are able to pass the language proficiency test.

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Prerequisites: University and are able to pass the language proficiency test.
LOGISTICS MANAGEMENT CURRICULUM
The Logistics Management concentration prepares students to assume roles as logistics 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 Logistics, students will take Strategic Logistics Management 469, Marketing 375, 472 and 474, plus four of the following: International Business 341, Law 353, 354 and 355, and Business Internship 401.

COURSE PREREQUISITES - see p 95

375 Business Logistics 3 cr
See Marketing Curriculum

469 Strategic Logistics Management 3 cr
Strategic Logistics Management is the capstone course in the Logistics concentration. The course will require students to apply concepts learned in previous courses. The course is designed to deal with issues of inbound logistics including purchasing and materials management, internal logistics including inventory management, and outbound logistics including distribution resources planning.

Prerequisites QSMIS 284 and 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 total quality management strategies 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.

427 Transportation 3 cr
See Marketing Curriculum

474 Purchasing Management 3 cr
See Marketing Curriculum

MANAGEMENT CURRICULUM
The Management curriculum prepares students for careers in the management of business and not-for-profit organizations. The curriculum provides students with thorough and current understanding of the organization, skills and competencies needed for managing enterprises effectively, an appreciation of the roles managers perform in all functional areas of business, and the ability to analyze and develop solutions to typical managerial issues.

For a concentration in Management, students will take Management 366, Marketing 478, QSMIS 481, plus five of the following: Management 465, 493 and 494, International Business 341, Human Resource Management 364, 365, 461, 463 and 466.

COURSE PREREQUISITES - see p 95

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.

366 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.

371 Introduction to Marketing 3 cr
Introduces the fundamentals of salesmanship and the problems confronted by the sales manager. Emphasis will be placed on developing an understanding of production planning, pricing, market analysis and specific management techniques to assist in the management of the sales force, recruitment, selection and ethical considerations. Prerequisite Marketing 371.

372 Transportation 3 cr
The fundamental principles of transportation management are applied to the movement and storage of goods and materials. Emphasis is on the role of transportation in the overall management function of logistics.

Prerequisites QSMIS 281 and 284, and Management 361.

474 Purchasing Management 3 cr
An introductory course on the principles of purchasing and materials management. Topics covered include the profit-generating potential of purchasing, the role of purchasing in total quality management, the price versus cost distinction, supplier selection and evaluation, inventory management, value analysis, and just-in-time purchasing.

Prerequisites Management 361, Marketing 371.
Franchising and the Changing Retail Environment

Market research, store location, services retailing,

Focuses on retail management from a strategic viewpoint. Differences between the retail and industrial sectors are discussed. The student will take Law 353, 354, and 355 as well as electives offered in this concentration.

COURSE PREREQUISITES - see p 95

PRE-LAW CURRICULUM

The objectives of this curriculum are:

1. To provide students with the opportunity to develop an understanding of the fundamental legal aspects that operate within the legal environment of business. This sequence is focused on the application of substantive legal rights and duties to the analysis of business and economic problems.

2. To provide solid preparation for the professional study of law. See three-year Bachelor's/jD, p 91.

For a concentration in Pre-Law Studies, the students will take Law 353, 354, and 355 as well as electives offered in this concentration.

COURSE PREREQUISITES - see p 95

251 Business Law

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

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.

354 Commercial Transactions

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

A course which focuses on various legal matters pertaining to the creation and termination of corporations, franchises, partnerships, agency, and other business entities. Prerequisite: Law 251.

357 Real Estate Law

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 borrowers and lenders. Prerequisite: Law 251.

453 Administration of Legal Systems

Study of the legal system and the procedures by which legal rights and duties are enforced and enforced. Prerequisite: Law 251.

SPORTS MARKETING CURRICULUM

The Sports Marketing Program provides a working understanding of the role of marketing in sports and sports-related organizations. The student will be able to apply theoretical concepts to real world experiences and develop an understanding of the legal environment of sports management. This sequence is focused on the application of substantive legal rights and duties to the analysis of sports and athletic organizations. The student will take Marketing 373, 374, 375, 476 or 479 and 477 plus three of the following: 376 Sports Marketing and Promotion, 377 Sports Management, 470 Legal Environment of Sports Management and Marketing, and 471 Special Topics in Sports. In addition, students will take Media and Sports and Media Sports Relations in the Department of Communications.

COURSE PREREQUISITES - see p 95

376 Sports Marketing and Promotion

This course will provide an intensive evaluation of marketing principles and promotional strategies. In addition, the topical coverage will include the marketing mix, new product strategy and services, interactive promotion, event 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. Prerequisite: Marketing 371.

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, royalties, rights and licensing issues will be covered. Prerequisite: Law 251.

471 Special Topics in Sports

This course will focus on specialized areas of interest designated 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. Prerequisite: see Management Curriculum.
School of Education

Administration

Interim Dean
James E. Henderson, Ed. D.

Chair, Department of Elementary
Secondary, and Reading Education
William P. Barone, Ph. D.

Chair, Department of Counseling
Psychology, and Special Education
Joseph F. Maola, Ph. D.

Chair, Department of Foundations
and Leadership
Rick R. McCown, Ph. D.

Chair, Department of Educational Services
Frank M. Ribich, Ed. 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, and elementary education, 1939. Guidance, 1952, school administration, special education, 1964, reading specialist and reading supervisor, 1969, school psychology, 1969, early childhood education, 1975, school supervision, 1976.

SELECTION AND ADMISSION

Candidates who express a desire to become teachers are admitted to the School of Education through the University Office of Admissions (apply to Dean of Admissions, Duquesne University, Pittsburgh, PA 15282). The curriculum for the first two years is devoted to the broad learning in general and basic professional education and beginning course work in a major discipline or area of concentration. Students are expected to demonstrate personal and professional characteristics, attitudes, and competencies that will recommend them as worthy candidates for the teaching profession.

PROGRAMS

The School of Education has program approval from the Pennsylvania Department of Education for the preparation of Elementary, Secondary, and Special (teaching the mentally and/or physically handicapped) Education teachers. Also, in consortium with Carlow College, students can become certified teachers. In addition to the professional program, the undergraduate study program culminates in student teaching. The undergraduate experience in the School of Education includes the following professional courses: admission to the School, student teaching in the classroom setting or other approved setting, field experiences, and professional supervision from the University and from the Pennsylvania Department of Education.

The undergraduate experience in the School of Education culminates in student teaching. Students must complete all the following requirements for student teaching:

1. The Instructional I (Provisional) Certificate in Pennsylvania
2. Admission to graduate programs in education

The last 30 credits of the degree must be earned at Duquesne University. The minimum number of credits for graduation is 120.

DEGREE

The School of Education offers the Bachelor of Science in Education degree.

CURRICULUM

General Education. The School of Education requires completion of general education which includes courses in the humanities, social sciences, natural and behavioral sciences, and theology. The University Core Curriculum requirements are fulfilled within the General Education Program.

Professional Education. The basic professional education program introduces the student to the teaching profession through study of the principles and practices of education and the learning process. Specialized courses provide preparation in teaching techniques and methods required for specific fields of concentration—elementary, secondary, special (mentally and/or physically handicapped), or early childhood education.

Professional Laboratory Experiences. The School has developed broad and diversified professional laboratory experiences designed to provide opportunities for observing and working with children and youth. These include:

1. Planned observations in public and private schools, agencies, institutions and educational settings
2. Teacher aide and tutorial experiences
3. Student teaching in an approved setting for an entire semester

All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agency.

GENERAL EDUCATION

The following courses in the arts and sciences are an integral part of each certification program.

Required Courses Credits
English Area 12
Core Writing 6
English Elective 3
Communication Area (Speech, Journalism, English) 3

SCHOOL OF EDUCATION

Math/Science

121 Problem Solving with Creative Mathematics 3
125 Fundamentals of Statistics 3
172 Chemistry 3
173 Physics or higher level courses 3
Social Sciences 12
141 Social, Political and Economic Systems 3
151 Shaping of the Modern World 3
161 The Arts and The Human Experience 3
486 Historical Geography 3

TEACHER EDUCATION CORE

The Teacher Education Core focuses on the knowledge-base that underlies effective teaching. The theoretical principles that constitute the knowledge base are not only studied but applied to teaching practice in a variety of ways. One way in which students are given opportunities to apply theory in practice is through field experiences which begin in the freshman year. The Teacher Education Core is designed to develop the knowledge, skills, and values undergraduates will need for success in the teaching profession.

Courses (Required in All Programs) Credits
101, 102 Introduction to Education I, II 1, 1
201W, 202W Educational Psychology I, II 3, 3
211 Instructional Planning & Assessment 3
290 Professional Development Seminar/Inclusion 1
291 Professional Development Seminar/Diversity 1
322 Instructional Media 2
324 Cultural Diversity in Education 2
326 Teaching Students with Special Learning Needs 3
*327W Developmental Issues in the Management of Elementary Classrooms 2
*328W Developmental Issues in the Management of Secondary Classrooms 2
329 Society, Politics, and the Teaching Profession 3
390 Professional Development Seminar/School Culture 1
391 Professional Development Seminar/Classroom Interaction 1
*Students take 327 and/or 328, depending on the area of certification

In Early Childhood Education, 327, 328, 390, and 391 are not required.

STUDENT TEACHING

The undergraduate experience in the School of Education culminates in student teaching. Students must complete all of the following requirements for student teaching:

1. Autobiographical Data Sheet on file
2. Placement Preference Sheet on file
3. Two faculty recommendations
4. Tuberculosis test on file
5. Act 34 Clearance on file
6. Removal of all I and F grades
7. Completion of all methods courses
8. Completion of all Undergraduate Teacher Education Core courses
9. Minimum QPA of 2.5 in major concentration
10. Minimum QPA of 2.5 in General Education course work
11. Minimum QPA of 2.5 in Undergraduate Teacher Education Core
12. Minimum QPA of 2.5 in Professional Preparation courses
13. Minimum overall QPA of 2.5
14. Successful completion of the General Knowledge and Communication tests of the Pennsylvania Test of Educational Factual Knowledge and Skills
15. Completion of all General Education requirements

EARLY CHILDHOOD EDUCATION

This is a cooperative program, approved by the Pennsylvania Department of Education, with Carlow College. Some of the professional courses are offered only on the Carlow campus.

PROFESSIONAL PREPARATION

Required Courses — Carlow College

201 Orientation to Early Childhood Education 3
203 Child Development 3
307 Curriculum & Methods for Early Childhood Education with Practicum 4
311 Infant and Toddler Programming 3
312 Working with Children with Special Needs and Practicum 3
404 Nursery School Student Teaching & Seminar 6
406 Primary Student Teaching & Seminar 6
SCHOOL OF EDUCATION

Required Courses — Duquesne University 16
231 Teaching Physical Education in Elementary Classroom 1
233 Teaching Health in Elementary Classroom 1
237 Teaching Art in Elementary Classroom 1
238 Teaching Music in Elementary Classroom 1
330W Teaching Elementary Language Arts 3
331 Teaching Elementary Social Studies 3
333 Teaching Elementary Science 3
335 Teaching Mathematics — Grades K-4 3
Electives 12

SPECIAL EDUCATION (MENTALLY AND/OR PHYSICALLY HANDICAPPED)
This program is designed to prepare students for teaching persons with mental and/or physical disabilities, including Autism/pervasive developmental disorder, serious emotional disturbance, neurological impairment, specific learning disability, mental retardation, multihandicaps, other health impairment, physical disability.

Professional Preparation Credits
(All Courses Required) 49
231 Teaching Physical Education in Elementary Classroom 1
233 Teaching Health in Elementary Classroom 1
237 Teaching Art in Elementary Classroom 1
238 Teaching Music in Elementary Classroom 1
276W Assessment in Special Education 3
325 Teaching Reading — Primary 3
330W Teaching Elementary Language Arts 3
333 Teaching Elementary Science 3
335 Teaching Mathematics — Grades K-4 3
336 Teaching Mathematics — Grades 5-8 3
485 Children’s Literature 3
491 Student Teaching 9

ELECTIVE CREDIT HOURS (Total) 12

SCHOOL OF EDUCATION

TWO DEGREE PROGRAM FOR MATHEMATICS AND EDUCATION
The School of Education and the College of Liberal Arts, Department of Mathematics, have approved a program of studies leading to a B.S. in Education and a B A or B S in Mathematics. The program provides options for students wishing to be certified on the secondary level in mathematics while completing a Bachelor’s degree in mathematics.

Professional Preparation Credits
(All Courses Required) 49
497 Reading in the Secondary School 3
341 Teaching Secondary Social Studies 3
431 Teaching Secondary Science 3
434 Teaching Secondary Foreign Languages 3
436 Teaching Secondary Social Studies 3
491 Student Teaching 12

*No student may register for additional course work during the student teaching semester without permission from the Committee on Student Standing.

DUAL CERTIFICATION
Through advisement, a student may complete requirements in two certification areas, such as elementary/early childhood, elementary/secondary, elementary/special education. Such programs require additional course work beyond the 120 semester-hour requirements for a degree to meet standards promulgated by the Pennsylvania Department of Education. Student teaching in both areas is offered during the student’s final semester.

SECONDARY EDUCATION
In addition to completing the requirements in the General Education Core and 27 in the Teacher Education Core, a student must complete the following 50 credits, 18-19 in Professional Preparation, 2-4 in electives and a minimum of 30 in an Arts or Sciences area to satisfy requirements for the degree and certification.

Professional Preparation Credits
(All Courses Required) 18 or 19
497 Reading in the Secondary School 3
Specific Methods Course 3
341 Teaching Secondary Social Studies 3
342 Teaching Secondary Science 3
343 Teaching Secondary English 3
434 Teaching Secondary Foreign Languages 3
436 Teaching Secondary Social Studies 3
491 Student Teaching 12

*No student may register for additional course work during the student teaching semester without permission from the Committee on Student Standing.

CLASS ATTENDANCE
The School of Education faculty has determined that the following policy will be in effect for the School of Education and will be adhered to by all professors who teach undergraduate courses. It is presumed that each student in a professional course will normally attend every session. The maximum number of unexcused absences permitted is equated in hours, not in periods the class meets. In other words, a student may miss three hours of class time in a three-credit course.

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. The organizations are

Duquesne University Chapter of the Council for Exceptional Children, state and national student organizations in Special Education
Duquesne University Student Education Association, a student chapter of the National Education Association
Kappa Delta Epsilon, national education sorority

HONOR AWARDS
These awards, presented at the annual Honors Days Convocation, are open to undergraduates in the School of Education.
Faculty Award for General Excellence in Early Childhood Education
Faculty Award for General Excellence in Elementary Education
Faculty Award for General Excellence in Secondary Education
Faculty Award for General Excellence in Special Education
Kappa Delta Epsilon National Professional Education Sorority Award for outstanding member of Alpha Kappa Chapter
Kappa Delta Epsilon National Professional Education Sorority President’s Award
William P. Faith Memorial Award to a sophomore student for demonstrated potential for excellence in teaching.

Lawrence A. Roche Memorial Award to a junior student for general excellence in the School of Education.

Philip C. Nielsens Memorial Award for outstanding achievement in the School of Education.

Margorey Eyles Sullivan Award to a junior who demonstrates exceptional promise in special education.

Council for Exceptional Children Award for outstanding work in the organization.

COURSE DESCRIPTIONS

TEACHER EDUCATION CORE

101, 102 Introduction to Education I, II 1 cr
Introduces students to the profession of teaching for the purpose of self-assessment and career exploration. Orients the student to teacher certification issues. Includes field experiences.

201W, 202W Educational Psychology I, II, III 3 cr
Surveys theory and research which demonstrate how psychological principles contribute to the classroom environment of students. The principles are derived from human development, learning, motivation, instructional planning, classroom management, and evaluation (201 is a prerequisite for 202).

211 Instructional Planning and Assessment 3 cr
Examines course, unit, and lesson planning, issues in the selection of materials and delivery system, and the evaluation of learning experiences. Focuses on the planning, delivery, and evaluation functions required of all teachers. (Prerequisite: 201).

