DIRECTORY

ADDRESS—Duquesne University, 600 Forbes Avenue, Pittsburgh, Pa. 15282
Telephone: Call specific number (see following)
for other offices, call (412) 396-6000

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

ADMISSIONS—Dean of Domestic Admissions 
and International Affairs
Administration Building, First Floor Telephone (412) 396-5000
(800) 456-0590 (Outside of 412 Area Code)

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

ADVISORS—McAnulty College of Liberal Arts 
College Hall, Room 212 Telephone (412) 396-6389/5905

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

School of Leadership and Professional Advancement 
Rockwell Hall, Room 210 Telephone (412) 396-5034

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

A. J. Palumbo School of Business Administration, 
Rockwell Hall, Room 705 Telephone (412) 396-6277/5702

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

School of Education, 
Caney Hall, Room 213 Telephone (412) 396-6118

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

Rangos School of Health Sciences 
Health Sciences Bldg., Room 302 Telephone (412) 396-6652

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

Mary Pappert School of Music, Room 303 
Telephone (412) 396-5744

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

Bayer School of Natural and Environmental Sciences 
100 Mellon Hall Telephone (412) 396-4921

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

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

PUBLIC SAFETY—Public Safety Building 
Telephone (412) 396-5002 
For Emergency, call (412) 396-4747

MYLAN SCHOOL OF PHARMACY— 
Bayer Learning Center, Room 304 Telephone (412) 396-6939

REGISTRAR—For Transcripts and Records, 
Administration Building, Ground Floor Telephone (412) 396-5623 (Transcripts) 
(412) 396-6212 (General Office)

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

RESIDENCE LIFE—Assumption Hall, Ground Floor Telephone (412) 396-6605/5028

CAMPUS MINISTRY— 
Administration Building, First Floor Telephone (412) 396-6020/5045

STUDENT ACCOUNTS— 
Administration Building, Room 201 Telephone (412) 396-6385/6587/6588

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

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

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

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

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

STUDENT ACCOUNTS— 
Administration Building, Room 201 Telephone (412) 396-6385/6587/6588

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

PUBLIC AFFAIRS— 
220 Fisher Hall Telephone (412) 396-6650

PUBLIC SAFETY—Public Safety Building 
Telephone (412) 396-5002 
For Emergency, call (412) 396-4747

REGISTRAR—For Transcripts and Records, 
Administration Building, Ground Floor Telephone (412) 396-5623 (Transcripts) 
(412) 396-6212 (General Office)

RESIDENCE LIFE—Assumption Hall, Ground Floor Telephone (412) 396-6605/5028

STUDENT ACCOUNTS— 
Administration Building, Room 201 Telephone (412) 396-6385/6587/6588

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

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

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

ADMISSIONS—Dean of Domestic Admissions 
and International Affairs
Administration Building, First Floor Telephone (412) 396-5000
(800) 456-0590 (Outside of 412 Area Code)

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

HEALTH SERVICE— 
Duquesne Towers, Second Floor Telephone (412) 396-1650

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

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

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

LEARNING SKILLS CENTER—
Administration Building, Ground Floor Telephone (412) 396-6661/6636

PSYCHOLOGY CLINIC—
Rockwell Hall, Ninth Floor Telephone (412) 396-6652

PUBLIC AFFAIRS—
220 Fisher Hall Telephone (412) 396-6650

PUBLIC SAFETY—
Public Safety Building 
Telephone (412) 396-5002 
For Emergency, call (412) 396-4747

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Administration Building, Ground Floor Telephone (412) 396-5623 (Transcripts) 
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Administration Building, Room 201 Telephone (412) 396-6385/6587/6588

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

UNIVERSITY COUNSELING CENTER— 
308 Administration Building Telephone (412) 396-6204/6208
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 values consistent with the University's mission statement. This policy applies to all educational programs and activities of the University, including, but not limited to, admission, educational policies, and policies of the University, including, but not limited to, admission, educational policies, security policies and procedures is available in the Admissions Office.

**SECURITY STATISTICS, POLICIES AND PROCEDURES**

In accordance with the College and University Security Information Act (Pennsylvania Act 73 of 1988) and the U.S. Student Right to Know and Security Act (P. C. 101-542), information regarding Duquesne University’s crime statistics, security policies and procedures is available in the Admission Office, and daily crime logs are available for review in the Public Safety Department. Information contained in this catalog is accurate to the date of publication. Published annually by Duquesne University, 600 Forbes Avenue, Pittsburgh, PA 15282.
Academic Calendars
Fall 2001 — Summer 2002

FALL SEMESTER — 2001
Classes Begin August 27 (Monday)
Labor Day Holiday September 3 (Monday)
All Saints Day November 1 (Thursday)
Holy Day
Thanksgiving Holiday November 19-24 (Monday-Saturday)
Immaculate Conception Holy Day December 8 (Saturday)
Thursday Class Schedule Followed December 11 (Tuesday)
Reading Day December 12 (Wednesday)
Final Exams December 13-19 (Thursday-Wednesday)
Commencement December 20 (Thursday)

SPRING SEMESTER — 2002
Classes Begin January 7 (Monday)
Martin Luther King Holiday (Observance) January 21 (Monday)
Spring Break March 4-9 (Monday-Saturday)
Easter Holiday March 28-April 1 (Thursday-Monday)
(Offices Closed Thursday, March 28
Friday, March 29)
Monday Class April 23 (Tuesday)
Schedule Followed
Friday Class April 24 (Wednesday)
Schedule Followed
Final Exams April 26-May 2 (Friday-Thursday)
Commencement May 4 (Saturday)

SUMMER SEMESTER — 2002
Summer Term Begins May 6 (Monday)
Ascension Holy Day May 9 (Thursday)
Memorial Day Holiday May 27 (Monday)
Independence Day July 4 (Thursday)
End of 12 week term July 26 (Friday)
Assumption Holy Day August 15 (Thursday)

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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 2001.

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 43-acre campus overlooking the city of Pittsburgh. Duquesne was cited by USA Today as having one of the safest urban campuses in the nation.

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

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

Duquesne's recent growth has been tremendous with 10,000 students in ten schools of study, including the College and Graduate School of Liberal Arts (1878), and the Schools of Law (1911), Business Administration (1913), Pharmacy (1925), Music (1926), Education (1929), Nursing (1937), Health Sciences (1990), School of Natural and Environmental Sciences (1994) and the School of Leadership and Professional Advancement (2001). Duquesne’s ten schools offer degree programs on the baccalaureate, 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 lay 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 throughout the world and encourages its students and faculty to take advantage of opportunities to study and teach abroad.

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.
The University believes that the sharing of the multiple traditions and mores of societies is an invaluable element in the educational process. 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-contained 43-acre setting.

As one of the world's great corporate centers, Pittsburgh combines the features of urban living with many of the charms and personal characteristics of a much smaller town. One of the largest corporate headquarters centers in the U.S., Pittsburgh is a city in a region dubbed by Rand McNally to be America's most livable city.

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

The world-renowned Pittsburgh Symphony Orchestra, Pittsburgh Opera, and Pittsburgh Ballet Theatre all perform regularly in the elegant Heinz Hall for the Performing Arts and the Benedum Center. The theatregoer 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 Summer Music series, and the International Folk Festival, three prestigious events which draw national attention.

Duquesne students can visit such points of interest as The Pittsburgh Zoo, Carnegie Museum of Art and History, Schenley Park, Carnegie Science Center and Buhl Planetarium, Pittsburgh History and Landmarks Museum, Duquesne Incline and Phipps Conservatory.

For an overview of the University setting, see the campus map in the front of this booklet.

CAMPUS FACILITIES

Physicall 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, University Student Services, and a number of other facilities of University Events, Alumni, and Development. Adjoining the building is the University Chapel, which offers daily Masses.

The Palumbo Center was dedicated in 1988, is the home of the Duquesne men's and women's basketball, and serves as a recreational facility for students, faculty and staff.

The 620-seat arena also houses intramural activities, racquetball and squash courts, modern athletic training facilities, a weight room, exercise room, sauna and locker facilities. The arena is also a convocation facility that allows the entire University to come together for major events.

Assumption Hall, the oldest residence hall on campus, was dedicated in 1956. A four-story structure with a 254-student capacity, the facility has its own academic wing which includes dedicated facilities for the Bayer School of Science and Public Affairs, computer labs, classrooms, and faculty offices. The Dominican Sisters of St. Mary of the Mount are the religious community of instructors and administrators who reside in the residence building.

The Bayer Learning Center is one of Duquesne's classless buildings including multimedia classroom rooms, it is the most advanced classroom facility in the region complete with satellite downlinks, electronic "white" boards and interactive student response pads. The center also offers students a variety of educational technology according to New Media Centers, a consortium of firms whose initiative is aimed at helping university campuses harness interactive media.
The Simon Silverman Center Phenomenology Collection — Focusing primarily on the work of German philosopher Edmund Husserl and his predecessors, Kierkegaard and Nietzsche. The various disciplines which utilize or offer criticism of the phenomenological approach are represented in the collection.

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

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

Honorable Michael A. Musmanno Collection — A collection of the papers and personal library of the former State Superior Court justice, U.S. Congressman, Nuremberg War Crimes Judge, and author. The collection consists of: U.S. and international history represented in this collection through primary source material, including the abolition of the Coal and Iron Police, interrogations of the close associates of Adolf Hitler, records of the Nuremberg trial that Musmanno presided over, and information on the Sacco and Vanzetti trial in which Musmanno was part of the defense team.

In keeping with its mission to support the teaching, learning and research of Duquesne's students and faculty, the library offers instruction in a state of the art classroom that is available to students for their personal use. There is no class in session, library faculty collaborate with faculty from the departments of Mathematics and Computer Science and the School of Music to teach a one-credit computer and information literacy course for freshmen.

The Gumberg Library publishes BiblioTech, a print and online newsletter. A virtual tour of the library is available at www.library.duq.edu

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

The Public Safety Building is headquarters for the University's Public Safety Office.

Richard King Mellon Hall of Science, an attractive, four-story structure dedicated in 1968, houses the departments of biological sciences and chemistry, the Dean's Office for the Bayer School of Natural and Environmental Sciences and part of the Mylan School of Pharmacy and Graduate School of Pharmaceutical Sciences. Designed by one of the world's most renowned architects, Eero Saarinen, the building was the "Laboratory of the Year" award in 1969. Instructional facilities include two large amphitheater-style lecture halls with seating capacities of 250 each, well-equipped laboratories, and a science computer facility.

The Music School, dedicated in 1967, has over 80 pianos, five organs, and over 300 orchestral and band instruments. Individually and group practice areas are available in the building, along with acoustically equipped classrooms. Performances are given throughout the year in the recital hall which is equipped with two Steinway concert grands. The Center for Music Technology, which houses a Music Learning Resource Center, an Electronic Piano Lab, and a Synthesizer and Recording Studio, features state-of-the-art synthesizers, sequencers, samplers and audio equipment.

Rockwell Hall, dedicated in 1968, is a 10-story structure which houses the A.J. Palumbo School of Business Administration. The John F. Donahue Graduate School of Business and whose skyscraper 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 School of Business computer laboratories, Computing and Technology Services, Chrysler Corp Small Business Development Center, the School of Leadership and Professional Advancement, Career Services Center, Psychology Clinic, Printing and Graphics Department, the Mailroom, well-equipped laboratories, and a recreational facility, double rooms, bathroom and laundry 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.

Vickroy Hall, opened for Fall 1997, is a 283 bed, air-conditioned facility, double rooms, bathroom and lounge areas are carpeted. Study/television lounge on each floor. Laundry room on each floor, with one washing machine and two dryers. Front desk security, security cameras in elevators and all outside doors. Ground floor multi-purpose room for meetings, programs and building function. Each room has individual heating and air-conditioning units. Upper classroom building. Coed by floor, 2, 3 and 4 are male, and 5, 6, 7 and 8 are female.

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 Admission Officers
American Council on Education
Catholic College Coordinating Council
College Entrance Examination Board
Council for Accreditation and Support of Education
Council of Independent Colleges and Universities
Middle States Association of Colleges and Universities
National Association of College Admission Counselors
National Association of College and University Business Officers
National Association of Foreign Student Administrators
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 on Higher Education
McAnulty College of Liberal Arts
Membership
American Association for Higher Education
American Association for State and Local History
American Conference of Academic Deans
American Historical Association
American Society of Journalism School Administrators
Association of American Colleges
Association of Departments of English
The Historical Society of Western Pennsylvania
National Collegiate Honors Council
Organization of American Historians

A.J. Palumbo School of Business Administration
Accreditation
American Assembly of Collegiate Schools of Business
Accreditation and Affiliation
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 Joint Review Committee on Educational Programs in Athletic Training (JRC-AT)

The Bachelor of Science in Health Management Systems (BSHMS) degree program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the American Health Information Management Association.
School of Nursing

Accreditation
National League for Nursing
Pennsylvania State Board of Nursing

Membership
American Association of Colleges of Nursing
National League for Nursing, (Council of Baccalaureate and Higher Degree Programs)
Pennsylvania Higher Education Nursing Schools, Inc.

Mylan School of Pharmacy

Accreditation
American Council on Pharmaceutical Education
Pennsylvania State Board of Pharmacy

Membership
American Association of Colleges of Pharmacy

School of Leadership and Professional Advancement

Accreditation
American Bar Association — Paralegal Institute

Membership
American Association for Paralegal Education
American Council on Higher Education
Continuing Education Association of Pennsylvania
North American Association of Summer Sessions

SCHOOL OF LEADERSHIP AND PROFESSIONAL ADVANCEMENT
Duquesne University’s School of Leadership and Professional Advancement offers a variety of educational opportunities for adults. Courses are conveniently offered in the evenings, on Saturdays and online. Bachelors’ degrees, masters’ degrees and professional certificates are available.

For additional information, please see the School of Leadership and Professional Advancement section of this catalog or call (412) 396-5600

HARRISBURG CAMPUS
Duquesne University offers some continuing education opportunities in Harrisburg. Please call (412) 396-5600 or (988) 508-2525 for more information.

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

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

Office of Admissions

The Office of Domestic Admissions is located on the first floor of the Administration Building.

Phone: (412) 396-5000
(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@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.

Admissions Requirements

1. A candidate should have been graduated from an approved secondary school in the upper two-thirds 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, in addition to a high school transcript.

2. High School curriculum must include 16 units distributed as follows: four units in English, eight units in any combination 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 sciences.)

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

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 1 of his/her senior year. The student is notified of the decision by December 15, and is required to send his/her non-refundable deposit within two weeks. This offers the candidate the advantage of knowing of the admissions decision early in his/her senior year.

Early Action Program

This program holds a deadline date of December 1 and allows the student to receive a decision during their senior year, well in advance of the normal response dates.

Application—New First-Year Students

Applications should be addressed to the Dean 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 $50 non-refundable application fee with the application form. No application will be processed for consideration by the Committee on Admissions unless accompanied by the required fee.
3. Request the secondary school principal or guidance counselor to submit a transcript of the candidate’s academic record. A recommendation is requested.
4. Complete the required SAT or ACT examination during the spring of the senior year and/or fall of senior year. It is the personal responsibility of each candidate to have test scores forwarded to the University.
5. An interview is highly recommended for prospective students. Auditions are required for School of Music applicants.
6. Students interested in being considered for University scholarships must submit their complete application by January 10 of their senior year.
7. Early Decision deadline (for students who have Duquesne as their first College choice) is November 1. Notification will be by December 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 early December. Early Decison applicants have been notified. If accepted, students are asked to submit a non-refundable tuition deposit of $200 for commuters and $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.

Early Admission/Honors Program

Although the University believes that most students profit from four years in the secondary school, the Early Admission/Honors Program is open to outstanding students who desire a true academic challenge. This is a plan whereby unusually able and mature candidates who have completed less than four years of a secondary school program may begin their university studies after their junior year, prior to high school graduation. The high school diploma is awarded following successful completion of the freshman year at Duquesne.

Applicants for the Early Admission/Honors Program must be in the top ten percent of their class with a grade point average of 3.0 or above. A minimum 1,100 SAT score or 26 ACT score is necessary for admission. An essay and an interview are also required. When approval from the candidate’s high school principal and/or guidance counselor must be provided outlining the courses received for the high school diploma. Applicants under the age of 18 requesting residence 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 course credit for the particular exam(s) they plan to take. Students should double check with the College of Liberal Arts Office or the University Counseling Center to ensure that they are eligible to receive credit for the particular exam(s) they plan to take. Students should wait six months to retake a test. The policy is subject to change.

Honors College/Integrated Honors Program

Robert A. Aronson, Director

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

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

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

Special Benefits

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

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

Honors College Advantages

Participation in an honors program offers a competitive edge in admission to professional and graduate schools and in obtaining assistantships and fellowships.

While graduation from an honors program cannot guarantee employment, persons with a breadth of liberal arts and sciences backgrounds are often preferred for professional and managerial positions.

APPLICATION—OTHER CATEGORIES

It is the responsibility of persons who apply for evening study, or as international students, admission students, transfers, or as prospective transfer students, to have all supporting credentials on file with the Office of Admissions and the Financial Aid Office before deadline dates.

ADMISSION OF UNDERGRADUATE INTERNATIONAL STUDENTS

Application Criteria

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

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

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

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

Application Procedures

Interested applicants should submit the following items:

a. Duquesne University Undergraduate International Application Form,

b. Completed Duquesne University Affidavit of Support Form along with required accompanying documents and financial resource certifications. (Note: Limited scholarships are available to undergraduate international students),

c. Original or certified copies of all academic records from secondary school study or post-secondary study,

d. One letter of recommendation, and

e. Application fee in the amount specified on the application form.

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

English Language Proficiency Requirements

English is the language of instruction at Duquesne University and demonstrated language proficiency is required of all international applicants.

Since Duquesne University maintains an on-campus Intensive and Semi-Intensive English as a Second Language Program (ESLP), qualified undergraduate applicants may be accepted to academic degree programs conditionally upon completion of English language requirements at Duquesne University.

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

A minimum of one year of academic credit, applicable towards elective credit requirements, may be awarded for ESL coursework successfully completed by eligible international students accepted into academic degree programs at Duquesne University.

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

Applicants to English as a Second Language Program

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

The ESLP is open to qualified international students interested in studying only English on 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 41.

Additional Information on International Student Applications

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

Director, Office of International Affairs
Duquesne University
601 Duquesne Union
Pittsburgh, Pennsylvania 15282-1660
U S A
Telephone 412-396-6113
Fax 412-396-3178
E-mail oia@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 a graduate 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.

The school then will be responsible for notifying both the student and the Office of Admissions of any decision concerning acceptance or rejection.

RE-ADMISSION

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

TRANSFERS

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

The College of Liberal Arts, the School of Natural and Environmental Sciences and School of Education award 60 semester hours of credit to accepted students
transfer applicants who have an Associate's 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+ (2.5 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 to the Division of Continuing Education and an official transcript from an official at the University at which the student is enrolled. A Temporary Transfer Student must re-apply if he/she desires to take a course or courses at Duquesne University beyond one semester.

No Temporary Transfer 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 continuation at the close of the preceding Spring Semester is authorized to register for summer classes by the Summer School Office at mid-March. These students are considered to be Temporary Transfer Students.

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

**PROGRAMS OF AID ADMINISTERED BY THE FINANCIAL AID OFFICE**

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

Available to incoming freshmen - that are renewable with cumulative QPA indicated:

- Chancellor's Scholarship
- Founders Merit Scholarship
- Presidential Merit Scholarship
- Provost Merit Scholarship
- Laval Merit Scholarship

Libermann Scholarship for International Students vary.

Available to renewal students only with cumulative QPA indicated:

- President's Scholarship
- Provost's Scholarship
- If funds are available, new applicants with minimum 30 credits earned at Duquesne, with 300 cumulative QPA and need will be considered.

**Scholars/ROTC** Assistance toward room and board costs for ROTC Scholarship winners. Renewable with a 3.0 cumulative QPA, on-campus residence and ROTC award.

**Duquesne Grant** These grant funds are available to students entering with the Fall 2000 semester and later. They are awarded to students with remaining need after utilizing all aid resources available. Grant is 25% of the 4.0 cumulative QPA of 2.0 for undergraduates and the appropriate score for the 3.5 cumulative QPA for renewal is 2.0, effective Fall 2000.

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

**Liz & John E. Murray, Jr. Scholarship** Every 4 years, Dr. and Mrs. Murray will fund scholarships to incoming freshmen students. Students will receive one-half tuition and university fee. Renewable for four years provided student maintains a minimum cumulative QPA of 3.50, continues to demonstrate exceptional need, applies for financial aid and resides on campus.

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

**Federal Perkins Loans** Recipients are selected in accordance with guidelines published by the Federal Government with 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 & Health Professions Loans** Selection and repayment identical to Perkins loan except that only full-time, dependent undergraduate Nursing Students are eligible for the Nursing Loans and only full-time, dependent undergraduate Pharmacy (not Pre-Pharmacy) students are eligible for the Health Professions Loan.

**Institutional Loans** Limited loan funds are available to full-time undergraduate students. Repayment periods and interest rates vary. Funds made available through Alcoa Foundation, Kershengens Estate, and Stanley K. Power Trust of the Pittsburgh Foundation are available 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**

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

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

**Loans**

**Federal Stafford Loans** Requires completion of FAFSA and Stafford Loan Master Promissory Note (MPN). New applications can be requested through most banks and lending institutions. Available to students who enroll at least half-time. Interest rates vary. Loan limits vary with academic level.

- $2625 for first academic level
- $3500 for second academic level
- $5500 for third and fourth academic levels (also 5th year Pharmacy).

The Federal Stafford Loan is need based. In the event the student does not demonstrate need for all or part of the loan limits above, Unsubsidized Stafford Loans are available. Interest must be paid while in school, but all other conditions are the same as the Federal Stafford Loan.

**Additional Federal Unsubsidized Stafford Loans** Available to independent students and dependent students whose parent is denied for the Federal PLUS Loan. Can apply for this loan using the Federal Stafford Loan Master Promissory Note (MPN). Interest rates vary. Loan limits vary with academic level.

- $4000 for first and second academic levels
- $5000 for third and fourth academic levels (also 5th year Pharmacy).

**Federal PLUS Loans** Available to parents of dependent undergraduate students. Loan applications may be obtained through most banks and lending institutions. Interest rate varies. Maximum is calculated cost of education minus all financial aid.

**University Discounts** These discounts are available to students meeting the requirements indicated. Discounts will be at basic tuition rate and may be used toward only one degree or part thereof. No other form of tuition remission or discount can be used simultaneously. Some program restrictions may apply.
Catholic High School Graduates  A 25% discount on basic tuition is extended to graduates of Vincen-
tian Academy—Duquesne University. This discount is effective with initial enrollment at Duquesne Uni-
versity immediately in the fall following graduation. This discount applies with the class entering in
the Fall of 1998. A 10% discount on basic tuition is ex-
tended to graduates of Roman Catholic High Schools
in the Dioceses of Pittsburgh and Greensburg, who
enroll as full-time students in the fall immediately
following graduation. Renewal requires continuous
full-time enrollment during the academic years
following initial enrollment, and re-application through the Financial Aid Office.

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

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

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

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

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

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

Nathan and Harry Daily Scholarship: Based on need and academics. Recipients of Butler County, PA.

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

Melrose A. Eberhardt Memorial Fund: Based on need, academics and activities.

Merle E Gilliland Scholarship: Based on need and academics.

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

Student Life

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

Coalhouse Scholarship: Based on need and volunteer activities.

Clinton Eddy Goodwin Memorial Scholarship: Based on academics. Pharmacy students who have an interest in a University Athletic Program.

Patrick and Mary Hogan Scholarship: Need based.

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

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

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

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

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

Vera Heinz Travel Award: Female students selected on the basis of academic achievement and interest in intercultural or international relations.

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

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

College of Liberal Arts

Carroll Scholarship: Based on academics and creative writing. Apply through English Department.

Frances Chambers Scholarship: Based on recommendations of English Department Chair. Juniors and Seniors in English.

School of Business Administration

Scholarship application/information available from the Admissions Office, 705 Rockwell Hall.

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

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

Glen Beeson Scholarship: Based on need and academics (3 $500). Available to sophomore, junior or senior Business students.

Clifford E. Bean Scholarship: Awarded annually to an undergraduate Business student. Based on financial need and merit. Administered by the Financial Aid Office.

Anthony Cagiazzo Scholarship: Awarded annually to an undergraduate or graduate Business student. Based on financial need and merit. Administered by the Financial Aid Office.

James L. and Paul L. McGrealth Scholarship: Need based.

Mary V. McGuirk Scholarship: Based on need and academics.

James P. McQuade Family Scholarship in Honor of Aaron and Pearl Curtor of Canons Market: Based on need and academics. Enrollment in A. J. Palumbo School of Business.

James P. McQuade Family Scholarship in Memory of James Hickey: Based on need and academics. Preference to accounting majors.

James P. McQuade Family Scholarship in Honor of Samuel Lebowski of Union Drug Store: Based on need and academics. Enrollment in Mylan School of Pharmacy.

James P. McQuade Family Scholarship in Honor of Thomas Francis McQuade for the School of Education: Based on need and academics. Preference to students enrolled in the School of Education.

Raymond F. Merkt Scholarship: Based on need and academics.

Theodore T. Myers Scholarship: Need based. First preference to child of member of Graphic Arts International Union — Local 24 - Pittsburgh.

John Joseph Mongillo Award: Need based.

Joseph J. Mulach Scholarship: Need based. Students who are enrolled in either the School of Music or the School of Education. For further criteria, please contact the Director of Financial Aid.

The Mundahl Family Scholarship: Need based.

Liz and John E. Murray, Jr Scholarship: Need based.

David Mussick Scholarship: Awarded to incoming freshmen, based on need and academics, who are from Jeannette High School, or from the Jeannette area.

Felicitas and Guentra Odila Scholarship: Need based. Enrollment in Mylan School of Pharmacy.

Florence M. Paetsch 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.

Jane and George Eiffert Scholarship: Based on need and academics.

Dr. and Mrs. Arthur William Phillips Scholarship: Based on academics. Pennsylvania residents from Allegheny, Armstrong, Butler, Clarion, Crawford, Jefferson, Lawrence, Mercer or Venango counties.

Pioneer and War Years Scholarship: Need based.

J W and Ruth Lewis Rahide Scholarship: Need based.

Alan Reynolds Scholarship: Need based.

FINANCIAL AID

Marie B. Rohrer Scholarship: Need based.

Frank W. Schratz Scholarship: Based on need and academics. Enrollment in A. J. Palumbo School of Business.

R P. Simmons Family Foundation Scholarship: Need based. Residents of Tristate area - Pennsylvania, Ohio, West Virginia.

Jerry Smith II Scholarship: Need based, average grades.

Spring Hill Foundation Wayne County, PA recipients with preference to children of employees or residents of Sterling Township. A, 2, 6 GPA needed for renewal.


Marie B. Stutler Scholarship: Need based.

Patrick and Mary Stutler Scholarship: Need based. Classics majors.

Mary Louise Sullivan Scholarship: Juniors or Seniors majoring in Special or Elementary Education.

Patrick and Louise Tassers Scholarship: Need based.

Donald L. Very Scholarship: Based on need and academics.

Donald W. Weber Scholarship: Based on need and minimum 3.0 GPA.

James F. and Mary E. Will Scholarship: Need based. Preference to business majors.


Thomas J. Wenschel Scholarship: Based on need and academics. Education majors.

Harry and Patricia Witt Scholarship: Need based.

Ronald and Leshel Wolfe Scholarship: Need based.

Richard Wright Family Scholarship: Based on need and academics.


The following are awarded by financial aid and outside representatives:

Albert and Ambrosia Colecchia Scholarship: Based on academics. Juniors and Seniors in McAnulty College of Liberal Arts or Bayer School of Natural and Environmental Sciences. With specific majors.

James P. McQuade Family Scholarship: Based on need and academics. Enrollment in A. J. Palumbo School of Business.

John Joseph Mongillo Award: Need based. Students who are enrolled in either the School of Music or the School of Education. For further criteria, please contact the Director of Financial Aid.

The Mundahl Family Scholarship: Need based.

Liz and John E. Murray, Jr Scholarship: Need based.

David Mussick Scholarship: Awarded to incoming freshmen, based on need and academics, who are from Jeannette High School, or from the Jeannette area.

Felicitas and Guentra Odila Scholarship: Need based. Enrollment in Mylan School of Pharmacy.

Florence M. Paetsch 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.

Jane and George Eiffert Scholarship: Based on need and academics.

Dr. and Mrs. Arthur William Phillips Scholarship: Based on academics. Pennsylvania residents from Allegheny, Armstrong, Butler, Clarion, Crawford, Jefferson, Lawrence, Mercer or Venango counties.

Pioneer and War Years Scholarship: Need based.

J W and Ruth Lewis Rahide Scholarship: Need based.

Alan Reynolds Scholarship: Need based.
Consolidation Coal Company Scholarship for Information Technology Awarded to a student majoring in Information Technology, with 3.0 QPA and senior standing by fall of award year. Final determination based on essay.

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

John L. McDonough, Jr. Scholarship Awarded to students majoring in Accounting, who demonstrate financial need and academic potential, with a preference for incoming freshmen students.

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

Joseph Monteverde Scholarship Awarded to sophomores, juniors and seniors. Based on academic achievement — 3.5 QPA, University and community service and a personal statement.

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

Patrick F. and Susan M. Spano Scholarship Awarded annually to an undergraduate Business student with financial need. Administered by the Financial Aid Office.

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

James F. and Mary Ellen Will Scholarship Awarded annually to an undergraduate Business student with financial need. Administered by the Financial Aid Office.

School of Education

Mary Buschhoff Scholarship Need based.

Katherine M. Carney Scholarship Based on need and academics. Special Education major.

William F. Fair Memorial Scholarship Sophomore involvement in on or off campus professional development.

Heastrt Scholarship Must be an athlete. Preference to minority students who have completed associate degree at Allegheny, Beaver or Butler County Community College.

Dr. Lawrence Rebo Scholarship Juniors Based on need and academics.

Maryjane Eyles Sullivan Scholarship Juniors or Seniors with Special or Elementary Education majors.

Valspar Foundation Scholarship Awarded to minority computer summer camp participants.

FINANCIAL AID

School of Health Sciences

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

Health Management Systems Loans and scholarships for final year students. Information available through American Health Information Management Association, 919 N. Michigan Avenue, Suite 1400, Chicago, IL 60611-1683 Phone 1-800-433-3243.