290, 291 Professional Seminar 1, 1 cr
Provides an opportunity for students to reflect critically on their developing knowledge base and their practical experiences. The seminar is designed to foster personal as well as professional growth in anticipation of student teaching and entry into the profession.

322 Instructional Media 2 cr
Examines the use of computers and other electronic technologies as tools for planning, delivering, and evaluating instruction. The goal of the course is to enhance the integration of technology into classroom practice.

324 Cultural Diversity in Education 2 cr
Examines how the cultural differences among students influence the nature and extent of their progress in school. Understanding of the cultural background of students is sought in order to determine effective teaching practice.

326 Teaching Students with Special Learning Needs 3 cr
This course is designed to provide an overview of critical issues and strategies related to educating students with special learning needs. The course content focuses on historical and legal foundations of special and inclusive education and diverse developmental characteristics of students with disabilities and strategies for accommodating in the general education environment.

327W Developmental Issues in the Management of Elementary Classrooms 2 cr
Investigates closely the psychological characteristics of children from preschool-junior high grades and the developmental issues they face. The course focuses on how to manage learning environments in developmentally appropriate ways.

328W Developmental Issues in the Management of Secondary Classrooms 2 cr
Investigates closely the psychological characteristics of students from junior high-school grades and the developmental issues they face. The course focuses on how to manage learning environments in developmentally appropriate ways.

329 Society, Politics, and the Teaching Profession 3 cr
Focuses on the history of schooling as a function of society, the political interests of the state in the educating of its citizens, and the legal dimensions of education. The intent is for aspiring teachers to understand the organizational culture of their chosen profession.

390, 391 Professional Seminar 1, 1 cr
Continues the opportunity for students to reflect critically on their developing knowledge base and their practical experiences. The seminar is designed to foster personal as well as professional growth in anticipation of student teaching and entry into the profession.

400, 481 Independent Study 1-3 cr
With permission of an instructor and approval of the Dean, seniors may pursue in-depth study of a subject area or engage in individual projects related to their professional goals.

EARLY CHILDHOOD EDUCATION

201 Orientation to Early Childhood Education 3 cr
Examination of the history of child development and practices of early education, culminating in an overview of theoretical issues influencing practice in the field today. Development of the student's observational skills, completion of on-site observations in early educational settings, defining the role of the Early Childhood Educator, and developing a personal philosophy (Fall semester only).

203 Child Development 3 cr
In-depth examination of the development of the child from birth-eight years in physical, intellectual, social, and emotional areas of growth. Methods of recording and assessing growth of young children will be examined and utilized and a term project based on readings and observations will be required (Spring semester only).

307 Curriculum and Methods for Early Childhood Education with Practicum 4 cr
Study of curriculum methodology and implementation in nursery, kindergarten, and primary settings. Students will design environments and enact active strategies for language development and reading, art, music, play, social studies, science and math for children 3-8 years. A weekly practicum in an early education classroom as an integral part of this course. Prerequisites: EC 201 and 203 (Fall semester only).

311 Infant/Toddler Program 3 cr
Examination of social needs, program design and curriculum implementation of day care services for children birth-8 years. Topics include research on working families, program design, environmental design and assessment, comprehensive curriculum planning, staffing strategies, parent communication, and research on impact of day care on young children and their families. Weekly practicum required in a child care classroom. Prerequisite: EC 201 and 203 (Spring semester only).

312 Working with Children with Special Needs and Practicum 3 cr
Implementation of current theory and principles of child development within an early childhood classroom that has children with special needs. A variety of children with special needs will be examined through classroom discussion and through written logs about the practicum experience. Students will begin with a wellness model and learn to capitalize on the strengths of each child. Whenever possible, students will use a developmental model and developmentally appropriate practices as they work in a classroom that has children with special needs. Prerequisites: ED 201, EC 203, ED 202, FY 308 before or during this class.

404 Nursery School Student Teaching and Seminar 6 cr

406 Primary Student Teaching and Seminar 6 cr
The student teaching experience involves the prospective teacher in a Nursery School setting and in a primary classroom for eight weeks each. The student assumes teaching responsibilities, applies theory/practice and develops a personal teaching style under the direct supervision of the cooperating teacher and college supervisor. Verification of student competency will be determined jointly by both the cooperating teacher and the college supervisor. Student teachers return to campus one afternoon a week for seminar with the college instructor. This seminar provides classroom discussion of various student teaching experiences as well as analysis of the goals, program designs and curricula of the various early childhood programs in which student teaching is completed. Pertinent topics related to ongoing professional development will be included. No other credits may be taken while the student is involved in 404 and 406 without special permission of the Director of Early Childhood Education.

ELEMENTARY EDUCATION

231 Teaching Physical Education in Elementary Classroom 1 cr

233 Teaching Health in Elementary Classroom 1 cr

237 Teaching Art in Elementary Classroom 1 cr

238 Teaching Music in Elementary Classroom 1 cr
An introduction to the basic principles and concepts of teaching physical education, visual arts, health, and music to children of elementary school age, including exceptional children.

325 Teaching Reading in the Primary School 3 cr
Mayer emphasis is on the pre-school, emergent literacy, and primary grades. Content deals with language, experiential, cognitive, and perceptual development in young children and their relationship to the beginning reading program. In addition, consideration will be given to the basic reading skills which comprise the first three years of a developmental reading program techniques of individualizing instruction, evaluating and reporting pupil progress.

326 Teaching Reading in Intermediate and Middle Schools 3 cr
Focuses on the transitional period in a developmental reading program in which reading becomes a tool to be used in each content area. In addition to continuing reading skills in the developmental reading program, specialized reading and study skills, necessary for students to function in social studies, science, language arts, mathematics, and other content areas, will be presented. Techniques of determining readability of materials, individualizing instruction, evaluating and reporting pupil progress are also studied.

330W Teaching Elementary Language Arts 3 cr
Presents psychological principles and historical perspective in the language arts, the foundation on which a good language arts program should be built. Four skills—listening, speaking, reading, writing— as acquired by the child, combined with knowledge of the evaluative process, teaching methods, and materials, provide a realistic approach to teaching language arts and reading experience.
333 Teaching Elementary Social Studies 3 cr
Emphasizes the design, delivery and evaluation of effective social studies plans and units Higher level thinking processes, values and moral development, and classroom management are explored in small group simulations

333 Teaching Elementary Science 3 cr
Study of theories, techniques, practices, and content of the science area. Accent is on discovery and inquiry instructional styles, organizing for learning

335 Teaching Mathematics in Grades K-4 3 cr
Examines mathematical concepts and skills taught in grades K-4, teaching strategies and methods that are developmentally appropriate for early grades

336 Teaching Mathematics in Grades 5-8 3 cr
Examines mathematical concepts and skills taught in grades 5-8, teaching strategies and methods that foster reasoning and mathematical thinking

480 Sensor Project 3 cr
A capstone experience in which seniors engage in an indepth investigation or pursue a special project related to their area of specialization Requires sponsorship by an instructor and approval of the Chairman

484 Children’s Literature 3 cr
A general survey of books and other printed materials for children; criteria for the evaluation and analysis of the children’s books, types of books available, considered in terms of interest, needs, and abilities of children

485 Problems in Teaching Reading 3 cr
Reading difficulties in elementary and secondary school levels, discussion of classroom and clinical procedures in solving reading problems, diagnostic and corrective techniques, and materials for the classroom teacher, reading improvement programs, special unit on reading problems of the special needs students (Spring and Summer)

490, 491 Student Teaching — Elementary 9,12 cr
Student teaching in an approved elementary school under the direct supervision of a cooperating teacher Prerequisites Senior status, good academic standing, completion of required professional courses, and recommendation of faculty

493 Student Teaching — Elementary 6 cr
Student teaching in elementary education for students who wish to complete requirements in two certification areas Registration is concurrent with Ed 490-Secondary or Ed 490-Special Education

SCHOOL OF EDUCATION

SPECIAL EDUCATION

387 Severe Disabilities 3 cr
Evaluation, integration, and implementation of theoretically based methodologies, curricula, adaptive instructional techniques and procedures for persons with severe disabilities Current legislation is also analyzed Students will develop skills to facilitate the success of students with severe disabilities in inclusive education programs Prerequisites 326, 276, 385

388 Transition to Adult Life 3 cr
This course provides an overview of secondary curricular practices, issues in planning and implementing a transition plan, interagency collaboration, as well as, support issues regarding all aspects of adult life for persons with disabilities, including the impact of the Americans with Disabilities Act

478 Advanced Seminar in Special Education 3 cr
Capstone experience for prospective special education teachers focusing on skills for collaboration, specifically in the Instruction Support Team process, a pre-student teaching self-evaluation, and specific career issues

490, 491 Student Teaching — Special Education 9, 12 cr
A full semester of supervised classroom experience in a carefully selected school for mentally and/or physically handicapped pupils Prerequisites senior status, good academic standing, completion of required professional courses, and recommendation of faculty

493 Student Teaching — Special Education 6 cr
Student teaching in special education for students who wish to complete requirements in two certification areas Registration is concurrent with Ed 490-Elementary or Ed 490-Secondary Education

497W Reading in Secondary Schools 3 cr
A survey course in the teaching of reading, appropriate for secondary education majors. Major emphasis is on methods of teaching reading, the materials for evaluating pupil growth in reading and reading in the content subjects (Fall)
SCHOOL OF MUSIC

ADMISSION

Students who wish to major in music should apply through the Office of Admissions. Following this an interview and audition should be scheduled through the Administrator of Music Enrollment. Specific audition requirements are mailed to auditionees. The audition consists of solo performance before a committee, a written theory exam, and an individual aural test. 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 major music students to have a background in theory, piano and certain instrumental skills prior to entering the School of Music. However, exceptions are made 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 three degree programs: the Bachelor of Music 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, opera, media arts or studio recording enroll in the Bachelor of Music program. Students preparing in teaching in any of these areas, certain prerequisites 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.

DEGREE PROGRAMS

The School of Music has well over 80 pianos. The Library Hall is equipped with two Steinway concert grands. Piano majors practice in specially designated rooms that contain grand pianos. Other practice rooms are supplied with studio upright pianos. Many students also practice on such instruments as violins, violas, cellos, and string basses. The Fender Studio is supplied with studio upright pianos. Many orchestral and band instruments are available for instrumental classes.

MUSIC TECHNOLOGY FACILITIES

New technologies such as computers and synthesizers 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 ability and artistry in the use of electronic media.

Duquesne offers a unique program which blends a strong traditional musical education with practical artistic experiences in all phases of music technology. The program is designed for talented students who wish to enhance their flexibility in order to take advantage of the new professional opportunities available to musicians possessing sophisticated music technology skills.

Fender Electronic Studio

Dedicated in the Fall of 1994 the Fender Electronic Studio is a state of the art electronic studio for MIDI recording. A multi-tracked system includes MIDI, computer, and ensemble rehearsal. Featuring Fender channel digital capable board, Fender professional sound reinforcement speakers and poweramp, full line of Fender tube guitar amps and acoustic guitars with Roland GK-2B synch pickups, Fender basses, Alesis Monitor I near-field monitors, DIGiSign's Session Eight, Sample Cell, Sound Designer II, Audiodrome II, Mark Comb Of The Unicorn's Digital Performer, Unisynth, MIDI Time piece II, Opcode's Max and Studio Vision, Coda's Finale, Turbo Symphony, Art and Alesis single processing, Kurzweil K2000 synthesizer, Roland VP-70, Roland TD-7 compact digital Drum Kit, Yamaha G-10 guitar controller, Roland GR-1, GR-9, and VG-8 Guitar systems, Oberheim Matrix 6 analog synth, Fostex 4 Track cassette deck, two Zeta violins, Zeta viola, Zeta cello, Roland SPD8, KAT mallet controller with Kurzweil sound board, Yamaha M-77, and EWI wind controllers, Roland PC200 keyboard controller with Kurzweil, Crawford, two Korg 01W/01D advanced integrated workstations, Yamaha SY77 and DX7/II/DX synthesis, Roland D-70, EMU Proteus 1/2/3 sound modules, Korg XSRG, G Van interactive guitar systems, Ensonic Mirage sampler.

The Recording Studio

Houses a MIDI/Harddisk recording Macintosh Workstation, Digital Performer, Pro Tools 4.0 digital recording studio containing the Otari MX80 with the Otari 34C console, Fostex 8-track tape recorder with MIDI/SMPTE auto loco, Panasonic DAT decks, CEDAR noise reduction, CD mastering and manufacturing capabilities.

Classroom of the Future

A keyboard/computer lab housing 16 Macintosh workstations, each equipped with EMU Proteus 1, Kawai G-Mega general MIDI sound module, Kawai MX8SR mixers, Kawai 330i Digital Pianos, printers, Kawai headphone communication system, Mark of the Unicorn's Fast Lane MIDI interfaces, Performer, Coda's Finale, Practica Musica, Music Lessons, Fiber-optic Internet connections.

The Music Learning Resource Center

A multipurpose learning facility containing ten Power Mac workstations A/V and CD ROM, Macromind Director, Multimeda capabilities with scanners and digital audio Studios, eight Korg OWIFD MIDI workstations, Korg GEC-16 stereo communication system, Moog Rogue, 6 Kawai GB-1 session trimmers, Kawai MX8SR mixers, Mark Of
MUSIC EDUCATION/MUSIC THERAPY

Students completing the course work in music education receive the B.S in M Ed and may be recommended for certification to the PA Department of Education Upon successful completion of the National Teacher Exam (NTE), graduates may receive the Instructional Level I — Music, K-12 certification.

Selection of students for this program depends upon completion of admissions and audition procedures and an interview with a department member. Candidates are expected to demonstrate leadership qualities, excellent communication skills, critical thinking, and analysis ability, and a genuine interest in a service oriented profession.

Post-graduate certification course work in music education is available to those with B M degrees or B S in Education degrees. Audition and/or course requirements are available upon request.

The Bachelor of Science in Music Therapy degree leads to certification as a registered music therapist. In order to receive the Music Therapy degree or its equivalency for certification, all Music Therapy students are required to take a prescribed number and sequence of courses in Music Therapy and give evidence of competency in the field, as determined by the Music Therapy Department in accordance with the National Association for Music Therapy (NAMT) guidelines. Upon completion of the academic requirements, a six-month internship is required, which culminates in registration and eligibility for board examination.

The Bachelor of Science in Music Therapy degree leads to certification as a registered music therapist upon completion of the 6-month internship from one of the National Association for Music Therapy (NAMT)-approved clinical training sites. It consists of 1,040 hours of clinical work supervised by a registered, board-certified music therapist. Upon completion of the internship, application for certification with the NAMT takes place. This qualifies the therapist to sit for the board certification examination.

COURSE DESCRIPTIONS

PERFORMANCE

Applied Music

1-3 cr

Private study of voice, piano, harpsichord, organ, guitar or orchestral instruments

107 Piano Accompanying

1 cr

This course is designed for the undergraduate with the purpose of affording the student instruction in the art of piano accompanying

135 Vocal Coaching

1-2 cr

Individual work with pianist as a supplement to Opera Workshop and/or Applied Music

French, Italian, German for Singers 2 cr each

Rudiments of each foreign language offered on a rotating basis in the fall semester in preparation for the appropriate Diction and Repertory course offered in the following spring

Diction and Repertory 2 cr each

Italian, German, French and English offered on a rotating basis each Spring Semester. All except English preceded by an introductory course in the fall, in the appropriate language.

313 Piano Pedagogy I

2 cr

Students will become acquainted with the techniques and materials for teaching piano at the elementary level. For piano majors, junior standing is recommended.

314 Piano Pedagogy II

2 cr

A continuation of 313 concentrating on the techniques and materials for teaching piano at the intermediate and advanced levels.

996 Junior Recital

0 cr

The candidate for the Bachelor of Music degree must give a recital during the junior year.

400 Recital

1 cr

The candidate for the Bachelor of Music degree must give a recital during the senior year. The recital will be presented to a faculty committee for approval at least one month prior to the date of the performance.

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, various woodwind ensembles, and Electronic Ensemble.

144 Opera Workshop

0-1 cr

A performing class in which students learn standard and other opera repertory in the original languages.

Chamber Music

2 cr

Study and performance of all types of chamber music for various instrumental combinations.
MUSICALIANSHIP

121, 122 Dalcroze Eurhythmics I & II 2 cr each

Experiencing, analyzing, and creatively manipulating the rhythmic and expressive components of music through rhythmic movement, ear-training, and improvisation

131, 132 Theory I and II 2 cr each

These sequential courses are designated to acquaint the student with the harmonic materials of art music of the Western Civilization. For basic knowledge the Baroque-Classical idiom is explored. Harmony is introduced in practical terms, including scales, triads, cadences, sight-reading, and improvisation.

133, 134 Solfege I & II 2 cr each

These sequential courses are designed to develop students’ competencies in the areas of intervals, melodic and rhythmic dictation as well as sight singing in traditional meters and tonalities. Prerequisite: passing the entrance examination to the School of Music.

231 Theory III 2 cr

This semester completes the study of materials of the Baroque and Classical style with emphasis on chromatic harmony and advanced modulation, then introduces some of the most important elements of the Romantic and 20th Century idioms. Class meetings and the elements of teaching are the same as in 131 and 132. Prerequisites: 131 and 132.

233, 234 Solfege III & IV 2 cr each

A continuation of 133, these sequential courses are designed to develop students’ competencies in the areas of intervallic relationships, melodic and rhythmic dictation as well as clef reading and sight singing in traditional tonalities and meters. Prerequisite for Solfege 233: Successful completion of Solfege 131.

235 20th Century Techniques 2 cr

A survey of the melodic, harmonic, and contrapuntal techniques employed by composers in the twentieth century. Readings, analyses, and short creative projects will be assigned.

251, 252 History and Literature of Music 3 cr each

The survey embraces two semesters which are arranged chronologically. These courses seek to provide a broad historical frame of reference within which the relationship of music to the development of man’s thought can be seen clearly, along with a survey and analysis of representative literature.

CONDUCTING

335 16th Century Counterpoint 2 cr

The course is devoted to a study of the polyphonic technique of the 16th Century. The class meets twice a week for lectures, analysis, written assignments, and listening. The species approach is employed. Prerequisite: At least 2 semesters of Theory.

356 18th Century Counterpoint 2 cr

A course study concerned with the contrapuntal technique of the period of J S Bach. Contents include lectures, written assignments, listening, and analysis. Prerequisites: Theory I, II, III.

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.

341 Analysis 2 cr

A course designed to acquaint the student with the formal structure of tonal music, from the smallest components to the most complex full compositions through analysis, performing and listening.

351 Composition 2-3 cr

A course in original creative writing.

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. The course is intended for students preparing for Piano for Music Education but is also open to non-music majors.

111, 112 Piano for Music Education I & II 2 cr each

This class provides students with functional competencies in piano which meet the certification requirements for the PA Dept of Education. It is required of all music education majors. Entrance to the class is on the basis of placement testing.

Advanced Piano Class

For students who wish to focus on vocal or instrumental accompanying and open score reading. Required of non-piano majors in the vocal track in music ed. Prerequisite: completion of Piano for Mus Ed I & II. Also open to non-music majors.

105 Voice for Music Education 2 cr

For all vocal and instrumental track majors. Fundamental techniques of singing, including posture, breath support, tone, diction, interpretation, and repertoire.

173, 174 Woodwind Techniques I, II 1 cr, 2 cr

Introduction to the techniques of clarinet, saxophone, flute, and bassoon, with an emphasis on development of teaching skills.

282, 283 Brass Techniques I, II 1 cr, 2 cr

Introduction to techniques of trumpet, french horn, and low brass, with an emphasis on development of teaching skills.

481 Percussion Techniques 2 cr

Introduction to techniques of percussion instruments with an emphasis on development of teaching skills.

381 String Techniques 2 cr

Introduction to techniques of violin, viola, cello, and bass with an emphasis on teaching techniques.

325 Marching Band Methods 1 cr

An overview of band methods with an emphasis on marching band styles.

Music Education Methods I 2 cr

A multi-faceted course leading to competencies in guitar, recorder, classroom instruments, multicultural music, and mainstreaming. Field experience included.

JAZZ STUDIES

141 Chamber Music - Jazz 2 cr

The purpose of this course is to develop the skills necessary for small jazz ensemble performance. Emphasis is on rhythm section techniques, interaction among the members of the group, and development of repertoire.
MUSIC THERAPY

107 Music Therapy Orientation 3 cr
An introduction to Music Therapy as practiced in a variety of rehabilitation settings. Observations followed by informal group discussions. Basic theory about the validity of music as therapy, the relationship of theory to practice. Intensive class participation will be required to prove qualification for further, in-depth study of the profession.

108 Music in Therapy 3 cr
An introduction to basic methods utilized in therapy settings. Assessment, planning, implementation and evaluation of sessions which will be designed for a variety of populations will be emphasized.

124 Practicum 2 cr
Field placement in a clinical setting for a minimum of 15 hours per semester. Certified music therapists and other specially trained staff who work within the settings assist in the development and growth of the prospective music therapist.

300 Psychology of Music Teaching and Learning 3 cr
A study of physiological, psychological, and sociological aspects of music teaching and learning. Emphasis on current research.

SACRED MUSIC

201 Sacred Choral and Solo Literature 2 cr
A survey of choral and vocal literature for the church with emphasis on practical materials for church choirs, soloists, and congregations.

103 Service Playing 1-2 cr
The objective of this course is to develop the service playing skills necessary to play for church services of all denominations through a study of applied harmony, counterpoint, hymnody, anthem accompaniments, and conducting from the console. Students unable to enroll for this course will study this material in their applied music lesson.

112 Church Music Practicum 1 cr
Seminar in practical aspects of church music, including the church music program in a church, graded chorus systems, children's choirs, instruments in workshop, contracts, cantor systems, worship commissions, etc.

305 Influence of Music on Behavior 2 cr
Reviews different treatment theories and their relationship to music therapy. Emphasizes the effects of music on behavior and total health. Develops a philosophy of music therapy with a background in holistic, health-related professions.

309 Directed Study in Music Therapy 2 cr
Study topics from areas of music therapy, psychol- ogy of music, brain research and other expressive therapies are reviewed and discussed.

310 Recreational Music in Therapy 1 cr
Planning, demonstrating, and evaluating music activities for patient populations served by music therapists. Skills in leading group music activities, circle and square dances. Music Therapy Majors only. Competency in accompanying with guitar or piano is emphasized.

315 Piano Improvisation for Music Therapy 2 cr
Development of functional keyboard skills in improvisation on rhythm and melismatic chords as an aid in non-verbal communication with the handicapped client.

374 Music and Movement for the Exceptional Person 2 cr
A course of study and experience to train the student to use music and movement as a tool to promote therapeutic and educational growth. Focus on developmental needs correlated with appropriate materials and methods.

RECORDING ARTS & SCIENCES

MUSR 101 Introduction to Audio 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.

MUSR 102 Digital Audio 3 cr
Foundations of the recording process. Covered are all aspects of the recording chain and basic procedures for two track and multitrack production. Lab required. Pre-requisite: Introduction to Audio.

MUSR 149 Audio III 2 cr
Individual studio projects with instructor coaching. Pre-requisite: Audio II.

MUSR 153 Audio IV 2 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. Pre-requisite: Audio III.

MUSR 291 Audio Production 2 cr
A study of the fundamentals of electronics dealing specifically with theory and terminology as pertaining to audio. Pre-requisite: Introduction to Audio.

MUSR 300 Digital Audio 3 cr
Students gain experience in CEDAR (Computer Enhanced Digital Audio Recording) techniques for the purpose of soundtrack restoration. Advanced digital techniques and digital signal processing are covered. Pre-requisite: Post Production.

MUSR 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. Pre-requisite: Audio IV.

MUSR 201 Electronics for Audio 2 cr
A study of the fundamentals of electronics dealing specifically with theory and terminology as pertaining to audio. Pre-requisite: Intro to Audio.

MUSR 300 Digital Theory 3 cr
Foundations in digital theory for application in digital audio recording. Study of Analog to Digital and Digital to Analog Conversion are covered as well as storage mediums. Digital terminology is explained.

MUSR 131 Applied Audio 1 cr
Directed individual study in Audio.

RECORDING STUDIOS ARRANGING 2 cr
Musical skills needed for recording studio arranging, conducting, and composition. Focus on the various idiomatic styles (Jazz, Pop, Electronic, and Classical) for musical flexibility. Pre-requisites: Music and Technology, Audio I and Acoustics.

MUSIC TECHNOLOGY

MUTK 140 Introduction to Music Technology 1 cr
An introductory music technology course that develops basic proficiency in music notation software on the MacIntosh.
### SCHOOL OF MUSIC

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUTK 101</td>
<td>Music Technology I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUTK 105</td>
<td>Music Technology II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUTK 201</td>
<td>Music Synthesis I</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUTK 205</td>
<td>Music Synthesis II</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUTK 207</td>
<td>Music Synthesis IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>MUTK 311</td>
<td>MIDI Controller Techniques</td>
<td>1 cr</td>
</tr>
<tr>
<td>MUTK 314</td>
<td>Electronic Orchestration</td>
<td>2 cr</td>
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**MUTK 101 Music Technology I**

An introduction to music technology. Includes basic MIDI theory, computer notation and sequencing, and the history of electronic music (the early years).

**MUTK 105 Music Technology II**

A continuation of Music Technology I, with more advanced applications of MIDI theory, computer notation and sequencing, and the history of electronic music (1945 to the present).

**MUTK 201 Music Synthesis I**

Synthesis and sound design, advanced sequencing techniques on complex workstations, and SMPTE synchronization. Prerequisites: Music Technology I & II.

**MUTK 205 Music Synthesis II**

Advanced sound design, hard disk recording techniques, and introduction to multi-media production.

**MUTK 207 Music Synthesis IV**

Advanced project in music technology which demonstrates expertise in a variety of music technology skills, includes the creation of a professional portfolio.

**MUTK 311 MIDI Controller Techniques**

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. Prerequisite: Music Technology I.

**MUTK 315 Introduction to Composition**

Fundamentals of composition (Class format).

### GENERAL

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>105 Seminar</td>
<td>Registration for Seminar is required of all undergraduate Music majors during most semesters of full-time enrollment. Course matriculation guarantees availability for master classes, student club meetings, and guest lectures held during the Tuesday and Thursday “common hour” periods.</td>
</tr>
<tr>
<td>170 Enjoyment of Music</td>
<td>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.</td>
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</tbody>
</table>

### SCHOOL OF NURSING

**School Of Nursing**

**Administration**

**Dean and Chair, Ph D Program**
Mary de Chesnay, D.S.N., R.N., C.S., FAAN

**Executive Associate Dean and Director, Center for International Nursing**
Joanne F. White, R.N., Ph D

**Assistant Director, Center for International Nursing**
Carolyn Smith, R.N., M.S.

**Associate Dean for Clinical Studies**
James O’Malley, M.S.N., R.N

**Advisor, RN/BSN/MSN & Second Degree Students and Special Assistant to Dean for Minority Recruitment and Retention**
Sharon Poe Smuth, M.N. Ed., R.N., CRNP

**Chair, BSN Program**
Joan Such-Lockhart, R.N., Ph.D., CORLN

**Associate Chair, BSN Program and Special Assistant to Dean for Development**
Leah V. George, R.N., M.N. Ed

**Chair, MSN Program**
Jeri Milstead, Ph.D., R.N., CNAA

**Director, AGH/DU Center for Nursing Research**
Judy DePalma, R.N., M.S.N

**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. On March 15, 1937, the Department of Nursing Education was given the status of a separate school with a Dean in charge.

On December 3, 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.

More recently, a second degree option was initiated in August 1991, this program opened and 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 business options including the dual MSN/MBA degree, Nursing Education, 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.

### SCHOOL OF NURSING PHILOSOPHY AND DEFINITION OF NURSING

The School of Nursing’s philosophy evolves from that of Duquesne University and its mission, goals, and objectives. This School’s philosophy provides a framework for the development of a personal and professional philosophy of life based on the moral and spiritual values espoused by the University, and supports a commitment to the values and dignity of Man which give meaning to life. Further, this philosophy fosters a spirit of inquiry that promotes continuing intellectual growth.

The School of Nursing faculty believe that nursing is a profession and an academic discipline. Therefore, a professional nursing education should occur in institutions of higher education (Senior college or university). The faculty is committed to curricula that view nursing as a human science in which the primary concern is the health care of Man from conception through death. A creative, flexible, and dynamic environment supports curricula in which students can pursue scholarly excellence. The faculty believes that the learning process involves both the teacher and learner who plan experiences, share knowledge, and evaluate results. Within this context, the teacher supports and encourages the student to synthesize knowledge and theories from the discipline of nursing, humanities, and the natural and behavioral sciences. The curricula and environment are strengthened by the faculty’s commitment to excellent teaching, scholarship and research, and professional and community service.

In making explicit the philosophy that underpins the curricula, the concepts of Man, Environment, and Health are implicit in the meaning of the concept of Nursing as a human science.
Within graduate education, there is a core of knowledge which pertains to specialty areas. Each nursing specialty area is viewed as evolving. This evolution is a synthesis of the fields of advanced clinical nursing and of other related disciplines. The purpose of the Duquesne University Master of Science Nursing Program is to prepare a specialist in nursing administration or education and provide a foundation for doctoral study.

Nurse administrators are prepared to lead and manage providers of care in organizations within an increasingly complex social, political, and economic environment. Nurse educators are prepared to teach specific target populations in a variety of health care settings. In both specialty areas, concepts are those which enable students to fulfill specific role expectations in their area of specialization. Other content emphasizes concepts related to the values, attitudes, and behaviors necessary for role socialization within the area of specialization. Scholarly inquiry and research are a major component of the educational process in the graduate program. As nursing leaders, both administrators and educators assess, plan, implement, evaluate, and change in the health care delivery system to ensure quality health care, and to enhance the profession of nursing, and to meet the future health care needs of society.

**PURPOSES OF THE SCHOOL**

The purposes of the School of Nursing are to meet the needs of the public and the health care community by:

1. Providing an undergraduate educational program to prepare students to be professional nurses.
2. Providing a program of graduate studies to prepare advanced practitioners.
3. Providing continuing education programs for professional nurses that prepare graduates for roles in advanced nursing practice.

**PROGRAM PURPOSES AND GOALS**

The purposes of the program are:

1. To prepare generalists who are accountable for their nursing practice, accept responsibility for the management of nursing care, and serve as advocates in a variety of health care settings.
2. To provide a foundation for graduate study.

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 developed a curriculum that provides learning experiences to assist students to acquire specific knowledge and skills. The goals of this program state that upon completion of the program, the graduate:

1. Promotes the rights, responsibilities, and dignity of man in health care.
2. Synthesizes knowledge from the related sciences, the humanities and nursing theories in applying the nursing process.
3. Utilizes political, cultural, and social processes in promoting the health of individuals within their environment.
4. Utilizes the nursing process in the promotion of health with the individual/family/group along the life continuum in a variety of settings.
5. Initiates health care from the perspective of the individual/family/group's value system.
6. Utilizes knowledge of ethical and legal dimensions in making nursing practice decisions.
7. Utilizes the process of inquiry and research in planning nursing care with individual/family/group.
8. Accepts responsibility and accountability for nursing practice.
9. Assumes the role of advocate in participating with other health care providers and consumers in the promotion of health.
10. Utilizes leadership skills for the improvement of health care to meet the emerging needs of consumers in a changing society.
11. Strives to enhance the profession of nursing.
12. Enhances own effectiveness in professional nursing roles through on-going evaluation and continuous self-growth.
13. Synthesizes principles of the teaching and learning process to promote the health of individuals/families/groups.

**DEGREE**

The School of Nursing undergraduate program leads to the degree of Bachelor of Science in Nursing.

**PROGRAM OF STUDY**

The School of Nursing offers a program with a major in nursing leading to a baccalaureate degree in Nursing to qualified high school graduates, registered nurses, non-nursing baccalaureate graduates, and qualified transfer students. The program includes four years of study, and is designed to provide the student with the knowledge and the skills needed to practice as a professional nurse generalist upon graduation. The general and professional education acquired in this program provides a basis for the graduate to progress to positions of increasing responsibility and to undertake graduate study.