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

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

Dawna V. Jones Scholarship One fifth year Physical Therapy student is awarded this scholarship based on academic achievement, service and leadership. Not renewable.

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

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

Speech-Language Pathology Financial aid and scholarship information may be obtained by writing to the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852 Phone (301) 897-7300.

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

FINANCIAL AID

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

School of Music

Afzal d’Auberge Scholarship Based on need and academics.

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

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

James Hunter Memorial Award Based upon musical and scholarly excellence.

Ronald Lattore Memorial Scholarship Trumpet player. Need based.

Robert Mairzah Scholarship Need based, academics secondary.

Music Therapy Scholarship Music Therapy students.

Annie K. Patton and George Locken Scholarship Based upon musical and scholarly excellence.

Parcell Trombone Scholarship Based on talent and promise of Jazz trombone student.

Paul B. Reinhold Scholarship Based upon musical and scholarly excellence.

Riley Piano Award One award per semester for piano excellence.

Laure V. Recereto Scholarship Woodwind major. Based on academics.

Matty & Eddie Shurer Students studying brass instruments.

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

Hennetta Voyvodich Cello Scholarship Cello student, minimum 3.0 QPA.

Women’s Advisory Scholarship Full time student.

Other Awards: Contact Dean’s Office for information — Presser Scholarship, Loyal Christian Benefit Association Award, Music School Scholarships.

School of Natural & Environmental Sciences

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

Chemistry Department Scholarship For chemistry majors.

School of Nursing

Richard J. Bohm Scholarship For nursing students.

Joseph William Hauser Scholarship For nursing students.

Ruth Maszkiewicz Scholarship For nursing students, based on need and academics.

James P. McCauley Family Scholarship For nursing students, with a strong preference for those who are female, and are experiencing exceptional and/or emergency financial need. Preference will also be given to students who participate in the University’s work-study program.

Converse Miller Scholarship For nursing students.

Nursing School 50th Anniversary Scholarship For nursing students.

Herbert Schreiber Scholarship For nursing students.

Sue Mignionna Thomas Scholarship For nursing students.

Barbara Ann Verbur Endowed Scholarship For nursing students.

School of Pharmacy

Unless otherwise stated, apply through School of Pharmacy.

Women of Galen Awarded by Women’s Auxiliary of Galen Pharmaceutical Society of Pittsburgh to deserving final year Pharmacy students.

Samuel W. Curtis Loan To provide assistance for Pharmacy students.

Chilton Loan To provide assistance for Pharmacy students.

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

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

Clinton Eddy Goodwyn Scholarship In memory of Clinton Eddy Goodwyn. Candidates must be a declared Pharmacy major, possess a minimum G.P.A. of 3.0, and have an interest in and demonstrated support of the University athletic program.

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

Fred Schiller Loan Revolving loan fund for worthy and qualified Pharmacy students. Amounts vary based on need and general ability.
Dr Hugo J Scarnati 75th Pharmacy Anniversary Scholarship Awarded to deserving Pharmacy students based on merit and need

John Clether Sims Loan Revolving loan fund for partial tuition loans Amounts vary based on need and general ability

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

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

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

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

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

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

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

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

Donald Bell Scholarship Fund of Eckerd (Ternf) 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 (Mae) Furguese Scholarship In memory of Geraldine (Mae) Furguese, P'50 Provides scholarships for needy and deserving female students in the School of Pharmacy

FINANCIAL AID

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

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

School of Pharmacy Class of 1939 Scholarship Awarded annually to deserving and needy Pharmacy students in the final years of study

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

Cora C. Craven, Norma Wells, Mary Connolly Livingston Educational Grants Grants awarded annually to members in good standing of Lambda Kappa Sigma, enrolled in Doctor of Pharmacy program Must rank in upper half of their class and present evidence of financial need Application information from School of Pharmacy

Hoefer-Scherger Scholarship Granted to a student entering the final years of the Pharmacy program Must have minimum 2.0 GPA in the professional program and demonstrate financial need

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

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

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

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

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

Patrice Lynn Tintero Scholarship Endowed fund established by Charles J Tintero, P'51 Family Annual award to a Pharmacy student in good academic standing with need

Richard H. and Mary W Berry Scholarship In memory of Richard H Barry, P'39 Selection of recipient from Pharmacy classes will be based on good academic standing and need

FINANCIAL AID

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

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

Sonya F. DeGray, P'59, Scholarship Assistance based on merit and need to Pharmacy student in professional phase of Pharm D program

Norman H. Marcus Scholarship Endowed fund established by Marcus family in memory of Norman Marcus, P'50 Award to Pharmacy student based on merit and need and demonstrated interest in community or long-term care practice

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

Gerard J Wolf Pharmacy Alumni Scholarship Endowed fund established by Pharmacy Alumni Association in memory of Jerry Wolf, P'49, longtime member and officer of the Association and School of Pharmacy instructor Annual earnings of the endowed fund are designated for, and restricted to, equal distribution among the children of Pharmacy alumni attending Duquesne, without regard to need or school of enrollment

Edgar N Ducaus, P'54, Scholarship Annual award to a deserving Pharmacy student

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

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

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

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

Samuel Procaccia, P'73, Scholarship Annual award to deserving Pharmacy student

Sylvia Berto Malzehl, MD, P'57, Scholarship Annual award to a deserving Pharmacy student

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

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

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

Pharmaceutical Companies Scholarship Fund Scholarships for Pharmacy students Based on financial need and good academic standing in the Pharmacy program

Mary McPartland Beck Scholarship Award Assistance to Pharmacy students

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

Louis J. DeBono, Jr, P'68, Scholarship Assistance based on merit and need to Pharmacy athlete in professional phase of Pharm D program

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

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

Hoofnagle, P'56, Endowed Scholarship Annual award to a Pharmacy student who demonstrates need and merit and interest in pursuing a career in industrial pharmacy

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

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

School of Leadership and Professional Advancement

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

Athletics

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

Gumberg Library

Gumberg Library Scholarship Students who have worked a minimum of two semesters in the Gumberg Library
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 by a registered student who does not subsequently attend cannot be canceled unless written notification of the decision not to attend is given to the Registrar before the first class day. Notification received on or after the opening day of classes is subject to the official withdrawal policy.

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

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

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

Except for changes requested by the dean or advisor, a fee of $500 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 Pittsburg Council on Higher Education (PCHE) institutions to take courses at any other PCHE institution. Member institutions of PCHE are:

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

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

POLICIES

ACADEMIC ADVISEMENT

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

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

AUDITING COURSES

Regularly enrolled Duquesne students are permitted to audit courses. In addition, non-degree students from the general community who would like to audit courses for personal enrichment and who are not matriculated nor pursuing a degree program are also eligible to audit. Regular students should consult 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 Schedule of Classes (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 credits. Courses audited may not be challenged later or completed via CLEP or other advanced standing tests.

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

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

Students 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. Schools may require attendance at every class.

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

The student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstance is responsible for notifying the office of the appropriate school advisor. The student must 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 has not taken the scheduled time, the policy is to assign a zero for that part of the course. An accumulation of zero grades could result in a final grade of F. If a student has significant reasons missed a part of the course or an examination, the grade may be submitted as an I If the temporary I grade is to be replaced by a passing grade, the work must be completed by the time stated in the Academic Calendar.

Library

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Library
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, or 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 $30.00 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.

Grade Description

A  Superior
A-  Excellent
B+  Very Good
B  Good
B-  Above Average
C+  Satisfactory
C  Average (Minimum general average for graduation)

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.

REGISTRATION AND SCHOLASTIC POLICIES

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 thousandths 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

Grade  Quality Points Per Credit
A  = 40
A-  = 37
B+  = 33
B  = 30
B-  = 27
C+  = 23
C  = 20
D  = 10
F  = 0

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

REPEATING COURSES AND COURSE RETROGRADATION

Students ordinarily are permitted to repeat courses in which D, and F grades were received. The request for permission to repeat a course is to be submitted in letter form to the academic advisor. An authorized request to repeat a course form must be obtained from the advisor before registering in the repeat course. All grades are retained on the permanent academic record. The 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 chairman 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 to which the student is returning. If a student transfers to another school within the University, the student can be admitted only by the Dean of that school.

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

Academic Warning 1 to 199 QPA (Letter of warning may be sent by appropriate Dean)
Probation 1 to 2.7 QPA (Subject to the jurisdiction of the appropriate Committee on Student Standing and may be required to modify or restrict academic program)
Dismissal Less than 1.5 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, the guidelines prevail.

Academic Warnings 1.5 to 1.9 QPA (Letter or warning may be sent by appropriate Dean)
Probation 2.1 to 1.9 QPA (Subject to the jurisdiction of the appropriate Committee on Student Standing and may be required to modify or restrict academic program)
Dismissal Less than 1.5 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 1.85 and 1.99 may continue on probation for one semester. However, students who have earned 90 credits or more are subject to dismissal unless they have a QPA of 2.0
or better. Students who accumulated three F grades in one semester are subject to dismissal. Appeals of academic dismissal must be directed to the appropriate College or School Committee on Student Standing. Students subject to the jurisdiction of the appropriate Committee on Student Standing in accordance with the established guidelines who are permitted to re-enroll on a full-time basis but continue participation in non-curricular and extracurricular activities shall be without appeal if they are subsequently dismissed from the University for poor scholarship.

ACADEMIC ADVISEMENT FOR STUDENT ATHLETES

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

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

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

c) Student-athletes must maintain a 2.0 cumulative GPA at all times in order to be academically eligible to compete in intercollegiate 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 intercollegiate competition is monitored by the Office of the Academic Coordinator of Intercollegiate Athletics. This office also provides other academic support services for student athletes, including, but not limited to, study halls, tutorial assistance, academic advisement, registration assistance, as well as orientation.

DEAN’S LIST

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

GRADUATE COURSES FOR UNDERGRADUATE CREDIT

Qualified seniors may be permitted to register in certain graduate courses at the 500 level for undergraduate credit on the recommendation of the advisor and with the approval of the dean of the graduate school involved. All 500 courses are described in 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. The candidate must have the Application for the University Degree with the Office of the Registrar on or before the last date to apply for graduation as announced in the Academic Calendar, and satisfied all financial obligations with the University.

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

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

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

1. The bachelor’s degree requires a minimum of 120 semester hours of course credits.
2. All bachelor’s degrees require an overall minimum quality point average of 2.0, which is a C grade average in a 4.0 system (Students should further determine the need for minimum 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 3.50 to 3.74
Magna Cum Laude—Quality Point Average 3.75 and above
Summa Cum Laude—Upon recommendation of the faculty and a 3.90 GPA, the Magna Cum Laude citation may be raised to Summa Cum Laude.

UNIT OF CREDIT

The unit of credit is the semester hour. One semester hour of credit is granted for the successful completion of one hour of lecture or recitation, or at least two hours 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 up to the date announced in the Academic Calendar for withdrawal with a W grade.

If a student wishes to withdraw from a course after the date announced in the Academic Calendar, the student must seek approval of the Committee on Student Standing of the student’s school. If approval is granted, the student then initiates the appropriate form through the advisor. A student who is not granted approval of the request and withdraws from the course unofficially will receive an F grade for the course.

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## 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 2001-2002 term only, unless otherwise indicated.

### TUITION

#### RATE 1 (Arts, Education, Nursing)

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#### RATE 2 (Natural and Environmental Sciences, Pre-Pharmacy)

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#### RATE 3 (Health Sciences)

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</table>

#### Per-credit

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td>598.00</td>
</tr>
<tr>
<td>University Services Fee</td>
<td>56.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>654.00</strong></td>
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#### RATE 4 (Music)

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Full-time Undergraduate Tuition (12-18 cr)</td>
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<tr>
<td>University Services Fee</td>
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<td><strong>Total</strong></td>
<td><strong>21,374</strong></td>
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</table>

#### Per-credit

<table>
<thead>
<tr>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td>656.00</td>
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<tr>
<td>University Services Fee</td>
<td>56.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>712.00</strong></td>
</tr>
</tbody>
</table>

### FEES

- **Application (non-refundable)**: $50.00
- **Matriculation Deposit (non-refundable)**: $200.00
- **Residence Hall Pre-Payment (non-refundable)**: $300.00
- **Change of Schedule**: $5.00
- **Credit by Examination**: $30.00
- **Orientation (New Students)**: $125.00
- **Late Registration**: $25.00
- **Removal of I Grade**: $5.00
- **Registration Correction Fee**: $15.00
- **Continuing Registration Fee**: $100.00
- **Undergraduate Pharmacy Student Activities (for Third, Fourth, Fifth, and Sixth Year Students)**: $40.00
- **University Services Fee**: $56.00 per credit (charged on each semester registration)

### TESTING FEES

- **English Language Placement Testing (ESL)**: $50.00 (one-time fee)

### SUMMER TUITION

Summer tuition is calculated on a per credit basis. See page 28 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 a refund of part of the tuition charged for the semester or session in accordance with the Tuition Remission Schedule. The amount of the remission is applied toward the room and board expenses. This remission is non-refundable.

Reservations are made on an annual basis—August to May. Rooms may be occupied no earlier than the first day of orientation for all freshmen and transfer students. If a student's application is approved, they are assigned a space in the residence area.

All students occupying rooms in the University residence halls are required to take a University Meal Plan. The University reserves the right to modify charges and require additional plans. Tuition and fees shall continue for the remainder of the Academic Term and 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.

Within the Summer Session—Based on a Six-Week Session Standard

<table>
<thead>
<tr>
<th>Period</th>
<th>Percent of Remission</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Week</td>
<td>80</td>
</tr>
<tr>
<td>Second Week</td>
<td>80</td>
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<tr>
<td>Third Week</td>
<td>40</td>
</tr>
<tr>
<td>Fourth Week</td>
<td>20</td>
</tr>
<tr>
<td>After Fourth Week</td>
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ROOM AND BOARD—WITHDRAWAL AND REFUND

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

a) If the Student decides not to live in the Living-Learning Centers and so notifies the Director of Residence Life. In this instance, the Student will be released from obligations under this Housing Agreement. All amounts which the Student has previously paid pursuant to this Agreement shall be refunded with the exception of $300.00 non-refundable room reservation fee and $100.00 penalty.

b) 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.

c) If the Student notifies the Assistant Director of Residence Life at any time 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.

d) 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.

FINANCIAL MATTERS

All charges for tuition, fees, room and board, and other charges for the semester by installment, are payable at registration with an NSF check will result in cancellation of the ten-month payment plan. For additional information, contact TMS at 1-800-722-4867.

BAD CHECKS

It is the policy of the University to charge bad checks against a student account. Checks are returned from a bank 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 developmental environment that will enhance students' growth for the individual self-actualization and positive involvement in the world community.

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

ORGANIZATION
The Executive Vice President for Student Life coordinates the Departments of Athletics, Commuter Affairs, University Counseling Center, Duquesne Union, Financial Aid, Freshman Development and Special Student Services, Greek Life, Health Services, 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, women's crew, men's and women's cross country, football (Division I-AA), men's golf, women's lacrosse, rifle (co-ed), men's and women's soccer, men's and women's swimming and diving, men's and women's tennis, women's indoor and outdoor track, women's volleyball, and wrestling. In addition, cheerleading, men's crew, hockey, and men's indoor and outdoor track are offered as club sports. Duquesne University believes in and promotes the concept of student athlete, evidenced by an Academic Support staff within the Department of Athletics. Athletic grants-in-aid are available in all varsity sports, with the exception of football.

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

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

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

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

Commuter Message Center If someone needs to get a non-emergency message to a student on campus, they may call (412) 396-6667. The message is posted outside the Office for the student to pick up.

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

Commuter Assistant Program This program is a support network of upperclassman students who serve as advisors and provide resources for new commuters. A student 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 117. Office hours are extended during the fall and spring semesters when the Office is open Monday through Thursday, 8:30 a.m. to 5:30 p.m. and Friday until 4:30 p.m. For further information call (412) 396-6660.

OFFICE OF STUDENT ACTIVITIES
The Office of Student Activities coordinates the programs, services and facilities of the Duquesne Union, provides programming and administrative support for all recognized student organizations, publishes the fall and spring Semester Activities Calendars, and coordinates the Duquesne University Volunteers (DUV), the University's volunteer program. The program 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 students' responsibilities to the University 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 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 and sophomores with a QPA of below 2.5, or whose parents are required to live in one of Duquesne's Living Learning Centers, are required to live in University housing. Housing Agreement terms are board rates being determined on an annual basis. Additional information regarding programs, polices and regulations for the Living Learning Centers is included in the Residence Life Handbook.

OFFICE OF FRESHMAN DEVELOPMENT AND SPECIAL STUDENT SERVICES
FRESHMEN The Office of Freshman Development and Special Student Services serves to implement and direct programs which integrate and enhance the academic, personal and social dimensions of freshmen at Duquesne University. To accomplish this, the office directs the New Student Orientation Program, implements the Freshman Mentor and Big Brother, Big Sister Programs, assists freshmen with finding tutors when needed, monitors freshman grades, prepares and edits the Freshman Newsletter, develops freshman leadership through the Freshman Class Advisory Committee, advises the freshman honor society, Phi Eta Sigma, and interacts with the Offices of Commuter Affairs, Intramurals, and Residence Life in developing programs for freshmen.

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

Please contact the Office of Freshman Development and Special Student Services at (412) 396-6657 or (412) 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 ideas of academic excellence, leadership, philanthropy, and moral and ethical development of students within the framework of the Duquesne University Mission Statement. The office provides training and consulting in leadership development, group processes, and interpersonal skills, sponsors educational and social programming, and promotes a sense of community in all the programs.

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 to students and provides guidance and support in academic and career planning, registration, and other academic matters.
Students and graduates of Duquesne University may earn academic credit for approved preprofessional work undertaken as part of the University's Undergraduate/Graduate 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. Please contact the Career Services Center at (412) 396-6208 for more information.

The University Counseling Center provides a variety of services to help students improve their academic and personal skills and advance their intellectual growth. Services are provided by professional counselors in a confidential and effective manner. Students are encouraged to meet with their advisor regularly.

**CAREER SERVICES CENTER**

Students and graduates of Duquesne University may seek employment assistance and advice, including resume preparation, interview and job search techniques, job referrals and credential services. The University Counseling Center is located in Room 308 of the Administration Building. Please call (412) 396-6204 for an appointment or to obtain more information.

**HEALTH SERVICE**

**Medical/Nursing**

The Health Service provides for the evaluation and treatment of illness and injury. 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) must provide proof of immunization requirements will follow guidelines from the Centers for Disease Control. Students must provide this documentation or registration for class will not be permitted.

**In-Hospital Care**

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

**Location**

The Health Service is located on the second floor, Towers Living Learning, (412) 396-1650/1652.

**Eligibility**

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. Insurance plans for dental care are also available.

Please contact the University Counseling Center at (412) 396-6204/6208 for any additional information.

**EMERGENCY**

- A Crisis Coordinator is available 24 hours a day to assist in any type of emergency resulting from psychological problems.
- Call Campus Security (412) 396-4747. They will provide assistance and will contact Paramedics, Health Service and the Crisis Coordinator as needed.

**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 achieve the legitimate needs of students consistent with the mission and goals of the University.

**STUDENT GOVERNMENT ASSOCIATION**

The Student Government Association (SGA) serves as the student body's representative to the university committees and to recognize and fund student organizations. The SGA provides 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.

**OIA**

Offices of International Affairs (OIA) provide services to international students and scholars pursuing undergraduate and graduate degree programs at the University. These specialized services include furnishing pre-arrival information to accepted students, facilitating compliance with U.S. Immigration and Naturalization Service (INS) requirements, assisting in academic and cross-cultural adjustment through initial arrival and extended orientation programs, promoting and supporting events, programs, and activities which foster deeper communication, awareness and understanding among U.S. and international students at Duquesne, and providing ongoing direct service and appropriate referral services to international students and scholars on campus in a personalized and professional manner.

The OIA supports the University's strong commitment to international education as a valued component of the overall mission of the institution.
COMMUTER COUNCIL
Commuter Council is a student run governing body designed to identify commuter concerns and to provide educational, social and service-oriented programs for the University’s large commuter population.

RESIDENCE HALL ASSOCIATION
The Residence Hall Association supports Living Learning Center activities and is involved with the Office of Residence Life in developing and implementing Living Learning Center policies and procedures. All resident students are automatically members of 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. As a result, representatives from 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 the body that governs and represents member social fraternities at Duquesne University.

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.

DUEQUESNE 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.

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

The Duquesne Duke, the University campus 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 is a literary publication which affords students the opportunity to submit writing, artwork, and photographs. It is published once a year.

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.

Part VI: WDUQ Radio

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

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

WDUQ reaches more than 130,000 listeners each week throughout southwestern Pennsylvania, and parts of Ohio, West Virginia and Maryland. WDUQ is the oldest public broadcasting station in Pittsburgh, on the air since 1949.

WDUQ’s offices and studios are in the Des Places Language Center of Duquesne University on the Duquesne campus.

STUDENT LIFE, PROGRAMS, SERVICES AND ORGANIZATIONS

E STUDENT ORGANIZATIONS
GENERAL
There are more than 120 student organizations at Duquesne. Some serve the needs of specific interest groups, others relate directly to major areas of study, and some honor academic achievement. Many are formed to meet social, service or religious needs and interests.

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

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

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FRATERNITIES AND SORORITIES
Fraternities and Sororities are organizations composed of college men and women who have joined together. They sponsor and promote social, athletic, service, and academic events.

PERFORMANCE GROUPS
TAMBURLITZANS
Based on the exciting traditions of Eastern Europe and neighboring cultures, the Duquesne University Tamburitzans show is a colorful extravaganza of dance, song, and music. The longest-running university-based performing ensemble in the United States, the Tamburitzans is named after the instrument prevalent in many of the cultures which the group artistically represents.

Established in 1937, the ensemble’s mission is to preserve and perpetuate the cultural heritages of Eastern Europe and its neighbors through performance, while awarding scholarships to talented and deserving performers. The group travels extensively throughout the U.S. during its August-to-June performing season, presenting an average of 80 shows.

Experience in folk arts performance is not required, performers with ballet, tap, jazz, band, orchestra, chorus, or musical theater experience may have the skills required to qualify for a scholarship and a position with this unique ensemble. Vacancies are filled through an annual audition process, which should be made in the fall prior to general auditions, which are held in February. Contact the Tamburitzans for further information: phone (412) 396-5185 fax (412) 396-5583 http://www.duq.edu/Tamburitzans e-mail podlaski@duq.edu

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

MEDIA ORGANIZATIONS
WDJR
WDJR is the Duquesne Student Radio Station. It broadcasts approximately nineteen hours per day, seven days per week during the Fall and Spring Semesters.
Part VII: Campus Ministry

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

The Campus Ministry sees itself at the service of all in an open, unstructured, trusting relationship, and invites the participation of the entire Duquesne community in religious, social and community activities.

All are invited to stop in to offer suggestions for programs or services, or just to get acquainted with the staff at any of the following Campus Ministry locations: 102 Administration Building, the Campus Ministry Center in Duquesne Towers, the Student Union and the Living/Learning Centers of St. Ann, Assumption and St. Martin.

Part VIII: University Programs and Courses

THE UNIVERSITY CORE CURRICULUM

STATEMENT OF PURPOSE

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

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

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

CORE COURSES

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

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

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

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

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

141 Social, Political and Economic Systems 3 cr
The course examines questions about equality and inequality in various societies from the vantage points of economics, political science and sociology. Specifically, it addresses economic, political and legal issues as they relate to gender, age, race and ethnicity.

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

161 Arts and the Human Experience 3 cr
The visual and musical arts are explored in light of major styles, artists, 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.

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

171 Biology
Evolution, inheritance, and the interrelation of energy, life and the physical environment provide the unifying themes of this course. Each of these is examined from multiple levels of organization—from the molecular to the biosphere—demonstrating the diversity of life within which the commonality of life is found. Issues to be considered include those critical to effective citizenship in our changing world such as disease, reproduction, genetics, genetic engineering, and ecology.
UNIVERSITY PROGRAMS AND COURSES

172 Chemistry
The fundamental concepts of structure, bonding, properties and chemical reactivity are presented through lecture and classroom experimentation. The chemical dimensions of selected social issues of current importance in the areas of environmental chemistry, energy technology and food production are examined.

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

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

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

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

182 Human Morality
An introduction to the central issues of moral theology, ethical theories, including methodological and ethical proofs of the existence of 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 through the experiences of a wide variety of cultures, including ancient 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 basis for human nature.

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

PRE-HEALTH PROFESSIONS PROGRAM
The Pre-Health Professions Program is a university-wide program for students pursuing a career in medicine, dentistry, veterinary medicine, optometry, podiatry or chiropractic. The program provides guidance to students in acquiring the requisite experiences and academic background for applying to health professional schools. Students in the program meet regularly with a pre-health advisor to evaluate the student’s academic progress and receive professional guidance in gaining volunteer and community service, clinical, internship and research experience. The program sponsors seminars and workshops which provide information about health professional schools, careers in the health professions and the development of personal skills needed for a health professions career. University and college core requirements offer each student the liberal arts education that provides a solid foundation for a career in a health profession. Most health professions schools prefer their applicants to have had a broad and well-rounded academic background with a diverse set of life and health-oriented experiences.

It is important for each student to register with the program as early as possible in his/her academic career and preferably upon first entering the university. At that time, each student will meet with a pre-health advisor to plan a tentative four-year academic program and other activities that are best suited for the individual student. Students in the program must complete the Pre-Health Professions Core Curriculum described below and declare a major. Students are urged to select a major in an area that is of the most interest to the student. Biology, psychology, biochemistry, English, history, psychology, and mathematics are a few of the more commonly chosen ones.

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

Several programs are available to students interested in a career in medicine and include the “3+4 Compressed Program in Family Practice” between Duquesne University and the Lake Erie College of Osteopathic Medicine (LECOM). This program offers qualified students an intensive three-year academic program at Duquesne University followed by four years at LECOM. Students must apply to this program when applying for admission to Duquesne University. Students admitted to this program are enrolled in The McAnulty College of Liberal Arts and are awarded a baccalaureate degree from Duquesne University after successfully completing the first year at LECOM. For a student interested in the management of health delivery, the Pre-Health Professions Program in combination with the Rangos School of Health Sciences offers a degree track for pre-health students in the department of Health Management Systems.

The core courses are as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semesters</th>
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</thead>
<tbody>
<tr>
<td>English</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry with laboratory</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Organic Chemistry with laboratory</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Biology with laboratory</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Physics with laboratory</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Behavioral Sciences</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

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 in ESL study only. The ESLP offers intensive (20 hours per week) or semi-intensive (4 to 16 hours per week) programs at basic, intermediate, and advanced levels. Placement tests are administered to all students who may also earn a Certificate of Program Completion.

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

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

Basic-level Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semesters</th>
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</thead>
<tbody>
<tr>
<td>120/142 Basic ESL Grammar A/B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>121 Basic ESL Speaking</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>122/127 Basic ESL Reading A/B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>123/128 Basic ESL Writing A/B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>124 Basic ESL Comprehension</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Intermediate-level Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 Intermediate ESL Grammar</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>126 Intermediate ESL Speaking</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>129 Intermediate ESL Comprehension</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>130 Intermediate ESL Reading</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>131 Intermediate ESL Writing</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Advanced & Special Purpose Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 Advanced ESL Grammar</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>131 Advanced Oral Skills</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>132 Advanced ESL Reading-A</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>133 Advanced ESL Writing</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>134 Advanced Comprehension/</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Presentation</td>
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</table>

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

Special Purpose Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>135 Special Topics - ITA Seminar</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

A multi-skills course for international teaching assistants.

143 ESL Graduate Research Paper
A course in writing advanced English for graduate students.
The University-wide CORE 102 literature course in an CORE 102 Imaginative Literature and
The
A
149/150 New International
42

Advanced ESL Reading-B
Advanced English reading for non-native speakers preparing for CORE 101 Thinking and Writing
145

ESL Computer Skills
Computer literacy for beginners
146

TOEFL Preparation
Strategies and practice for the TOEFL
147

ESL Term Paper
Advanced English research writing for non-native speakers preparing for CORE 101 Thinking and Writing
148

ESL Academic Discourse
A multi-skills course in discourse analysis for graduate students
149/150 New International
Student Seminar
0-1 cr
A course on cross-cultural adjustment to U.S. and academic life
CORE 101 Thinking and Writing
3 cr
The University-wide CORE 101 composition course in an ESL context
CORE 102 Imaginative Literature and Critical Thinking
3 cr
The University-wide CORE 102 literature course in an ESL context

The McAnulty College of Liberal Arts

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

HISTORY
In 1878 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 approved the amendment in favor of the corporate title, Duquesne University.

STATEMENT OF MISSION AND OBJECTIVES
Throughout history, education in the liberal arts has produced, nurtured and transmitted civilization's greatest ideas and accomplishments. Study of the liberal arts prepares students for the future. It teaches them to seek the truth, to understand the knowledge and values of many disciplines, and to bring these insights to bear on modern problems in a world of change, complexity and diversity.

The McAnulty College of Liberal Arts is at the center of Duquesne University's Education for the Mind, Heart and Soul. Founded in 1878 as the first of the University's schools, the College embodies both Duquesne's Catholic tradition and its ecumenical atmosphere. We strive for academic excellence, search for truth, aspire to live a virtuous life, respect the dignity of the human person, foster a spirit of service to the poor and to all others, and seek to build the communities in which we live and work.

A liberal arts education provides the practical intellectual framework for informed choice that leaders require in the 21st Century. Successful leaders must have the skills that a liberal arts education best cultivates: disciplined thought, careful analysis, articulate presentation of ideas, and organized and persuasive writing and speech. They also need the human values and broad perspective that are hallmarks of graduates of the McAnulty College.

MISSION
The College prepares students for productive and creative lives of service in a rapidly changing world. We teach students to think, write and speak clearly and critically, so they can seek truth about God, themselves, and society, and contribute to their families, communities, businesses and professions.

Education for the Mind, Heart and Soul at the McAnulty College of Liberal Arts

• shapes the essential skills of written and oral communication that are the basic building blocks of a successful career in any field, • trains students to use the most current technologies for their chosen fields of study and to appreciate the place and contribution of those technologies, • encourages the international competence important to succeed in the global community, • provides the instructional excellence and sophistication necessary for students to succeed in graduate training for the learned professions, • establishes the broad foundation of knowledge necessary for lifelong learning and career flexibility in a rapidly changing world, • guides students in their spiritual development, • makes available opportunities for students to use their knowledge and skills to serve others, • encourages students to contribute to their families, their professions and the communities around them, • reinforces enduring values that give meaning to life and work, and that lead to happiness and fulfillment.