The curriculum is designed to provide a strong liberal arts and science base. The course offerings in the natural, biological and behavioral sciences, and the University core courses support the philosophy that provides the basis for the organizing framework of the professional nursing program. Professional nursing courses, which constitute the nursing major, include theory and practice in the nursing care of individuals and families. Learning opportunities are provided in hospitals, in homes, in schools, in health agencies and in the community. A learning resource center in the school provides students with access to computerized learning, media review, and simulations used in learning nursing skills. The School's Center for International Nursing and AGH/NU Center for Nursing Research offer students an environment of cultural exchange and inquiry in nursing.

The faculty of the School of Nursing conducts all professional nursing courses and also guides and directs the practicum learning experiences. A variety of hospitals and agencies cooperate with the School of Nursing to provide a wide selection of excellent practice settings.

Upon the successful completion of their program of studies, graduates are eligible to take the NCLEX-RN examination for licensure.

The faculty reserves the right to make changes in the curriculum and program requirements which are believed to be in keeping with the changing health needs of society and/or the best interest of the students and the School to maintain quality professional nursing education. The undergraduate program of studies is fully approved by the State Board of Nursing and is fully accredited by the National League for Nursing.

**ADMISSION REQUIREMENTS**

**ADMISSION OF HIGH SCHOOL GRADUATES**

Students who are interested in applying for admission to the School of Nursing should request an application from the Office of Admissions, 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 (1 unit = 1 year):
   - English: 4 years required
   - Social Studies: 3-4 years recommended
   - Science: 2 years recommended
   - Math & Science: 4 years required
   - Language: Biology 1 year
   - Chemistry 1 year
   - Algebra 1 year
   - Additional year is required in science or math (e.g., Physics, Algebra, Computers, etc.)
2 A candidate must have been 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 are reviewed.

3 The primary consideration for admission is the secondary school academic record. This is considered to be the most important criterion of success at Duquesne University. It is the desire of the Admissions Committee to admit those candidates who possess qualities of character and intellect and who show promise of development into useful and contributing citizens.

As of January 1986, felonious acts prohibit license in Pennsylvania. A person convicted of any felonious act may be prohibited from licensure by the State Board of Nursing. At the time of application to the School of Nursing, individuals are made aware that the State Board of Nursing may make them of their past history regarding convictions.

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.

Other additional School of Nursing requirements include evidence of physical and emotional health adequate to meet the demands of the program and compliance with the Standards of Personal Conduct as outlined in the School of Nursing Standards of Personal Conduct Policy. Following notification of acceptance to the University by the Office of Admissions, the School of Nursing candidate must:

1. Submit the School of Nursing's required health forms to the University Health Services Department.

2. Submit signed School of Nursing Standards of Personal Conduct Statement.

In specific instances, and at the discretion of the Committee on Admissions, the equivalent of these requirements may be accepted in lieu of the foregoing precise requirements. All applicants are evaluated based on individual potential and total profile with variances permitted as necessary and desirable.

TRANSFER STUDENT ADMISSION

See the section on Admissions for further University requirements.

Admission criteria for transfer students

1. A cumulative QPA of 2.5 from the transferring institution.

2. 1 unit of chemistry and 1 unit of algebra, which can be from either a secondary school or postsecondary institution.

3. Personal interview with a representative of the School of Nursing, and two letters of reference.

4. Compliance with the 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. No transfer student can 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 also offers the registered nurse an opportunity to obtain the baccalaureate in nursing degree. Part-time or full-time enrollment is available to allow the registered nurse to continue to be employed while undertaking the course of study. Through the acceptance of transfer credits, CLEP testing, and challenge examinations, the School of Nursing strives to apply the registered nurse's previous learning experience towards the requirements of the BSN degree.

Specific information concerning the acceptance of transfer credits, eligibility for CLEP testing and challenge examinations can be obtained by contacting the R N / BSN / M S N Advisor within the School of Nursing.

Admission Requirements — RN / BSN / M S N Option

Students who are interested in applying for admission to the RN / BSN / M S N Option should request an application from the Division of Continuing Education, Duquesne University, Pittsburgh, PA 15282.

- Graduation from a baccalaureate program in another discipline.

- Personal interview with the Second Degree student advisor 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. A student wishing to do this will become a temporary transfer student, providing he or she receives the necessary clearance from both institutions.

1. A student must bring to the appropriate advisor in the School of Nursing, Undergraduate Program, both the catalog description of courses he or she wishes to take and the schedule for the summer session in which they are given. 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 desiring waiver of this policy must obtain the permission of the Student Standing Committee of the School of Nursing.

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

4. The student is responsible for earning a minimum of a C grade, or its equivalent if the or she expects to receive advanced standing. The student must arrange to have an official copy of the transcript of grades earned at the institution in which he or she is a temporary transfer sent to the Office of the Associate Dean, Undergraduate Program 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) $25.00

Uniforms, identification pin, shoes $120.00

Transportation to and from clinical agencies (weekly) $10.00

School of Nursing upon graduation (as directed) cost varies

Physical examinations, diagnostic procedures, and immunizations:

1st year $200.00

2nd-4th year $150.00

Physical Assessment Kit $40.00

Sensor Assessment Examination $30.00

*All expenses are approximate.

Training in Cardiopulmonary Resuscitation (CPR) is a prerequisite to all nursing clinical courses. Students must show evidence of current CPR training prior to entering the clinical area.

An annual physical examination and certain immunizations and health tests are required for all students in the School of Nursing Preclinical students must complete specific health requirements by the designated deadline date of March 15 in order to register for the following semester courses 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 amounts of $1,000,000/3,000,000 professional coverage.
Each student is responsible for transportation to and from hospital and other clinical agencies. Each student will be expected to have access to an automobile to permit experiences with home care of clients and their families during the senior year.

**STUDENT ORGANIZATIONS**

Each nursing student is a member of the general student body and may select and participate in any of the campus organizations. There are numerous social sororities and organizations as well as professional organizations. These organizations exist for the promotion of the scholarly and professional interests of members.

Alpha Tau Delta (meaning “through force of character”) is a national professional fraternity for persons in nursing. Theta Chapter was chartered on the Duquesne University campus on April 21, 1938. Eligibility is limited to full-time students who have completed a minimum of one semester in the School of Nursing with a cumulative quality point average of 2.5.

**Student Nurses Association of Pennsylvania** (SNAP) is a constituent of the National Student Nurses Association, Inc. (NSNA). The purpose of SNAP is to assure responsibility for contributing to nursing education, to provide programs representative of fundamental and current professional interest, and to aid in the development of the whole person. Active membership is open to undergraduate students enrolled in state approved programs leading to licensure as a registered nurse and registered nurses enrolled in undergraduate programs of nursing.

Kappa Alpha Beta is an undergraduate nursing sorority of Chi Eta Phi, Inc., established in 1966. The purpose of this organization is to increase minority students in nursing and to foster continuing education. While membership is predominantly African-American, individuals from other ethnic/racial groups, as well as male nursing students, are invited to join.

**Class Organizations** Each class is an officially recognized organization in the School of Nursing. As such, each class elects its own officers and conducts such programs and affairs as its members deem desirable toward achieving its goals.

Sigma Theta Tau International, Inc. is the international honor society of nursing. The Duquesne University Nursing Honor Society was chartered in 1927 under the name of Epsilon Phi Chapter. In March 1982, Membership is open to senior students and community leaders who meet the criteria for election.

**Nursing Alumni Association** Upon graduation, each graduate is cordially invited to join this organization as a School of Nursing Alumni Club member.

**HONOR AWARDS**

In addition to graduation honors, these awards and others are presented at Honors Day.

The Mary W Tobin Gold Medal and the Dean Johnson Memorial Medal are awarded annually to two outstanding seniors chosen by the faculty. The Mary W Tobin Gold Medal is awarded by the Theta Chapter of Alpha Tau Delta National Professional Fraternity for persons in nursing. It was established in 1945 to honor Mary Tobin, the first Dean of the School. The Dean Johnson Memorial Medal established in 1963 commemorates Dean Johnson's contributions to the growth of the School of Nursing as its second Dean.

Four new awards were presented for the first time in 1983. The first award is on behalf of Bayer Corporation. It is awarded annually to the outstanding graduating senior in the area of acute care nursing. The award is called the Bayer Award for Excellence in Nursing Practice in the Acute Care Setting. The second award is called the Lanza Award for Excellence in Home Health Nursing, and is sponsored by Lanza, Hospital Equipment for the Home. This award is presented annually to the graduating senior demonstrating outstanding ability in the area of community health. The third award is sponsored by the United States Air Force. This award, the Air Force Leadership in Nursing Award, is presented to the graduating senior best demonstrating outstanding leadership qualities (in general), contributions to the nursing program, and class, and evidence of community service and commitment to the profession. The fourth Sigma Theta Tau International, Epsilon Phi Chapter, presents four awards, one each to a Basic, R.N./B.S. in M.S. N.S., Second Degree and Graduate Student Program student for excellence in scholarship, leadership, and professional commitment.

Five new awards have also been added. The Community Health Education Award, established in 1985, is awarded to recognize the graduate student who demonstrates creativity and teaching skills in promoting community health. The Faculty Recognition Award, established in 1986, is awarded to an outstanding graduate student, as selected by faculty vote. The Nursing Alumni Award, established in 1987, is awarded to three graduating senior students, as a Basic Program student, a Second Degree Option student, and a Registered Nurse student; for excellence in scholarship, professional commitment, and implementation of Duquesne's philosophy.

**GRADUATION REQUIREMENTS**

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

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**SCHOOL OF NURSING**

1. Completion of 125 credits
2. A minimum cumulative over-all quality point average of 2.0
3. Successful completion of all clinical practicum courses
4. Completion of the required curriculum plan
5. Removal of I and F grades in all required courses
6. A candidate for the Bachelor's degree must complete the last 30 credits toward the degree at Duquesne University.
7. Submission of an application for the degree. No student is considered a degree candidate until he/she files an application for the degree on a form provided by the Registrar.

**HALL COURSE SEQUENCE**

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<td>132 Basic Philosophical Quest*</td>
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<td>103 Introduction to Psychology</td>
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<td>111 Principles of Chemistry</td>
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<td>N325 Fund of Statistics</td>
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<td>N340 Psych/Mental Health Nsg</td>
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<td>N325 Psychopathological Alterations in Health</td>
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<td>Care Adult</td>
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<td>N350 Physical Assessment of Adult</td>
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**RECOMMENDED COURSE SEQUENCE**

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**NCLEX-RN** — Diagnostic assessment testing is required of all seniors to provide feedback to students in identifying strengths and weaknesses in preparation for the NCLEX-RN licensing examination. Following the assessment examination, students are required to attend formal and informal NCLEX preparation classes.

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 in terms of the curriculum in effect at that time, and the student is advised of any additional requirements for graduation. The responsibility for fulfilling degree requirements rests with the student.
NURSING COURSE DESCRIPTIONS

100 Orientation to Professional Nursing 3 cr
This course introduces students to the discipline of nursing as a human science, and provides the framework for explaining the practice of professional nursing according to the philosophy of Duquesne University School of Nursing. Students explore the assumptions about man and environment beginning with nursing process, self-esteem as a means of valuing self. In addition, students examine beliefs about man, environment, and health and how they make a difference in the practice of nursing. Professional nursing is explored from the historical aspect as it relates to present and emerging roles.

The relationship of nursing research and theories is examined with a concentration on the nursing theories of Rogers, King, Orem and Watson. Students begin to investigate how nursing theories serve as a basis for the practice of nursing. Prerequisite: None

Note: RN/BSN/MSN students enroll in 201 Survey of Professional Nursing (3 cr) to meet this requirement.
Second degree students enroll in 205 Introduction to Professional Nursing Practice (5 cr) to meet the requirements of 100 and 262.

215 Basic Pharmacology 3 cr
This course covers the basic principles of pharmacology needed in daily practice. This includes drug effectiveness, mechanism and interaction. In most instances, drugs will be discussed in relation to their effectiveness, mechanism and interaction. In most courses, the relationship of nursing research and theories is examined with a concentration on the nursing theories of Rogers, King, Orem and Watson. As a means of valuing self. In addition, students examine beliefs about man, environment, and health and how they make a difference in the practice of nursing. Professional nursing is explored from the historical aspect as it relates to present and emerging roles.

The relationship of nursing research and theories is examined with a concentration on the nursing theories of Rogers, King, Orem and Watson. Students begin to investigate how nursing theories serve as a basis for the practice of nursing. Prerequisite: None

222 Human Development Throughout the Life Continuum 4 cr
This course builds upon the major concepts of man, environment, health and nursing. The student studies human development from conception through death. Emphasis is placed on an individual's...
psychological, intellectual and personality development within the context of the family, society and culture. Health promotion practices are explored relative to each age group throughout the life continuum. This course provides the basis for students to assess the developmental stages in the clinical environment. Prerequisites: Introduction to Psychology

229 Toward Healthy Aging 2 cr
This course focuses on elderly people, the aging process, and age-related physiological and psychosocial changes. Emphasis is placed on enhancing quality of life through the promotion of health and wellness, and strategies to encourage independence and functioning. Environmental and personal safety, various living situations, and economic and legal considerations are discussed. The development of gerontology is highlighted. Prerequisites: Anatomy and Physiology I (concurrent) and Introduction to Psychology (concurrent)

234 Introduction to Inquiry in Nursing 1 cr
This one credit Introduction to Inquiry in Nursing course is offered early in the nursing program. The focus of the course is on assessment, decision-making, and the development of critical thinking. Students will be introduced to the critical thinking process and its components, describe how they think, and participate in determining learning strategies that will enhance thinking. Students will be encouraged to actively participate in learning as they progress through the course. Through the process of critical thinking, this course provides a foundation that promotes open inquiry into assumptions, beliefs, goals and values that characterize nursing

253 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. Prerequisites: Principles of Chemistry 111 and 112

254 Therapeutic Nutrition 1 cr
This course focuses on nutrition in nursing practice for the restoration of health. Emphasis is placed on nutrition assessment and interventions for persons with short or long term disruptions of health status in relation to current research in therapeutic nutrition.

262 Health Promotion Through the Nursing Process 5 cr
This course is designed to introduce students to the application of concepts and skills relevant to the practice of professional nursing. The course explores man's individual health patterns and includes an introduction to alterations in health patterns. Students study the nursing process as the vehicle for providing nursing care to clients. The concepts of health education, rehabilitation, and loss and grief are incorporated. Students identify the interrelationship of these theoretical components in man's experience of health. The professional role is explored within the framework of the nursing process. Prerequisites: CPR Certification, Orientation to Professional Nursing, Anatomy & Physiology I, Anatomy & Physiology II (concurrent), Human Development Throughout the Life Continuum (concurrent), Basic Communications in Nursing (concurrent)

272 Basic Communications in Nursing 2 cr
This is a basic theory course in communication. Students examine the theoretical components of the communication process, and modalities of nursing theories while exploring their own style of communication, evaluating the effectiveness of communication, and learning ways to change one's pattern of relating. This course is foundational to nursing practice as interaction is essential to the nursing process. It is offered prior to or concurrent with Health Promotion through the Nursing Process to enable students to begin to apply communication theory with clients in a long-term setting. Prerequisites: Orientation to Professional Nursing

312 Pathology 4 cr
This course is a theory course designed to acquaint students with the structural and functional changes that occur as the result of illness, as well as the body's remarkable ability to compensate for those illness-related changes. Since the abnormal changes can ultimately be traced to underlying molecular, cellular, and histological deviations from the homeostatic state, the mechanisms that disrupt this optimal state will also be elucidated. In addition, the basic mechanisms involved in the pathogenesis of various body systems and the body as a whole are emphasized and continued with the similar mechanisms that support normal health. Prerequisites: Biology of Microbes, Anatomy and Physiology I and II

320 Nursing Care of the Adult Client 7 cr
Nursing Care of the Adult Client I is the first clinical nursing course offered at the junior level. It is a continuation of the study of health and the experience of illness and wellness. Prerequisites: Anatomy and Physiology I and II, Pathology (concurrent)

360 Nursing Care of the Adult Client II 7 cr
This clinical nursing course offered at the junior level builds on previously learned knowledge of Pathology, Physical Assessment, Nursing Care of the Adult Client I, and concepts from selected nursing theories. The student is provided with the opportunity to apply the nursing process in caring for an adult in a variety of medical-surgical settings. The family is viewed as a support system to the client. Increasingly complex concepts related to the integrity of biological, psycho-social, spiritual and environmental health patterns are presented. Concepts of loss and grief, oncology and rehabilitation continue to be integrated throughout the course. Students explore the ways in which adult clients respond to long and short term alterations in health, and the interaction of a variety of complex changes related to the client's experience of health. Students also explore community resources for support and rehabilitative care, and participate in the referral of clients for these health care services. Students integrate previously learned knowledge in nursing care and begin to practice therapeutic relationships.
the nursing process as a framework, the student will assess the child with alterations in health and address the biological, social, environmental, and psychosocial patterns of the child and family. Norms and alterations in health patterns will provide the basis for discussion as they relate to the developmental level of the child. Content for the physical assessment of the child is presented. The nurse’s role in the promotion of health is identified as a major focus of the course. Prerequisites: Family Systems, Nursing Care of the Adult Client II, Psychiatric-Mental Health Nursing Care of the Adult Client II, Nursing Care of the Childbearing Family.

430 The Research Process in Nursing 3 cr
This senior level undergraduate research course focuses on the role of the professional nurse as a consumer of research. Each step of the research process is examined. Application exercises reinforce didactic material. The critical thinking process is utilized with current nursing studies. The advantages and disadvantages of quantitative and qualitative research are explored. Prerequisites: Fundamentals of Statistics, Introduction to Research in Nursing, Nursing Care of the Adult Client II.

455 Nursing Leadership and Management of Client Care 4 cr
This clinical course provides students the opportunity to synthesize previous learning and develop additional knowledge and skills. Concepts of alteration in patterns and clinical decision-making form the foundation for nursing judgment and priority setting in complex care situations. The student performance as a beginning professional in the workplace dimensions of client care is enhanced through advanced clinical knowledge, clinical judgement and technical skill development. Prerequisites: Nursing Care of the Childbearing Family, and Nursing Care of the Child and Family.

NURSING ELECTIVES

NOTE: Not all nursing electives are offered each semester.

104 Dosages and Solutions 1 cr
This directed study course provides the student with an opportunity for a self-paced review of the basic pharmacologic principles necessary for problem-solving and understanding in the calculation of dosages and solutions necessary for the administration of medications in clinical practice. The course is designed around student use of a computer-assisted instructional program with teacher supervision. Special permission is required to register for this course.

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 on spiritual needs encountered in the nurse/client/family relationship. Students are encouraged to develop an awareness of their own spiritual dimensions 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 (entered into) 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: Nursing Care of the Adult Client I.

495 Advanced Concepts in Clinical Nursing 3 cr
This preceptor clinical course provides students the opportunity to synthesize previous learning and develop additional knowledge and skills. Concepts of alteration in patterns and clinical decision-making form the foundation for nursing judgment and priority setting in complex care situations. The student performance as a beginning professional in the workplace dimensions of client care is enhanced through advanced clinical knowledge, clinical judgement and technical skill development. Prerequisites: Nursing Care of the Childbearing Family, and Nursing Care of the Child and Family.

485 Trends and Issues in Nursing 3 cr
This course builds upon all previous learning experiences. It considers current issues in nursing, trends in health care delivery, political accountability and ethical decision-making. Trends and issues and their interrelationships are explored in order to assist the student to assume professional responsibility for involvement in issues affecting nursing and delivery of health care. Prerequisites: Nursing Care of the Adult Client II, Psychiatric-Mental Health Nursing Care of the Adult Client II.

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 requires extensive knowledge of health promotion and self-care. It becomes the responsibility of the health care professional to meet these needs through the process of health education. This course, utilizing an interdisciplinary approach, introduces the student preparing for a health care career to the role of educator through identification, analysis, synthesis, and application of the teaching-learning process. Students from various disciplines have an opportunity to share their perspectives on health and health promotion as related to client education.

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.

459 Transcultural Nursing 3 cr
Transcultural Nursing builds on the basic concepts of man, health, nursing, and environment, and their interrelationships as developed in the student’s previous sciences, humanities, and nursing courses. Emphasis is placed on the development of Leininger’s model of transcultural nursing and transcultural health care 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. Emphasis is placed on the assessment and analysis of selected cultural diversities as related to nursing practice. Methods utilized in transcultural nursing research that foster culture-specific nursing care are included. Prerequisite: Health Promotion Through the Nursing Process.

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.

The undergraduate program of studies is fully approved by the State Board of Nursing (PO Box 2649, Harrisburg, PA 17105-2649, Phone 1-717-783-7142) and is fully accredited by the National League for Nursing (350 Hudson Street, New York, NY 10014, Phone 1-800-669-1656, Ext 146).
School of Pharmacy

CURRICULAR CHANGES
The current B.S. in Pharmacy program will no longer be offered with the graduation of the class of 1998 (entered in Fall 1992). As of Fall 1994, the School of Pharmacy initiated a six-year entry-level Doctor of Pharmacy program of study. The new Pharm D will be configured in a two-year pre-professional and four-year professional curricular format.

Faculty of the School of Pharmacy are developing a competency-based, outcomes-oriented curriculum that will prepare future generalist pharmacy practitioners to provide quality pharmaceutical care to patients. The new professional curriculum will emphasize critical thinking, problem solving, active learning and enhanced communications skills, integrated studies in the biological, chemical, pharmaceutical, administrative, behavioral and clinical sciences taught using traditional and innovative instructional techniques, and a multi-year, introductory-to-advanced level experiential component. Opportunities will be provided for additional preparation in community pharmacy practice, institutional practice, nuclear pharmacy, industrial practice, and for graduate study.

ADMISSIONS
Traditionally, Duquesne University's excellence in pharmacy education has resulted in a large number of applicants for enrollment. Admission to the entry-level Doctor of Pharmacy Class will be on a competitive basis for well qualified Duquesne University students and a select group of transfer students from outside Duquesne University.

The minimum requirements for admission to the Duquesne University School of Pharmacy entry-level Pharm D program are:
1) Completion of the pre-Pharmacy course requirements listed in the University catalog.
2) A minimum overall and science/math grade point average of 2.5 and no grade lower than a "C" in a required course.
3) Completion of an application form that includes a written essay and three letters of recommendation.
4) Evidence of participation in community service is strongly encouraged and will be a favorable asset in consideration for admission to the program.

PRE-PHARMACY COURSE REQUIREMENTS

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<tr>
<th>Course</th>
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<tr>
<td>Duquesne Pre-Pharmacy</td>
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<tr>
<td>Biology I and II</td>
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<td>General Chemistry I and II</td>
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<td>Organic Chemistry I and II</td>
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<td>Calculus I (115)</td>
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<td>Physics for Pharmacy (200)</td>
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<tr>
<td>Thinking and Writing Across the Curriculum (101)</td>
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<td>Imaginative Literature and Critical Writing (102)</td>
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<tr>
<td>Theology (Core)</td>
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<td>Basic Philosophical Questions (132)</td>
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<td>Shaping of the Modern World (151)</td>
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<td>Arts and the Human Experience (161)</td>
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<td>Elements of Economics (121)</td>
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<td>Computer Literacy (COSC 100 or QSMIS 182)</td>
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<td>Public Speaking (102)</td>
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<td>Psychology</td>
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<td>General Sociology/Political Science</td>
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General Requirements

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<th>Course</th>
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<td>General Biology with Laboratory</td>
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<tr>
<td>General Chemistry with Laboratory</td>
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<td>Organic Chemistry with Laboratory</td>
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<td>Calculus (for science or math majors)</td>
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<td>General Physics with Laboratory</td>
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<td>English Composition and Literature</td>
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<td>English Literature</td>
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<td>Religous Studies</td>
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<td>Philosophy</td>
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<td>Modern U.S. European or World History</td>
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<td>Music or Art Appreciation</td>
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<tr>
<td>Economics</td>
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<td>Computer Literacy (Applications)</td>
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<td>Speech (Interpersonal Communication)</td>
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<td>Psychology</td>
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<tr>
<td>General Sociology</td>
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PHILOSOPHY
The Ranges School of Health Sciences was founded in accord with the educational philosophy and objectives of the University. Students in the Ranges School of Health Sciences will be exposed to a broad liberal arts education with an emphasis on understanding the scientific, theoretical and ethical aspects of the world. The academic program will focus on the scientific theories which support the practice of the various professions, coupled with a strong appreciation and understanding of human values and quality of life.

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), health management systems (B.S. in Health Management Systems), and perfusion technology (B.S. in Perfusion Technology) which follow a traditional curricular design. These academic models for these programs are two years of liberal arts and science requirements followed by two years of professional education. In the case of the Health Management Systems program, students may also opt to pursue a Master of Health Management Systems.

Entry-Level Master's Degree Programs
The RSHS offers five-year entry-level master's degree programs in occupational therapy (M.O.T.), physical therapy (M.P.T.), speech-language pathology (M.S.L.P.) Health management systems students anticipating baccalaureate graduation through May, 1998, may opt to complete a five-year, entry-level master's degree program. The academic models for these programs are three years of liberal arts and science requirements followed by two years of professional education. Typically, professional-level education occurs on a year-round basis during the fall, spring, and summer semesters. This three-two model is unique for these professions and provides the RSHS faculty the opportunity to maximally utilize the excellent core curriculum and science offerings at Duquesne as the base for creative professional curricula. All of the five-year entry-level master's degree programs will 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 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.

Advanced Master's Degree Program
The Advance Master of Health Management Systems program is a 24-month, project-oriented, real-world, problem-based curriculum for executive-level health management systems professionals. A joint MHMS/MBA option will be available to graduates of an accredited business school, or to those who have completed Duquesne University's graduate business core, who have sought and been granted admission into the MBA program as well.

A flexible schedule is also available for students with work obligations. For further information,
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 this joint degree opportunity students may be eligible for permanent teaching certification in the areas of Mentally and Physically Handicapped, Secondary General Science, Secondary Biology, or Elementary Education.

In addition, on a very limited basis, athletic training majors may apply for the joint degree program with the Department of Physical Therapy, and physical therapy majors may apply for the joint degree program with the Department of Athletic Training. An application to this joint degree program will automatically be sent to all first-semester freshmen in both athletic training and physical therapy programs.

Inter-School Majors and Minors
Should students decide to pursue an inter-School major or minor, they should carefully investigate the implications of an increased course and credit load, as well as ensure they will be able to complete all RSHS program requirements in time for entry into the professional phase of their respective program.

Inter-School Majors
At this time, there are no inter-School majors available to RSHS students.

Inter-School Minors
Students interested in pursuing an inter-School minor within the McAnulty College and Graduate School of Liberal Arts and the Bauer School of Natural and Environmental Sciences could 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 courses with the appropriate Department within the McAnulty College and Graduate School of Liberal Arts and Bauer School of Natural and Environmental Sciences.

Academic and Program Requirements for Entry into the Professional Phase

ADMISSIONS POLICIES
Please note that admissions policies are subject to change at the discretion of the RSHS and the Office of Domestic and International Admissions.

1. All early action applications to the athletic training, occupational therapy, physical therapy and physician assistant programs must be completed and postmarked by December 1. This is the only deadline for these programs.

2. Admissions to the health management systems, perfusion technology and speech-language pathology programs is by EITHER Early Decision or Regular Decision.

3. All qualified students whose applications are submitted by January 15 will be reviewed for scholarship consideration.

Waitlist Process
Once spaces have been filled in a particular program, qualified students will be selected for placement on a waitlist in the event that positions do become available at a later date. Should a student accept a waitlist position, he/she 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 space. 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 (e.g., Fall 1996)) is only valid for that respective program, class level or academic year. All students should be aware that, due to space restrictions, acceptance or enrollment into one program, class level or academic year does not ensure acceptance into another program, class level or academic year should a student wish to change his/her status.

STUDENTS SHOULD BE AWARE THAT THE POSSIBILITIES OF A CHANGE IN PROGRAM, CLASS LEVEL OR ACADEMIC YEAR WILL BE EXTREMELY LIMITED DUE TO SEVERE SPACE LIMITATIONS IN ALL PROGRAMS. 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 athletic training, occupational therapy, physical therapy and physician assistant programs must be completed and postmarked by December 1. This is the only deadline for these programs.

2. Admissions to the health management systems, perfusion technology and speech-language pathology programs is by EITHER Early Decision or Regular Decision.

3. All qualified students whose applications are submitted by January 15 will be reviewed for scholarship consideration.
Admissions Criteria for Freshmen

Admissions will be on a selective basis as long as space permits. Prospective freshmen should have graduated from an approved secondary school and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school must submit a High School Equivalency Diploma issued by their state department of education.

The Office of Domestic and International Admissions will review all freshmen applications based on the following guidelines established by the RSHS.

1. All candidates for physical therapy should have:
   a. Seven units of math and science, including Algebra I, Algebra II, Geometry, and Trigonometry (with Calculus recommended but not required) and General Science, Biology and Chemistry (with Physics or advanced sciences strongly recommended). All RSHS programs have an intensive science component, students who feel they do not have a strong background in Algebra, Trigonometry, and Chemistry should seriously consider taking college preparatory courses, particularly in College Algebra/Trigonometry.
   b. A class rank in the top fifth of their graduating class.
   c. A QPA of at least a 3.0.
   d. A composite SAT score of at least 1100 or a composite ACT score of at least 24.

2. All candidates for programs other than physical therapy should have:
   a. Seven units of math and science, including Algebra I, Algebra II, Geometry, and Trigonometry (with Calculus recommended but not required) and General Science, Biology and Chemistry (with Physics or advanced sciences strongly recommended). All RSHS programs have an intensive science component, students who feel they do not have a strong background in Algebra, Trigonometry, and Chemistry should seriously consider taking college preparatory courses, particularly in College Algebra/Trigonometry.
   b. A class rank in the top two-fifths of their graduating class.
   c. A QPA of at least 2.5.
   d. A total SAT score of at least 1100 or a composite ACT score of at least 24.

Admissions for Internal Transfer, Transfer and Second Degree Candidates

AMINITION OF INTERNAL TRANSFER, TRANSFER AND SECOND DEGREE CANDIDATES

Admissions Deadlines for Internal Transfer, Transfer and Second Degree Candidates

1. All applications to the physician assistant program must be completed and postmarked by November 1.
2. All applications to the athletic training, occupational therapy, and physical therapy programs must be completed and postmarked by December 1.
3. All applications to the health management systems, perfusion technology and speech-language pathology programs must be completed and received by July 1.

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.

SCHOOL OF HEALTH SCIENCES

ADMISSION AT THE TRANSFER LEVEL IS EXTREMELY COMPETITIVE DUE TO SEVERE SPACE LIMITATIONS IN ALL PROGRAMS, THEREFORE, ALL APPLICANTS ARE ENCOURAGED TO COMPLETE THE ENTIRE APPLICATION PROCESS AS EARLY AS POSSIBLE.

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 requirements must have been met:

1. The application form
   a. Internal Transfers - Must contact a RSHS academic advisor in the RSHS Office of the Dean for an Internal Transfer Application.
   b. Transfers and Second Degrees - Must contact the Office of Domestic and International Admissions for the standard undergraduate admissions application (excluding the personal statement on the back of the application) and the letter of reference.

2. The addendum
   a. A minimum cumulative QPA of at least a 2.75 for athletic training, health management systems, perfusion technology and speech-language pathology programs, and a minimum QPA of at least a 2.5 for occupational therapy, physical therapy and physician assistant.

3. A "C" or better in all RSHS, Science, Math and Humanities, Communication and Education (SLP), Business (RMS), and Medical Sciences courses.

4. GRE's are not required for admission.

PLEASE KEEP IN MIND THAT THE ABOVE CRITERIA REFER TO THE MINIMUM CRITERIA REQUIRED FOR CONSIDERATION FOR THE RSHS DUE TO SEVERE SPACE LIMITATIONS, HIGHLY COMPETITIVE APPLICANTS GENERALLY CARRY A 3.5 QPA OR WELL ABOVE, HAVE "A" AND "B" GRADES IN COURSE WORK AND HAVE EXTENSIVE VOLUNTEER/PROFESSIONAL EXPERIENCE.