DEGREES
The College confers two undergraduate degrees, Bachelor of Arts and Bachelor of Science. 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 Degree 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 minimum cumulative quality point average of 2.0. A minimum cumulative quality point average of 2.0 both in the major and in the minor
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. The catalog has been prepared with the best information available as of Spring 2000. 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 advisement.

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

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 (political science, 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.

THE McANULTY COLLEGE OF LIBERAL ARTS

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; they 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 credits is still limited to 60.

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

CLEP and Advanced Placement
—See page 9

University-Level Courses Taken
While in High School
Unversity-level courses taken by entering freshmen students while in high school will be evaluated for credit if the following criteria have been met:

The courses are recorded on an official transcript from an accredited institution of higher learning.

The grades are C or better.

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

SPECIAL PROGRAMS

MINOR IN WOMEN'S AND GENDER STUDIES
The Women's and Gender Studies minor is an inter- and multi-disciplinary program based in the humanities and social sciences that offers an undergraduate minor to all students across the University. This program introduces students to the rapidly expanding areas of scholarship focused upon women, men, and gender that have developed within the academy that is transforming scholarship in virtually every academic discipline today. This program promotes open dialogue directed toward a vision of a world community that embraces diversity, justice, peace, freedom — values central to a liberal education

CERTIFICATE IN BUSINESS
This program enables students to preserve the benefits of a liberal education while also acquiring business skills. The program consists of 4 prerequisite courses (12-14 credits) in the College of Liberal Arts and 8 courses (24 credits) in the School of Business Administration. Further information may also be obtained from the advisement office in the College of Liberal Arts or the School of Business Advisement Office.

OTHER CERTIFICATE PROGRAMS
Certificate programs are also available in Computer Science (Department of Mathematics and Computer Science), Corporate Communication and Professional Communication Skills (Department of Communication), and Gerontology (Department of Sociology). Several of these are offered in conjunction with the Division of Continuing Education. Further information may be obtained from the appropriate department or from the Continuing Education Office.

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

BACHELOR OF ARTS — LIBERAL ARTS
This program is designed for those students who wish 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.

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.

JOIN 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 dental 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 perimeter and to understand 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 enrich-
COURSE DESCRIPTIONS

THE MCANULTY COLLEGE OF LIBERAL ARTS

REQUIREMENTS FOR THE MINORS

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

111 History of Art
An overview of American architecture, painting, sculpture and decorative arts

210 American 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

220 History of Photography
A history of photography development from the early 19th Century to the present. Emphasis is upon the United States and upon the interaction of and confrontation between artists and photographers

232 Late Medieval Art
Western European art from the 13th 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

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

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

304 Fourth Century
Greek orators, Plato, Aristotle, Xenophon and Menander

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

REQUIREMENTS FOR THE MAJORS

A History major with a concentration in Art History is available. Consult the History Department listing for requirements

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

112 History of Art
Renaissance to Modern World
3 cr
A survey of the art and archaeology of Chna, 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 history of photography development from the early 19th Century to the present. Emphasis is upon the United States and upon the interaction of and confrontation between artists and photographers

232 Late Medieval Art
Western European art from the 13th 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

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Herodotus, Thucydides, Aeschylus, Sophocles, Euripides, and Aristophanes

304 Fourth Century
Greek orators, Plato, Aristotle, Xenophon and Menander

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

logical, and cultural. Field trips to Carnegie Institute and other area collections are scheduled

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

DEPARTMENT OF CLASSICS

Chair
Lawrence E. Gauchas, 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 in Classical Latin, Classical Greek, Classical Languages (knowledge in both Latin and Greek required), and Classical Civilizations (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 in ancient archaeology, ancient history, or ancient literature courses in English

4) The Classical Civilization major is an individually designed program of twenty-four credits of ancient literature, history, art, and archaeology. Students majoring in Classical Civilization create programs with the close advice and the approval of the Classics Department to fit their background, 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

ORIGINAL LANGUAGE COURSES

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

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

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

201, 202 Introduction to Latin Readings I and II
3 cr each
Selections from major Latin author(s)

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

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

305 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

DEPARTMENT OF ART HISTORY

Survey of the Renaissance and Baroque periods in Western Europe from the 15th to the 18th centuries, emphasizing the development of stone vaulting systems, monumental architectural sculpture, stained glass, fresco and panel painting, and illuminated manuscripts in England, France, Italy and Germany.
DEPARTMENT OF COMMUNICATION

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

307 Imperial Literature 3 cr
Seneca, Lucan, Petronius, Martial, Plutarch, Tacitus, Juvenal, Flinx 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

401 Independent Readings and Research 3 cr

CLASSICS COURSES IN ENGLISH (NO CREEK 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 writings of Lucan, Lucretius, Horace, Persius, Martial, and Juvenal

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

244 History of Ancient Medicine 3 cr
Examination of the most significant medical theories and practices in the period from the Egyptian temple physicans to the doctors of the Roman Empire. Special attention will be given to Hippocrates and Galen

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

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

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

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

249 Egyptian Civilization 3 cr
A survey of Egyptian history and culture from the pre-dynastic period to the establishment of Roman rule in Egypt. Special attention will be given to the artistic, literary, and religious achievements of Egypt

260 The Classical Tradition 3 cr
A study of the influences of Greek-Roman civilization on later cultural life

300 Seminar 3 cr
Topics variable

315 Archaeological History of the Ancient Greek World 3 cr
A survey of the archaeology of Greece from prehistory to the Roman period

316 Archaeological History of Athens 3 cr
An investigation into the topography and monuments of Athens and Attica, from the prehistoric to the Roman period

317 Archaeological History of the Ancient Roman World 3 cr
A survey of the archaeology of Italy from prehistory to the middle fourth century A.D.

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

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

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

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

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

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

249 Egyptian Civilization 3 cr
A survey of Egyptian history and culture from the pre-dynastic period to the establishment of Roman rule in Egypt. Special attention will be given to the artistic, literary, and religious achievements of Egypt

260 The Classical Tradition 3 cr
A study of the influences of Greek-Roman civilization on later cultural life

300 Seminar 3 cr
Topics variable

315 Archaeological History of the Ancient Greek World 3 cr
A survey of the archaeology of Greece from prehistory to the Roman period

316 Archaeological History of Athens 3 cr
An investigation into the topography and monuments of Athens and Attica, from the prehistoric to the Roman period

317 Archaeological History of the Ancient Roman World 3 cr
A survey of the archaeology of Italy from prehistory to the middle fourth century A.D.

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

319 Archaeological History Seminar 3 cr
Possible topics include The Bronze Age Aegean, 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 extraordinarily contemporary discipline — from its origin in classical Greek culture to what has been called the “Communication Century” It is a practical liberal art for leadership in professions and communities

Communication in written and oral form helps us know, establish and clarify belief, and act upon the environment to bring about change or to reinforce stability in communication contexts ranging across interpersonal, organizational, intercultural, advanced technological and media environments

The comprehensive nature of our communication program introduces the student to corporate communication (profit and not-for-profit), media, multimedia, journalism, public relations, advertising, marketing and management career options

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

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


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 our public radio station (WDQ)

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, in consultation with their advisors, 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 & Society
COMM 210 Mass Communication & Society
COMM 301W History of Communication
COMM 407 Intercultural Communication
COMM 494W Communication Ethics

SPECIFIC REQUIREMENTS BY DEGREE

1. Major in Communication Studies

A. Five core courses 15 hours

1) 103 Introduction to Interpersonal Communication OR 454W Interpersonal Communication
2) One of the following
102 Public Speaking
304W Persuasion
333 Advertising & PR Campaigns

C. Specialization dependent on advisement 9 hours
Corporate Communication/Interpersonal Public Relations Integrated Marketing Communication Management Communication Information Management in Organizations Media Design, Rhetoric and Argumentation Self-Designed Program
**Major in Media Communication**

- A Five core courses 15 hours
- B Media Communication Requirement 3 hours
- C Specialization dependent on advisement 12 hours

**Requirements for the Minor in Multimedia Arts**

- Required 18 hours minimum
  - A Non-communication Majors
    - COMM 213 Introduction to Multimedia
    - COMM 416 World Wide Web Publishing
    - COMM 494W Communication Ethics
    - FINAR 245 Studio Art
    - Two electives (300 or 400 level)
  - B Communication Majors
    - COMM 213 Introduction to Multimedia
    - COMM 416 World Wide Web Publishing
    - COMM 440 Communication Ethics and Technology
    - FINAR 245 Studio Art
    - Two electives (300 or 400 level)

**Major in Theatre Arts — 30 to 45 hours** (Affiliated Degree with the Department of English)

- Theatre Arts Requirements 9 hours
  - COMM 190 Introduction to Theatre Arts
  - ENGL 204W Introduction to Drama
  - COMM 190 Introduction to Theatre Arts
  - COMM 190 Introduction to Theatre Arts
  - COMM 380 Acting
  - COMM 385 Directing I
  - COMM 380 Acting II
  - COMM 385 Directing I
  - Literature Courses 9 hours
  - Three semesters at two credit hours per semester as part of the affiliation with the Pittsburgh Irish and Classical Theatre
  - Practicum 6 hours
    - Three semesters at two credit hours per semester as part of the affiliation with the Pittsburgh Irish and Classical Theatre

**UNDERGRADUATE CURRICULUM**

**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

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

**Acting Workshop**
3 cr
A practical introduction to the art of the theatre with an emphasis on acting. After a brief exploration of the esthetics of performance, students will work with seasoned university actors in exercises involving direction, movement, blocking, interpretation and performance

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

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

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

**Photography**
3 cr
Introduces students to the use of photography as a medium of communication. Teaches the fundamentals of film work, light, filters, film development, and printing

**Introduction to Theatre Arts**
3 cr
Introduces students to the technical and creative aspects of the theatre, and the impact of multimedia upon various societal segments

**Designing for the World Wide Web**
3 cr
Introduces students to the technical and creative aspects of web page design. Students study the best ways to add multimedia content including graphs, text, animation, video and interactive content to web sites. Co-requisite COMM 213 or instructor permission

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

**Modeling and Animation Principles**
3 cr
An introduction to the creation of two and three-dimensional objects, this course looks at specific modeling techniques including splines, nurbs, lighting, camera management, texture, environment, and rendering. Prerequisite: COMM 213 or instructor permission

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

**Communication and Professional Civility**
3 cr
Develops communication skills in group and organizational relationships

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

**Introduction to Multimedia**
3 cr
Emphasis is on the uses of technology within multimedia, the process of developing interactive multimedia projects, an overview of the multimedia field, and the impact of multimedia upon various societal segments

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

**Media Design and Scriptwriting**
3 cr
Introduces the theory, process, and techniques of designing and writing for corporate media, employee communication, training, and marketing promoting

**Sound Design**
3 cr
Explores the digital side of audio, sound file management, recording techniques for video and audio based presentations, and the use of sound in multimedia

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<th>Course Title</th>
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<tr>
<td>271W</td>
<td>News Writing &amp; Reporting I</td>
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<td>280</td>
<td>Acting I</td>
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<td>285W</td>
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<td>301W</td>
<td>History of Communication</td>
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<td>Digital Videography</td>
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<td>346</td>
<td>Video Production EFP/ENG</td>
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<td>351</td>
<td>Writing for Multimedia</td>
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<td>353</td>
<td>Oral Interpretation of Literature</td>
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<td>354</td>
<td>Acting for the Camera</td>
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<td>367</td>
<td>Radio-TV Principles &amp; Writing</td>
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<td>368</td>
<td>Media Management and Economics</td>
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<td>Media Programming</td>
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<td>402</td>
<td>Argumentation and Debate</td>
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<td>Multimedia Advertising &amp; Public Relations</td>
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<td>Mass Communication &amp; Everyday Life</td>
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<td>Communication and Gender</td>
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<td>Evidence</td>
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<td>Group Project</td>
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<td>426</td>
<td>Electronic Commerce</td>
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<td>427</td>
<td>Communication Management</td>
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<tr>
<td>428</td>
<td>Visual Communication</td>
<td>3 cr</td>
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The Department of Communication, McAnulty College of Liberal Arts

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

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

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

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

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

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

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

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

437 Media Sales 3 cr
Explains the multi-faceted dimension of sales within contemporary business environments with special emphasis on the tools for media sales

438 Character Animation 3 cr
Provides an understanding of the principles behind anatomy and motion by explaining how and why animated characters move the way they do. Prerequisite: COMM 250

440 Communication Ethics and Technology 3 cr
Examines the implications of technology for communication ethics. Technology's impact on interpersonal, organizational, and public communication is addressed

45W Interpersonal Communication 3 cr
Examines communication between individuals in the context of a variety of human relationships

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

490 Special Topic 3 cr
Check semester class offerings for special classes offered

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

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

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

496 Directed Research 1-6 cr
Offers the opportunity for students to prepare print or electronic products (e.g., brochures, slide shows, video programs, etc.) commissioned by University or community organizations

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

498 Practicum in Health Communication 3 cr
Conducted by a trained personnel in the field of health communication, this practicum introduces students to the opportunity for analysis, discussion, and written composition, they also develop clarity of thought, precision of expression, and informed critical judgment.

499W Undergraduate Honors Thesis 3 cr
Proposal submitted by student approved by thesis advisor and Chair of Department

499 Performance Practicum 2 cr
Students work with a professional production either as a member of the cast (if PICT casts the student based on the student's audition) or as a member of the stage management team, as assigned by PICT in accord with the particular needs of the production(s) that occur during the time of the practicum. Prerequisite: COMM 190, COMM 280, ENGL 204W

DEPARTMENT OF ENGLISH
Chairperson
Ronald C Arnett, Ph D

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

Students of English learn literature, but through the opportunities for analysis, discussion, and written composition, they also develop clarity of thought, precision of expression, and informed critical judgment.

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

Cooperative Programs
The affiliation of the Department of English and the Department of Communication, professionally separate but sharing a common center in language and interpretation, creates the possibility of distinctive interdisciplinary programs, such as a double major in English and Communication. Under this program students must meet all existing requirements for a major in one of these disciplines, and may complete a second major in the other, with only 24 additional credits.

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

The Department of English and Communication, in conjunction with the Pittsburgh Irish and Classical
DEPARTMENT OF ENGLISH

Theatre offer an interdisciplinary major in Theatre Arts, which includes experience with a professional theatrical company.

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

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

REQUIREMENTS FOR THE MAJOR

MAJOR IN LITERARY STUDIES OR WRITING

Required 30 credits

All Majors

Core requirement — 12 credits

ENGL 300W Ethical and Critical Issues in Literary Studies Survey courses, 9 credits

Three credits chosen from English 301-304

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

One 400 level period course (English 401-457)

One 400 level Literature Across Boundaries course (English 438-468)

No more than two 200-level courses may be counted toward the Core 30 credits

Concentration in Writing — 18 credits in addition to Core requirements

Three writing courses at the 300 or 400 level

One 400 level literature course

No more than two 200 level courses may be counted toward the required 30 credits

Requirements for the Minor in English

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

* ENGL 300W Ethical and Critical Issues in Literary Studies
* At least one of the following English core curriculum courses ENGL 301W, 302W, 303W, 304W
* At least one 400-level literature course (ENGL 401-457), and
* Enough other elective English courses to accrue the necessary 18 credits

MAJOR IN THEATRE ARTS

(Affiliated Degree with the Department of Communication)

A Theatre Arts Requirements 9 hours

*COMM 390W Introduction to Theatre Arts
*ENGL 204W Introduction to Drama
ENGL 483 Theatre, Values and Society
*Prerequisite to any 300-400 level course in the major

B Theatre Courses 6 hours

COMM 151 Voice and Diction
COMM 280 Acting I
COMM 353 Oral Interpretation of Literature
COMM 380 Acting I
COMM 385 Directing I

C Literature Courses 9 hours

300 or 400 level English or Communication courses that emphasize dramatic literature in their title. Three hours must be in Shakespeare.

D Practicum 6 hours

Three semesters at two credit hours per semester as part of the affiliation with The Pittsburgh Irish and Classical Theatre

Requirements for the Minor in Theatre Arts

Required 18 hours minimum

Required courses 9 hours

COMM 190 Introduction to Theatre Arts
ENGL 204W Introduction to Drama
ENGL 483 Theatre, Values and Society

Elective courses 9 hours

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

UNDERGRADUATE CURRICULUM

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

201W Introduction to the Short Story 3 cr

202W Introduction to the Novel 3 cr

203W Introduction to Poetry 3 cr

204W Introduction to Drama 3 cr

205W Survey Literature of Western World I 3 cr

206W Survey Literature of Western World II 3 cr

207W Readings in Non-Western World Literature 3 cr

210W Introduction to Film 3 cr

211W Science Fiction 3 cr

212W Science Fiction on Film 3 cr

213W Women Novelists 3 cr

214W Literature of Crime & Detection 3 cr

215W American West Text & Film 3 cr

230W Ethical and Critical Issues in Literary Studies 3 cr

301W Survey of British Literature I 3 cr

302W Survey of British Literature II 3 cr

303W Survey of American Literature I 3 cr

304W Survey of American Literature II 3 cr

305W Catholic Voices in Literature 3 cr

310W Expository Writing 3 cr

311W Poetry Writing 3 cr

312W Fiction Writing 3 cr

313W Writing for Business and Industry 3 cr

314W Professional and Technical Writing 3 cr

320W Advanced Writing 3 cr

Further development of exposition in longer forms. Admissions by instructor's permission

400 Special Topics

Catholicism and Literature 3 cr

Topical concerns are in the area of Catholicism, chosen from various areas of literature

402 Medieval English Drama 3 cr

Introduction to the forms and conventions of medieval drama

403 Chaucer 3 cr

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

404 Arthurian Literature 3 cr

Cultural and historical origins, with emphasis on a particular theme Merlin, Holy Grail, etc.

408 Special Topics Medieval Literature 3 cr

Topics chosen to reflect current interests of faculty and students

409 Spenser 3 cr

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

410 English Renaissance Drama 3 cr

The drama of Shakespeare's contemporaries

411 Shakespeare I Comedies and Romances 3 cr

Selected comedies and romances

412 Shakespeare Tragedies and Romances 3 cr

Selected histories and tragedies

413 Shakespeare Text and Film 3 cr

Parallel study of selected plays and filmed versions of them

414 Sixteenth Century British Literature 3 cr

Non-dramatic sixteenth century literature including Sidney, Spenser, and Shakespeare
415 Seventeenth Century English Literature 3 cr
Seventeenth century poetry and prose, with special emphasis on the poetry of John Donne and George Herbert

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

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

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

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

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

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

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

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

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

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

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

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

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

439 American Literature of the National Period 3 cr
Post-revolutionary literature focusing on Irving, Bown, Copper, Summ, Rowson, Child, and Sedgwick

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

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

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

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

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

449 English Literature 1890-1945 3 cr
Tradition and innovation in the works of such writers as Conrad, Yeats, Eliot, Rhys, Woolf, and Joyce

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

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

452 American Literature 1900-1945 3 cr
Poetry, fiction, non-fiction in such diverse literary trends as Modernism, the Harlem Renaissance, the Southern Renaissance, and regional writing

453 Twentieth Century American Poetry 3 cr
Works of selected poets

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

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

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

459 Southern Literature 3 cr
Literature of the American South considered as a cultural phenomenon with a distinctive character

468 Special Topics Literature Across Boundaries 3 cr
Varying topics reflecting the current interests of faculty and students, in courses that transcend the boundaries of a single culture, language or discipline

475 Special Topics Writing 3 cr
Topics chosen to meet the needs of advanced students in the writing concentration, or in other majors who require advanced instruction

476 History of the English Language 3 cr
Linguistic analysis with primary emphasis on the history of the structure of English ENGL 477 Introduction to Linguistics is recommended preparation for this course

477 Introduction to Linguistics 3 cr
Basic principles and methods of modern linguistics, emphasizing phrase structure grammar and its practical application to teaching

478 Applied Linguistics 3 cr
Application of linguistic theory to literary analysis and the teaching of writing

479 Modern English Grammar 3 cr
Phrase-structure (generative-transformational) grammar and its application to writing

480 Advanced English Grammar 3 cr
Further study of phrase-structure grammar and its applications

482 Special Topics Linguistics 3 cr
Topics chosen to reflect current interests of faculty and students

483 Theatre, Values and Society 3 cr
This course examines the complex and interesting relations between drama and social values, through the study of theatrical history and of plays from several cultures and periods

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

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

492 Literary Theory Plato to Shelley 3 cr
A study of the major statements about the nature of literature and the nature of criticism from their Greek origins to the mid-nineteenth century

493 Literary Theory 3 cr
Principal developments in 20th century literary theory and criticism, emphasizing New Criticism, structuralism, post-structuralism, Marxism, and feminism

494 Feminist Theory 3 cr
This course introduces students to the established field of feminist scholarship and its methodologies, with application to literary texts

498 Internship 1-6 cr
Provides a supervised observation/experience program of study (assignment and performance) in areas such as technical writing, magazine and news writing, and writing for business and industry. Most placements are in the Pittsburgh/Western Pennsylvania area

499 Directed Studies 1-3 cr
Offers the opportunity for students and faculty to conduct in-depth study of a topic not covered, or covered only briefly, in other departmental courses

THE ARTS

THTR 497 Theatre Management Practicum 2 cr
Students learn the business of theatre by working with the Pittsburgh Irish & Classical Theatre in the areas of marketing, house management, actor contracts, equity laws, public relations, ticket sales, etc, Prerequisite COMM 190, ENGL 204W

THTR 498 Technical Theatre Practicum 2 cr
Students learn about the technical side of mounting a play by working with the Pittsburgh Irish & Classical Theatre in the areas of costume, set, properties, lighting, sound, etc Prerequisite COMM 190, ENGL 204W

THTR 499 Performance Practicum 2 cr
Students work with a professional production either as a member of the cast (if PICT casts the student based on the student's audition) or as a member of the stage management team, as assigned by PICT in accord with the particular needs of the production, which occur during the time of the practicum Prerequisite COMM 190, ENGL 204W

DEPARTMENT OF HISTORY

Chairperson
Perry K Blatz, Ph D

REQUIREMENTS FOR THE MAJOR

A minimum of thirty credits must be taken including Writing History (311), and three of the following courses History of the U S I (103), History of the U S II (104), Western Civilization I (113), and Western Civilization II (114). At least three credits must be taken at the 200 level and at least six credits must be taken at the 400 level. Six credits of Art History can count for a History major.

A History major with a concentration in Art History is required to take 30 credits of History and Art History courses, which must include Western Civilization I and II (113, 114), Art History Ancient through Medieval Art (111) and Art History Renaissance to Modern World (112), and a Senior Honors Seminar or a Directed Readings course in Art History. Of the thirteen additional credits, at least nine must be taken in Art History courses above the 100 level.

No more than two transfer credits in History can be applied to the major requirement

REQUIREMENTS FOR THE MINOR

A student minoring in history is required to take fifteen credits, with six at the 100 level and nine at the 200, 300, and 400 levels
Similarly, the Art History minor in History consists of fifteen credits of Art History courses, with at least nine credits at the 200 level or above

103 History of the United States to 1877 3 cr
The historical development of American institutions, ideals, and society from earliest times to 1877

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

113 Western Civilization I 3 cr
An introductory survey of the origins and characteristics of European civilization, emphasizing the personalities, events, and institutions that have shaped the West through the 17th century

114 Western Civilization II 3 cr
An introduction to the origins and characteristics of European civilization, emphasizing the personalities, events, and institutions that have shaped the West from the 17th century

254 The History of the Modern Middle East 3 cr
A study of the modern Near East with concentration upon the conflict between imperialism and nationalism, traditionalism and western influences in the area

255 History of Asia 3 cr
A survey of Asian civilization from ancient times to the present day, western colonialism, the rise of the nationalist movement, and the establishment of modern states

257 Russia Before Communism 3 cr
Development of society and state in Russia from their origins to the Bolshevik Revolution of 1917

258 Russia in the Twentieth Century 3 cr
Development of society and state in Russia in the 1900s, focusing on the Communist takeover of Russia, the impact of more than seventy years of Communist rule, and the collapse of Communism and its aftermath

261 Eastern Europe From Nationalism Through Communism 3 cr
This course covers the fascinating modern history of the lands situated between Germany and Russia focusing on diverse ethnic groups, such as Poles, Croats, Slovaks, Serbs, Slovenes, Ukrainians, and Hungarians. The major themes include struggles for national independence, the impact of Soviet control after World War II, and the reassessment of national sovereignty after the end of the Cold War

265 England to 1715 3 cr
The foundations of England, emphasizing the origins of the common law, the rise of parliament, the development of English society, and England's contribution to Western thought

266 Modern Britain 3 cr
A study of the first industrial nation, with special attention to the achievement of constitutional monarchy, the social and economic problems of industrialization, the nature of British imperialism, and the problems faced in the 20th century

267 Canada 3 cr
An introduction to Canadian history, with particular attention to the years from 1763 to the present, Canadian-American relations, and contemporary concerns

270 Colonial Latin America 3 cr
A survey of the area, beginning with the complex, and powerful native American civilizations that dominated Central and South America until their conquest by Spain and proceeding through the development of colonial economies and the growing tensions that led to the struggle for independence

271 Modern Latin America 3 cr
A course which examines society and politics in modern Latin America, from Puerto Rico and Cuba in the Caribbean, through Mexico and Central America to Peru, Argentina, Chile and Brazil in the south. Among other themes, it explains the persistent recurrence of political dictatorship and economic crises across this diverse and dynamic land

277 Mexico, Puerto Rico, and the Caribbean in the Twentieth Century 3 cr
By focusing on two of the Caribbean’s most important societies, this course examines the central themes in the modern history of the region – revolutionary change, the growth of nationalism, stability and instability in domestic politics, transformation from agrarian to industrial society, and the impact of their relations with the United States

302 Age of Crusades 3 cr
For more than five hundred years during the Middle Ages the Islam, Byzantine, and Christian worlds were locked in a savage contest over land and religion, yet, at the same time, these same cultures cooperated with each other in trade, politics, and scholarship. Using a multi-cultural interdisciplinary approach, this course examines how and why this occurred, how and why the Crusades defined the culture, and how this age has influenced current relations between the Middle East, the Near East, and the West

303 Age of Columbus 3 cr
Explains the impact on the world made by the voyages of discovery in the fifteenth and sixteenth centuries, emphasizing the contributions and consequences of that single event. Columbus’ voyages, and the single most important legacy of the Columbian voyages – an interdependent and interconnected world

305 History of Medicine 3 cr
A survey exploring the development of medicine as both an art and a science. The latter part of the course will focus on the social and institutional aspects of the development of American medicine

311 Writing History 3 cr
Through intensive writing activities in a seminar format, students explore the nature of historical evidence and how to formulate that evidence cogently. Descriptions and analyses

320 Colonial America 3 cr
The exploration and settlement of the British North American Colonies to 1763

321 American Revolution 3 cr
A survey of the major events, persons, and movements in American history from 1763 to 1790

329 Pennsylvania and the American Nation 3 cr
A history of Pennsylvania’s society and politics from the experience of its native American peoples and European settlement upon the aegis of William Penn and its role in the French and Indian War and American Revolution to its rapid industrial development in the 19th century and its modern-day urban growth

340 Historical Evolution of Western Law 3 cr
Primary emphasis will be placed on the rise of customary law, from its roots in ancient times until the modern era

342 War in the Pre-Modern Era 3 cr
A study and analysis of the phenomenon of war in the West from the Ancient World to the Enlightenment, with a special emphasis not only on how and why warfare affected society and brought about changes in politics but also on how soldiers lived their lives and did their duty

343 Church History 3 cr
A religious and historical exploration of the growth of Christianity from the first century, discussion of issues within the Church and the external forces which brought about major conflict and development

345 American Church History 3 cr
Emphasizes the historical development of major religious traditions in America, both Catholic and Protestant

347 War in Modern Society 3 cr
A study and analysis of the phenomenon of war in the Western World from the Age of Napoleon to the present, with special emphasis on the interrelationship between international conflict and social, political, and technological change

348 Family and Society in History 3 cr
Interaction between the family, the traditional basic unit of society, and the larger world in modern times. Working through family histories, the course will investigate the changing nature of the family in an effort to better understand the modern institution

351 History of the American Presidency 3 cr
Primarily an investigation and evaluation - personal, political, contemporary, and historical - of each president with some attention to the growth of the office

358 Civil War and Reconstruction 3 cr
An intensive study of the American experience from the roots of the sectional conflict in the expansion of the United States through the struggle over slavery, the War itself, and the controversies over the restoration of the Union

360 Constitutional History of the United States 3 cr
An analysis of the Supreme Court and constitutional development, stressing the major controversies in the field

362 History of the United States' Political Parties 3 cr
A detailed examination and analysis of the origins, leadership, and operation of the major political parties since 1868

364 The American Mind 3 cr
The origins, development and contemporary modes of American thought, including major "climates of opinion," diverse movements, and selected scientific, religious, social, and artistic topics

366 The Modern Mind 3 cr
The major ideological tendencies of modern European thought and their connection to society and politics, and to the major philosophical and scientific currents of the 19th and 20th centuries

367 Science and Society in the Twentieth Century 3 cr
The economic, social and cultural consequences of the rise of modern science

375 History of Inner Asia 3 cr
The history of Inner Asia from Genghis Khan’s Mongol Empire to Mikhail Gorbachev’s Soviet Empire

378 Europe and International Politics 1870-1970 3 cr
A study of global international relations since 1870, with emphasis upon the evolution from a European-centered world to global politics

379 Revolution in the Modern World 3 cr
An analysis of the major political and social revolutions since 1878, the nature of the revolutionary phenomenon, and the inevitable counter-revolutionary trend

382 Psychohistory 3 cr
Examines the interrelationships between psychology — especially psychoanalysis — and history, including the psychology of leadership, of group behavior, of war, etc.
386 The American South 3 cr
By focusing primarily on the antebellum era, this course offers an examination of a distinctive region and culture that illuminates the construction of American civilization.

387 Native American History 3 cr
Contact, Conquest, and Colonization 3 cr
This course focuses on Native American societies and the nature of their contact and conflicts with European settler societies from the 1490s to the 1840s.