Special Notes To Transfer and Second Degree Students

1. Students with any transfer credits or any previous degree, are all considered transfer students, and will be considered for admission as undergraduate students.

READMISSION

Students who are no longer enrolled, but had previously attended or graduated from Duquesne University, must fill out the "Application for Readmission" available through the Office of Domestic and International Admissions.

Students who have completed 12 credits or less at another institution(s) since leaving Duquesne, are considered "straight readmits," their applications for readmission will be forwarded to, and handled by the RSHS as internal transfer candidates.

Students who have completed more than 12 credits at another institution(s) since leaving Duquesne, are handled by the Office of Domestic and International Admissions.

STUDENTS SHOULD REALIZE THAT THE POSSIBILITIES FOR READMISSION TO THE RSHS ARE VERY RESTRICTED DUE TO EXTREME COMPETITIVENESS AND SEVERE SPACE LIMITATIONS IN ALL PROGRAMS.

EDUCATIONAL EXPENSES AND FINANCIAL AID

ADDITIONAL EDUCATIONAL EXPENSES FOR RSHS STUDENTS

Pre-Professional Phase

Students in their final year within the pre-professional phase will also need to meet the program requirements for entry into the professional phase (i.e., C.P.R., physical examination and immunizations).

Professional Phase

Expenses for all programs may include the purchase of a lab coat and lab clothes, medical insurance, transportation, fees for laboratory work or professional practice, clinical education costs (i.e., 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).

FINANCIAL IMPLICATIONS OF STUDENT CLASSIFICATION AND ACADEMIC LOAD

Students who are interested in financial and/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 specific credit loads and Q.P.A.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 with the Office of Financial Aid for further information regarding their personal financial situation and 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 RSHS, 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 RSHS under another (i.e., as a second-year student within a RSHS program). For example, if a student has 64 credits completed prior to matriculation to the RSHS, 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 by his/her credit level might indicate that these 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
Second degree candidates should carefully investigate the requirements involved with matriculating into the RSHS, these students enter any of the RSHS programs as undergraduates. If students have a degree, typically they do not qualify for standard undergraduate financial aid.

Graduate Students
Students enrolled in any of the five-year entry-level master's degree programs should be aware that, for financial reasons, the RSHS considers students to be graduate students upon completion of the spring semester of their fourth year. Students are strongly advised to contact 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 final year of the professional phase.

PROGRAM AND CURRICULUM INFORMATION

Please note that all program and curriculum information is subject to change at the discretion of the RSHS. Once enrolled students should refer to the RSHS Academic Student Handbook for specific information regarding academic policies pertaining to their respective programs.

The following interdisciplinary courses may be required by some of the programs:

HLTSC 101 Health Sciences Orientation 1 cr
An overview of the health care industry and specific health professions. Students will learn study skills and learn about various health careers while developing an understanding of the health professional's role in the health care industry.

HLTSC 305 Physiology 4 cr
This course in human physiology presents the normal homeostatic and reproductive functions of the body, with emphasis on unifying concepts and systems integration. The course is intended to provide the student with a solid foundation in human physiology for subsequent clinical training in the Physician Assistant and Perfusion Technology programs. Prerequisites: BIOL 121/123 or 122/124, HLTSC 207/208, 209/210, or permission of the instructor.

HLTSC 306 Physiology 4 cr
This course in human physiology presents the normal functions of the body, with emphasis on unifying concepts and systems integration. The course is designed to prepare the student with a solid foundation in human physiology for subsequent clinical training in Occupational Therapy, Physical Therapy, and Speech-Language Pathology. Prerequisites: BIOL 121/123 or 122/124, HLTSC 207/208, 209/210, or permission of the instructor.

HLTSC 307/307L Anatomy 5 cr
This anatomy course presents the aspects of basic histology, embryology and morphology of the human organ system. This course is designed to provide the student with a broad foundation necessary for subsequent clinical training in the health professions. Prerequisites: BIOL 121/123 or 122/124, HLTSC 207/208, 209/210, or permission of the instructor.

SENIOR DEPARTMENT OF ATHLETIC TRAINING (AT)

Chairman
Paula Sammarino Turco, EdD, ATC

Sports Medicine is a popular general term that refers to all those individuals and services necessary to maintain the overall health of athletes. Those who are physically active Athlete 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 physically active individuals for more than 40 years.

The responsibilities of the athletic trainer are prevent injury and illness, first aid and emergency care, management of injuries, design and implementation of treatment and rehabilitation programs, and preparation of athletes for return to competition using flexibility, strength, and cardiovascular programs designed specifically for the individual athlete. Athletic trainers work under the supervision of physicans and have found employment in athletic programs, schools, hospitals, sports medicine clinics, and private practice.

The CAATE-approved (Commission on Accreditation of Allied Health Education Programs) athletic training education program at Duquesne University provides students with a comprehensive basic science background, a general liberal arts core of classes, and specific comprehensive course work in athletic training. In this four year bachelor's degree program, students are presented with opportunities to pursue clinical experiences at the collegiate, secondary, professional, and, clinical settings, as well as work with athletes of the opposite gender and with varying levels of skill.

A student enrolled in this program also has the option to complete a Master's degree with a Master of Science in Education. The joint degree opportunity, students may become eligible for professional teaching certification in the areas of Mental and Physically Handicapped, Elementary Education, Secondary General Science, and/or Secondary Biology Education. Also, on a very limited basis, athletic training students may be considered for the joint degree program with the Department of Physical Therapy, leading to a Bachelor of Science in Athletic Training and a Master of Physical Therapy.
ATHLETIC TRAINING CURRICULUM

PRE-PROFESSIONAL PHASE — 63 CREDITS

The pre-professional phase of the curriculum includes the University core courses, Science, Math, and Humanities, Medical Sciences, RSHS courses, and ATHTR 201 with a grade of "B" or better. These prerequisite courses provide a strong foundation for success in the professional phase of the curriculum.

A sample course plan for the pre-professional phase of the curriculum can be obtained directly from the Office of Domestic and International Admissions or from RSHS at (412) 396-6652.

PROFESSIONAL PHASE — 65 CREDITS

A sample course plan for the professional phase of the curriculum can be obtained from the Office of Domestic and International Admissions at (412) 396-5000 or from RSHS at (412) 396-6652.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

ATHTR 201 Essential Concepts & Techniques in Athletic Training 3 crs

This course is an introduction to the basic and essential elements of athletic training to include prevention, emergency management, recognition, evaluation, and follow-up care for injury and illness. Prerequisite: BIOL 207/208.

ATHTR 302 Art & Science of Athletic Training 1 3 crs

This course provides students with experiences in evaluation techniques, recognition of common pathologies associated with the lower body and internal organs, as well as information on tissue types, methods of palpation, medical notation, and use of evaluative technology. Prerequisite: ATHTR 201.

ATHTR 303 Art & Science of Athletic Training 2 3 crs

This second part course provides students with learning experiences in evaluation techniques, recognition of common pathologies associated with the upper extremity, head, and spine. Prerequisite: ATHTR 302.

ATHTR 305W Health & Medicine 3 crs

This course presents common medical pathologies and current personal and community health information on topics germane to the physically active population. Corequisite: HLTSC 307/307L.

ATHTR 306 Therapeutic Exercise & Reconditioning in Athletic Training 4 crs

In this course, students learn the theory and application of knowledge to develop comprehensive rehabilitation programs and to address the rehabilitation and reconditioning needs of the physically active. Prerequisite: HLTSC 307/307L.

ATHTR 307W Physiology of Exercise 3 crs

This course prepares students to understand, assess, and manipulate the physiological components of metabolization, muscular activity, and cardiorespiratory function to enhance performance. Prerequisites: BIOL 122/124, 207/208, 290/210, CHEM 121.

ATHTR 311 Current Issues in Athletic Training 3 crs

This seminar course includes a review of topical literature, political issues, and other contemporary concerns in the athletic training community. Students discuss, develop, and debate issues germane to the physically active population. Prerequisite: ATHTR 303.

ATHTR 315 Clinical Practicum in Athletic Training I 2 crs

This practicum involves "hands on" work in an athletic training setting where students will be responsible for the health care of the athletes during practice, games, and in the rehabilitation setting. Students learn to be Psychomotor emergency management skills and class discussions also are included in this course. Prerequisite: ATHTR 201.

ATHTR 316 Clinical Practicum in Athletic Training II 3 crs

This is a continuation of the previous practicum, however, students will receive knowledge gained from previous and current coursework and experiences to their care of the athletes. Psychomotor emergency management skills and class discussions also are included in this course. Prerequisite: ATHTR 302, 315.

ATHTR 402 Nutrition & Weight Management in Sport 3 crs

This course covers the essential nutrients, their physiological effects on the body, and the methods by which these nutrients influence the performance of a physically active individual. Eating disorders, weight management, and ergogenic aids also are discussed. Prerequisites: CHEM 121, ATHTR 307.

ATHTR 404W Psychology of Sport 3 crs

This course is designed to expose students to the role of psychological principles to discuss topics such as mental imagery, physiology of injury, self-esteem, self-efficacy, stress management, and burnout. Prerequisites: ATHTR 311, 316.

ATHTR 410W Clinical Practicum in Athletic Training III 4 crs

Students assume responsibility for the total health care within the scope of practice of the athletic trainer for the athletes of assigned sport teams. Advanced psychomotor skills and preparation for employment and graduate education are discussed. Prerequisites: ATHTR 425, ATHTR 303, 306, 316.

ATHTR 411W Advanced Clinical Practicum in Athletic Training 4 crs

During this practicum, students may receive experiences either in a traditional or non-traditional athletic training setting. Preparations for the National Athletic Trainers' Association Board of Certification examination are made during this semester. Prerequisites: HLTSC 425, ATHTR 303, 306, 316.

ATHTR 412 Organization & Administration in Athletic Training 3 crs

This course provides students with information to enhance awareness and knowledge of current professional, administrative, organizational, and legal issues that pertain to athletic training. Prerequisite: ATHTR 316.

ATHTR 414 Medical Perspectives in Athletic Training 3 crs

This course is designed for exposure to a variety of medical topics to include orthopedics, OB/GYN, dentistry, family practice medicine, podiatry, physical therapy, dermatology, health records, and radiology. Professionals from the respective disciplines provide information to enhance the interdisciplinary approach of the responsibilities of an athletic trainer. Prerequisite: ATHTR 303.

DEPARTMENT OF HEALTH MANAGEMENT SYSTEMS (HMS)

Chairman
Joan M. Kiel, Ph.D.

The health care environment is changing rapidly. Doctors, hospitals, and other health care and related professionals must now interact quickly to provide quality patient care. This has created volumes of patient information that must be transferred efficiently. Innovative methods and advanced technologies are critical to keep this process accurate and timely. This is the challenge of the Health Management professional.

This new health professional possesses a unique blend of skills in clinical, information sciences and business management. Clinical skills and communication with other medical professionals for the delivery of quality health care. Information sciences provide the ability to apply technological knowledge to information management. Finally, business management skills are necessary to link business and clinical for an improved health care delivery system.

These integrated skills can be applied in a variety of health care and related settings that range from the traditional ones of acute care hospitals and clinics to the non-traditional ones of software development companies and health insurers. These skills are needed in any situation that requires the transfer of medical information.

The Bachelor of Science in Health Management Systems has three tracks:

• HEALTH MANAGEMENT SYSTEMS gives students the ability to interface in any medical and technical setting.

• REGISTERED RECORD ADMINISTRATOR concentrates on administrative and technical positions in acute care hospitals.

• DUAL DEGREE — Bachelor of Science in Health Management Systems — Bachelor of Science in Business Administration with the A J. Palumbo School of Business Administration.

A fast track Master's degree is available. Students must apply for admission during their third year of study. This degree can be completed in one additional year after receiving the Bachelor of Science degree.

SPECIAL PROJECTS

This is the capstone experience of the program. Students are able to obtain real world experience in many clinical and technical settings. It is intended that this experience be suitable for inclusion in the student's resume or portfolio. Requirements will be discussed on an individual basis.

HEALTH MANAGEMENT SYSTEMS CURRICULUM

PRE-PROFESSIONAL PHASE — 64 CREDITS

The pre-professional phase of the curriculum includes the University core courses, Science, Math, and Humanities, Medical Sciences, Business, and RSHS courses. These prerequisite courses provide a strong foundation for success in the professional phase of the curriculum. A sample course plan for the pre-professional phase of the curriculum can be obtained directly from the Office of Domestic and International Admissions at (412) 396-5000 or from the RSHS at (412) 396-6652.

PROFESSIONAL PHASE — 60 CREDITS

A sample course plan for the professional phase of the curriculum can be obtained from the Office of Domestic and International Admissions at (412) 396-5000 or from the RSHS at (412) 396-6652.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

HLTMS 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 Chairman.

HLTMS 431 Health Care Processes 3 crs

Introduction to eight key health care processes explored via the system analysis tool of fact finding and data flow diagrams.

HLTMS 445 Health Management Systems Seminar 1 cr

This forum examines the impact of contemporary care issues on information management.
HUMS 460 Elements of Health Information Science 3 crs
Introduction to elements of computer application development in the context of health care emphasizing visual development environments. Prerequisite QMIS 182 or equivalent experience.

HUMS 461 Health Information Science 3 crs
Survey of health information science and hands-on introduction to emerging technologies relevant to health care. Prerequisite HUMS 460.

HUMS 466 Medical Sciences 3 crs
A clinical applications course in which case study presentations are analyzed using quality management principles given trends and issues in health care.

HUMS 470 Health Care Systems Analysis and Design 3 crs
The traditional systems development life cycle (SDLC) and the object oriented approach to the analysis and design of health care information systems are compared and applied through implementation of graphical development packages. Prerequisite HUMS 461.

HUMS 471 Networking for Health Professionals 3 crs
Exploration of client/server, Internet access, distributed computing, multimedia delivery services, telemedicine, distributed clinical databases, and local area network access in today's ever more sophisticated health care systems. Prerequisite HUMS 470.

HUMS 477 Health Law 3 crs
This course provides a review of the laws affecting the delivery of health care and related services.

DEPARTMENT OF OCCUPATIONAL THERAPY (OT)
Chairman
Patricia A. Crest, PhD, OTR

Occupations are the essence of productive living. Occupations, or activities of daily living, include work or education, self-care, and play/leisure. The goal of occupational therapy is to maximize a person's ability to perform a healthy balance of culturally-appropriate daily occupations in order to live a full, independent quality life.

Occupational therapists treat the "whole person" throughout the life span, including physical, psychological, emotional, social, and cultural competencies as influenced by the person-environment-performance interaction. Occupational therapists promote self-determination by actively involving clients in choosing the activities which receive attention during service delivery. Removal of architectural barriers that hinder occupational performance and provision of reasonable accommodations through rehabilitation technology or assistive devices are addressed.

The wide variety of health care issues addressed by occupational therapists includes acute care, industrial rehabilitation, physical rehabilitation, mental health, long-term care, home health care, community services, education, disease prevention, and health promotion. Central to the practice of occupational therapy are the concepts of quality of life, productive function, independent living, full access to community, social participation, cultural identification, and balanced life styles. Therefore, graduates of this program must be able to evaluate emerging information, develop and share new knowledge, guide professional decisions, cooperate effectively with a variety of groups and serve as professional leaders and community advocates.

The occupational therapy program at Duquesne University is an entry-level master's degree program offered in a traditional academic model as well as a non-traditional weekend program. The Weekend Program in Occupational Therapy is offered jointly by the RSHS and the Division of Continuing Education. This unique program has been tailored for adults who wish to pursue a career in occupational therapy, with a license, either during or after employment. The program is accredited by the Accreditation Council for Occupational Therapy Education (AOTA) and offers a state license upon graduation. The traditional program is accredited by the Accreditation Council for Occupational Therapy Education, 4720 Montgomery Lane, PO Box 31220, Bethesda, MD 20824-1220 (Telephone Number 301-652-2682).

OCCUPATIONAL THERAPY CURRICULUM

PRE-PROFESSIONAL PHASE AND PROFESSIONAL PHASE

A sample course plan for the pre-professional and professional phases of the curriculum can be obtained from the Office of Domestic and International Admissions (412) 396-5000 or from RSHS at (412) 396-6652.

OCCTH 305 Occupational Therapy Foundations 3 crs
Overview of the profession's history, philosophies, roles and functions, scholarly activities, current issues, and future directions. Prerequisite Junior in pre-professional occupational therapy program.

OCCTH 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 Chairman.

OCCTH 410 Life Span Occupational Performance 3 crs

OCCTH 420 Neuromotor & Sensory Approaches to Treatment 4 crs
Application of sensory, motor learning, and development theories in practice. Prerequisites OCCTH 430, 445, 455, HLTSC 403.

OCCTH 425 Psychological Approaches to Treatment 4 crs
Psychodynamic, behavioral, developmental, and volitional theories and intervention strategies for life span psychological conditions. Prerequisites OCCTH 440, 445, 455, 460W, HLTSC 441.

OCCTH 430 Biomechanical Treatment 3 crs
Theoretical occupational therapy strategies related to strength, endurance, joint function, and voluntary control over movement. Orthotics, prosthetics, biofeedback, mobility equipment, ergonomics, and human factors are discussed. Prerequisites OCCTH 410, 435, 445, 455, HLTSC 307/307L, 415/415L.

OCCTH 435 Occupational Performance Assessment 3 crs
Introduction to measurement and interpretation of occupational performance areas and performance components. Prerequisite OCCTH 305.

OCCTH 440 International Communication & Group Dynamics 3 crs
Analyzing and directing individual and group interaction activities for therapeutic and supervisory functions. Prerequisite OCCTH 305.

OCCTH 445 Activity Analysis & Adaptations 3 crs
Introduction to activity analysis and the teaching-learning process during occupational performance using a variety of therapeutic modalities specific to practice. Prerequisites OCCTH 305, HLTSC 307/307L, 415/415L.

OCCTH 455 Clinical Education & Reasoning 2 crs
Transformation of didactic learning into clinical reasoning with a focus on evaluation, treatment planning and implementation, and documentation. Includes 40 hours of practicum. Prerequisites OCCTH 430, 435, 460W, HLTSC 403, 441.

OCCTH 456 Clinical Education & Reasoning II 2 crs
Transformation of didactic learning into clinical reasoning with a focus on establishing therapeutic interactions, clinical observation, and case study methodology. Includes 40 hours of practicum. Prerequisites: OCCTH 410, 435, 440, 445.

OCCTH 460W Sociocultural Diversity in Therapy 3 crs

OCCTH 500 Independent Study 1-3 crs
With the guidance of a faculty member, a student may pursue an in-depth study of a subject area or develop an individual project in an area of interest related to their professional goals. Prerequisites: Endorsement of the supervising faculty member and approval of the Department Chairman.

OCCTH 535 Cognitive Approaches to Treatment 2 crs
Cognitive and information processes, theories, and rehabilitation approaches in occupational therapy. Prerequisites: OCCTH 420, 425, 456, HLTSC 403, 441, 442.

OCCTH 540W Research Procedures 2 crs
Implementation of a group research project, including proposal development, human subjects approval, and computer resources. Prerequisites: OCCTH 456, HLTSC 431, 442.

OCCTH 545 Occupational Performance Approaches 4 crs
Synthesis of material from previous treatment courses, emphasizing provision of services within various systems through case study methodology. Prerequisites: OCCTH 420, 425, 430, 456. Corequisite: OCCTH 535.

OCCTH 550 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, 425, 430, 456.

OCCTH 552 Clinical Seminar 2 crs
Guided discussions regarding Level II fieldwork to integrate the relationship between the clinical experience with essential curriculum concepts. Advanced learning in several specialty areas may be included. Prerequisites: OCCTH 555, 556, 557.

OCCTH 555, 556, & 557 Level II A, B, & C Fieldwork 8 crs, 4 crs & 4 crs
Clinical education including exposure to a wide range of diagnoses and treatment in a variety of settings supervised by a registered occupational therapist. Duration of each course a minimum of 40 hours per week for 6 or 12 weeks. Prerequisite: OCCTH 456.
PERFT 313 Business Management for Health Professionals
2 crs
Basic management skills including organization, planning, human resource management, finance, and quality control are covered with an emphasis on their application to the health sciences

PERFT 320W Perfusion Techniques & Applications
2 crs
This course emphasizes laboratory experiments utilizing extracorporeal devices Technical writing skills will also be discussed and evaluated Prerequisites PERFT 301

PERFT 330 Cardiovascular Pharmacology
2 crs
Cardiovascular drugs and agents used during open-heart surgery are discussed. Particular emphasis is placed on the interactions of these drugs as they apply to the cardiovascular and respiratory systems Prerequisites UPNSG 215, PERFT 331

PERFT 331 Cardiovascular Pathophysiology
4 crs
Designed to provide the student with a thorough understanding of the common pathologies associated with the adult cardiovascular system

PERFT 332 Cardiovascular Pathophysiology II
2 crs
Focuses on the pathophysiology of congenital heart disease Prerequisite PERFT 331

PERFT 340 Introductory Practicum in Perfusion Technology
1 cr
Emphasis is on interactive clinical experience in the role of an interprofessional technologist Prerequisites PERFT 302, 320

PERFT 401W Clinical Perfusion Technology I
4 crs
This writing intensive course is designed to give the senior perfusion student the opportunity to discuss and develop a strong understanding of techniques employed during a clinical practicum. Prerequisites PERFT 302, 320, 330, 332

PERFT 402 Clinical Perfusion Technology II
4 crs
Designed to discuss advanced applications and current topics in the science of perfusion technology. Prerequisite PERFT 401

PERFT 410W Principles of Research I
2 crs
Discussions focus on the design and conduct of clinical research Technical writing skills will be emphasized through the completion of a research proposal Prerequisite MATH 225

PERFT 411W Principles of Research II
2 crs
Discussions focus on the analysis and interpretation of clinical research studies Computer and technical writing skills will be reinforced through the reporting of student research projects Prerequisites COSC 100, PERFT 410
SCHOOL OF HEALTH SCIENCES

PHYS 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 Chairman.

PHYS 401 Clinical Education I 2 crs
This is an introductory clinical experience, which will broaden the student's perception and understanding of the physical therapist's professional role. Prerequisites: HLTSC 306, 307/307L, 401, 403, 425, 437/438, 441, 541, PHYS 421, 422, 430, 431, 432, 447, 448 and successful completion of all elements of the Clinical Education Matriculation Examination.

PHYS 421W PT Seminar I 1 cr
This course will be devoted to clinically-related discussions.

PHYS 422 PT Seminar II 1 cr
This course is a clinically-related seminar in which various topics will be discussed. Prerequisite: PHYS 421.

PHYS 431 Evaluation Methods I 3 crs
This course will serve as an introduction to basic evaluation techniques. This will include observation and inspection, range of motion, manual muscle testing, basic neurological testing, postural analysis and ADL/Functional abilities. Prerequisites: HLTSC 306, 307/307L.

PHYS 432 Evaluation Methods II 3 crs
Special emphasis will be placed on learning the evaluation and treatment skills for musculoskeletal dysfunction of the upper quarter. Prerequisite: PHYS 431.

PHYS 447 PT Science I 4 crs
An introduction to basic procedures in physical therapy common to all areas of practice. Emphasis will be given to body mechanics, gait training, functional activities, safety, basic manual techniques, wound care, and basic exercise programs. Prerequisites: HLTSC 306, 307/307L.

PHYS 448 PT Science II 4 crs
This second course in the PT Science sequence will cover the theories and management of musculoskeletal dysfunction with emphasis on upper-quarter dysfunction. Prerequisite: PHYS 447.

PHYS 500 Independent Study 1-3 crs
With the guidance of a faculty member, a student may pursue an in-depth study of a subject area or develop an individual project in an area of interest related to their professional goals. Prerequisites: Endorsement of the supervising faculty member and approval of the Department Chairman.

PHYS 505 Exercise I 3 crs
An in-depth study of the body's physiological function during exercise and its capacities within the context of athletics, recreation, aging, disease prevention and rehabilitation. Prerequisite: HLTSC 306.

PHYS 511 Clinical Education II 4 crs
This is an intermediate level clinical experience which will build on the skills attained in Clinical Education I. Prerequisites: PHYS 411, 523, 533, 549, 561, and 568.

PHYS 514 Clinical Education IIIA 5 crs
During this final phase of clinical education, the students will complete their professional training and become integral members of the health care team. Prerequisites: PHYS 422, PHYS 505, 511, 524, 525, 534, 550, 551, 562, 563, 566, 567 and successful completion of all elements of the Clinical Education Matriculation Examination II.

PHYS 515 Clinical Education IIIB 5 crs
Prerequisites: PHYS 514.

PHYS 523 PT Seminar III 1 cr
The purpose of this course is to define the health care system. Prerequisite: PHYS 422.

PHYS 524/525 PT Seminar IV & V 1 cr (each)
These seminars will be devoted to discussions relating to clinical and patient experiences which the students have encountered during their clinical affiliations. Prerequisite: PHYS 523.

PHYS 533 Evaluation Methods III 3 crs
This course is a continuation of Evaluation Methods II. The major emphasis is on techniques to assess the lower quarter of the musculoskeletal system. Prerequisite: PHYS 432.

PHYS 534 Evaluation Methods IV 3 crs
The major emphasis of this course is the evaluation of the neuromuscular system and analysis of movement dysfunction in normal and abnormal systems. Prerequisites: HLTSC 301, PHYS 533.

PHYS 540 PT Science III 3 crs
The theoretical and practical components of the PT Science sequence will cover the theories and management of movement dysfunction in the lower quarter. Prerequisite: PHYS 448.

PHYS 550 PT Science IV 4 crs
This course will cover the theories of motor control, motor development, and motor learning as these areas relate to the treatment of neurologic dysfunction in all age groups. Prerequisites: HLTSC 403, PHYS 549.

PHYS 551 Special Topics in Clinical Neuroscience 4 crs
This course will provide the students with an in-depth understanding of the pathophysiology, clinical signs and symptoms, and treatment of common neurologic disorders. Prerequisites: PHYS 534, 550.

PHYS 561W Research Methods & Statistics 3 crs
The course will examine experimental design and the appropriate statistics to use for the analysis of data. Prerequisite: HLTSC 430.

PHYS 562W/563W Research Project I & II 2 crs (each)
During these two courses the research prerequisite course will be completed. The student will be guided through the acquisition, analysis, and written description of his/her results by an assigned mentor. The end result should be a written document of the quality to be presented at professional meetings. Prerequisite: PHYS 561W.

PHYS 566. PT Management 3 crs
A thorough examination of the position of Manager of Physical Therapy Service/Department will be undertaken.

PHYS 567/U/PNSG 399 Patient & Consumer Health Education & Consultation 2 crs
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.

PHYS 568 Therapeutic Considerations in Development. 2 crs
This course will provide the student with a more detailed knowledge of the differences during early development, and through the aging process. Both pediatric and geriatric topics will be addressed including special evaluation and treatment considerations for those groups.

DEPARTMENT OF PHYSICIAN ASSISTANT (PA)

Chairman
A J Pinevich, M.D.

Medical Director
Michael J. Essig, M.D.

Associate Medical Directors
Louis K. Hauber, M.D.
Jack E. Wilberger, M.D., F.A.C.S.

Physician assistants (PA), as described by the American Association of Physician Assistants (AAPA), are health professionals licensed to practice medicine with physician supervision. Physician assistants are qualified by graduation from an accredited physician assistant educational program and/or certification by the National Commission on Certification of Physician Assistants (NCCPA).

Within the physician/PA relationship, physician assistants exercise autonomy in medical decision-making and provide a broad range of diagnostic and therapeutic services. The clinical role of physician assistants includes primary and specialty care in medical and surgical practice settings in rural and urban areas. Physician assistant practice is centered on patient care and may include educational, research, and administrative activities.

Upon successful completion of the fifth year, students will be awarded a Master of Physician Assistant (MPA) and will be eligible to sit for the National Commission on Certification of Physician Assistants (NCCPA).

PHYSICIAN ASSISTANT CURRICULUM

PRE-PROFESSIONAL PHASE — 90 Credits

The pre-professional phase of the curriculum includes the University core courses, Science, Math, and Humanities, Medical Sciences, and RSHS courses. These prerequisite courses provide a strong foundation for success in the professional phase of the curriculum. A sample course plan for the pre-professional phase of the curriculum can be obtained directly from the Office of Domestic and International Admissions at (412) 396-5000 or from the RSIS at (412) 396-6652.

PROFESSIONAL PHASE — 88 Credits

A sample course plan for the professional phase of the curriculum can be obtained from the Office of Domestic and International Admissions at (412) 396-5000 or from the RSIS at (412) 396-6652.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

PHYSA 400 Introduction to PA Profession 1 cr
This course explores the history, role, practice scope, and professional policies of the physician assistant in health care delivery. It is explored in lectures, literature, and panel discussion.

PHYSA 401/402/520. Clinical Medicine 1/III/III 3 crs (each)
There will be an examination of the principles of disease, diagnosis, intervention, and management. Prerequisite: PHYS 409.

PHYSA 404 Clinical History Skills & Practice. 3 crs
A practical study designed to aid beginning practitioners in the arts of listening, communicating, data collection and documentation associated with the traditional health history of the patient.

PHYSA 406 Clinical Lab Methods 3 crs
A study of indications, techniques, and interpretation of a variety of common and routine clinical bench lab tests.
PHYS 409 Clinical Pharmacology 4 crs
A study of the mechanisms, pharmacokinetic actions of therapeutic agents and rationales for the therapeutic use of prescription and non-prescription medications

PHYS 410/411 Applied Clinical Methods I/II 3 crs (each)
Indications, technical clinical skills and diagnostic modalities are discussed and performed. Prerequisite PHYS 406

PHYS 413 Clinical Problem Solving I 3 crs
Designed to promote the integration of didactic sciences and unfold the art of medicine, thus course uses the teaching strategy of cooperative learning. Prerequisite PHYS 401 Corequisite PHYS 402

PHYS 415 Basic Pathology 4 crs.
Principles of basic pathology and the mechanisms of the physiologic responses associated with selected human disease processes. Prerequisites PHYS 505, 506, PHYS 406 Corequisite PHYS 401

PHYS 418 Aspects of Community Health & Resources 2 crs
Study of institutional and community-based primary care models accomplished both in the classroom and through field experience

PHYS 420 History & Physical Examination I 3 crs
A practical study of physical examination techniques of the adult patient including a systematic approach to history-taking, integration of examination systems, patient assessment, and documentation practices. Prerequisite PHYS 408 Corequisites PHYS 401, HTSC 403

PHYS 421 History & Physical Examination II 3 crs
A practical study of examination techniques of the pediatric, geriatric, obstetric patient combined with a systematic approach to history-taking, integration of examination systems, patient assessment, and documentation practices. Prerequisites PHYS 401, 403 Corequisite PHYS 402

PHYS 505 Clinical Problem Solving II 3 crs
Students continue active learning in the cooperative teaching format. Prerequisites PHYS 402, 413

PHYS 506 Clinical Problem Solving III 3 crs.
Students engage in more advanced problem-based learning and exercises. Prerequisite PHYS 505

PHYS 510 Health Policy & Preventive Medicine 2 crs
Course explores current trends, issues and public policies reflective of America's evolving health care system. Prerequisite PHYS 418

PHYS 515 Fundamentals of Surgery 2 crs
Lecture series addresses preoperative, perioperative and postoperative patient care and interventions. Prerequisites HTSC 305, 310, PHYS 410, 411

SCHOOL OF HEALTH SCIENCES

SPEECH-LANGUAGE PATHOLOGY CURRICULUM

PRE-PROFESSIONAL PHASE — 98 Credits
The pre-professional phase of the curriculum includes the University core courses, Science, Math, and Humanities, Communication and Education, Medical Sciences, and RSHS courses. These prerequisite courses provide a strong foundation for success in the professional phase of the curriculum. A sample course plan for the pre-professional phase of the curriculum can be obtained directly from the Office of Domestic and International Admissions at (412) 396-5000 or from the RSHS at (412) 396-6652.