388 United States 1945 to the Present 3 cr
A discussion of selected contemporary issues, foreign and domestic, which illustrate the identity crisis in the U.S.

389 Europe Industrialism and the Masses 3 cr
A historical analysis of Europe in the last two centuries with particular attention to the relationship between technological and social change and its impact on politics and culture.

390 Historical Geography 3 cr
A survey of the physical world which is the basis for a human civilization, past, present, and future. What are the possibilities and limitations of different places for human development? How successful or unsuccessful were human settlements? Emphasis also on geography as an intellectual discipline and cultural phenomenon.

391 History of the American City 3 cr
The rise of urban America, addressing such topics as city growth and change, industrialization, immigration, and renewal in the latter half of the twentieth century.

392 Reform in Modern America 3 cr
The study of the progressive reform movements in the United States since the Civil War.

393 Economic History of the United States 3 cr
Investigates the economic development of the United States, emphasizing its impact on social and political issues as background for current economic problems.

394 American Women in Historical Perspective 3 cr
An investigation of the historical experiences of American women beginning with the European heritage, continuing with the special conditions in the country that led to the rise of the world's first women's movement, and concluding with the changes that women have faced in the industrial and post-industrial world of the twentieth century.

414 Reformation Europe 3 cr
A lecture and discussion course, including audio-visual presentations, emphasizing political, economic, social, and cultural developments in Europe from 1500 to 1648.

417 Reason and Revolution 3 cr
An examination of the history of Europe between 1648 and 1789, this course will concentrate on the rise of absolutism as personified by Louis XIV, the Counter-Reformation in the context of economic, political, and social developments in western Europe from 1500 to 1648.

418 Cold War 3 cr
An analysis of the diplomatic and political struggle between the United States and the Soviet Union in the aftermath of the Second World War and the ideological conflict between free enterprise and communism around the world.

420 History of American Daily Life 3 cr
An exploration of how Americans have lived over the whole course of our history, from the Amurindian context and early settlement through the industrialization and commercialization of American life.

421 19th-Century Europe 3 cr
An examination of the European experience between 1815 and 1914, with emphasis on political, social, and cultural trends.

422 20th-Century Europe 3 cr
A study of the European experience between 1914 and the present, centering on such topics as the great wars, fascism, and contemporary trends in both eastern and western Europe.

430 American Women in Historical Perspective 3 cr
An investigation of the historical experiences of American women beginning with the European heritage, continuing with the special conditions in the country that led to the rise of the world's first women's movement, and concluding with the changes that women have faced in the industrial and post-industrial world of the twentieth century.

445 Imperial Russia 3 cr
An investigation of the political, social, and intellectual evolution of the Russian Empire in the 18th and 19th centuries.

447 The Hapsburg Empire 3 cr
An analysis of the rise and fall of the multinational, dynastic state of the Hapsburgs from the sixteenth to the early twentieth century.

448 Ottoman Empire and Balkans 3 cr
An examination of the Turkish conquest of south-eastern Europe and the Ottoman impact on the peoples of that area.

449 Global Socioeconomic Development Historical Perspectives 3 cr
A course analyzing the history of economic development and social change, examining both capitalist and noncapitalist models from the beginnings of industrialization in the West through contemporary struggles for a better life in Asia, Africa, and Latin America.

450 American Popular Culture 3 cr
By examining the pastimes that Americans throughout their history have engaged in for amusement and relaxation, like the entertainment industry, sports, popular fiction, and even trystory "crazes," this course will illuminate aspects of the past too often overlooked.

458 American Urbanization in Historical Perspective 3 cr
This course examines the development of the American city from colonial times to the twentieth century.

461 American Science and Technology 3 cr
The development of science and technology in America from colonial times to the twentieth century.

462 The American Character 3 cr
Since the discovery of the New World, many Americans and others have claimed that the "American experience" is unique and has fostered a new sort of individual. This course will examine the character through a variety of psychocultural studies of the nation's past.

500 American Civilization 3 cr
The development of American civilization through a variety of psychocultural studies of the nation's past.

DEPARTMENT OF HISTORY

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Chairperson

Thomas Keagy, Ph D

MATHEMATICS PROGRAM

The major objectives of the mathematics program are to provide knowledge of the theoretical basis of the field, appreciation for the intrinsic beauty of the discipline, skill in interpreting the concepts underlying quantitative procedures, and ability to apply modern mathematical techniques and tools to practical problems. Courses in the curriculum give students an opportunity to develop the basis for critical and logical analysis of problems and to design and implement creative solutions. In addition to comprehensive programs leading to a major or minor in mathematics, offerings are designed to serve the liberally educated person in support of other disciplines.

REQUIREMENTS FOR A MAJOR

The student may choose to pursue a major in mathematics with a program leading to a Bachelor of Arts (B A ) or a Bachelor of Science (B S ) degree. The B A program, which requires a minimum of 33 semester hours of mathematics, allows a great deal of flexibility for persons interested in combining the major program with a strong minor or double major in another discipline. The B S program, which requires a minimum of 39 semester hours of mathe-
MATHEMATICS COURSES

101 College Algebra 3 cr
Algebraic expressions, equations and inequalities
104 Calculus with College Algebra and Trigonometry I 4 cr
Initial topics of 115 with topics from 101 and
Trigonometry I 4 cr
Remaining topics of 115 with topics from 101 and
Trigonometry I 4 cr

111 Calculus for Science Students 3 cr
Limits, continuity, differentiation of algebraic,
exponential and logarithmic functions
115 Calculus I 4 cr
The same topics as 111 except trigonometric functions
116 Calculus II 4 cr
Applications of the definite integral, parametric
125 Fundamentals of Statistics 3 cr
Exploratory data analysis and statistical inference
including graphical summaries of data, sampling
distributions, confidence intervals, and hypothesis
testing
135 Discrete Mathematics 3 cr
Sets, functions, relations, partial order, methods of
propositional logic, introduction to predicate logic,
counting, recurrence relations, asymptotic analysis,
proof, including induction, introduction to proba-
ble graphs
215 Calculus III 4 cr
Calculus of functions of several variables and vec-
tor valued functions
225 Introduction to Biostatistics 3 cr
Descriptive statistics, sampling distributions, con-
fidence intervals, hypothesis testing, non-parametric
methods, chi-square tests, regression and correla-
tion methods, and analysis of variance
300 Advanced Calculus 3 cr
A continuation of 415W including integration and
theory and advanced topics in analysis
325W Applied Statistics with Regression 3 cr
One-way, two-way analysis of variance, Latin
squares, methods of multiple comparisons, analysis
of covariance, balanced and unbalanced designs,
linear and multiple regression
330W Fundamentals of Geometry 3 cr
Euclidean and non-Euclidean geometry from both
the synthetic and metric axiomatic approach
340W Abstract Algebra I 3 cr
An introduction to algebraic structures (rings, ideals,
integral domains, fields, and groups, as well as
homomorphisms and isomorphisms
350W Introduction to Complex Variables 3 cr
The complex number plane, analytic functions, inte-
rated complex functions, sequences and series,
and conformal mappings
360W Advanced Calculus II 3 cr
A continuation of 415W including integration theory
and advanced topics in analysis
420 Introduction to Complex Variables 3 cr
The complex number plane, analytic functions, inte-
rated complex functions, sequences and series,
and conformal mappings
425W Experimental Design 3 cr
Factorial designs, fixed and random effects models,
nested and nested-facto designs, split-plot
designs, response surface designs
491-99 Selected Topics in Mathematics 1-3 cr

COMPUTER SCIENCE PROGRAM

The major objectives of the computer science pro-
gram are to provide the student with a knowledge
of the theoretical basis of computing, an apprecia-
tion for the relationship between the various com-
ponents of the field, skills in applying the subject
to practical problems, and an ability to adapt to new
technologies and advancements

325W Applied Statistics with Regression 3 cr
One-way, two-way analysis of variance, Latin
330W Fundamentals of Geometry 3 cr
Euclidean and non-Euclidean geometry from both
the synthetic and metric axiomatic approach
340W Abstract Algebra I 3 cr
An introduction to algebraic structures (rings, ideals,
integral domains, fields, and groups, as well as
homomorphisms and isomorphisms
350W Introduction to Complex Variables 3 cr
The complex number plane, analytic functions, inte-
rated complex functions, sequences and series,
and conformal mappings
360W Advanced Calculus II 3 cr
A continuation of 415W including integration theory
and advanced topics in analysis
420 Introduction to Complex Variables 3 cr
The complex number plane, analytic functions, inte-
rated complex functions, sequences and series,
and conformal mappings
425W Experimental Design 3 cr
Factorial designs, fixed and random effects models,
nested and nested-facto designs, split-plot
designs, response surface designs
491-99 Selected Topics in Mathematics 1-3 cr

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 30
semester hours in computer science, allows a great
deal of flexibility for persons interested in combin-
ing the major with a strong minor or double major
in a non-science discipline. The B.S. program, which
requires a minimum of 40 semester hours in com-
puter science, is recommended for students inter-
ested 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, 253, 300,
and 325W (each with a grade of "C" or better)

Additional B.A. Computer Science Requirements
At least 14 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 24 hours at the 300 level or above
In
cluded must be 480W and at least an additional
9 hours at the 400 level or above

Extratedepartmental Requirements
B.A. 115-116 (Calculus I & II)

B.S. At least 30 credits of mathematics and science
including
Mathematics At least 15 credits including 115-116
(Algebra II & Calculus II) and 135 (Discrete
Mathematics)

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COMPUTER SCIENCE COURSES

100 Elements of Computer Science 2 cr
A survey of topics necessary for basic computer literacy. Includes laboratory exercises. Credit not given to computer science majors or minors.

101 Basic Programming 3 cr
Microcomputer programming in Visual Basic. Design, structure, and data representation. Credit not given to computer science majors or minors.

103 JavaScript Programming 3 cr
Programming constructs and heuristics using JavaScript, including object based programming, objects, properties, events, methods, variables, constants, functions, and structured concepts. Emphasis is on using JavaScript for web interactivity and forms processing.

130 Fundamentals of the Internet 3 cr
Technical concepts of electronic mail, web browsing concepts and advanced features, HTML, and web page design, technical concepts of the internet, advanced internet services, concepts and issues in electronic publishing, ethics and security issues. Prerequisite COSC 030 or equivalent.

150 Computer Programming C++ 3 cr
Object oriented programming, objects and classes, functions, files and libraries, selections, repetitions, arrays, strings, structures, searching, and sorting.

210 Data Structures 3 cr
Dynamic allocation, stacks, queues, linked lists, induction, recursion, stacks, trees, string processing, advanced searching, and sorting. Prerequisites 150 and MATH 135 (may be taken concurrently).

220 Computer Organization and Assembly Language 3 cr
Basic structure of computer hardware and software, data representation, addresses and instructions, control structures, device drivers, files, and macros. Prerequisite 210.

253 Programming Languages JAVA 1 cr
Object oriented language, containing such features as classes, objects, inheritance, message passing, and exception handling. Prerequisite 210.

300 Advanced Data Structures 3 cr
Data organization, connections between the design of algorithms and the efficient implementation and manipulation of data structures. Abstract data types, trees, tries, B-trees, and graphs. Prerequisite 210.

305 Digital Logic 3 cr
Boolean algebra and logic gates, combinational logic, decoders, encoders, multiplexers, registers, counters, memory units, flip-flops, algorithmic state machines, and digital integrated circuits. Prerequisite 220.

308 Numerical Analysis 3 cr
Identical to MATH 308. Credit only given for COSC 308 or MATH 308. Prerequisites 150 and MATH 116.

311 System Programming and Design 3 cr
Interaction between software and hardware components in an integrated system, program translation issues, assemblers, linkers, loaders, and compilers. Prerequisite 220.

325W Operating Systems and Computer Architecture 3 cr
Organization of operating systems and basic computer architecture. Implementing single- and multi-threaded memory management, communicating with input/output devices, concurrency, synchronization, file systems and scheduling the processor. Prerequisite 220.

350W Computers and Humanity 3 cr
An exploration of the impact of computers on present and future society including sociological and philosophical issues in computer science. Prerequisite One course in computer science or permission of instructor.

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 heuristics, expert systems, and applications. Prerequisite 300.

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

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

435 Theory of Programming Languages 3 cr
Syntactic and semantic issues in program language definition and implementation. Static vs. dynamic properties, parameter passing, recursion, and language comparisons. Prerequisite 300.

445W Systems Analysis and Software Design 3 cr
Methods and tools for the structuring and modular design of large systems, organization and techniques of team programming, design evaluation and validation. Prerequisite 300.

450 Computer Networks 3 cr
Network technologies, protocols, and management. Programming networked applications. The effects of the Internet and World Wide Web on computing and society. Prerequisite 300.

480W Senior Project 1-3 cr
An individual or group project involving a significant programming component, documentation, and written report on a topic of current interest in computer science. 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 medicine, 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 their 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 literature other than their major. A maximum of 12 transfer credits will be accepted toward the major.

The student possessing a knowledge of foreign languages will find career opportunities in a number of fields such as education, government employment, foreign service, social work, business and industry, tourism, and international law.

REQUIREMENTS FOR THE MAJOR

The Department offers major programs in Spanish and Modern Languages. In addition, if offers a minor in French, German, Italian, as well as non-major courses in Chinese and Japanese. Elementary and intermediate courses must be taken in sequence. Credit toward the major or minor will not be given for 101, 102, and 202 or its equivalents. Proficiency at the 202 level or its equivalent is the prerequisite to all courses numbered 301 and above.

The major programs consist of courses at the 300-level and above:
1. Spanish — 27 credits at the 300 and 400 levels
2. Modern Languages — 24 credits at the 300 and 400 levels in one language, 12 credits at the 300 and 400 levels in a second language, and 12 credits at any level in a third language.

REQUIREMENTS FOR THE MINOR

The minor program consists of a minimum of 12 semester hours at the 300-level and above. As for the certificates, inquire at the Department office.

490 Independent Field Study (All Languages) 1-6 cr
Under the supervision and guidance of the instructor in foreign countries and the permission of the Department chairperson.

499 Professional Language Internship 3 cr
A paid or unpaid internship consisting of 100-120 hours of supervised work with permission of the Department chairperson.

French

101 Elementary French I 4 cr
Fundamentals of oral and written French. Weekly lab attendance.

102 Elementary French II 4 cr
Fundamentals of oral and written French. Weekly lab attendance. Prerequisite French 101 or its equivalent.

115 French for Musicians 2 cr

120 Intensive French 6 cr

202 Intermediate French II 4 cr
Emphasis on the written and oral aspects of the language. Weekly lab attendance. Prerequisite French 102 or its equivalent.

301 French Conversation and Composition I 3 cr
Prerequisite 202.

302 French Conversation and Composition II 3 cr
Prerequisite 301.

306 Intensive French Conversation and Composition 6 cr
Beginning with the influence of the Revolution on An overview of the theatre of
464 17th Century French Theatre 463 19th Century Modern Period

lab attendance 

400 Italian Cinema 3 cr

100 Elementary Italian I 4 cr 
Fundamentals of oral and written Italian Weekly lab attendance
102 Elementary Italian II 4 cr 
Fundamentals of oral and written Italian Weekly lab attendance Prerequisite Italian 101
109 Italian for Lawyers 3 cr 
115 Italian for Musicians 2 cr 
For majors in music
202 Intermediate Italian II 4 cr 
Emphasis on the written and oral aspects of the language Prerequisite Italian 102
306 Advanced Italian Conversation and Composition 6 cr 
Prerequisite 202 or equivalent Prerequisite for all courses above 306
314/315 Individual Study 1-6 cr
With written permission of the Department chairperson
321 Introduction to Italian Literature 3 cr
324 Introduction to Italian Poetry 3 cr
326 Italian Culture and Civilization 3 cr
400 Italian Cinema 3 cr

Japanese
101 Elementary Japanese I 4 cr 
Fundamentals of oral and written Japanese Weekly lab attendance
102 Elementary Japanese II 4 cr 
Fundamentals of oral and written Japanese Weekly lab attendance Prerequisite Japanese 101 or equivalent
202 Intermediate Japanese II 4 cr 
An intensified continuation of oral and written Japanese Prerequisite Japanese 102

Spanish
101 Elementary Spanish I 4 cr 
Fundamentals of oral and written Spanish Weekly lab attendance
102 Elementary Spanish II 4 cr 
Fundamentals of oral and written Spanish Weekly lab attendance Prerequisite Spanish 101 or equivalent
202 Intermediate Spanish II 4 cr 
Emphasis on the oral and written aspects of the language Prerequisite Spanish 102

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr 

202 Intermediate Spanish II 4 cr
DEPARTMENT OF PHILOSOPHY

Chairperson
Wilhelm S. Wurzer, Ph.D.

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 texts by early philosophers, the medieval period, modern periods of philosophy, and contemporary continental thought.

Courses are offered to examine the nature of religious knowledge, the problem of evil in biblical experience, and phenomenology of the body as well as to discuss these approaches comparatively and examine their philosophical contexts.

The department offers an Honors Program for outstanding undergraduate majors with an overall GPA of at least 3.5 in Philosophy. Students must also complete an Honors Thesis, for which 3 credits will be given.

REQUIREMENTS FOR THE MAJOR
A total of 30 credits
- at least 24 credits above the 100-level, at least 9 credits from courses 300-305, at least 6 credits at the 400-level

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

105 Ethics 3 cr
The course provides an introduction to important ethical theories, past and present, and some of their applications to concrete issues.

106 Introduction to Logic 3 cr
This course exposes students to the basics of logic, including basic arguments and inferences, and introduces them to the logical identity of sentences in ordinary discourse, and the formal logic of first-order theories.

107 Medical Ethics 3 cr
Ethical questions that arise in medical care and research are examined. Possible topics include topics related to patient care, informed consent, and euthanasia.

108 Business Ethics 3 cr
Ethical questions that arise in business are examined. Possible topics include topics related to corporate law, legal reasoning, and philosophical issues in evidence and procedure.

109 Contemporary Moral Problems 3 cr
This course concentrates on concrete case studies from various fields. Prerequisite: PHIL 105 Ethics.

BASIC COURSES are useful electives for general undergraduates. Prerequisite: at least one 100-level course in philosophy.

200 Introduction to Phenomenology 3 cr
The phenomenological method originated by Husserl is explored. Possible topics include intentionality, signs, and meaning.

204 Philosophy and Literary Theory 3 cr
This course explores philosophical themes in selected works of literature and studies the relation between recent continental philosophy and theories of literature and of literary criticism.

206 Philosophy & Film 3 cr
This course examines the art of cinema from a philosophical perspective.

208 Existentialism 3 cr
Working our way through a family of thinkers often labeled existentialists, such as Kierkegaard, Nietzsche, Marcel, Heidegger, Sartre, and Camus, we shall guide our inquiry into this school of philosophy by means of a few shared themes—freedom, anguish, responsibility, and meaning.

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 questions is emphasized as much as possible.

213 Philosophical Roots of Psychology 3 cr
This course examines the philosophical roots and psychological incursion of four important approaches to understanding human existence: rationalism (Descartes, Kant, and cognitive psychology), empiricism (Hume and Skinner's behaviorism, phenomenology (Merleau-Ponty), and genealogy/psychoanalysis (Nietzsche and Freud).

300W Ancient Philosophy 3 cr
This course spans the beginning of philosophy in Greece, from the Pre-Socratics to Plato, with readings taken primarily from Plato and Aristotle.

301 Medieval Philosophy 3 cr
A sampling of Christian and Islamic thought from late antiquity through the thirteenth century, with emphasis on the continuity, the development, and the interplay of the Platonic and the Aristotelian traditions. Such themes as knowledge, the existence of God, the problem of evil, the relation between divine and natural causes, and the soul will receive special attention, always through primary sources.

302 Early Modern Philosophy 3 cr
Major issues in modern thought beginning with Descartes are discussed. Selected texts might include figures such as Montaigne, Pascal, Spinoza, Leibniz, Hume, and Kant.

304 Later Modern Philosophy 3 cr
A study of the period of philosophy initiated by Kant, this course deals with some of the crucial thinkers of the 19th century such as Hegel, Feuerbach, Kierkegaard, Marx, Mill, and Nietzsche.

305 Contemporary Philosophy 3 cr
This course concentrates on philosophy from 1900 to the present and covers the methods of selected 20th-century movements, such as phenomenology, hermeneutics, and deconstruction.

311 Aesthetics and Philosophy of Art 3 cr
This course explores the branch of philosophy concerned with questions of art and beauty, art theory and art criticism, aesthetic judgment, and the sublime. Selected readings are from the writings of Plato, Plotinus, Kant, Hegel, Nietzsche, Heidegger, and Adorno.

ADVANCED COURSES are designed for majors, minors, and other serious students of philosophy. 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.

415 Elements of Thomistic Thought 3 cr
An introduction to the philosophical thought of St. Thomas Aquinas through his own writings, especially those on the relation between faith and reason, the existence and attributes of God, knowledge, and language. Students will learn how to interpret his works in light of his sources, historical context, and alternative readings.
422 Saint Thomas Aquinas 3 cr
The early dialogues and the Confessions will be discussed. Possible topics: skepticism, truth, free will, existence of God, faith and reason, the soul, memory, and time.

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

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

434 Senior Honors Seminar — Hermeneutics 3 cr
This course focuses on one of the most outstanding exponents of hermeneutics and a master of hermeneutic praxis, Hans-Georg Gadamer and his text Truth and Method. We will study theories of interpretation with regard to ancient, medieval, and modern texts as well as the function of understanding and the role of language in communication.

463 Problems in Ethics 3 cr
This course consists of a discussion of selected issues in ethics.

469 Honors Research 3 cr
Designed for students in the Honors program in philosophy. Consists of directed readings, periodic reports, and work on Honors thesis.

498 Philosophy of God 3 cr
This course introduces students to selected traditional and contemporary texts and basic themes in types of religious experience, such as babylonian, greek, and judaico-christian. It delineates such questions as what is the holy? What is the status of arguments for the existence of God? Why is there human suffering if God is good and all-powerful?

DEPARTMENT OF POLITICAL SCIENCE

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

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

426 Elections, Campaigns, and Voting Behavior 3 cr
Examine the determinants of political beliefs and participation.

428 or 436 American Defense Policy 3 cr or 2 cr
Examines American foreign policy since World War II.

429 Public Policy 3 cr
A study of how and why government responds to problems.

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

431 Western Political Thought 3 cr
A study of the ideas that constitute our western heritage of reflection on perennial political issues. 331 considers theorists from the classical period to the early 16th century; 318 considers theorists from the late 16th to the late 19th centuries.

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

433 Constitutional Law Federalism 3 cr
A study of constitutional interpretation as it relates to federalism and the separation of powers.

434 Constitutional Law Civil Liberties 3 cr
A survey of problems and cases in civil liberties and civil rights, e.g. freedom of speech, freedom of religion, privacy, and equal protection.

435 Constitutional Law Criminal Law 3 cr
This course will consider appellate cases in criminal rights, and major aspects of criminal procedure.

436 American Politics and Policy 3 cr
This course studies the political environment for public policy analysis in the United States at the federal level.

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

438 Philosophy of God 3 cr
A course on the nature of God and its relationship to politics.

439 Intro To Political Economy 3 cr
An introduction to the political and social context of economic phenomena.

440 Political Economy of Russia and the Independent States 3 cr
An analysis of the political and economic transition in post-Soviet states.

441 The American Congress 3 cr
An introduction to American government and politics.

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

443 The American Presidency 3 cr
Studies the Presidency and the role it plays at the federal level.

444 War and Peace in the Nuclear Age 3 cr
An examination of the interaction between politics and the use of force in the nuclear age.

445 Human Rights Politics and Policy 3 cr
An analysis of human rights issues in contemporary politics.

446 International Law and Organization 3 cr
Examines the historical development and present role played by international law and organizations.

447 Theory of Comparative Government 3 cr
The issues of democracy, political and economic development, and cultural politics from a global perspective.

448 American Defense Policy 3 cr
Examines the military strategy and policy of the United States.

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

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

451 Public Policy 3 cr
A study of how and why government responds to problems.

452 American Politics and Policy 3 cr
This course studies the political environment for public policy analysis in the United States at the federal level.

453 Controversies in Public Policy 3 cr
Analysis of the sources of conflict in contemporary public policy making.

454 Human Rights Politics and Policy 3 cr
An intensive examination of the international human rights regime including philosophical sources, legal instruments, governmental and non-state actors and impacts on states and international order.

455 Ethnicty Identity and Conflict 3 cr
Ethnic conflict, identity issues, politics and cultural policy, and conflict resolution and peacemaking.

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

457 American Defense Policy 3 cr
Studies the institutions, policies, and decision making of the American defense establishment.

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

459 European Union 3 cr
Examines the political, economic, and social developments of the European Union.

460 International Law and Organization 3 cr
Examines the historical development and present role played by international law and organizations.

461 Theory of Comparative Government 3 cr
The issues of democracy, political and economic development, and cultural politics from a global perspective.

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

463 Public Policy 3 cr
A study of how and why government responds to problems.

464 American Politics and Policy 3 cr
This course studies the political environment for public policy analysis in the United States at the federal level.

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

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

467 The American Congress 3 cr
An introduction to the operation of the Congress within the U.S. system of Government.

468 Comparative Political Systems 3 cr
An introduction to government, politics, culture, and economic policy in Europe and Japan.

469 Comparative Political Systems Developing States 3 cr
An introduction to government, politics, culture, and economic policy in the developing world.

470 Comparative Political Systems Advanced Industrial States 3 cr
An introduction to government, politics, culture, and economic policy in Europe and Japan.

471 Political Economy of Russia and the Independent States 3 cr
An analysis of the political and cultural challenges in democratization and market economy transition.

472 Constitutional Law Federalism 3 cr
A study of constitutional interpretation as it relates to federalism and the separation of powers.

473 Constitutional Law Civil Liberties 3 cr
A survey of problems and cases in civil liberties and civil rights, e.g. freedom of speech, freedom of religion, privacy, and equal protection.

474 Constitutional Law Criminal Law 3 cr
This course will consider appellate cases in criminal rights, and major aspects of criminal procedure.

475 American Defense Policy 3 cr
Studies the institutions, policies, and decision making of the American defense establishment.

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

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

478 International Law and Organization 3 cr
Examines the historical development and present role played by international law and organizations.

479 Theory of Comparative Government 3 cr
The issues of democracy, political and economic development, and cultural politics from a global perspective.

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

481 Public Policy 3 cr
A study of how and why government responds to problems.

482 American Politics and Policy 3 cr
This course studies the political environment for public policy analysis in the United States at the federal level.

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

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

485 The American Congress 3 cr
An introduction to the operation of the Congress within the U.S. system of Government.

486 Comparative Political Systems 3 cr
An introduction to government, politics, culture, and economic policy in Europe and Japan.

487 Comparative Political Systems Developing States 3 cr
An introduction to government, politics, culture, and economic policy in the developing world.

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

DEPARTMENT OF POLITICAL SCIENCE

Charpyerson
Peter Roman, 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 ideas 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 mass media, and continued studies at the graduate level.
DEPARTMENT OF PSYCHOLOGY
Chairperson
Russell Walsh, Ph. D

The undergraduate program of the Department of Psychology is designed 1) to introduce and familiarize students with the fundamental content, issues, and interest of various areas of psychology and critically evaluate and formulate these in the context of psychology as a human science, 2) to foster intellectual and personal freedom and critical thinking as essential to the humanizing process, 3) to prepare the professionally oriented student for advanced work, 4) to provide a foundation for careers involving human services. To these ends, the department offers a wide variety of courses covering psychology conceived as a human science, a natural science, and within a historical perspective.

REQUIRED FOR THE MAJOR

The major program consists of 103-Introduction to Psychology plus a minimum of 24 semester hours. These credits must include 220, 223, and 328. 223 Introduction to Existential Phenomenological Psychology, and 328 Psychology of Personality are designated as writing-intensive courses. In addition, majors must complete 213 Philosophical Roots of Psychology offered by the Department of Philosophy. Majors desiring to pursue graduate study in psychology are strongly advised to take six additional credits through cross-registration at other universities (Learning Theory, Experimental, Perception, Memory, etc.), and Statistics (125 Fundamentals of Statistics offered by the Mathematics department) may be considered part of the mathematics/science requirement. Finally, it is recommended that majors enroll in a hospital or community practicum for credit, and/or do volunteer work in a neighborhood clinic. Three credits earned in practicum count toward the 24 required credits, an additional three credits in practicum may be earned above and beyond the required minimum of 24. A minimum of 15 credits in psychology exclusive of practicum must be taken at Duquesne University for the major.

REQUIREMENTS FOR THE MINOR

Requirements for the minor are 103, 223, and 328, and any two of the following: 290, 340, 352, 361, 390. 400-level courses may be taken for the minor with the permission of the department head. A maximum of nine credits in psychology must be taken at Duquesne University for the minor.

INSTRUCTION

103 Introduction to Psychology 3 cr

(Prerequisite to all courses)

Introduction to fundamental concepts and methods of psychology, examined from both traditional and phenomenological perspectives. Prerequisite for all other departmental courses. *111 Social Psychology 3 cr

For non-majors only. Majors only, permission of instructor required.

120 Systematic Psychology 3 cr

For majors only. Traditional approaches (behavioral, physiological, psychoanalytic) to sensation, perception, learning, and motivation. Required for majors.

223 Introduction to Existential Phenomenological Psychology 3 cr

Introduction to a human-science alternative to psychology as a natural science. Prerequisite for 356 and 410. Required for majors. Writing-intensive course.

225 Developmental Psychology I (Infancy and Childhood) 3 cr

Growth and development of the child, with emphasis on personality development.

226 Developmental Psychology II (Adolescence and Maturity) 3 cr

Development from adolescence, through adult ages, to coping with death.

230 Psychology of Community Experience 3 cr

Experence of community phenomena, e.g., individual versus group priorities, intimacy vs privacy.

326 Psychology of Personality 3 cr

Critical examination of major theories of personality, required for majors and minors. Writing-intensive course.

340 Social Psychology 3 cr

Foundations of social processes, attitudes, values and roles, public opinion, propaganda and communication, personal participation in society.

352 Abnormal Psychology 3 cr

Examination of theories and data on disordered human existence.

356 Research Psychology Theory and Practice 3 cr

Review of theory and practice of traditional and human-science research. Includes student projects. Prerequisites: 220, 223, permission of department head for non-majors.

361 Psychology of Identity and Fulfillment 3 cr

The ways in which identity is lived individually and collectively. Designed to be personally relevant to the life of the student. Open to juniors and seniors only.

370 Psychology of Aesthetic Experience 3 cr

Theoretical and empirical explorations of aesthetic experience.

391 Applied Psychology Practicum 3 cr

An applied psychology setting provides opportunity for working directly with professionals. Settings have included psychiatric hospitals and community centers. Majors only, permission of department head required. Repeatable once.

392 The Individual and His/Her World 3 cr

Examination of individual's relation to society, from a development and cross-cultural perspective.

393 Principles of Psychoanalytic Thought 3 cr

Examination of the times and contributions of Freud and selected other major psychoanalytic theories. Permission of department head for non-majors.

394 Psychology of Language and Expression 3 cr

Communication as a life-embodied relation of person to world and others. Emphasis is on phenomenological, modern psycholinguistic, and/or post-structuralist approaches. Permission of department head for non-majors.

410 Advanced Existential-Phenomenological Psychology 3 cr

Detailed investigation of selected works in existential-phenomenological psychology and psychological philosophy. Prerequisite: 223. Permission of department head for non-majors.

426 History of Psychology 3 cr

Overview of figures and issues in the history of psychology, from precursors to present. Prerequisite: Philosophy 213.

432 Gestalt Psychology 3 cr

Contributions of Gestalt psychology, especially the works of Kolle, Kohler, and Goldstein to traditional and human-science psychology. Permission of department head for non-majors.

450 Contemporary Issues in Clinical Psychology 3 cr

A human-science examination of the approach, methods, data, and current issues of clinical psychology. Permission of department head for non-majors.

453 Psychology of Gender 3 cr

This course explores men's and women's existence as gendered beings. The theoretical as well 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.

DEPARTMENT OF SOCIOLOGY
Chairperson
Douglas Harper, Ph D

Sociology offers students a greater understanding of the social structures and processes that underlie our daily lives, and an awareness of the possibilities of social-scientific research for increasing our understanding of society.

Duquesne's program in sociology provides a strong academic foundation. Our core curriculum teaches social theory and research methods, which provide the basic knowledge necessary for graduate study or employment in the social sciences. Our elective courses offer knowledge relevant to specific areas of students' interests.

For students who wish to specialize early in their careers, we offer academic concentrations in Social Policy and Criminal Justice. Our concentration in Social Policy prepares students for graduate programs in social science and for research in government agencies, private research firms, the non-profit sector and other applied research areas.

The Criminal Justice concentration provides substantive background for work or further education in the criminal justice field.

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

REQUIREMENTS FOR THE MAJOR

A minimum of 34 semester hours is required for the major. These must include 101 Survey of Sociology, 200W Classical Sociological Theory, 201 Sociological Methods I, 202 Sociological Methods II, Sociological...
**DEPARTMENT OF SOCIOLOGY**

**SOCIAL POLICY**

This concentration is designed for the student who is interested in applying sociological theory and research to an understanding of social policy and its applications. It prepares the student for advanced study or careers in such areas as urban planning, local government, human services, and gerontology. The student may be interested in applying to Duquesne's Graduate Center for Social and Public Policy. The successful applicant may apply the 6 credits of 400/450 level courses to the Master's degree.

**Majors**

The remaining 6 credits may be selected from any of the following:

- 404/504 Social Ecology and Political Culture
- 408/508 Population
- 409/509 Correctional Policy and Practice
- 415/515 Health, Health and Social Policy
- 416/516 Minorities and Public Policy

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

**REQUIREMENTS FOR THE MINOR**

To earn a sociology minor you must enroll in a minimum of 15 semester hours, which must include 101 Survey of Sociology. You should design your minor in consultation with a sociology professor.

**THE GERONTOLOGY CERTIFICATE**

The Department offers an 18-credit program leading to a Certificate in Gerontology. This concentration is designed for the student who is interested in applying sociological theory and research to an understanding of social policy and its applications. It prepares the student for advanced study or careers in such areas as urban planning, local government, human services, and gerontology. The student may be interested in applying to Duquesne's Graduate Center for Social and Public Policy. The successful applicant may apply the 6 credits of 400/450 level courses to the Master's degree.

To earn the Certificate of Gerontology, the student must complete 101 Survey of Sociology, and five of the following courses:

- 203, 207, 208, 225, 303, 315, 408, 415, 450 OR 451

To apply for the Certificate program, students need to complete the application form obtained in the Sociology Department Office, and officially register for the Certificate on their registration forms.

**THE GOETTE ENDOWED SCHOLARSHIP**

At the end of each academic year, the Sociology Department awards a merit scholarship to an outstanding sociology major who has completed at least 60 credits with a minimum of 9 in sociology. The amount of the award varies from year to year. The criteria for merit are scholarship, service and interpretation of statistics using computerized statistical packages such as SPSS. Prerequisites 101 and 201. It is highly recommended that MATH 125, Fundamentals of Statistics be completed before taking this course. The concentration requires at least 60 credits toward the major, with the exception of 450 and 451, which may be taken only during the student's senior year.

**THE SOCIOLOGY CLUB**

Sociology majors are invited to join the Sociology Club of Duquesne University. This club meets regularly throughout the year to enhance the culture of our major on campus, and schedules special events such as the annual "Professional Day." The club is open to all majors, and is highly recommended that MATH 125, Fundamentals of Statistics be completed before taking this course. The club is open to ALL Sociology Majors. All students must be concurrently enrolled in SOC 201L.

**202L Sociological Methods Lab II**

This lab provides guidance in data construction and analysis. Prerequisites 101 and 201 and concurrent enrollment in SOC 202.

**203 Social Gerontology**

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

**205 Person and Society**

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

**206 Social Problems and Social Policy**

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

**207 Sociology of Mental Health and Illness**

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

**208 Racial and Ethnic Groups**

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

**209 Social Stratification**

A survey of the social classes, segments and social strata in the United States and other societies. Prerequisite 101.

**210 Sociology of Sex and Gender**

The study of social structures and the role of gender in shaping the lives of individuals. Prerequisite 101.

**212 Drugs and Society**

Drug use as a socially constructed deviant activity. The legal, political, and personal effects of substance use on society and individuals. Prerequisite 101.

**213 Crimeology**

A study of criminal justice issues. Prerequisite 101.

**215 Critical Criminology**

A study of critical criminology. Prerequisite 101.
DEPARTMENT OF THEOLOGY

COURSE INFORMATION

The Department has organized its courses into three divisions: Biblical Studies, Religious and Theological Studies, Ethical Studies. The numbering of the courses indicates the level of the approach.

200 These are courses introducing students to particular areas or questions in theology.

300 These courses explore subject matter in greater depth and specificity than do courses at the 200-level.

400 In these courses selected topics are dealt with at a more advanced level, independent research is required.

BIBLICAL STUDIES

213 The Old Testament 3 cr

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

214 The New Testament 3 cr

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

311 The Torah 3 cr

A study of the first five books of the Bible in the light of their historical, literary and theological features.

313 Archaeology and The Bible 3 cr

An illumination through archaeology of the historical setting, the cultural background, and the events described in the Bible.

315 Prophetic Literature of The Old Testament 3 cr

A study of classical Israelite prophetic writings which not only characterize a strong connection against evil, but also an urgent call to return to the roots of the Israelite faith.

316 The Pauline Literature 3 cr

A critical study of the letters traditionally attributed to Paul (including Hebrews).

317 The Wisdom Literature of The Old Testament 3 cr

A study of Proverbs, Ecclesiastes, Job and other wisdom writings which treat both the practical quest for happiness and the more speculative quest for meaning in life.

321 The Gospel Literature 3 cr

A critical study of the four Gospels in the light of contemporary scholarship.

324 The Johannine Literature 3 cr


329 Special Topics in Biblical Studies 3 cr

An opportunity to pursue a particular interest of professor and students.

490 Field Experience in Biblical Archaeology 3 cr

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

493 Directed Readings in Biblical Studies 1-3 cr

Independent Study. Department permission required.

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

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

232 Faith and Atheism 3 cr

An examination of the claims which atheists make against faith and the response made by believers to these arguments.

235 Christian Worship 3 cr

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

242 Love in Theological Thought 3 cr

A study of family love, friendship, and romantic love and their relationship to God's love.

258 Catholicism 3 cr

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

274 Beginnings of Christianity 3 cr

How in 300 years the Jesus whom the Romans crucified became the God even the emperor worshipped.

280 Religious Experience 3 cr

How the Divine is sensed and responded to in various geographical, cultural, and chronological contexts.

283 Judaism 3 cr

The faith, beliefs and practices of Jewish life over the centuries and today.
DEPARTMENT OF THEOLOGY

301 Marriage 3 cr
An examination of conjugal love as the basis for marriage as a Christian sacrament

331 The Church in The Modern World 3 cr
How the Christian community is a prophetic presence in secular society and a community which affirms and sustains human dignity and values

335 Theology of The Sacraments 3 cr
The seven sacraments as rituals and symbols in the growth of the life of Christians

345 Women and Christianity 3 cr
From the Bible to the churches today, with special attention to contemporary roles and spirituality

348 Religion in The United States 3 cr
The role played by religion in American society and culture, with special attention to historical developments and contemporary trends

372 Religious Themes in Literature and Film 3 cr
An exploration of religious experience and religious concepts as expressed in significant worlds in film and literature

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

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

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

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

Department permission required

ETHICAL STUDIES

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

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

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

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

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

441 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 LITERATURES PROGRAM

Coordinator
Wallace S Watson, Ph D

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

REQUIREMENTS FOR THE MAJOR
24 credits These must include 490 Topics in World Literature, at least 6 additional credits selected from the World Literature Core courses listed below, and 15 credits from qualifying courses in Classics, English, and Modern Languages and Literatures (including at least one course from each of these departments). The program must include at least one course studying literature in its original language other than English (for appropriate language prerequisites, see listings for Classics, English, and Modern Languages and Literatures).

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

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

CORE COURSES

205 Survey Literature of the Western World I 3 cr
A thematic survey of literature through the Renaissance

206 Survey Literature of the Western World II 3 cr
A thematic survey of literature from the Renaissance onwards

215 Non-Western Literature 3 cr
Study of literature may be cross-listed with one or more courses in Classics, English, or Modern Languages and Literatures

QUALIFYING DEPARTMENT COURSES

Classics Any literature course, whether in translation or in the original language, numbered 200 or higher

English Any literature course at the 300 or 400-level

Modern Languages and Literatures Any literature course, either in translation or in the original language, above 300
Bayer School of Natural and Environmental Sciences

Administration
Interim Dean
David W Seybert, Ph D

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

DEGREES
The Bayer School of Natural and Environmental Sciences (BSNES) offers Bachelor of Science degrees in Biological Sciences, Biochemistry, Chemistry, Environmental Chemistry, Microbiology, and Physics, as well as Bachelor of Arts degrees in Chemistry, Biochemistry, and Physics for those students enrolled in the binary Engineering program. Science majors may apply for the Pre-Health Professions Program, the BS/Biology/Master of Science in Environmental Science and Management, the BS in Microbiology/Master of Science in Environmental Science and Management, the BS in Chemistry/Master of Science in Environmental Science and Management, the BA/Physics/BS 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 the Degree of Bachelor of Science or Bachelor of Arts in the BSNES, a student must complete the following requirements:

- A minimum of 120 semester hours of course credits. The last 30 hours must be taken at the University.
- University Core Curriculum as described below.
- Thinking and Writing Across the Curriculum
- Imaginative Literature and Critical Writing
- Problem Solving with Creative Math
- WAVE
- Core Science (Biology, Chemistry, or Physics) WAVE
- Core Theology (Select one of six courses)
- Basic Philosophical Questions
- The Arts and the Human Experience
- Social, Political, and Economic Systems
- The Shaping of the Modern World
- Computer Information & Literacy

- General Requirements as described below.
  - Language
  - History/Literature
  - Social Sciences
    - Psychology, Sociology, Polical Science
  - Communications
  - Philosophy/Theology

- Major program (refer to departmental requirements)
- An overall minimum cumulative quality point average of 2.0
- A minimum cumulative quality point average of 2.0 in the major.
- Removal of I and F grades both in the major and in the required courses.
- Pre-registration (on form S1K) for B S/B A degree in major field. Submission of application for the degree on form provided by the Registrar, before the deadline published in the current University 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 2.0 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. Students who wish to carry more than 12 credits of courses in the summer sessions must consult with the Chair of the department in which the student is majoring.

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 2.0 is required in the minor for graduation. Refer to Departmental listing for specific minor requirements.

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

BSNES Temporary Transfers (Summer Classes)
No course taken by a student in the BSNES as a Temporary Transfer at another institution may count toward the degree unless approved by the Chair of the department in which the student is majoring.

Science Classes - The BSNES will accept science courses taken at a 4-year college/university outside Duquesne University upon the approval of the 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 prior to taking a course. If the student has not yet reached 60 credits, (s)he may take the class at a two-year college.

CLEP and Advanced Placement
(Refer to page 9 of the Undergraduate Catalog)

University-Level Courses Taken While in High School
University-level courses taken by 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 students 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’S-MASTER’S PROGRAM IN BIOLOGY, MICROBIOLOGY, OR CHEMISTRY AND ENVIRONMENTAL SCIENCE AND MANAGEMENT

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

Students who wish to complete the joint B.S./M.S. program will follow the curriculum for the appropriate major in the Bayer School of Natural and Environmental Sciences. They may begin coursework in the environmental sciences in the third year. The bachelor of science degree will be awarded at the end of the fourth year if all University and College Core Curriculum requirements have been met. Students must have earned a cumulative QPA of 3.0 or better to be permitted to continue graduate coursework 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 Bachelor of Science in Biology, Chemistry, Physics, and a Master of Science in education joint degree program.

Students enrolled 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
Biology Requirements (Continued)

Organismal concentration 3 cr
Lab I Experimental 3 cr
Lab II, III or IV 3 cr
Biology Electives 6 cr

ELECTIVES
May be chosen from courses listed above, other departmental courses, Biochemistry (CHEM 401), and research.

Courses in CONCENTRATIONS

GENETICS pick one

General Genetics Fall every year
Microbial Genetics Fall every year

HUMAN GENETICS pick one

General Microbiology Fall every year
Hist of Animal Viruses Fall every year
Immunology Spring every year

PHYSIOLOGY pick one

Mammalian Physiology Fall every year
Comp Envir Physiol Fall every year

ORGANISMAL pick one

Microbial Ecology Fall
Evolution Spring
Environmental Micro Fall
Developmental Biology Fall
Plant Biology Fall
Environmental Ecology Spring

Total Credits 33

Co-requisite Science/Math Requirements

Total co-req credits 37

General Chemistry I 5 cr
General Chemistry II 5 cr
Organic Chemistry I 4 cr
Organic Chemistry II 4 cr
Biochemistry 4 cr
General Physics I 4 cr
General Physics II 4 cr
Calculus I 4 cr
Biostatistics (Math 225) 4 cr

requirements for the minor

A minor in Biology consists of BIOL 111 or 115, 112 or 117, 113 or 116, 114 or 118, and a minimum of 12 credits selected from the Department's courses numbered 200-495. Normally, this will include BIOL 211 and 213 and 2-3 other courses Individual prerequisites for courses must be satisfied

Non-major courses

(Courses may not be taken for Biology major credit)

101 Introduction to Life's Processes 2 cr
An emphasis on the fundamental biochemical and cellular concepts required for a solid understanding of life's processes. This course will provide the background for the Anatomy & Physiology and Biology of Microbes courses. Lecture and recitation

102 Introduction to Life's Processes Laboratory 1 cr
Laboratory experiments and demonstrations illustrating biochemical and cellular processes. The lab is designed to accompany the lecture & recitation

201 Biology of Microbes 2 cr
Examination of microbes as to what they are, how they grow, how they may be controlled, and their relationships to other living things. This course will explore the background for the Genetics, Microbiology and Immunology courses. A strong emphasis on laboratory work and participation in research projects is required.

202 Biology of Microbes Laboratory 1 cr
Prerequisite 201 (or concurrent registration)

203 Introductory Microbiology 3 cr
Introduction to microorganisms, their morphology, metabolism, ecology, and cultural characteristics, with emphasis on their interaction with other organisms, including man. Principles of medical and health related aspects of microbiology, immunology and animal virology are presented. This course is restricted to Health Sciences students only. Lecture

204 Introductory Microbiology Laboratory 1 cr

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, laboratory, 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 entering 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. Course selections of students wishing to pursue graduate training, or the more diverse and diverse bio-technological research career opportunities in industry, government, or universities, are guided by the Microbiology Major and Biological Sciences Major faculty mentors. For those interested in health professions, the Pre-Health Professions Program advisor counsels students as they progress through their curriculum and apply for admission to health-related professional schools.
Biological Inquiry I

This course investigates the biological world at the level of biomolecules and cells. It also provides an introduction to the mechanisms of inheritance, homeostasis, and the process of development — the progression from fertilized egg to adult. Information and concepts essential to understanding the biological sciences are integrated with the process and excitement of scientific discovery. This course is required for all majors. Prerequisite: BIOL 101 or BIOL 114, 115, 117, 113 or 116, 114 or 118 Lecture

Biological Inquiry II

This course investigates living systems at the organismal, cellular, and ecosystem levels. Included is a survey of the diversity of life, ecology, and evolution. The information and concepts essential to understanding the biological sciences are integrated with the process and excitement of scientific discovery. This course is restricted to science majors. Prerequisite: permission of instructor Lecture

Biological Inquiry III

This course investigates living systems at the organismal, cellular, and ecosystem levels. Included is a survey of the diversity of life, ecology, and evolution. The information and concepts essential to understanding the biological sciences are integrated with the process and excitement of scientific discovery. This course is restricted to science majors. Prerequisite: permission of instructor Lecture

Developmental Biology

The study of the progression through time and space from a single cell, the fertilized egg, to a complex multicellular organism. The powerful tools of molecular and cellular biology have linked the fields of embryology, morphology, genetics, and evolution. This course explores the processes of morphogenesis, differentiation, pattern formation, growth, and reproduction at the molecular, cellular, and organismal levels to provide a current overview of development in a wide variety of organisms. Prerequisite: or better in BIOL 215 and 311 is recommended Lecture

Mammalian Physiology

This course will examine the molecular and cellular mechanisms of mammalian body function, including considerations of the basic components of biological control systems and the manner in which various tissues and organ systems contribute to the maintenance of physiological homeostasis in health and disease. Prerequisite: or better in BIOL 216 Lecture

Comparative and Environmental Physiology

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: or better in BIOL 216 Lecture

Medical Microbiology

A systematic coverage of medical microbiology and its role in clinical medicine. Emphasis is based on current concepts of infectious disease and microbial genetics as it pertains to pathogenicity. Special attention is given to host-parasite interactions and to the interpretation and significance of laboratory findings in the diagnosis and treatment of human microbial disease. Prerequisites: 111 or 115, 112 or 117, 113 or 116, 114 or 138, and 219 or equivalent or permission of the instructor Lecture

Evolution

Evolution is the single most important concept uniting the many fields of biology. This course covers the theory of evolution and the various levels at which evolution works in living systems. Topics to be addressed include evolutionary genetics (including the course, gene evolution, adaptation and natural selection, evolution and diversity (including phylogeny reconstruction), and paleobiology and macroevolution. Prerequisites: or better in BIOL 211, 213. This course is strongly recommended Lecture

Biology and Society

This junior level lab course sequence is designed to provide students with a multidisciplinary lab that reflects the integration among different disciplines in the broad areas of cellular and molecular biology. The course emphasizes techniques and approaches in the molecular, biochemical, and cellular biological disciplines of organisms from bacteria to mammals. Included are an introduction to research skills (computer use, laboratory techniques, and manipulations of cellular macromolecules including proteins and nucleic acids, and microscopy. Prerequisites: or better in BIOL 211, 213 Laboratory and recitation

Cell and Molecular Biology

The second semester continues to build on BIOL 370 through investigative labs in cellular and molecular biology (experimental embryology, genetic mapping, constructing transgenic organisms, microscopy of cellular structures) and includes a capstone lab project for the last portion of the semester. Prerequisites: BIOL 370 Laboratory and recitation

Cell and Systems Physiology

The second semester continues to build on BIOL 370 through investigative labs in cellular and molecular biology (experimental embryology, genetic mapping, constructing transgenic organisms, microscopy of cellular structures) and includes a capstone lab project for the last portion of the semester. Prerequisites: BIOL 370 Laboratory and recitation

Microbiology

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: or better in BIOL 216 Lecture
405 Microbial Genetics 3 cr
A course presenting the fundamentals to the rapidly growing field of microbial genetics Emphasis is on gene structure and function Areas to be discussed are DNA replication, transcription, translation, control of gene expression, recombination, transformation, conjugation, transduction, transposon, genetic fine structure and colinear mapping methods, mutation, DNA repair, plasmids and their properties Genetic engineering and gene cloning are described Lecture

407 Recombinant DNA Techniques 3 cr
This course provides a broad hands-on introduction to contemporary techniques in molecular biology Manipulation of cloned DNA using restriction endonucleases, ligation, and phosphatases will be carried out Molecular cloning using both plasmid and bacteriophage vectors will be done Nucleotide sequencing and sequence analyses will be discussed The student will carry out a nucleic acid hybridization in the form of a Southern blot Cloned DNA will be transposon mutagenized Analyses of cloned DNA using a reporter gene will be carried out DNA amplification using the Polymerase Chain Reaction will be done Prerequisite organic chemistry or permission of the instructor Lecture and laboratory

414H Honors Seminar 1-2 cr
Discussion of current issues and research literature in the Biological Sciences Format includes student presentations, faculty seminars, and invited speakers Prerequisite Application and acceptance into the honors program in Biology 1 hour session per week

415H Honors Thesis 1-4 cr
Laboratory research under the direction of a faculty mentor leading to a written honors thesis and a presentation of the thesis research Prerequisite Application and acceptance into the honors program in Biology

417 Vertebrate Microstructure 3 cr
A study of the structure and function of the nervous system and organ systems The course covers the cellular and molecular basis of each organ system and integrates this knowledge with the organismic and functional aspects of the system Prerequisite permission of the instructor Lecture

418 Vertebrate Microstructure Laboratory 1 cr
Completion of or concurrent registration in 410/510 is required

420 Natural History of Animal Viruses 3 cr
Provides an introduction to animal viruses as etiologic agents of disease Emphasis will be placed on the pathogenesis and epidemiology of viral infections and diseases of humans as well as selected diseases of veterinary significance Prerequisite permission of the instructor Lecture

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

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 cellular and humoral immune responses, immunoochemistry, antigen-antibody reactions, immunogenetics, immunopathologies, and immunodeficiencies Prerequisite permission of the instructor Lecture

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 Prerequisite a course in molecular biology and/or biochemistry

426 Pathogenic Microbiology 3 cr
Study of the infectious agents of human disease with emphasis on host-parasite relationships, unique aspects of bacterial activities and organization, metabolism, regulation and genetics, control 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 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, biochemical cycling, energy metabolism, microbial evolution, and the role of microorganisms in the biosphere will be examined Prerequisites 213, 219, and CHEM 202, or permission of the instructor

429 Microbial Physiology 3 cr
This is a course which focuses on microbial energy metabolism, biosynthesis, metabolic regulation, and cell structure Energy metabolism includes organosynthesis (aerobic and anaerobic respiration, fermentation), chemolithotrophy; and phototrophy Selected topics of microbial biosynthesis, including cell envelope biosynthesis, will be covered Regulation of energy metabolism and biosynthesis at the levels of gene expression and enzyme activity will be a major topic in this course Prerequisites organic chemistry and a course in microbiology or permission of the instructor

432 Environmental Microbiology 3 cr
This course provides an overview of man's impact on the environment Basic ecological principles are examined in the context of man's interaction with the biosphere The ecological effects of pollution and other man-made disturbances are described Topics include principles pertaining to ecosystems, communities and populations, biogeochemical cycles, sources of pollution, effects of pollutants on terrestrial and aquatic ecosystems, deforestation, loss of species richness, biomarkers, and bioindicators The course is appropriate for science majors and nonmajors with a strong science background Prerequisites 311 or 115, 112 or 117, or consent of instructor

444 Plant Biology 3 cr
An in-depth examination of plant biochemistry, genetics, development and physiology Emphasis is placed upon the presentation of current research findings in plant biology Typical subjects will include developmental genetics, applications of molecular biology to understand cellular structure and function, ecological physiology, and plant/pathogen relationships Prerequisites 311, 313 or permission of instructor

445 Advanced Cell Biology 3 cr
An in-depth examination of advanced topics in cell biology Subjects such as cytoskeletal protein assembly, kinetochore, motor molecules, cell cycle controls and membrane biophysics will be discussed, as well as the cellular aspects of diseases such as cancer, Alzheimer's disease and AIDS Course materials are drawn from review articles and recent primary research reports Prerequisite 213 or permission of instructor

455 Cardiovascular & Respiratory Physiology 3 cr
This advanced course provides students with an in-depth understanding of contemporary mammalian cardiovascular and respiratory system biology Topics covered include cardiac cell biology and regulation, vascular endothelium, the microcirculation, vascular smooth muscle biology and regulation, regional circulations, body defense mechanisms, the respiratory properties of blood, pulmonary mechanics and gas exchange, ventilation/perfusion matching, and acid-base balance After considering the general biology of the molecular and cellular mechanisms that underlie normal function, the integrated responses to various stresses and diseases are considered Prerequisite an animal-based physiology course or permission of the instructor
456 Cardiovascular & Respiratory Physiology Laboratory 3 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 scientific experiments supplemented by interactive microcomputer simulations. Prerequisite: an animal-based physiology course or permission of the instructor.

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 application of modern techniques of cellular and molecular biology to answer central questions of reproductive physiology will be explored in more detail. Prerequisites: BIOL 315 or 316 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 coordination and control of body functions. Topics include (a) behavior, (b) pituitary axis, (c) thyroid and parathyroid glands, (d) adrenal cortex and medulla, (e) functions of the gonads, (f) neuroendocrine functions and their control, (g) role of the hypothalamus and hypophyseal hormones, (h) role of the sympathetic and parasympathetic nervous systems, (i) role of the pituitary gland in control of other endocrine glands, (j) role of the hypothalamus in control of other endocrine glands, (k) role of the hypothalamus in control of other endocrine glands, (l) role of the hypothalamus in control of other endocrine glands, (m) role of the hypothalamus in control of other endocrine glands, (n) role of the hypothalamus in control of other endocrine glands, (o) role of the hypothalamus in control of other endocrine glands, (p) role of the hypothalamus in control of other endocrine glands, (q) role of the hypothalamus in control of other endocrine glands, (r) role of the hypothalamus in control of other endocrine glands, (s) role of the hypothalamus in control of other endocrine glands, (t) role of the hypothalamus in control of other endocrine glands, (u) role of the hypothalamus in control of other endocrine glands, (v) role of the hypothalamus in control of other endocrine glands, (w) role of the hypothalamus in control of other endocrine glands, (x) role of the hypothalamus in control of other endocrine glands, (y) role of the hypothalamus in control of other endocrine glands, (z) role of the hypothalamus in control of other endocrine glands. Prerequisites: BIOL 457. Lecture

466 Terrestrial Field Biology 2 cr
This applied ecology course is designed to present an overview of field and laboratory methods used by ecologists to describe and analyze plant and animal aggregations and their environments. The course material is presented as a combination of lecture, laboratory and field sessions. Prerequisites: BIOL 113, 114, 211, 212, and 215, 225, or permission of the instructor. Lecture

468 Human Genetics 3 cr
This course is a 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, the genetic basis of cancer, and the human genome project. Prerequisite: BIOL 311 or CHEM 402 or permission of the instructor. Lecture

469 Signal Transduction 3 cr
This advanced cell biology course addresses the question of how the messages from various chemical signaling molecules are "transduced" into biological responses. Topics include modes of cell communication, types of chemical signals, steroid hormone action, transduction by cell-surface receptor proteins, channel-linked receptors, G-protein-linked receptors, catalytic receptors, second messengers, cAMP, calcium, calmodulin, muscarinic acetylcholine receptor, diacylglycerol pathway, protein kinases and growth factors. Prerequisites: BIOL 211, 213 and instructor approval. Lecture

475 Neurobiology 3 cr
Study of the properties of neurons including excitation, transmission and integration, as well as sensory mechanisms, neural processing, and behavior using vertebrate and invertebrate examples. Prerequisites: a course in animal physiology and permission of the instructor. Lecture

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, field stations, biotechnology laboratories, and other universities.

492/592 Stream Field Biology 3 cr
This course is the study of the functional relationships and productivity of fresh water streams as they are affected by their physical, chemical and biotic environment. The course material is presented as a combination of lecture, laboratory and field sessions. Prerequisites: There are no specific course prerequisites, however, students should have knowledge of basic biology, chemistry and fundamental algebra.

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

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Chairperson
Jeffrey D. Madura, Ph.D.

Professors
H. M. Kingston, Ph.D.
David W. Seybert, Ph.D.
Omar W. Steward, Ph.D.

Associate Professors
Bruce D. Beaver, Ph.D.
Frederick C. Cleland, Ph.D.
Mitchell E. Johnson, Ph.D.
Shahed U. Khan, Ph.D.
Jeff D. Madura, Ph.D.
Julian Talbot, Ph.D.

Assistant Professors
Partha Basu, Ph.D.
Paul G. Johnson, Ph.D.
David Wright, Ph.D.

Emeritus
Jack W. Hauser, Ph.D.
Kurt C. Schreiber, Ph.D.

Adjunct Professors
Heinz W. Machatake, D.Sc.
Ted J. Weissmann, Ph.D.

The Chemistry and Biochemistry program is designed to provide the student with a fundamental background in chemistry and an understanding of the relationship of chemistry to other sciences and disciplines. Elective courses and the opportunity to do undergraduate research allow the chemistry major to develop interests in a specialized area of chemistry, such as analytical, inorganic, physical chemistry, and biochemistry. Because of the fundamental nature of chemistry as a science, numerous opportunities for advanced study, as well as employment, are open to chemistry and biochemistry majors. A large percentage of students elect to continue their study in graduate programs in chemistry and related fields. Chemists and biochemists provide a core of personnel in pure and applied research, technical sales, technical libraries, management positions in the chemical and related industries, the space industry, education, the environmental sciences and the health professions, such as medicine, dentistry and veterinary medicine. The major in biochemistry centers around the core of basic chemistry courses while also providing advanced courses in biochemistry and electives in biology.