PROFESSIONAL PHASE — 79 Credits
A sample course plan for the professional phase of the curriculum can be obtained from the Office of Domestic and International Admissions at (412) 396-5000 or from the RSHS at (412) 396-6652.

Students should be aware that the Department is pursuing accreditation. Students must graduate from an accredited program to be eligible for licensure/certification examinations. Concerns should be clarified with the Department Chair.

DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY (SLP)

Chairman
Mikael D. Z. Kimelman, Ph.D

Speech and language disorders affect the way people talk and understand. 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 patients with communication problems.

The speech-language pathologist will have a master's degree or doctoral degree in speech-language pathology and should hold a Certificate of Clinical Competence (CCC) from the American Speech-Language-Hearing Association. In many states a license is also required.

Speech-language pathologists provide many specialized professional services which include helping people with articulation disorders learn proper production of speech sound, assisting people with voice disorders to develop proper control for correct production, assisting people who stutter to increase the amount of fluent speech, and to cope with this disorder, assisting people with aphasia to re-learn language and speech skills and sentence order to compensate for lost language and speech skills, counseling people with speech and language disorders and their families to understand their disorder to achieve normal communication in education, social and vocational settings, and helping people understand the types and severity of communication disorders.

PHYS 524 Patient Counseling & Education 2 crs
Emphasizes basic considerations and techniques needed for effective communication with patients regarding personal health problems, achieving optimal outcomes and enhancing compliance with medical regimes.

PHYS 528-536. Clinical Externships I-VIII 24 crs (total)
A series of supervised clinical externship assignments equal to 32 weeks in primary care, 12 weeks in non-primary care, and an 8-week elective in either primary or non-primary care medicine. Prerequisite Successful completion of didactic curriculum in the first professional year.

PHYS 540 Master's Independent Research Study 4 crs.
Culmination of independent research project.

PITTSBURGH HEALTH RESEARCH INSTITUTE (PHRI)

Executive Director
Sean McLinden, M.D

In 1995, Duquesne University announced the acquisition of The Pittsburgh Research Institute (PRI) through a transfer of control of this non-profit affiliate of Blue Cross of Western Pennsylvania. PRI is now called the Pittsburgh Health Research Institute (PHRI) at Duquesne University.

Created in 1986 from Blue Cross of Western Pennsylvania's Research Department staff, PRI is a not-for-profit organization established to conduct scientific research on health care delivery and financing systems for organizations in the United States and abroad. The principle mission of PHRI is to conduct computerized health services research to provide critically important data to the health care industry through the analyses of outcome assessments, practice parameters and treatment protocols. Major research initiatives currently include the evaluation of the economic impact of practice parameters and treatment protocols. Major research initiatives currently include the evaluation of the economic impact of practice parameters and treatment protocols.

According to Duquesne President Dr. John E. Murray, Jr., "The institute is a perfectly logical extension of our current work in health information sciences, which adds a completely new dimension to that work. The institute will continue its highly effective research. We also see a number of intersections for the institute that could only occur in a university setting. In this rapidly changing health care environment with particular emphasis upon managed health care, the need for such research is critical. Duquesne is pleased to play a major role in its development."
**Reserve Officers’ Training Corps (ROTC)**

**DEPARTMENT OF MILITARY SCIENCE**

**ARMY OFFICERS’ COMMISSIONING PROGRAM**

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 it offers opportunities and challenges that can put college students on the fast track to success in leadership. ROTC provides a combination of academics and military 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-discipline, 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, and covers subjects like military history, traditions and organizations, national defense, and leadership. There is no commitment for participants at this level. Upon successful completion of the Basic Course, students are eligible for the Advanced Course, taken in the junior and senior years. This course covers management, tactics, ethics, professionalism, and continued leadership development. 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 attend a six-week summer camp.

**ARMY ROTC SCHOLARSHIPS**

Army ROTC offers four, three, and two-year scholarships of up to $12,800 per year, with additional annual allowances of $450 for books and $1,500 for spending. At Duquesne, this scholarship is increased up to a $5,000 bonus for room and board. Both high school and college students are eligible to apply. For application and information call ROTC at the University of Pittsburgh at (412) 624-6495.

**ARMY ROTC RANGERS**

Army ROTC students are eligible to participate on the Ranger Challenge Team, which conduct physical and mentally challenging extracurricular training to promote fitness, teamwork, self-confidence, and fellowship. The training includes a comprehensive exercise program, rappelling, rope bridging, tactics, hiking, climbing, weapons training, and orienteering. The team participates in annual competition against other university Ranger Challenge Teams in Pennsylvania. Uniforms, equipment, and instruction are provided.

**MILITARY SCIENCE CURRICULUM**

**THE BASIC COURSE**

ROTC 001 Military Science I

These courses cover leadership, the role and origin of the Army, the customs and traditions of the Army, the branches of the Army, the role of the U.S. Army Reserve and Army National Guard, and selected military operations and tactical tasks. Physical training, field trips and socials, and a weekly one-hour leadership lab accompany the class. All uniforms, books, and supplies are provided.

**THE ADVANCED COURSE**

ROTC 003 Military Science III

These courses cover leadership, Command and Staff functions, professional military education components in human behavior, military history, military reasoning, and computer literacy. The Law of War, weapons, and the branches of the Army. Students must sign an Army contract to take these courses. Physical training, several field trips and socials, a weekly two-hour leadership lab, and internal leadership and evaluation positions in ROTC accompany the class. All uniforms, books, and supplies are provided.

**SUMMER PROGRAMS**

ROTC 103 Army Adventure Training

ROTC Advanced Course students are eligible to participate in Airborne School, Air Assault School, Mountain Warfare School, and Cadet Troop Leadership Training the summer before the junior year. These courses range from two to four weeks, and students must arrive in top physical condition.

ROTC 104 Camp Challenge

This is an entry level course into the ROTC Advanced Course done the summer before the junior year. To get more information, call ROTC at the University of Pittsburgh at (412) 624-6495.

**THE SIMULTANEOUS MEMBERSHIP PROGRAM (SMP)**

This program allows students to become members of the Army National Guard or the Army Reserve while enrolled in Army ROTC. Students in the Advanced Course and SMP are paid for their Guard/Reserve training plus $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.

**ARMY ROTC NURSE PROGRAM**

Nursing students can take Army ROTC along with their other studies and begin their professional careers as officers in the Army Nurse Corps (ANC). Nursing students are exposed to the professionalism of Army Nursing through a special Nurse Summer Training Program. All nursing students from the Army Reserve, andjunior and senior years. This program offers students a clinical training phase, where they work one-on-one with Army nurses at Army hospitals throughout the U.S.

**THE SUMMER PROGRAM**

These courses cover leadership, administrative, intelligence and electronic warfare, the Army Personnel Management System, the Army Logistics System, post and installation support, and operations and tactics. Students must be contracted and have attended Advanced Camp to take this course. Physical training, several field trips and socials, a weekly two-hour leadership lab, and internal leadership and evaluation positions in ROTC accompany the class. All uniforms, books, and supplies are provided.

**RESERVE OFFICERS’ TRAINING CORPS (ROTC)**

leadership lab accompany the class. All uniforms, books, and supplies are provided.
Continuing Education

Mission Statement
The mission of the Division of Continuing Education is to extend the resources of the University to advance lifelong learning and economic development.

Summary Statement of Philosophy
Credit Programs
The Division of Continuing Education (396-5034) is the arm of Duquesne University which addresses the needs of adult learners. Through the Division, adult students have access to undergraduate courses offered in the college and many schools within the University. 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 Division includes working, adult, and other non-traditional-aged students whose preference is to pursue a degree through day, evening or weekend study, on either a full or part-time basis.

Continuing Education students may pursue course work for a variety of reasons:

- to earn a Bachelor of Science in Professional Studies (BSPS) during the day, evening, or in Saturday College
- to earn a Master of Arts in Leadership and Liberal Studies on Saturdays
- to pursue course work as preparation for application to an undergraduate or graduate program
- to earn a post-baccalaureate Professional Certificate
- to take courses for personal enrichment

Professional Development Programs
With the Professional Development Programs, the Division of Continuing Education 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
1) The Saturday College
Saturday College provides the adult student the opportunity to earn a degree by attending classes only on Saturday. Five-eight-week Saturday terms comprise the accelerated academic calendar. The student earns the Bachelor of Science in Professional Studies with concentrations in Organizational Leadership and Professional Communication.

The Division of Continuing Education 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 curriculum of Saturday College requires the same level of achievement as that expected of students in a more traditional academic environment, but in an intensive, challenging format appropriate only to the adult student. Saturday College is rigorous with a competitive and high admission standard. Students are considered for admission according to the following lists of criteria:

a) Applicants with prior college course work must have a cumulative transcript GPA of 2.5 or above. Students are admitted on the basis of knowledge and skills they need to succeed at the University.

b) Applicants with no prior college course work must take a series of placement tests to document the skills necessary for college level work. Results of the placement tests determine whether remediation at the community college level is necessary, prior to entering the program.

Due to the challenging nature of this unique, accelerated degree program, all students are required to have a personal interview.

A) The Degree

Students in Saturday College earn a Bachelor of Science in Professional Studies (BSPS - Saturday College). Professional Studies is the term that describes the degree (2) required, interdisciplinary concentration areas. Professional Communication and Organizational Leadership. A minimum of 120 total credits is required to complete these degree components. The degree is as follows:

Univarsity Core Curriculum - 30 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.

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.

1) General Core
2) Concentration Areas - 36 Total Credits

Electives - 30 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.

II) The Master of Arts in Leadership and Liberal Studies
Duquesne University's Graduate School of Liberal Arts has united with the Division of Continuing Education 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 (MALS) 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 premier program is designed for busy adults who wish to earn their master's degree without interrupting their careers. Modeled after the award-winning Saturday College, courses will be offered on alternate Saturdays in the morning and afternoon. 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
701 Leadership and Liberal Studies: The Humanistic Perspective 3 Cr
702 Leadership and Liberal Studies: Social, Political & Economic Issues 3 Cr
703 Leadership and Liberal Studies: The Ethical and Spiritual Dimensions 3 Cr
790 Leadership and Liberal Studies: Colloquium 3 Cr

Leadership Core Curriculum — 15 Total Credits
710 Introduction to the Graduate Study of Leadership (required) 3 Cr
Select Three of the Following:
711 Interpersonal Communication 3 Cr
712 Decision Making and Problem Solving for Leaders 3 Cr
714 Conflict Resolution 3 Cr
715 Valuing a Diverse Workforce 3 Cr
716 Public Policy and Legal Issues for Leaders 3 Cr

Electives — 9 Total Credits
Select Three of the Following:
730 Science, Technology, and Society 3 Cr
731 The Shaping of the Contemporary World 3 Cr
732 Economics and the Modern World 3 Cr
733 Comparative Political Systems 3 Cr
734 Human and Financial Resources 3 Cr
735 Information Technologies for Modern Organizations 3 Cr

III) The Bachelor of Science in Professional Studies Degree

The Bachelor of Science in Professional Studies (BSPS) is designed for adult students who seek flexibility in a bachelor's degree program. While the BSPS in Saturday College consists of a prescribed series of courses, adult students are also provided the opportunity to customize plans of study to meet personal and professional goals. A strong foundation in both business and the liberal arts allows students to 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 business and/or liberal arts subjects. A minimum of 120 total credits is required to complete degree requirements, which are listed below.

University Core Curriculum — 30 Total Credits

The University Core Curriculum for this version of the BSPS is the same as that for the BS in Saturday College, outlined above on page 156.

Professional Core Curriculum — 24 Total Credits

The Professional Core Curriculum for this version of the BSPS parallels that for the BS in Saturday College. Since Saturday College courses are limited to Saturday College enrollees, courses from the A J Palumbo School of Business Administration, which are available in the day and evening schedules, are utilized in this version of the BSPS. Those courses are:

182 Micro Computer Software Applications 3 Cr
183 Management Information Systems 3 Cr
214/215 Financial and Managerial Accounting 6 Cr
221/222 Principles of Economics I & II 6 Cr
251 Legal Process 3 Cr
371 Principles of Marketing 3 Cr

Concentrations — 30-42 Total Credits

In consultation with an academic advisor, students customize two concentrations consisting of integrated course work from the A J Palumbo School of Business Administration and/or the College of Liberal Arts. A wide range of business and liberal arts disciplines is available from which these concentrations may be designed. A minimum of 15 credits is required to complete a concentration, with the emphasis on business courses from the Paralegal Institute.

Non-credit Programs

The Paralegal Institute

As the need for legal services has increased over the past decade, the demand for paralegals has risen dramatically. Government studies show that the paralegal profession is the fastest growing profession in America today.

Financial Analysis (Basic) — 5 Total Credits

Electives — 6-18 Total Credits

Electives provide the opportunity for students to select courses based on their areas of interests. Communication courses are highly recommended. Consultation with an academic advisor is recommended to fully benefit from the wide variety of electives available.

IV) Professional Certificate Programs

This certificate is a free-standing professional credential. Each program of study includes between five and nine (5-9) credit courses that cover a focused area of professional knowledge. Candidates for the professional certificates usually have an Associate's or Bachelor's degree and typically enroll in a certificate program in order to enter a new profession or to advance in their current careers. Some of these certificate programs have prerequisites. Please call 396-6232 for a complete catalogue with all prerequisites and course work specifics.

Professional Certificate programs are available in the following areas:

Accounting (Basic)

This certificate is a six-course, 18 credit program of the following courses:

214 Financial Accounting
215 Managerial Accounting
216 Accounting Practice and Systems
311 Intermediate Accounting I
312 Intermediate Accounting II

Select one (1) of the following:
315 Cost Accounting
411 Auditing

Accounting (Advanced)

This certificate is a nine-course, 24 credit program of the following courses:

214 Financial Accounting
215 Managerial Accounting
216 Accounting Practice and Systems
311 Intermediate Accounting I
312 Intermediate Accounting II
381 Corporate Financial Management
383 Financial Markets
385 Financial Management

Select two (2) of the following:
305 Digital Logic
311 System Programming and Design
330W Computers and Humanity
401 Data Base Management Systems
410 Artificial Intelligence
418 Formal Languages and Automata
425 Computer Graphics
435 Theory of Programming Languages
445W Systems Analysis and Software Design

Management Information Systems (MIS)

This certificate is an eight-course, 24 credit program of the following courses:

182 Microcomputer Software Applications
183 Management Information Systems
382 Information Processing with COBOL
384 File Processing with COBOL
385 Computer Systems
481 Systems Analysis and Design
482 Data Base Management
483 MIS in Organizations

NON-CREDIT PROGRAMS

The Paralegal Institute
Duquesne Benefits Institute

The Duquesne Benefits Institute is an educational institution associated with the Center for Continuing Education of Duquesne University and devoted to continuing professional education for those who work in the field of employee benefits.

Once principally the domain of tax lawyers, the employee benefit field exploded with the passage of the Federal Employee Retirement Income Security Act of 1974 (ERISA). This field has become one of the most challenging areas of professional practice, encompassing professionals from the areas of law, human resources, management, consulting, actuarial science, insurance, and investment management.

The Curriculum consists of five (5) courses and leads to the awarding of the Certificate in Benefit Plans, entitling the holder to use the designation “CBP” after his or her name.

For those entering the field, the Program is designed to provide a solid foundation of practical skills which will enable the certificate holder to discharge major responsibilities in the design, installation, and operation of employee benefit plans.

For those already in the field, the Program is designed to provide a combination refresher/update on all of the latest developments in this fast-moving area, as well as broaden the professional’s base within the field.

Entry Requirements

A college degree is normally required for admission to the Certificate in Benefit Plans Program. In certain cases, the Admissions Committee may waive this requirement and consider other related factors such as previous experience.

Academic Standards

Students must maintain a 2.5 grade point average for successful completion of the program and certificate.

Exam Preparation Courses

Three review courses are offered for individuals interested in preparing to sit for examinations required for graduate school admittance.

Instructors are members of the Duquesne University faculty.
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