REQUIREMENTS FOR THE MAJORS

All students must take BIOL 121, 122, 321, 325, 425, 428, 432, 457, and MATH 115, 116, Physics 211, 212, Biology 111, 112.

Chemistry Major
B A Chemistry 122 cr All students must take BIOL 211, 212, 211L, 212L, 322, 422, Math 215, Biology 113, 114
B S Chemistry 125 cr All students must take BIOL 211H, 212H, 211L, 212L, 322, 422, two Chemistry electives, and Math 215.

Environmental Chemistry Major
B S Environmental Chemistry 137 cr All students must take Chem 211H, 212H, 211L, 212L, 322, 375, Biology 113, 114, Math 215, 225, and four environmental science electives.

Biochemistry Major
B A Biochemistry 125 cr All students must take BIOL 211, 212, 211L, 212L, 401, 402, Biology 113, 114, 213
B S Biochemistry 128 cr All students must take BIOL 211H, 212H, 212L, 401, 402, 403, 322, Biol 113, 114, and two 300-400 level Biology electives.

To meet the American Chemical Society’s requirements for Professional Certification, the Chemistry Major must take two additional courses from the following: Chem 501, 402, 503, 581, 582, 583, 584, 585, 586, 587, Mathematics 308 or 315, and Physics 306. The Biochemistry Major must take 322, and 422 for certification.

REQUIREMENTS FOR THE MINORS

A minor in Chemistry or Biochemistry consists of 121, 122 and a minimum of 12 credits selected from Departmental courses numbered 200 or above. Normally, 211 and 211L, 212 and 212L, and 401 will constitute a minor in Biochemistry. Individual course prerequisites must be satisfied.

121, 122 General Chemistry 5 cr each
The fundamental principles and concepts of chemistry are presented from the standpoint of atomic and molecular structure with illustrative examples from descriptive chemistry. The basic concepts of thermodynamics, chemical kinetics and equilibrium are introduced. The laboratory portion of the first semester illustrates the principle of ionic equilibria including qualitative inorganic analysis. Prerequisite for 121, Math 105 (College Algebra and Trigonometry) or a Math SAT greater than 500 and/or Math Placement Exam score greater than 17 Toledo Chemistry Placement Exam is required by all students. Prerequisite for 122: 121 Lecture, three hours, laboratory, three hours, recitation, two hours
Both microscale and macroscale equipment are used. The student acquires a knowledge of the various wet methods of qualitative organic analysis and also learns to generate and interpret IR and NMR spectra. Prerequisites: 211L for 212L. 211 must be taken prior to or concurrent with 211L, 212 must be taken prior to or concurrent with 212L. Laboratory: three hours.

221L, 222L Organic Chemistry Majors’ Lab 1 cr each
Students cover the same techniques as the 211L, 212L labs. In the Honors labs students are taught additional techniques useful for undergraduate research. They are permitted hands-on use of various instrumentation such as the NMR spectrometer, gas chromatograph, and GC-MS instruments. Students are introduced to the chemical literature and perform a small research project involving single- and multi-step syntheses. Prerequisites: 221L for 222L. 211H must be taken prior to or concurrent with 221L, and 212H must be taken prior to or concurrent with 222L. Laboratory: six hours.

211H, 212H Lab Organic Chemistry Honors 1 cr each
Students cover the same techniques as the 211L, 212L labs. In the Honors labs students are taught additional techniques useful for undergraduate research. They are permitted hands-on use of various instrumentation such as the NMR spectrometer, gas chromatograph, and GC-MS instruments. Students are introduced to the chemical literature and perform a small research project involving single- and multi-step syntheses. Prerequisites: 211H lab for 212H lab. 211H must be taken prior to or concurrent with 211H lab, and 212H must be taken prior to or concurrent with 221H lab. Laboratory: three hours.

230L Research Laboratory Techniques 1 cr
This lab emphasizes the refinement of quantitative analytical wet method techniques and the application of basic statistical methods of data analysis. Prerequisites: 121, 122, 125 laboratory; four hours.

275 Environmental Chemistry 3 cr
Provides students with training in correlation, interpretation, and analysis of related topics and issues involved in environmental chemistry including aqueous, atmospheric, and geochemical interactions. They will receive experience in environmental chemical sampling, modeling and testing methods. Prerequisites: 121, 122, and 211H or 211H.

321, 322 Physical Chemistry 4 each
A study of the structure and properties of the various states of matter, thermodynamics, chemical reactions, and introduction to quantum chemistry. Prerequisites: Physics 202 or 212. Chemistry 122, Mathematics 116 Lecture, four hours.

325L Advanced Integrated Lab I 1-3 cr
Students consolidate basic laboratory technique and learn to use and interpret results from modern chemical analytical instrumentation. Experiments are open-ended allowing students to approach problems in a genuine scientific format of designing their approach to defined problems, executing the experiments, and interpreting the results. Topic areas are drawn from inorganic synthesis, kinetics, chemical analysis, bioanalytical analysis, and spectroscopy techniques. Prerequisites: electrophoresis, computational methods and statistics. Students will begin learning to interpret and communicate their work. Prerequisite: 321L, 421L. Laboratory: eight hours.

401 General Biochemistry I 4 cr
An introduction to modern biochemistry at the molecular level. The course includes discussion of the structure and function of proteins, the chemical mechanisms and regulation of enzyme catalysis, bio-membrane structure and function, the structure and mechanism of carbohydrates, and the bioenergetics of ATP synthesis and utilization. Prerequisites: 212L Lecture, four hours.

402 General Biochemistry II 4 cr
This course is a continuation of CHEM 401. The course presents an overview of the metabolic transformations of fatty acids and the complex lipids. Students consolidate basic laboratory technique and learn to use and interpret results from modern chemical analytical instrumentation. Prerequisites: 212L and 401. Laboratory: eight hours.

421 Analytical Chemistry 3 cr

422 Inorganic Chemistry 3 cr
A survey of the basic principles required for understanding inorganic chemistry including atomic and molecular structure, crystal structure, non-aqueous solvents and coordination compounds. Prerequisites: 321L, 421L. 3 cr.

425L Advanced Integrated Lab II 1-3 cr
Students work in small teams on real research problems. Each team contributes to a single problem, and several chemical and biochemical problems may be studied over the course of a semester. Emphasis is placed on developing the group interaction skills and the ability to produce publishable results. Prerequisites: 321L, 325L, 421L. Laboratory: eight hours.

475 Senior Seminar 1 cr
Students learn to prepare the presentation of a research topic to a general audience having some knowledge of chemistry. They learn to use scientific references, journals, and electronic information retrieval. Students will incorporate different types of multimedia in presenting a seminar. Prerequisites: 325L.

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

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Department Chairperson
Chairperson
K. Thomas R. Davies, Ph.D.

Professor
K. Thomas R. Davies, Ph.D.

Rev. J. Clifton Hill, Ph.D.

Associate Professor
Barbara M. Manning, Ph.D.

Assistant Professor
Scott Cohen, Ph.D.

Simon Sorescu, Ph.D.

Instructor
Anna D'Eramo, B.Sc.

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

REQUIREMENTS FOR THE MAJOR

To major in Physics, students must complete the following courses, with the option to substitute one of the following for PHYS 242, 480, and 482. It is also strongly suggested that each major take SPRG 103.

DEPARTMENT OF PHYSICS

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

Professor
K. Thomas R. Davies, Ph.D.

Rev. J. Clifton Hill, Ph.D.

Associate Professor
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Extra-departmental Science and Mathematics Requirements

Chemistry 121, 122 or Biology 111, 112, Mathematics 115, 116, 215, 308, and 315, Computer
PERCEPTION OF SOUND Examples of the principles are underlying the production, propagation, and light, and selected topics in modern physics. In addition to being introduced to the physical concepts, the student will also be introduced in the analytical approach to problem solving that is essential to both the physical and pharmaceutical sciences. Physics 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 Nuclear Pharmacy are encouraged to complete Physics 201 and 202.)

201, 202 Physics for the Life Sciences I, II 4 cr each Designed to give the student a basic knowledge and understanding of mechanics, properties of matter, heat, wave motion, sound, magnetism, electricity, light, and modern physics through the use of modern day examples and applications. At the completion of this course, the student should have attained a working knowledge of physics, its concepts 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. The solar system and its origin, 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. Thus course presumes no scientific background, and is open to all students within the University. Lecture, three hours

211, 212 General Analytical Physics I, II 4 cr each An introduction to the fundamental theories and applications of classical physics designed for students of science and engineering. A good algebra and trigonometry background is presumed and methods of using the calculus are presented. The approach is strongly quantitative and emphasizes the solving of problems. Mechanics and electromagnetism are treated in detail in 211 and 212.

The Schrodinger wave equation, which occurs in quantum mechanics. In addition, we will include other important theoretical topics, such as vector, matrix, and tensor methods, complex arithmetic and complex variable theory, Fourier and Laplace transforms, and general expansions using orthogonal functions. Also, simple statistical methods and numerical methods that are useful for general problem solving in advanced science and engineering courses for example, in atomic and molecular structure, mechanics, electricity and magnetism, thermodynamics, and hydrodynamics. There are a variety of specialized differential equations (both ordinary and partial) that will be studied. We will also address certain elementary problems involving the Schrodinger wave equation, which occurs in quantum mechanics.
419 Introduction to Microcomputers 3 cr
An introduction to the electronic design of micro and mini (PC-type) computers and the methods of interfacing microprocessors and PCs to the outside world. Some aspects of assembler and specialized languages for small computers are examined and applied to microprocessor data acquisition from and control of real world sensors and other electronic devices. Prerequisites: Computer Science 200, Computer Organization and Assembly Language, and Computer Science 325, Operating Systems and Computer Architecture 1 or some electronic background in programming and completion of Physics 202 or 212 is encouraged.

425 Microcomputer Laboratory 3 cr
A "hands-on" laboratory course in the use of single board microcomputers for interfacing and control. This course introduces the student to those concepts of digital and electronic devices that are related to the use of these concepts for interfacing the microcomputer with the "real," analog world. Some of the topics covered are assembly language programming, for an 8085 microprocessor, use of parallel and serial I/O ports, analog to digital conversion, •••

430 Senior Research 2 cr
Special topics and problems in microcomputers, microcomputer interfacing circuitry and related subjects suitable for independent work. Prerequisites: Physics 419, or consent of the instructor.

447 Robotics 3 cr
This is an introductory course that deals with robotic controllers, programming, operational aids, drive systems, interfacing, end effectors, sensors and robotic applications. Prerequisites: Physics 212, or 202 and permission of the instructor.

450/580 Chaos 3 cr
This course provides an introduction to the theory and applications of chaos. The topics presented include characterizations of dynamical systems and of maps and flows, sensitivity to initial conditions, fractals, iteration schemes of 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 Schwarzian 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 and the Lorenz attractor. Prerequisite: Mathematics 115.

482 Elementary Particle Physics 3 cr
The contents cover elements of nuclear and elementary particle physics, as well as the discoveries and ideas of modern elementary particle physics. The topics presented may include the charge-independent, nuclear interaction, the nuclear shell model, the four fundamental forces in nature, the properties of baryons, mesons, and leptons, the quark structure of the hadrons, including the "flavor" and "color" labels, asymptotic freedom and "infrared slavery," and the electroweak theory. Connections between particle physics and cosmology may be discussed. Prerequisite: 212

484, 485, 486 Special Topic Courses 1-3 cr each
These courses are designed to allow the Physics Major flexibility in designing his/her program. These courses are offered irregularly and at times when there is sufficient student demand to justify the offering of the course. The courses offered include 484 Introductory Solid State Physics, 485 Relativity and 486 Shop Techniques. Descriptions of these courses follow.
SPRG 103 The Big Bang and Beyond 3 cr
Deals qualitatively with the modern scientific understanding of the origin and evolution of the universe. The theory of the Big Bang is presented, together with its observational evidence. The redshift of distant galaxies, the cosmic background radiation and the cosmic abundance of hydrogen and helium. The inflationary universe and the dark matter problem are included. The topics of relativistic cosmology, white dwarfs, neutron stars, and gravitational waves manifest explicitly the gravitational tone of the course. Gravity modeling the cosmos, ruling star evolution and opening a new window to the universe. The course uses computer-based resources and includes field trips to nearby observatories. No previous knowledge of astronomy, physics or mathematics is required.

A.J. Palumbo School Of Business Administration

Administration

Dean
James C. Stalder, B.S.
Associate Dean and Director of Undergraduate Studies
Thomas A. Pollack, Ph.D.
Associate Dean and Director of Graduate Studies
William D. Presutti, Jr., Ph.D.

HISTORY
The A.J. Palumbo School of Business Administration was established in 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 community. During the next seven 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 this 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. Continuously monitor and 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 academe, 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.

- Espouse 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 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 and the Dean's Student Advisory Council to assist in the continuing development of the School and to improve the timeliness 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 can 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 required English language course work. This may involve at least one semester or more of course work until such time as the student's English proficiency sufficiently improves to take undergraduate classes.

Students transferring from a school of business that is accredited by AACSB - The International Association for Management Education must present an overall quality point average of 2.5 (on a 4.0 scale) or better. For other students, including those
transferring from another school within the University, a quality point average of 2.50 or better overall and a grade of C or better in all business courses and in their highest level math course are necessary.

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

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 John F. Donahue Graduate School of Business.

SATURDAY PROGRAMS
The School of Business Administration offers its accounting and information technology programs in a Saturday format. These accelerated programs provide adult learners the opportunity to earn a degree by attending classes only on Saturdays. For additional information on these programs, please contact the School of Business Administration Admissions Office.

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 minimum 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 at Duquesne University 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 studies. Because of the restrictive nature of this program, it is not open to transfer students.

EARLY ADMISSION TO MBA PROGRAM-BSBA/MBA
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 Mylan School of Pharmacy have a cooperative program that enables 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 (BSBA/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 PROGRAM WITH COLLEGE OF LIBERAL ARTS, SCHOOL OF EDUCATION, SCHOOL OF NURSING AND SCHOOL OF MUSIC
The School of Business Administration and the College of Liberal Arts, the School of Education, the School of Nursing and the School of Music have developed certificate programs in business for liberal arts, education, nursing, and music students. Students in the College of Liberal Arts, the School of Education, the School of Nursing and the Music School who are interested in the program should consult their advisors in the School of Business Administration.

HEALTH MANAGEMENT SYSTEMS JOINT PROGRAM WITH SCHOOL OF HEALTH SCIENCES
The A. J. Palumbo School of Business Administration, in conjunction with the Rangos School of Health 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/INSTITUTES
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 within Western Pennsylvania and the Tri-State area primarily to upgrade economic literacy and teaching competency in the economic system. The Center is the premier source of economic education programs for clergy and media professionals.

The Beard Center for Leadership in Ethics
The mission of the Beard Center for Leadership in Ethics is to accentuate issues of ethical concern by promoting public discussion in an attempt to develop an overall awareness of ethical context and an increase in leadership standards for the organization. Important initiatives in this mission are the Distinguished Speaker Series on Ethics and the Ethics Breakfast Forums. At these programs, prominent executives from the local and national business community share their experiences and philosophy on ethical conduct with students and local business people.

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 also conducts economic 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 Institute for Economic Transformation
The Institute for Economic Transformation (IET) collaborates with university, industry and community sectors to improve the economic performance of our region by rebuilding the global competitive advantages of our industrial base. The IET is committed to be the premier source of assistance for education, training and the creation of broadly based business networks for industry and industry support organizations. In 1996 the IET introduced its new "Center..."
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 Psi is the local honorary scholarship society of the School. Its membership is limited to juniors and seniors in the Business School who have attained QPA of 3.25 or better.

Beta Alpha Psi is the premier national honorary accounting fraternity. Less than 15% of (AACSBB) The International Association for Management Education 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.

The Zeta Chapter of Beta Gamma Sigma, a national honorary fraternity for accredited schools of (AACSB) The International Association for Management Education, is chartered at Duquesne University. Membership in this honorary fraternity is limited to juniors in the top five percent of their class and to seniors in the top 10 percent of their class.

Business and Accounting Students Society (BASS) is an organization where business students with similar interests, network with professionals in the Pittsburgh business community. In very relaxed and informal settings, students learn about career opportunities in accounting, as well as other business fields. Membership is open to all School of Business students.

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

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

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

Duquesne Supply Chain Council (DSCC) is a student-run organization for Supply Chain Management majors that provides opportunities for students to gain real-world experiences, network with industry professionals, and enhance their professional development.

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

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

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

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

ADVISORY BOARDS

Ten separate Advisory Boards, comprised of high-ranking business professionals, serve the School of Business. These business executives, representing the various disciplines within the School, offer advice and counsel on matters of curriculum development, promotion, assessment, 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 total of eleven concentrations (majors) from which to choose courses. The respective areas of concentration include: Accounting, Finance, Information Technology, International Business, Investment Management, Management, Marketing, Pre-Law, Sports Marketing, Supply Chain Management, and Technology 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 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. 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.

PROGRAM FOR PROFESSIONAL DEVELOPMENT

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

Pre-Business Experience

This orientation program is designed to introduce business students to the broad context of 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 within a cooperative learning environment.

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

FOUR YEAR SAMPLE PLAN

(Effective September 1999)

THEME OF CURRICULUM

PASSION FOR SUCCESS

FRESHMAN YEAR

University Core

101 Thinking and Writing
Across the Curriculum 3 cr
102 Imaginative Literature and Critical Thinking 3 cr
103 College Algebra 3 cr
111 Calculus 3 cr
132 Basic Philosophical Questions 3 cr
141 Social, Political and Economic Systems 3 cr
151 The Shaping of the Modern World 3 cr
161 The Arts and the Human Experience 3 cr

TOTAL Credits 30 cr

BUSINESS CORE

182 Information Systems I 3 cr
183 Information Systems II 3 cr

TOTAL Credits 6 cr

JUNIOR YEAR

Business Core

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

TOTAL Credits 30 cr

SENIOR YEAR

Business Core

499 Strategic Management 3 cr
3Specified Non-Business Elective 3 cr

TOTAL Credits 6 cr

MAJOR AREA OF CONCENTRATION

Major Area of Concentration 3 cr
Major Area of Concentration 3 cr
Major Area of Concentration 3 cr
Major Area of Concentration 3 cr

TOTAL Credits 12 cr

ELECTIVES

Non-business Elective 3 cr
Non-business Elective 3 cr
Non-business Elective 3 cr
Elective 3 cr

TOTAL Credits 12 cr

TOTAL Credits 30 cr

SOLOMORI YEAR

University Core

Core Theology Requirement 3 cr
Core Science Requirement 3 cr

BUSINESS CORE

281 Quantitative Analysis I 3 cr
284 Quantitative Analysis II 3 cr
214 Financial Accounting 3 cr
215 Managerial Accounting 3 cr
221 Principles of Economics I 3 cr
222 Principles of Economics II 3 cr
251 Business Law 3 cr
210 Pre-Business Experience 3 cr
Communication Requirement 24 cr

TOTAL Credits 30 cr
STUDENTS REGISTERING FOR 300-400 LEVEL BUSINESS COURSES MUST HAVE SUCCESSFULLY COMPLETED 60 CREDITS AND HAVE JUNIOR STANDING. STUDENTS ARE RESPONSIBLE FOR KNOWING AND ADHERING TO THE PREREQUISITES FOR THOSE COURSES IN WHICH THEY ARE REGISTERED.

The sample plan has a degree of flexibility. The University Core and Communication/Culture Requirements may be taken at anytime during the student's four years. Students must consult their academic advisor for further information.

ACADEMIC REGULATIONS

ACADEMIC LOAD

Students may normally carry 15 credits in one semester. A schedule of more than 15 credits must be approved by the Admissions 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 2000.

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 be familiar with any instructions which may have been given during the absence.

STUDENTS WITH DISABILITIES

Students with disabilities requiring special assistance are urged to notify the Office of Special Student Services before the first day of class.

ENROLLMENT IN BUSINESS COURSES

BY STUDENTS IN OTHER SCHOOLS OF THE UNIVERSITY

Students enrolled in other schools in the University are welcome to take business courses provided they meet all prerequisites. Under no circumstances, however, may a student in another school take more than 27 credit hours in business. Students in the College of Liberal Arts, the Music School, the Nursing School 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 on this matter.

PREREQUISITE — UPPER LEVEL BUSINESS COURSES

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

GENERAL BUSINESS COURSES

The Pre-Business Experience is required for all students enrolled in the School of Business Administration. The Business Administration Internship is strongly recommended for all students.

203 Pre-Business Experience

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 concept of total quality management, the importance of ethical decision making, the philosophy of cooperative learning, and the realities of the global marketplace. Prerequisite: Sophomore standing.

401 Business Administration Internship

3 cr

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, six credits completed in major, an overall GPA of 2.5 or better, and completion of at least 15 credits at Duquesne University.

ACCOUNTING CURRICULUM

The Accounting curriculum prepares students for excellent career opportunities as professionals in the areas of corporate, industrial, government, nonprofit and public accounting. The program provides students with a sound theoretical foundation as well as practical business experience opportunities, such as internships. The program also satisfies course preparation requirements for the Certified Public Accountant (CPA) Exam and the Certified Management Accountant (CMA) Exam.

Students interested in sitting for the CPA Exam are strongly encouraged to take the following courses in their major area of concentration: 216, 311, 312, 313, 314, 411, 412, and 414. Additionally, Law 354 is strongly recommended.

Students interested in other areas of accounting should take at least six (6) of the above listed Accounting courses along with additional electives from the areas of Accounting, Information Technology or Finance, such as QSMIS 481, 485 and Finance 333.

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

COURSE PREREQUISITES - see p 106

214 Financial Accounting

3 cr

Provides an introduction to the discipline of accounting, the principles of external financial reporting, and the use of general purpose financial statements (balance sheet, income statement and statement of cash flows) in decision making. Students will develop a basic understanding of how to use the financial statements to assess the profitability, liquidity and solvency of business entities. Prerequisite: QSMIS 102.

215 Managerial Accounting

3 cr

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

216 Accounting Information Systems

3 cr

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

311, 312 Intermediate Accounting

3 cr each

An investigation and analysis of the accounting principles, and practices of the corporation, with detailed study of the component elements of the balance sheet and income statement. Basic topics include generally accepted accounting principles, financial statements, income determination and presentation. Prerequisites: Accounting 214 and 215.

314 Advanced Accounting

3 cr

Explores students to some of the more advanced and topical accounting subject matter. Potential areas of study include accounting for partnerships, accounting for government entities, the preparation of consolidated financial statements and foreign currency transactions and translations. Prerequisite: Accounting 311 and 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. Prerequisite: Accounting 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. Prerequisite: Accounting 312.

412 Introductory Income Tax Accounting

3 cr

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

414 Corporate and Partnership Taxation

3 cr

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

419 Seminar in Accounting

3 cr

Develops students' ability in technical expression, deep understanding of accounting theory, and acquaint the student with contemporary accounting problems and literature. Prerequisite: Accounting 314.

COURSE PREREQUISITES - see p 106

ECONOMICS CURRICULUM

The Economics curriculum is designed to provide 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 106
121 Elements of Economics 3 cr
An introductory course that provides an understanding of the principles of market economic system, the forces which affect the level, composition, and distribution of the output of the economy, and the economics of current issues. Not counted toward a degree in the School of Business Administration.

221 Principles of Economics I 3 cr
Microeconomics acquaints the student with the concepts and logical basis of 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.

222 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 economic principles and concepts to analyze business 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, basic principles, and its social and economic significance. The course explores macroeconomic methods of economic analysis and the determination of aggregate output and income. Prerequisites: Economics 221 and 222.

322 Price Theory 3 cr
Price theory examines producer and consumer theory from a mathematical perspective. Students will construct mathematical models which represent the motivating factors behind the constraints placed upon consumer and producer behavior. By manipulating these models, students will observe how consumers and producers interact to arrive at market prices. Students are expected to have a polished knowledge of calculus. Prerequisites: Economics 221 and 222.

323 Public Finance 3 cr
A study of the theory of the privatization and management of government revenues and expenditures with an emphasis on American practices and policies at the various levels of government. Includes benefit-cost and cost-effectiveness analysis together with the economic consequences of various tax structures and alternative social choice mechanisms. Prerequisites: Economics 221 and 222.

324 Comparative Economic Systems 3 cr
A comparative study of the history and development of economic systems and political institutions of capitalism, socialism, communism and other economic systems. Emphasis will be placed on the philosophies and economic implications of the various systems. Prerequisites: Economics 221 and 222.

328 Urban Land Economics 3 cr
A study of the economic forces that influence business and residential location in a metropolitan area. Specific areas of study include transportation, housing, poverty, and the urban public sector. Prerequisites: Economics 221 or 222.

420 Labor Economics 3 cr
Analysis of the principles of wage and employment determination in the U.S. economy under non-union conditions as well as under collective bargaining arrangements. Includes the factors underlying labor demand and supply with an emphasis on a human capital approach to relative earnings differentials. Prerequisites: Economics 221 or 222.

423 Econometrics and Forecasting 3 cr
In this course, students apply statistical theory to economic and business data in an attempt to quantitatively measure relationships. Students will learn how to test for significance and identify the major statistical anomalies that plague time series and panel data. Students will also learn to estimate statistical relationships using various procedures and to interpret their results in an effort to construct and interpret economic and financial forecasts. Prerequisites: Economics 221 and 222, QSMS 281 and 284.

424 Business and Public Policy 3 cr
A study of the regulatory rules used by government to influence and modify business behavior. Includes an examination of the regulatory process and conduct, and performance considerations pertaining to the firm and the industry. Emphasis is given to the anti-trust laws and special regulatory problems. Prerequisite: Economics 221.

425 Current Economic Issues 3 cr
Focuses on specific current economic issues. The course and its content vary for example, topics might include the federal budget deficit, economics and politics, or the economic changes in Europe and Asia. Prerequisites: Economics 121, 221, 222 or Core 141.

426 Monetary Theory and Policy 3 cr
Deals with the chief theoretical contributions in monetary theory along with their policy implications. Specific topics include the modern quantity theory of money, monetarist versus keynesian models, the stability of the demand for money, real versus discretion, rational expectations, monetary policy in an open economy, foreign exchange markets, and international capital flows. Prerequisites: Economics 221 and 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. Prerequisites: Permission of the instructor.

442 International Economics 3 cr
Covers international trade theory and international monetary economics. The classical and neo-classical theory of comparative advantage, balance of trade, balance of payments, customs union theory, commercial policy, theory of foreign exchange markets, history of the international monetary system, and fixed versus flexible exchange rates. Prerequisites: 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 this area are: Finance 333, 336, 337, 338, 339, 433 and 450.

For students with an interest in Real Estate or Insurance, electives are offered in these areas.

Finance students are required to take Accounting 216 and 217, and 311 and 312 are strongly recommended.

COURSE PREREQUISITES - see p. 106

330 Theory of Finance 3 cr
Theory of Finance presents fundamental principles of corporate finance and investments. It provides the necessary conceptual foundation for upper-level courses in Finance and Investment Management and is required for students in both concentrations. After completing the course, students will understand and be able to apply time value of money concepts, and understand equity valuation models and the theoretical relations in risk and return. Prerequisites: Economics 221, 222, Accounting 214, 215 and QSMS 281 and 284.

331 Business Finance 3 cr
Concerned with maximizing the value of the firm in reference to the risk-return relationship. The student is introduced to financial statement analysis, the time value of money, capital budgeting, working capital management, cost of capital and the impact of leverage the value of the firm. Prerequisites: Accounting 214 and 215, and QSMS 281.

332 Money and Financial Institutions 3 cr
Examine the influence of monetary policy on such variables as the nominal interest rate, level of income, inflation rate, foreign exchange rate, etc. Specific topics include bank portfolio management, interest rate risk, the yield curve, real versus nominal interest rates, financial intermediation, etc.

333 Financial Management 3 cr
Provides a theoretical or conceptual framework that financial managers can use to make 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 enterprise, with special attention to the need for identifying these in terms of nature and magnitude. Emphasis is on techniques available to aid the decision-maker in making decisions under constraints of uncertainty. Prerequisite: Finance 331.

336 Security Analysis 3 cr
An intensive study of the analytic techniques applicable to the security of the various securities of private as well as public entities. Consideration is given to the markets in which these securities are traded and the types of information necessary to the decision-making process of the investor. Prerequisite: Finance 331.

338 Futures and Options 3 cr
Designed to develop an understanding of futures 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 the opportunity to study actual market behavior through project analysis. Prerequisites: 331 and 336.

339 Fundamentals of Real Estate 3 cr
A study of the problems involved in financing residential, commercial and industrial real estate from the points of view of both owner and lender.

341 Real Estate Investment Analysis 3 cr
Emphasis is on the estimation and revenues/expenses and risk-return relationships in investment of real estate and the effects of financing, income taxes, and entity selection upon investment profitability. Prerequisite: Real Estate 331.

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.
433 Financial Markets 3 cr
An extensive and intensive study of the market in which the financing of needs takes 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.

437 Computer Financial Management 3 cr
Provides an understanding of financial decision-making in the context of decision technologies. Emphasis will be placed on the use of Internet tools to develop proficiency in using Internet tools.

439 Seminar in Finance and/or Real Estate 3 cr
Concentration upon selected contemporary topics presented by distinguished visiting professors or resident faculty. Open only to senior students. Prerequisite Finance 331.

450 Cases in Finance 3 cr
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 the case study method. The student is expected to be able to identify problems, reach conclusions, recommend solutions, and identify implementation techniques.

COURSE PREREQUISITES - see p. 196

182 Information Systems I 3 cr
An introduction to the productivity potential of spreadsheet, graphics, database, multimedia and word processing applications. In recognition of the importance of information systems, students will develop proficiency using Internet tools.

183 Information Systems II 3 cr
Provides the student with an overview of the theory and implementation of today's information systems. The instructor 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. Emphasis is placed on the ability to design and implement information systems applications as they relate to the organization. Prerequisite QSMIS 182.

382 Information Processing with Programming 3 cr
Provides a conceptual framework within which basic key financial decisional processes of the multi-national firm can be analyzed and maintained. Emphasis is placed on providing students with a general understanding of the broad spectrum of computer systems and information management. In addition, management and control of operations are examined extensively. Prerequisite Finance 331. Recommended prerequisite Economics 442.

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 and development of object-oriented software. Case studies are used to generate detailed data flow diagrams. The issues involving conversion, testing, training, documenting, maintaining and managing a system are addressed. Prerequisites QSMIS 183, 462 and COSC 101 or 150.

482 Database Management 3 cr
Focuses on the theory, derivation and development of the relational database 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. Prerequisites QSMIS 183 and COSC 101 or 150 (may be taken concurrently).

483 MIS Project 3 cr
Students are expected to use tools and techniques learned in prior MIS courses to develop an information system. Using Computer-Aided Software Engineering products and fourth generation languages, students design and implement a project chosen from a specific problem. Emphasis is placed on the student's ability to take a group project and develop a software application.

484 Networks and Telecommunications 3 cr
Develops an understanding of the importance of an open systems approach, such as OSI, and contrasts it with several proprietary ones, like IBM's SNA and TCP/IP. Using the OSI model as a base, students learn fundamentals of physical components, error detection and correction, line disciplines and network addressing. Special emphasis is placed on local area networks and connecting them to organizational networks. Prerequisite QSMIS 385.

485 EDP Audit and Control 3 cr
Prerequisite QSMIS 382, 385, 481 and 482.

487 Advanced Systems Concepts 3 cr
The course provides a practical familiarity with higher level technologies used for accomplishing the tasks found in systems analysis, design, and development, specifically those centered on database technologies. This includes advanced business management systems (DBMS), data and database manipulation, as well as the use of computer-aided systems engineering (CASE) tools. Prerequisites QSMIS 481, 482.

488 Collaborative Computing 3 cr
This course attempts to make the student aware of the current state of technology, issues in the technical areas of collaborative computing, and how collaborative computing is used in organizations. Emphasis is placed on the business relevance of these technologies. Prerequisites QSMIS 382, 481, 482, 484 (may be taken concurrently).

INTERNATIONAL BUSINESS CURRICULUM

The International Business program prepares students for careers in managing the international operations of business and non-business organizations. Students learn about the global environment of business, international economics and finance, international law and export trade, and business and society in major economic regions of the world. In addition, students develop strong multicultural awareness and competency in a second language. This IB program offers students the opportunity to study abroad in one of the colleges with whom Duquesne University is affiliated. Students majoring in IB may elect to include a functional area of business as part of their program of study.

For a concentration in International Business, students need to take (1) International Business 341, Finance 437, Marketing 443, and Law 454, (2) Four courses from the following: International Business 342, 369, 444, 446, 448, 491, Economics 442, and Management 445, and (3) Twelve credit hours of a second language. Students are encouraged to include courses of international studies offered by the College of Liberal Arts as electives. For study abroad opportunities, students are encouraged to consult with the Study Abroad Office. IB professors, or the University's Office of International Affairs Students can request a waiver of the language requirement if (1) they pass the level proficiency test administered by the Department of Modern Languages or a specialized language testing institute; or (2) they are natives of a non-English speaking nation.

COURSE PREREQUISITES - see p. 196
341 International Business 3 cr
An introductory study of the environment and management of cross-national business activities. Topics include sociocultural, legal and political environment, international monetary and financial systems, international trade, foreign direct and portfolio investments, and the management of international marketing, financial, production and personnel functions. Prerequisite Management 361

342 International Business 3 cr
Study Abroad 3 cr
Study abroad opportunities with a number of universities are available. Students should check with their advisor in the School of Business Administration regarding both opportunities and the possibility of transfer of credits

369 Export Management 3 cr
This course offers a comprehensive study of international export procedures and operations. Topics covered include export documentation, managing export transactions, planning export operations, export communications, shipping and packaging, export payment and collection methods, export insurance, governmental and foreign export regulations, export support programs and services, exports within NAFTA, and designing export management systems. Prerequisite IBUS 341

437 International Financial Management 3 cr
See Finance Curriculum

442 International Economics 3 cr
See Economics Curriculum

443 International Marketing 3 cr
See Marketing Curriculum

444 Business and Society in Europe 3 cr
Survey of the major cultural, social, and political factors influencing the conduct of business in Europe. The course includes an overview of the major European economies, a description of the institutions and politics of the European Community, and a detailed examination of business and society in Germany and at least two other European countries. Prerequisite Management 361

445 International Management 3 cr
See Management Curriculum

446 Japanese Business and Management 3 cr
Focuses on the history of Japanese business, the essential elements of Japanese management practices, and the strategies used by successful Japanese global corporations including their approaches to marketing, operations management, human resource management, and financial strategy. Prerequisite Management 361

448 Business and Society in Latin America 3 cr
Survey of the major cultural, social, political and economic factors influencing the conduct of business and the prospects for continued economic development in Latin America. The impact of contemporary changes in economic and political conditions on the prospects for long term economic development are discussed. The course includes a more detailed examination of economic, social and political conditions in Mexico, Brazil and at least one other Latin American country. Prerequisite Management 361

451 The Law of International Commercial Transactions 3 cr
See Pre-Law Curriculum

491 Practicum in International Business 3 cr
This course integrates international business skills and methods into a professional practiontum. Student teams work with an international business firm as consultants to help the company deal with international business projects and issues. Prerequisite Senior standing

INVESTMENT MANAGEMENT CURRICULUM

The Investment Management Curriculum is closely related to the Finance curriculum. Investment Management students study courses in security analysis, money and financial institutions, futures and options, and portfolio management, along with basic finance courses and a business core curriculum that exposes them to all business disciplines.

Upon successful completion of the Investment Management program, graduates will be able to effectively communicate their analyses of the global economy and its effect on values of financial and real assets. They will have developed an in-depth understanding of the financial models used by investment professionals to develop strategies and make asset allocation decisions between stocks, bonds, mutual funds, money markets, currencies, futures, options, and derivatives.

For a concentration in Investment Management, students will take INVMG 301, 302, 440, and BUADM 401. Students will also take four courses chosen from FINAN 334, 336, 337, 338, and 433, or from electives offered in Investment Management. Students should consult with an academic advisor or speak with a member of the finance faculty to develop their courses of study.

COURSE PREREQUISITES - see p 106

301 The Investment Environment 3 cr
The Investment Environment provides important strategies for investing in a broad array of financial assets with a focus on common stocks, bonds and mutual funds. Course topics include the structure and functioning of financial markets, trading mechanics, the measurement and presentation of performance, features of common stocks, bonds and mutual funds, financial market regulation and standards of professional conduct. Attention is given to legal, regulatory and accounting issues. Prerequisite FINAN 331 (may be taken concurrently)

302 Personal Financial Planning 3 cr
Personal Financial Planning provides detailed coverage of important issues and techniques employed in the financial planning process. The course deals with identifying client needs and making recommendations on establishing retirement plans. Course topics include investments in bonds and mutual funds, insurance, tax and estate planning. Attention is given to developing a financial plan for potential clients. Prerequisites FINAN 331 and INVMG 301

310 Fixed Income Securities 3 cr
Topics include bond pricing, the Treasury Market (operations of bond dealers, treasury auctions), bond risk management based on duration and convexity, yield-curve, trading strategies, and term structure estimation. Part of the course will be devoted to understanding and using stochastic interest rate models for valuing fixed income securities and derivatives. The course emphasizes modern evaluation techniques based on an observed "term structure" (maturity structure) of interest rates, or on a theoretical model of such a structure. Therefore, interest rate risk is a primary consideration. That is, most of the work is based on situations where credit risk is virtually non-existent (i.e. U.S. Treasury securities) or ignored for simplicity. The valuation principles of the default-free framework are fundamental and widely applicable. Prerequisites FINAN 330 and FINAN 331

401 Business Administration Internship 3 cr
See General Business Curriculum

410 Equity Portfolio Management 3 cr
Extends modern portfolio principles (covered in FINAN 330) to a theory of active portfolio management. Within the context of portfolio optimization, the course provides a general framework for designing, evaluating and implementing a variety of active strategies for selecting common stock portfolios. The essence of active management lies in forecasting abnormal returns, and, to this end, the course reviews a number of empirical regularities in stock returns. A discussion of the basic tools of the "technical" analyst is also presented. Using the "trading room," students apply these concepts in the development and evaluation of their own portfolio strategies. Prerequisites FINAN 330, and a level of comfort with basic statistical concepts such as mean, variance, correlation and linear regression

440 Seminar in Investment Management 3 cr
Concentration upon selected contemporary topics presented by distinguished visiting professors or resident faculty Prerequisite INVMG 301 and senior standing

MANAGEMENT CURRICULUM

The Management concentration enables undergraduates to acquire key process skills which can be applied to a wide variety of business sectors, as well as public and non-profit organizations. In addition, it encourages a student's understanding of at least one specialized business discipline while providing a degree of flexibility in pursuing a wider variety of subjects than permitted in other concentrations. Management students should be able to qualify for a broad range of entry-level positions in all sectors of the economy.

For a concentration in management, students must take at least one course in each of the following four areas: (MGMT 366 or 461), information technology (from QSMIS offerings), international business (five possible choices), and decision making (MGMT 465 or 494). In addition, students should take six to nine credits in another specific discipline, such as marketing, finance, supply chain management, etc. The remaining credits required to complete the major should be chosen in accordance with the student's career plans after consultation with a faculty member and/or academic advisor.

COURSE PREREQUISITES - see p 106

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 operate. Areas covered include the planning, organizing, and leadership of activities and the context (internal and external) in which managers work to discharge their responsibilities effectively.

364 Human Resource Management 3 cr
Explores the strategic role, technical functions and services provided by an organization's personnel and human resources department. Among the topics covered are human resource planning and systems, job evaluation, recruiting, performance appraisal, compensation, occupational health and safety, employee rights, labor unions, and equal employment opportunity issues. Prerequisite Management 361
### Program Overview

**Management Labor Relations**
- 3 cr
- Presents the role of labor, management, and government in collective bargaining and current industrial relations policies and practices

**Prerequisite Management 361**
- at federal, state, and local government levels
- It also introduces the student to the content of public administration

**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**
- in collective bargaining and current industrial relations

**Total Quality and Operations Management**
- 3 cr
- An introduction to the principle topics and issues in production and operations management with an emphasis on total quality management
- Both manufacturing and service operations are addressed with consideration of how operations support overall strategy and contribute to productivity and competitiveness

**Prerequisites:** QSMIS 284 and Management 361

**Business Ethics/Communications**
- 3 cr
- Discussed 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.

**Prerequisites:** QSMIS 281 and Management 361

**Entrepreneurship and Small Business Management**
- 3 cr
- Deals with the overall management of the small business enterprise
- Covers entrepreneur small business arena, organizing and financing a business, operation of the small firm, growth planning, and problems associated with being small business

**Prerequisite Management 361**
- of small business

**Compensation and Benefits**
- 3 cr
- This is an advanced course focusing on pay and benefits issues
- Coverage includes relating compensation to strategy, designing job evaluation methods, evaluating full benefits, developing a pay structure, financial pay, incentive systems, gain sharing, executive compensation, paying expatriates, employee benefits including social security, workers' and unemployment compensation, medical, retirement, costs, and cost containment

**Prerequisites Management 361 and 364**
- in compensation and benefits

**Training in Business and Industry**
- 3 cr
- Explores the training and development function in human resource management
- Covers the assessment of training needs and conducting training programs, and evaluations of training effectiveness
- Student teams design and conduct a mini-training program

**Prerequisite Management 364**
- of training and development

**Independent Scholarly Study**
- 3 cr
- Students must initiate an original research project in a field of business of their choice
- The research proposal must be submitted (in written form) for approval
- This course is open to students in all concentrations in the School of Business
- The project must be completed within an academic semester

**Prerequisite Management 361 and 364**
- in independent study

**International Management**
- 3 cr
- A study of multinational corporations' structures, strategies, and management processes
- The course includes a thorough understanding of international management and a competent awareness of cultural diversity and development of decision-making skills in multinational settings

**Prerequisites:** QSMIS 284 and Management 361

**Human Relations and Teamwork**
- 3 cr
- An advanced, experiential Organizational Behavior course designed to aid the student in developing practical skills in managing interpersonal relationships in the workplace
- Topics covered include communication, conflict resolution, leadership styles, interpersonal relationship management, conflict resolution, problem solving, team effectiveness, managing conflict, and the management of change

**Prerequisite Management 361**
- of management

**Public Administration**
- 3 cr
- Introduces the student to the content of public administration and to the work of the public manager at federal, state, and local government levels
- It also compares and contrasts public and private management and links management theory and practice

**Prerequisite Management 361**
- of public administration
Segmentation, positioning, and marketing mix strategies are discussed in relation to consumer behavior.

476 Product Management

3 cr

Examinations of methods and tools leading to successful product development and commercialization, as well as the maintenance of existing products and product lines, including product positioning, design, marketing mix, testing, forecasting and product launch, plus product strategy and product life cycle management, using case studies and computer simulations. Prerequisites: Accounting 215, Marketing 371 and 374.

477 Strategic Marketing Planning

3 cr

Designed to enable the student to acquire marketing knowledge and expertise to real world opportunities. The case method is employed using marketing situations that illustrate opportunity analysis, marketing environments, product management, communication planning, pricing and distribution strategies, and global planning. Students demonstrate decision making skills through learning to identify and define a marketing problem, analyze and evaluate it, and prepare recommendations concerning implementation for the organization and its environment. Prerequisites: minimum of 12 credits in marketing (including 371). This course is recommended as a spring offering for graduating seniors.

478 Industrial Marketing

3 cr

Focuses on business-to-business marketing. It will demonstrate the differences between industrial and consumer marketing, how industrial marketers evaluate their marketing environments, including an understanding of customers and competitors. Prerequisite: Marketing 371.

479 Retail Management

3 cr

Focuses on retail management from a strategic perspective while emphasizing the similarities and differences between the retail and industrial sector. Emphasis will be placed on consumer behavior, market research, store location, services retailing, franchising, and the changing retail environment. Prerequisites: Management 361, Marketing 371.

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/J D, p 102

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 106

251 Business Law

3 cr

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

353 Contracts

3 cr

The fundamental concepts of the law of contracts are examined to provide the student with an understanding of the common law system regarding formation, performance, third party rights, ethics, discharge and remedies. Prerequisite: Law 251.

354 Commercial Transactions

3 cr

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

355 Law of Business Organizations

3 cr

A course which focuses on various laws pertaining to the creation and termination of corporations, franchises, partnerships, agency and other business entities. Prerequisite: Law 251.

357 Real Estate Law

3 cr

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.

545 The Law of International Commercial Transactions

3 cr

Provides the student with an overall perspective of the basic legal problems involved in doing business with and in other countries. Topics covered include an introduction to foreign legal systems, study of various forms of business organization, legal problems involved in letters of credit, insurance, risk of loss, intangible aspects of the sale of goods, forms of dispute settlement, and the problems of enforcing judgments in and against foreign countries. Prerequisite: Law 251.

456 Legal Aspects of Human Resource Management

3 cr

A survey course of state and federal laws that influence the legal environment of personnel and human resource management. Prerequisite: Management 364.

QUANTITATIVE METHODS CURRICULUM

Students in the undergraduate School of Business Administration complete a basic sequence in Quantitative Methods. This sequence is concerned with the application of mathematics, statistics, and information processing to the analysis of business and economic problems. Prior to entry into the sequence, Mathematics 101 and 111 in the College of Liberal Arts or the equivalent are required.

COURSE PREREQUISITES - see p 106

182 Information Systems I

3 cr

See Information Technology Curriculum.

183 Information Systems II

3 cr

See Information Technology Curriculum.

281 Quantitative Analysis I

3 cr

An introduction to probability and the more commonly used statistical techniques for analyzing data from one population, with an emphasis on their application to decision making and quality management. Coverage includes basic descriptive statistics, the concepts of probability and specific distributions, and inferential statistics. Prerequisites: QSMIS 182 and Mathematics 111.

284 Quantitative Analysis II

3 cr

A continuation of statistical analysis, extending to the comparison of two or more populations and analyzing the association between variables through regression, correlation, and contingency analysis. Developing basic time series for forecasting and developing and analyzing simulation models are also covered. Prerequisite: QSMIS 281.

367 Total Quality and Operations Management

3 cr

See Management Curriculum.

366 Computer Simulation

3 cr

See Information Technology Curriculum.

SPORTS MARKETING CURRICULUM

The Sports Marketing Program provides a working understanding of the role of marketing in sports and sports-related organizations, develops skills in applying fundamental marketing concepts, explores strategic marketing concepts, sales management, product development and marketing research techniques, while creating a skill base for employment. For a concentration in Sports Marketing, students will take Marketing 373, 374, 376, 377, 476, 477 and 478 plus two of the following Marketing 375, 470, 471, 474, 475, 479 and 481. In addition students will take Media and Sports Media Relations in the Department of Communication as non-business electives.

COURSE PREREQUISITES - see p 106

376 Sports Marketing and Promotion

3 cr

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

377 Sports Management

3 cr

This course will provide a knowledge base in planning, organizing, motivating and controlling sports organizations. The content of this course will help in the development of skills necessary to manage organizations in the sports industry including marketing firms, licensing agencies, major retailers, professional sports organizations and sporting venues. Prerequisite: Marketing 371.

470 Legal Environment of Sports Management and Marketing

3 cr

This course will cover regulation in the sports industry including NCAA regulations, collective bargaining, and codes of industry conduct. In addition, royalties, rights and licensing issues will be covered. Prerequisite: Law 251.

471 Special Topics in Sports Management

3 cr

The course will focus on specialized areas of interest in the form of a practicum designed by the instructor or the individual student. This course provides an opportunity for the student to pursue special areas of interest in sports marketing and management covering major issues in specific sports venues or the sports industry in general. Prerequisites: Marketing 376 and 377.

SUPPLY CHAIN MANAGEMENT CURRICULUM

The Supply Chain Management concentration prepares students to assume roles as 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 Supply Chain Management, 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, QSMIS 481 and Business Internship 401.

COURSE PREREQUISITES - see p 106

375 Business Logistics

3 cr

See Marketing Curriculum.
469 Strategic Logistics Management  3 cr
Strategic Logistics Management is the capstone course in the Supply Chain Management 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: Accounting 215, Management 367, and Marketing 375, 472, and 474.

472 Transportation  3 cr
See Marketing Curriculum

474 Purchasing Management  3 cr
See Marketing Curriculum

TECHNOLOGY MARKETING CURRICULUM
The Technology Marketing program offers a specially-designed curriculum that combines aspects of both marketing and information technology. Not only will students gain an understanding of analysis and design, computer hardware concepts, database applications, and networks, but they will also become skilled in applying marketing concepts, sales and market research techniques, and new product development. This unique combination is designed to enhance students' career opportunities in the information technology field and is especially applicable for those interested in business consulting and/or the marketing of high tech products in established or start-up technology companies.

For a concentration in Technology Marketing, students must complete eight of the following nine courses. Students must also take either COSC 101 Basic Programming or COSC 150 Computer Programming C++ in their freshman or sophomore year.

COURSE PREREQUISITES - see p 106

373 Sales Administration  3 cr
See Marketing Curriculum

374 Research Applications in Marketing  3 cr
See Marketing Curriculum

385 Computer Systems  3 cr
See IT Curriculum

471 Services Marketing  3 cr
See Marketing Curriculum

476 Product Management  3 cr
See Marketing Curriculum

481 Systems Analysis and Design  3 cr
See IT Curriculum

482 Database Management  3 cr
See IT Curriculum

484 Networks and Telecommunication  3 cr
See IT Curriculum

486 Electronic Commerce  3 cr
See IT Curriculum

School of Education

http://www.education.duq.edu

Administration

Dean
James E. Henderson, Ed.D

Chair, Department of Instruction and Leadership in Education
William P. Barone, Ph.D

Chair, Department of Foundations and Leadership
Susan M. Brookhart, Ph.D

Chair, Department of Counseling, Psychology, and Special Education
Joseph F. Maola, Ph.D

Director, Office of Educational Services
George J. Szymanski, Ph.D

HISTORY

The School of Education was founded in 1929. In that year, the newly organized School of Education granted its first degrees in programs of secondary education. Today, the School of Education offers a wide range of degree programs and educational opportunities. The School of Education is committed to developing leaders in education who are dedicated to improving the educational experiences of all learners.

For a concentration in Technology Marketing, students must complete eight of the following nine courses. Students must also take either COSC 101 Basic Programming or COSC 150 Computer Programming C++ in their freshman or sophomore year.

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486 Electronic Commerce  3 cr
See IT Curriculum

SELECTION AND ADMISSION TO THE SCHOOL OF EDUCATION

Candidates who desire to become teachers are admitted to the School of Education through the University Office of Admissions. Apply to the Dean of Admissions, Duquesne University, Pittsburgh, PA 15282. During the first two years of study, the curriculum is devoted to broad learnings in general and professional education. Students are expected to demonstrate personal and professional characteristics, attitudes, and competencies that will recommend them as worthy candidates for the teaching profession.

ADMISSION TO THE PROFESSIONAL EDUCATOR CERTIFICATION TRACK

Candidates are formally admitted to the Professional Educator Certification Track after completion of four semesters of full-time or full-time equivalent (60 credits) of college level study. Candidates will be admitted to the Professional Educator Certification Track with a minimum grade point average of 3.0 in each of three areas: General Education Core, Foundations of The Leading Teacher Program, and Academic Cognate for Early Childhood and Elementary Education students or Academic Major for Secondary Education students. The Standing Committee may accept a limited number of candidates for admission to the certification program who do not meet the minimum GPA, if exceptional circumstances justify admission.

Checkpoints and Gateways

The Leading Teacher Program (LTP) provides students with checklists and gateways to ensure their success in fulfilling the requirements of the Professional Educator Certification Program. Checkpoints are formative in nature and are provided to assist students in assessing their progress toward completion of the program. Gateways are summative in nature, include checkpoint requirements, and must be achieved in order to progress to the next stage of the program. The Pennsylvania Department of Education has periodically changed the Praxis Tests required for state certification.

Semester One
Checkpoints: Act 34, 6 Clearances, Speech and Language screening, Assessment of language arts and mathematics skills

Semester Two
Checkpoints: Oral and written demonstration of skills to foundations' faculty

Semester Three
Checkpoints: Praxis Pre-Professional Skills Tests for Reading, Writing, Listening, and Mathematics. All K-6 and K-12 certification areas require Elementary School Content Knowledge.

Semester Four
Gateway: Formal approval of application to the Professional Educator Certification Track. Minimum 30 QPA in General Education Core, Leading Teacher Program, and Cognate or Academic Major.

Semester Five
Checkpoints: None

Semester Six
Checkpoints: Praxis Principles of Teaching and Learning

Semester Seven
Checkpoints: Placement for student teaching finalized by Office of Educational Services

Semester Eight
Checkpoints: Praxis for Specialty Area Examinations

Gateway: Formal application and recommendation for student teaching. Minimum 30 QPA in General Education Core, Leading Teacher Program, and Cognate or Academic Major.
### Domain III - Becoming an Expert in School Context
- This domain explores the interplay between ethical, cultural, political, and governmental influences upon schools, including traditional and emerging perspectives.

### Domain IV - Becoming a Master Practitioner
- This domain develops competencies in instructional strategies, technology, reflective practice, school-community partnerships, and academic training.

### Domain V - Becoming an Instructional Leader
- This domain emphasizes the leader and knowledge of self in relationship with the group and the relationship with the community and society.

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

**Leadership**
- A leading teacher is a life-long learner, inspiring a community of learners to pursue continuous improvement and growth.

**Diversity**
- A leading teacher advocates for minority students and acknowledges all abilities and valuing human differences.

**Technology**
- A leading teacher is an architect building learning environments that acknowledge and incorporate the power of technology.

Four major curriculum components comprise The Leading Teacher Program: General Education Core, Academic Cognate/Academic Major, Foundations of The Leading Teacher Program, and the Professional Educator Certification Track. The students in the School of Education also comply with all Penn State Department of Education requirements and will be notified of any modifications regarding entrance into certification programs of study. The Undergraduate Advisors and Program Coordinators make program requirements known to students.

### The Leading Teacher Program

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
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<td>EDE 181 Cohort Experience</td>
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<td>EDE 282 Cohort Experience</td>
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**Academic Cognate/Academic Major**

Students enrolled in the Early Childhood and Elementary certification tracks are required to pursue a 15 credit academic cognate to enhance their knowledge base and competency in a specific academic area. Cognates are available in the following disciplines: Mathematics and Computer Science, Science, Social Sciences and History, English and Communications, Humanities and Foreign Languages. Students enrolled in a Secondary Education certification track utilize elective credits to build the academic major required for certification in the Commonwealth of Pennsylvania. The academic component includes at least 26 credit hours in the specific content area.

### Foundations of The Leading Teacher Program

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

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

#### Semester 1

- **Course Title**: Orientation to the LTP
- **Credits**: 2

- **Course Title**: Instructional Technology I
- **Credits**: 1

- **Course Title**: Cohort Experience
- **Credits**: 0

#### Semester 2

- **Course Title**: Context of the Teaching Profession
- **Credits**: 3

- **Course Title**: Instructional Technology II
- **Credits**: 1

- **Course Title**: Field Experience
- **Credits**: 1

- **Course Title**: Cohort Experience
- **Credits**: 0

#### Semester 3

- **Course Title**: Ed Psych I Learning Development & Motivation
- **Credits**: 3

- **Course Title**: Characteristics of Persons W/Disabilities
- **Credits**: 1

- **Course Title**: Field Experience
- **Credits**: 1

- **Course Title**: Cohort Experience
- **Credits**: 0

#### Semester 4

- **Course Title**: Ed Psych II Classroom Leadership, Assessment & Evaluation
- **Credits**: 3

- **Course Title**: Critical Issues in Spec Ed
- **Credits**: 1

- **Course Title**: Field Experience
- **Credits**: 1

- **Course Title**: Cohort Experience
- **Credits**: 0

The School has also developed a track designed to provide opportunities for observing and working with children and youth, beginning the second semester of full-time study. These experiences include planned observations in public and private schools, agencies, institutions and educational settings and a teacher aide and tutor experiences. Experiences are provided in urban, suburban, rural, and international settings. All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agency.

### Course Descriptions - Foundations of The Leading Teacher Program

- **EDLTF 101 Orientation to the LTP**: 2 cr. Introduces aspiring teachers to the organizational structures, the professional challenges, and learning opportunities of the Leading Teacher Program. Introduces aspiring teachers to the domains of learning and associated competencies as well as the themes that will frame their documentation of learning and continuous improvement.

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

- **EDLTF 102W Ed Psych I Learning Development & Motivation**: 3 cr. Provides the aspiring teacher with the set of technology-based tools required to integrate technology into the curriculum. Advanced features of word processing, graphics presentation, and the Internet are presented. In addition, online lesson plans, content-rich images, and related digitized...
EDLTD 202 Critical Issues in Special Ed 1 cr
Investigates the skills required for collaboration in the team decision-making process with parents, teachers, administrators, and community agencies. Focuses on building family partnerships, effective communication, and developing instructional and behavioral supports for students with diverse learning and behavior needs based on individualized assessments.

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

CERTIFICATION TRACKS IN THE LEADING TEACHER PROGRAM

EARY CHILDHOOD EDUCATION: The Leading Teacher Program (LTP) in Early Childhood Education is designed to prepare leading teachers for early childhood classrooms and child care settings. Throughout the program, students will have the opportunity to develop professional and personal competence by participating in experiences that are both theoretical and applied in our nation's schools. All students will complete a set of core experiences in teaching methodology and will participate in guided fieldwork. Students have options to distinguish themselves through independent and/or international study and teaching opportunities.

The Early Childhood Education program is guided by Pennsylvania state standards and by standards of national professional organizations. Students will address Pennsylvania standards in each of the five domains of the LTP and will implement the standards in their fieldwork. All of the experiences in the Early Childhood Education program reflect the themes of leadership, diversity, and technology and are based on the five domains of the Leading Teacher Program.

The Early Childhood Education program is a 130 credit program that consists of courses and experiences organized into four major areas of study: General Education - 39 credits, Academic Cognate - 15 credits, Foundations of Education - 19 credits, Professional Preparation - 51 credits, and Electives - 6 credits. Students in the Early Childhood Education program concentrate in the General Education Core, Foundations of the LTP, and Cognate Studies during the first four semesters.

Details are provided in the description of the Foundation of the Leading Teacher Program.

Course | Course Title | Credits
--- | --- | ---
Seminars 5-7 | Academic Cognate | 9
Professional Preparation | Focus Semesters | 3-7
EDLTD 201 | Orientation to ECE | 3
EDLTD 202 | Child Development (Birth-8) | 3
EDLTD 301W | Literacy | 7
EDLTD 391 | Literacy Field Work | 1
EDLTD 330 | Literacy Academic Adaptations | 1
EDLTD 302 | Numeracy | 7
EDLTD 392 | Numeracy Field Work | 1
EDLTD 333 | Numeracy Academic Adaptations | 1
EDLTD 401 | Educated Citizenry | 10
EDLTD 491 | Educated Citizenry | 1
EDLTD 430 | Educated Citizenry | 1
EDLTD 300 | Literacy Field Work | 1
EDLTD 492 | Student Teaching | 12
EDLTD 402 | Senior Seminar | 3

Electives 6 credits
Students may register for 6 credits from the following areas: International Studies, Instructional Technology, Cognate Study, Leadership Studies or Independent Research. Students can complete electives during semesters 5-7 or summer sessions.

Course Descriptions - Early Childhood Education

Early Childhood majors will work with Elementary Education majors, but will focus on grades N-3. Each cohort will rotate through a sequence of the focused seminars.

EDLTD 201 | Orientation to Early Childhood Education | 3 cr
This course provides an overview of early childhood education and explores the ways teachers can nurture and challenge the whole child (physically, socially, emotionally, and cognitively) by providing developmentally appropriate practices.

EDLTD 202 | Child Development Birth-8 | 3 cr
This course explores the development of the child from birth through eight years of age in physical, social, emotional and cognitive years of growth. Emphasis is given to application of theoretical principles, as well as techniques for observing and assessing growth and development.

EDLTD 301W | Literacy | 7 cr
The Literacy Seminar introduces the principles of reading instruction, language arts education, and children's literature for grades N-3. Students will participate in three instructional modules and will be assigned to a local school to do field work focusing on literacy. Writing is used extensively to enhance learning and, therefore, quality of writing is assessed throughout the course.

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

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

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

EDLTD 491 | Literacy Field Work | 1 cr
Students compare local instructional practices in literacy with regional and national initiatives and teach individuals, small groups, or whole classes. The focus is on instructional planning, instructional practice, and formative evaluation.

EDLTD 330 | Literacy Academic Adaptations | 1 cr
Students will focus on adaptations in literacy assessment, curriculum, and instructional strategies for students with learning differences.

EDLTD 302 | Numeracy | 7 cr
The Numeracy Seminar consists of three major components that will be integrated and focused on the teaching and learning of mathematics in grades N-3 and on the development of mathematical thinking.

Knowing Mathematics and School Mathematics
Students will develop knowledge of the content and discourse of N-3 mathematics, including:
- mathematical concepts and procedures and the connections among them,
- multiple representations of mathematical concepts and procedures,
- ways to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formalism.
**Academic Adaptations**

**Early Childhood**
- 12 cr

**EDLTC**
- Assessment, curriculum, and instructional strategies
- Schools, museums, and other educational facilities
- Investigations, and classroom teaching skills in
- Theories and applications of literacy in Early Childhood and a ten-week experience in Elementary or Secondary Education or International. This course is for students who will complete the requirements in two certification areas. Registration is concurrent with 492 in another program

**EDLTD 335 Numeracy Academic Adaptations**
- 1 cr
- Students will focus on adaptations in numeracy assessments, curriculum, and instructional strategies
- Ways to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formality

**EDLTE 330 Literacy Academic Adaptations**
- 1 cr
- Students will focus on adaptations in literacy assessments, curriculum, and instructional strategies
- The focus is on instructional planning, instructional practice, and formative evaluation

**EDLTE 391 Literacy Field Work**
- 1 cr
- Students compare local instructional practices in literacy with regional and national initiatives, and teach individuals, small groups, or whole classes
- The focus is on instructional planning, instructional practice, and formative evaluation

**EDLTE 330 Literacy Academic Adaptations**
- 1 cr
- Students will focus on adaptations in literacy assessment, curriculum, and instructional strategies for students with learning differences

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

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

**EDLTE 493 Student Teaching — Early Childhood**
- 6 cr
- Student teaching is a ten-week experience in Early Childhood and a ten-week experience in Elementary or Secondary Education or International. This course is for students who will complete the requirements in two certification areas. Registration is concurrent with 492 in another program

**ELEMENTARY EDUCATION**

The Leading Teacher Program (LTP) in Elementary Education is designed to prepare leading teachers for elementary school classrooms in our nation's schools. Throughout the program, students will have the opportunity to develop professional and personal competence by participating in experiences that are both theoretical and applied in local, national, and international settings. All students will complete a set of core experiences in teaching methodology and will participate in guided fieldwork. Students have options to distinguish themselves through independent research and/or international study and teaching opportunities.

The secondary education program is guided by Pennsylvania state standards and by standards of national professional organizations. Students will address professional standards in each of the elementary, secondary, and preservice teacher education roles. Students will implement the standards in their fieldwork. All of the experiences in the elementary education program reflect the themes of leadership, diversity, and technology and are based on the five domains of the Leading Teacher Program.

The Elementary Education program is a 130 credit program that consists of courses and experiences organized into four major areas of study: General Education, 39 credits; Academic Cognates, 15 credits; Foundations of Education, 19 credits; Professional Preparation, 51 credits; and Electives, 6 credits. Students in the Elementary Certification program concentrate studies in the General Education Core. Foundations of the LTP and Cognate Studies during the first four semesters. Details are provided in the description of the Foundations of the Leading Teacher Program.

**EDLTE 301W Literacy**
- 10 cr
- The Literacy semester merges the areas of reading instruction, language arts education, and children's literature for grades N-8. Students will participate in three one-week modules. The course will be assigned to a local school to do field work focusing on literacy. Writing is used extensively to enhance learning and, therefore, quality of writing is assessed throughout the course.

**Module 1** focuses on N-8 student learning outcomes and the knowledge base that beginning leading teachers must have in order to facilitate learning in N-8 classrooms.

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

**Module 3** addresses the service of reading, language arts and related literature to all aspects of pre-school, elementary, and middle years education including the relationship of literacy to other areas of the school curriculum. The course includes project, instruction, and interdisciplinary activities are referenced to scholarly research. Students will be linked through technology to regional, national and international schools and to expert practitioners found in local school districts.
The Educated Citizenry semester will focus on becoming educated in French and German. Special arrangements must be made with an advisor for individual majors.

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

The last third of the semester will concentrate on science, social studies, and the performing arts in integrated Teacher Platforms. This course is for students who will complete the Elementary and a ten-week experience in Early Childhood, Secondary Education or International Education Program. Students will complete the academic major required by Pennsylvania. Details of course sequences are provided in the description of the Foundations of the Leading Teacher Program.

This course is for students who will complete the academic major required by Pennsylvania. Details of course sequences are provided in the description of the Foundations of the Leading Teacher Program.

The following course is required for secondary education majors during semesters 5-8.

Course Title

Semester 5
Acad Courses Major discipline & Related coursework 12
EDLTT 301 Inst Technology III 3
EDLTT 391 Field Experience 1

Semester 6
Acad Courses Major discipline & Related coursework Methods Courses 9-12
EDLTT 336 Math 5-8 3
EDLTT 341 Tchg Sec Math* 3
*Both required
EDLTT 342 Tchg Sec Science 3
EDLTT 343 Tchg Eng + Comm 3
EDLTT 345 Tchg Foreign Language 3
EDLTT 346 Tchg Soc Studies 3
EDLTT 302 Inst Technology IV 3
EDLTT 392 Field Experience 1

Semester 7
Acad Courses Major discipline & Related coursework 12
EDLTT 345 Adaptive Strategies for Inclusive Programs 3
EDLTT 391, 392, 491 Field Experience 1
Continues the opportunity for students to reflect on their educational achievements, suitable for presentation during formal interviews.

Course Descriptions — Secondary Education

EDLTT 336 Teaching Mathematics Gr 5-8 3 Examinations mathematical concepts and skills taught in grades 5-8, teaching strategies and methods that foster reasoning and mathematical thinking

EDLTT 341 Teaching Secondary Mathematics 3 explores methods, strategies, and content of secondary mathematics with emphasis on problem solving and technology

EDLTT 342 Teaching Secondary Science 3 explores methods, strategies, and content of secondary science, with emphasis on discovery, inquiry, and technology

EDLTT 343 Teaching Secondary English and Communication 3 explores various ways to teach grammar, language, and composition, provides opportunities for students to review the basics of grammar and composition and to develop lessons for teaching at the secondary level and in special education

EDLTT 345 Teaching Secondary Foreign Languages 3 explores a variety of approaches for teaching foreign languages (K-12), grammar, structure, verbal exercises, and literature germane to the specific language to be taught, will be discussed.

EDLTT 346 Teaching Secondary Social Studies 3 is a competency-based experience for social studies/history majors that develops evaluation skills, knowledge of curricula, media and technological experiences, and methods, expands planning and questioning skills.

EDLTT 345 Adaptive Strategies for Secondary Inclusive Programs 3 explores the range of services needed for students with learning and behavior challenges in secondary education programs. Students will develop skills in the process of selecting adaptations in content area instruction, and in teaching effective study skills and learning strategies across the curriculum. The process of planning for transition to adult life will be investigated, as will strategies for facilitation of effective social skill development. Applications of computer and assistive technology for students with challenges will be addressed.

EDLTT 391, 392, 491 Field Experience 1
Continues the opportunity for students to reflect critically on their developing knowledge base and practical experiences. These seminars are designed to foster personal and professional growth in preparation for student teaching and entry into the teaching profession.

EDLTT 480 Senior Leadership Seminar 3 An elective experience in which seniors engage in an in-depth investigation or pursue a special project related to their leadership development. Requires sponsorship by an instructor and approval of the Chairman.

EDLTT 492 Student Teaching — Secondary 12 Student teaching is a 15-week experience in an approved secondary school under the direct supervision of a cooperating teacher and a University supervisor.

EDLTT 493 Student Teaching — Secondary 6 Student teaching in secondary education for students who wish to complete requirements in two certification areas. The student teaching experience is two, ten-week assignments. Registration is concurrent with EDLTT 493, EDLTT 495 or International Study.

EDLTT 501 Instructional Technology III 3 Text-Based Instruction 3 examines the design, integration, and evaluation of text-based printed and graphics materials including content-specific handouts, student workbooks, and lesson study guides. In addition, students prepare comprehensive curriculum-based lessons using a variety of commonly accepted instructional technologies, including digitized resources found on the most up-to-date educational sites on the Internet. These resources will be firmly grounded in accepted academic standards and assessment. Upon completion of the course, approved materials are uploaded to the School of Education server for access by practicing teachers.

EDLTT 502 Instructional Technology IV 3 Visual-Based Instruction 3 increases the level of technology competencies with an examination of visual-based instructional materials having age-appropriate classroom presentations, interactive instructional media, and professional development portfolios. Students complete a visual-based unit of instruction and present their results in a typical classroom environment. Upon completion of the course, approved presentations are uploaded to the School of Education server for access by practicing teachers. They also create a computer-based portfolio depicting notable educational achievements, suitable for presentation during formal interviews.

EDLTT 503 Instructional Technology V 3 Web-Based Instruction (Elective) 3 completes the journey into Instructional Technology with an examination of the design and implementation of Web-Based instruction. Students compose a personal home page and several phototype course web pages supporting different academic disciplines. Internal (student-made) and external (Internet-ready) links to the Web are incorporated into the pages after considerable research of content material. Upon completion of the course, approved pages are uploaded to the School of Education server for access by practicing teachers.
INTERNATIONAL STUDY IN EDUCATION

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

DUAL DEGREE PROGRAMS

B.S. Education and B.S./B.A. Mathematics

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

- B.S. Education and B.A. English
- B.S. Education and B.A. Communications
- B.S. Education and B.A. Spanish
- B.S. Education and B.A. Latin

Similar dual degree programs with Bachelor and Master degrees include:

- B.S. Science and M.S. Education
- B.S. Athletic Training and M.S. Education
- B.S. Physical Therapy and M.S. Education

MUSIC EDUCATION

The School of Music determines general and professional coursework and professional education courses required for this program.

SPEECH AND LANGUAGE PATHOLOGY IN EDUCATION

The School of Education, in cooperation with the Rangos School of Health Sciences, provides coursework for students majoring in speech-language pathology to obtain Pennsylvania state certification as teachers of Speech and Language Impaired.

STUDENT TEACHING

The undergraduate experience in the School of Education culminates in student teaching. Student teaching allows the undergraduate to apply the principles and techniques in an actual classroom or other instructional settings for a full semester in the senior year. Students must make application and satisfy the specific requirements for student teaching as outlined in the School of Education Handbook.

TEACHER CERTIFICATION

The School of Education has been approved by the Pennsylvania Department of Education to offer coursework leading to the Pennsylvania Instructional I Certificate. This certificate is valid for ten years beginning the first year the individual is actually employed as a teacher in the State of Pennsylvania. In order for a student to be eligible for certification, the following requirements must be met:

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

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

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

DUAL CERTIFICATION

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

STUDENT ORGANIZATIONS

The School of Education provides opportunities for participation in student organizations related to professional education preparation. Students are encouraged to take an active part in these professional organizations.

HONORS

As an assurance of the quality of the most outstanding graduates from Duquesne University's School of Education, truly outstanding students are designated as the Dean's Teaching Fellows. The Dean's Teaching Fellows are selected after a rigorous application and screening process. Other awards are available to undergraduates in the School of Education and are presented at the annual Honors Day Convocation. Students should consult the School of Education Handbook for details.
MARY PAPPERT SCHOOL OF MUSIC

PHILOSOPHY AND OBJECTIVES

The Mary Pappert School of Music offers a comprehensive musical education in tune with the realities of the times. Overlooking the City of Pittsburgh with its unique blend of old and new, with its thriving cultural life, the campus symbolizes the goal development of a well rounded professional musician who is well equipped to contribute to the contemporary musical world.

To meet that goal, the Mary Pappert School of Music aims to develop in each student the highest caliber of individual performance informed by current music scholarship. Music studies at Duquesne are enriched by the core curriculum, a sequence of courses which place music studies within a broader cultural context.

Duquesne maintains a commitment to the new and innovative — to the proposition that music is ever alive and always changing, that the musician of the future must be versatile and adaptable. This philosophy is evidenced in the various programs and opportunities available to students, from traditional studies in music to a focus on contemporary music and the role of current technology in the life of a twenty-first-century musician.

To that end, the Mary Pappert School of Music offers students an education for the 21st century rooted in the traditions of historical thought.

ADMISSION

Students who wish to major in music should apply through the Office of Admissions. Following this interview, and audition should be scheduled through the Administrator of Music Enrollments. 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 requiring scholarship assistance should apply through the Financial Aid Office. Taped performances can be evaluated, but the audition process is not completed entirely until the testing has been done. Students receive written confirmation of their status from the Office of Admissions.

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

DEGREES

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

Students in the Bachelor of Music program major in piano, organ, voice, orchestral instruments, guitar, sound recording or music technology, they elect a concentration in classical music, jazz, sacred music, or music technology. Students in the Bachelor of Science in Music Education program elect a concentration in choral music or instrumental music.

The curriculum is enhanced by the vital cultural life in the City of Pittsburgh, which was a factor in its recent ranking as America's "most livable city" by Philadelphia magazine. 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 desire to increase their flexibility in order to take advantage of the new professional opportunities available to musicians possessing sophisticated music technology skills.

Fender Electronic Studio


The David Kates Recording Complex

Houses a MIDI/HD disk recording Macintosh Workstation with Pro Tools 24-track analog studio consisting of the Otari MX80 with the Arta34C console, Fostex 8-track tape recorder with MIDI/SMpte auto locator, Panasonics DAT, CEDAR noise reduction, CD mastering and mastering capabilities. 2 TASCAM DA-38, and 1 TASCAM DA-D, TASCAM TM-8000 Digital Mixing Consol, Pro Tool ProMix 24 plus System, and Tanoy Studio Monitors.

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.

Houses a MIDI/HD disk recording Macintosh Workstation with Pro Tools 24-track analog studio consisting of the Otari MX80 with the Arta34C console, Fostex 8-track tape recorder with MIDI/SMpte auto locator, Panasonics DAT, CEDAR noise reduction, CD mastering and mastering capabilities. 2 TASCAM DA-38, and 1 TASCAM DA-D, TASCAM TM-8000 Digital Mixing Consol, Pro Tool ProMix 24 plus System, and Tanoy Studio Monitors.

Keyboard Lab

A keyboard/computer lab housing 16 Macintosh G3-workstations, each equipped with 17 Yamaha clavinovas printers, Yamaha headphone communication system, Mark of the Unicorn's Fast Lane MIDI interfaces, Free Style Coda's Finale, Practica Musica, Music Lessons, Fiber-optic Internet connections.
The Music Technology Center

A multipurpose learning facility containing ten Power Mac workstations A/V and CD ROM, Macromind Director, Multimedia capabilities with scanners and digital audio stations, eighteen Korg Triniti workstations, Korg GEC-16 stereo communication system, Moog Rogue, Mark of The Unicorn's MIDI express, Performer, Codas Finale, C-Vox guitar software, Fender guitars/amps/basses and PA equipment student sign-out, Fender Hearfield six-string bass

STUDENT ORGANIZATIONS

A chapter of the national music organization Mu Phi Epsilon contributes substantially to the students' professional and social development. Chapters of the American Guild of Organists, the Audio Engineering Society, the National Association for Music Therapy, and the American Choral Directors Association. A chapter of Pi Kappa Lambda, the national music honor society, was installed in March, 1988

HONOR AWARDS

The Seibert Medal is presented to a senior for excellence in violin or piano upon recommendation of department committee

Andre Marchal Award is presented to the graduating organ student with the highest academic standing in performance

Jean Langlass Award is presented to the graduating organ student with the highest academic standing in Sacred Music

J Cornetti Tiucci Piano Performance Award is presented annually to an outstanding piano student

Mu Phi Epsilon Sterling Achievement Award is presented by Mu Phi Epsilon to an outstanding senior music student

Robert Egan Award for Academic Excellence, Richard Gray Award for Outstanding Service are presented by the Music Therapy department to graduating senior students

MUSIC EDUCATION

Admission and Retention in the Music Ed Program Students are admitted to the school through the formal application and audition process, but are admitted provisionally to the certification program. After the first year, students who earn a 2.75 cumulative GPA, with minimum B- grades in all music classes, pass the Communications and General Knowledge parts of the standardized Praxis Exam and complete a favorable interview with department staff may be admitted formally into the program. Additional evaluations and proficiency exams are administered over the next several semesters. Those who are successful may apply for student teaching. The remaining Praxis exams must be completed prior to recommendation for certification.

Certification

Students who successfully complete the entire baccalaureate program and achieve satisfactory scores on the Praxis Exam may apply for Pennsylvania teachers certification in Instructional Level I, Music K-12. The teacher training curriculum offered by Duquesne prepares students to teach both vocal and instrumental music at all age levels. Permanent certification is awarded after completion of 24 postgraduate credits and three successful years of teaching within a six year period.

Curriculum

Students complete 132 credits distributed in the areas of music, professional education, and general education. These include 28 credits of core music classes, 20 credits of general education classes, 12 credits of core music classes, and music in all families of instruments. Students may request the applied music teacher of their choice. All students learn the use of the up-to-date technology in state-of-the-art computer and piano labs.

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

Clinical experiences begin during the first year and continue throughout the program, culminating in a full semester of student teaching spanning grades K-12 and encompassing both vocal and instrumental music. General education courses are designed to develop well-rounded teachers who are able to relate to their society and culture. These include the 27 credits of the university core curriculum. Exceptionally gifted students may apply for admission to the B S in M Ed with a performance emphasis, a 5 year program which incorporates the requirements of the B M in Performance degree. It is also possible to double major with Therapy and Music Technology.

MUSIC EDUCATION/MUSIC THERAPY CERTIFICATION

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 Praxis Exam, graduates may receive the Instructional Level I — Music, K-12 certificate

Selection of students for this program depends upon completion of admissions and audition 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. Postgraduate certification coursework 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. To earn the Bachelor of Science in Music Therapy Degree, Music Therapy candidates are required to complete a structured sequence of Music Therapy courses as prescribed by the American Music Therapy Association Upon completion of the academic requirements, a six month internship consisting of 1040 hours of clinical work under the direct supervision of a Music Therapist at an approved site is required. Completion of both the academic and the internship requirements culminates an eligibility to sit for the board certification examination.

COURE DESCRIPTIONS

PERFORMANCE

Applied Music 1-3 cr

Private study of voice, piano, harpsichord, organ, guitar or orchestral instruments

Performance Accompanying 1-2 cr

This course is designed for the performing musical artist, in which the emphasis is to gain control and composition of one's self in a performing setting. Proper preparation of material and practice techniques for performance is studied. Through weekly in-class performances each student gains experience in proper recital procedure, mental focus for minimizing errors and successful artistic performances.

Vocal Coaching 1-2 cr

Individual work with pianist as a supplement to Opera Workshop and/or Applied Music

Italian for Musicians 1-2 cr each

Study of the 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.

Alexander Technique 2 cr

This course is an introduction to the Alexander Technique in which students examine bodily movement patterns and identify those which are destructive or interfere with musical performance. The technique heightens kinesthetic sensitivity, offering performers a control that is fluid and lively, thus learning of performance injury. The techniques are based on an understanding of human anatomy which promotes ease and freedom of movement, balance, flexibility, and coordination.

Diction and Repertory 2 cr each

Italian, German, French and English offered on a rotating basis each spring semester All except English

BRAHMS BUSINESS OF MUSIC 2 cr

This course focuses on the details of making a living in the music world. Topics include creating and maintaining a portfolio and resume, negotiating business matters and marketing.

BEGINNING PIANO FOR PERFORMANCE MAJORS 2 cr

Class piano instruction in basic techniques of piano performance including scales, keyboard harmonization, and introductory score reading. MIDI piano lab equipped with music work stations, synthesizers, and six track recorders are used.

BEGINNING PIANO FOR PERFORMANCE MAJORS II 2 cr

Class piano instruction in intermediate techniques of piano performance including two octave scales, keyboard harmonization of secondary chords, transcription, and score reading. Upper elementary piano literature is studied.

Piano Ensemble 1-2 cr

This course focuses on the study and performance of literature written for various piano ensemble combinations. Works for one or two pianos will be emphasized.

Performance Development for Guitar 2 cr

This course is designed for the performing musical artist, in which the emphasis is to gain control and composition of one's self in a performing setting. Proper preparation of material and practice techniques for performance is studied. Through weekly in-class performances each student gains experience in proper recital procedure, mental focus for minimizing errors and successful artistic performances.

155 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.

156 Piano Pedagogy II 2 cr

A continuation of 155 concentrating on the techniques associated with teaching piano at the intermediate and advanced levels.

Pedagogy for Performance Majors 2 cr

The course is designed to provide an introduction to the elements of studio teaching. Topics will include learning theory, business considerations, pedagogical/technical approaches, and materials
321 Guitar Pedagogy 2 cr
To prepare the guitar performance student to teach individual and classroom guitar successfully. Primary focus is the classic and jazz styles of playing, more specifically finger style and plucked style. Concepts of anatomy and how to properly utilize our bodies with the guitar are the foundation. Students will be exposed to available materials for teaching the guitar and proper curriculum techniques will be discussed for ensembles, development of graded musical items and the business of guitar instruction.

396 Student Recital 0 cr
This course is designed for students giving non-degree recitals.

398 Junior Recital 0 cr
The candidate for the Bachelor of Music degree must 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.

420 Performance Internship 0-12 cr
A rigorous occupational and academic opportunity for highly-qualified students to combine career goals in an individually-designed work experience. Skills in performance, research, analysis, and communication are developed under the supervision of an onsite supervisor in cooperation with a faculty member who may require an academic project.

ENSEMBLE/CHAMBER MUSIC
Required for all students as laboratory work, during most semesters of full-time enrollment. Non-music majors are invited to register for ensemble with permission of instructor.

Large Ensembles 0-1 cr each
The Large Ensembles include Wind Symphony, Orchestra, Concert Choir, Chamber Singers, and Jazz Band

Small Ensembles 0-1 cr each
The Small Ensembles include Trombone Choir, Brass Ensemble, Guitar Ensemble, Percussion Ensemble, Jazz Ensemble, various woodwind ensembles, and Electronic Ensemble

144 Opera Workshop 0-1 cr
A performing class in which students learn standard and other opera repertory in the original language.

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

MUSICIANSHP
110, 112 Musicianship I and II 4 cr each
These two courses comprise the first two semesters of the seven-semitone Musicianship sequence. This sequence integrates many areas of learning within music, including history and literature, solfège, aural comprehension, harmony and counterpoint, analysis and interpretation, arranging and composition, improvisation, and keyboard skills. All of these areas of music are tied together in an integrated fashion, highlighting interrelationships between the various aspects of music. Students learn about a wide variety of musical styles, including jazz, world music, and the European tradition from the Middle Ages until the present day. In these first two semesters, students utilize tonal materials up to the level of the secondary dominant. Students also learn basic contrapuntal and formal techniques. The first semester includes a brief survey of music history, and the second focuses on the music of the Medieval through the mid-Baroque eras. Prerequisites: passing the entrance examinations to the Mary Pappert School of Music.

113, 114 Musicianship III and IV 4 cr each
These courses continue work in all areas started in Musicianship I and II. These semesters focus on the music of the late Baroque, Classical, and Romantic eras. Work in harmony, counterpoint, form, solfège, aural comprehension, composition, keyboard skills, and improvisation is tied to the structures encountered in the covered historical eras. Students acquire sufficient skills to analyze, interpret, sight-sing, compose, arrange, and perform music in styles and forms which evolved during those eras. Prerequisites (Musicianship I and II)

115, 116 Musicianship V and VI 4 cr each
These courses continue work in all areas started in Musicianship I through IV. The first semester focuses on jazz, and the second semester examines music from the first half of the 20th century. Work in harmony, form, solfège, aural comprehension, composition, keyboard skills, and improvisation is tied to the structures encountered in the covered historical eras. In the first semester, students study jazz forms, styles, arranging, and history, and acquire a working improvisational vocabulary. In the second semester, students acquire skills related to the analysis, interpretation, composition, sight-singing, and performance of music from the first half of the 20th century. Prerequisites (Musicianship I through IV).

121, 122 Dalcroze Eurhythmics I & II 2 cr each
Experiencing, analyzing, and creatively manipulating the motoric/structural and the expressive/interpretive moments of music: through rhythmic movement, ear-training, and improvisation.

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

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

336 18th Century Counterpoint 2 cr
A course concerned with the contrapuntal techniques of the period of JS Bach. Contents include lectures, written assignments, listening, and analysis.

340 Orchestration 2 cr
A study of the basic problems of scoring for individual instruments, particularly orchestral choirs, the entire orchestra, and unique instrumental combinations. Analysis of the techniques of orchestration of selected composers of the 19th, 20th, and 21st centuries.

351 Composition 2-3 cr each
A course in original creative writing.

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

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

MUSIC EDUCATION
091, 092 Fundamentals of Piano I, II 2 cr each
This course introduces students to basic piano skills including scales, trills, cadences, sight-reading and improvisation. The course is intended for students preparing for Piano for Music Education but is also open to non-music majors.

101 Introduction to Music Education 1 cr
This course for music education majors is an overview of the primary facets of the profession- components of music teaching, professional preparation, relation between music in the school and the community, curriculum development, performance, psychology and teaching, discipline, multicultural resources, assessment, field observation skills, inclusion and reading skills.

105, 106 Voice for Music Education I, II 1 cr each
This course teaches fundamental techniques of singing, including posture, breathing, tone, diction, expression and style. Repertoire includes folksongs, art songs and multicultural songs sung in solo, unison, duets and small ensembles. Students learn standard voice classifications taught through opera, oratorio and art songs.

111W, 112W Piano for Music Education I, II 2 cr each
This course provides piano instruction in harmonizations, improvisation and transcription using a MIDI piano lab equipped with music workstations that consist of electronic keyboards, synthesizers and six-track recorders.

173 Woodwind Techniques 2 cr
This course focuses on playing skills and pedagogical applications of clarinet, flute, saxophone, oboe and bassoon. Students are expected to play each instrument and to be knowledgeable of appropriate teaching materials for each.

251 Music Ed Methods I 2 cr
This course presents an introduction to a sequence in music teacher training based upon the National Standards for Arts Education, Music Advocacy and Leadership in Arts Education. Content emphasizes early childhood development in music from pre-K to grade 2. The structure of the course is based on the Kodaly concept of music education, with singing and movement as the primary means of building a foundation for further musical learning. Students learn the basic components of effective lessons, and begin the creation of an anthology of folklore materials suitable for this age group. Advocacy projects in the schools comprise the field experience.

253 Music Ed Methods II 2 cr
A continuation of MEM I, with emphasis on the general music class from grades 2-4. Music learning theory is introduced as an additional pedagogy.
Traditional instruments, international folk dancing and games are included with the instructional techniques. The song anthology is expanded 15 hours of clinical experience in a school system emphasizes grades 2-4. Students begin a portfolio which will document their experiences during the entire MEM sequence.

254 Music Ed Methods III 2 cr
This course advances the sequence of the National Standards, developing tracks in general, choral, instrumental and orchestral methods for grades 5-8. Study of inclusion and assessment techniques appropriate for these grades are included. The anthology is expanded. They continue the advocacy projects, which are incorporated into the portfolio documenting the second 15 hours of clinical experiences.

256 Music Ed Methods IV 3 cr
This course focuses on grades 7-8. Emphasis is on the development of performing ensembles as well as non-performance classes and appropriate means of assessment. Students complete a third clinical experience of 15 hours. The anthology and portfolios are expanded.

258 Music Ed Methods V 3 cr
This is the final course in the MEM sequence. Its structure parallels that of previous semesters, and completes the study of grades 9-12. It includes the fourth 15 hour clinical experience.

282, 283 Brass Techniques I, II 1 cr each
This course focuses on playing skills and pedagogical applications of trumpet, French horn, euphonium, trombone, and tuba. Students are expected to play each instrument and be knowledgeable of appropriate teaching materials for each.

290 Guitar Class 1 cr
An introductory course in guitar techniques for the music educator. Content includes playing skills as well as pedagogical applications for elementary, middle and high school levels, all of which align to the National Standards.

295 Classroom Instruments 1 cr
An introductory course which develops skills in recorder playing, Orff instruments, standard and non-traditional classroom instruments.

325 Marching Band Methods 1 cr
An overview of band methods with an emphasis on marching band styles.

330 Choral Materials Lab 1 cr
This lab is an appendix to the conducting class. It emphasizes the selection, analysis, score preparation and laboratory conducting of choral repertoire appropriate for various grade and proficiency levels of students.

331 Instrumental Materials Lab 1 cr
This lab is an appendix to the conducting class. It emphasizes the selection, analysis, score preparation, laboratory conducting of instrumental and orchestral materials appropriate for various grade and proficiency levels of students.

381 String Techniques 2 cr
This course focuses on playing skills and pedagogical applications of violin, viola, cello and bass. Students are expected to play each instrument and be knowledgeable of appropriate teaching materials for each.

386W Children’s Choir Lab 1 cr
This course provides field and clinical experiences in the areas of musicianship, pedagogy, and classroom management. It includes the learning of children's Festival Chorus, in residence at Duquesne University. Students will study rehearsal techniques, group motivation, repertoire and concert production.

481 Percussion Techniques 2 cr
This course is designed to develop an introductory understanding of percussion pedagogy with special emphasis on the musical growth of elementary school age students. Secondary considerations will include percussion related information, and ideas needed to successfully conduct and train junior high and high school individuals in traditional instrumental and Orff ensembles.

486 Clinical Experience 1 cr
This experience occurs in the senior year, opposite the student teaching semester. Students work a minimum of 15 hours in the instructional area of their choice in an approved school setting.

492 Student Teaching - Instrumental 6 cr
For the senior music education student who has completed all required music and professional education classes satisfactorily and has been recommended for student teaching. Placement is with the grade 4-12 instrumental music program in a selected school with a qualified cooperating teacher.

493 Student Teaching - Choral 6 cr
For the senior music education student who has completed all required music and professional education classes satisfactorily and has been recommended for student teaching. Placement is with the grade K-12 vocal or choral music program in a selected school with a qualified cooperating teacher.

141 Chamber Music - Jazz 2 cr
The purpose of this course is to develop the skills and techniques necessary for small jazz ensemble performance. Emphasis is on rhythm section techniques, interaction among the members of the group, and development of repertoire.

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

226 Jazz Improvisation 2 cr
Study and practice of melodic improvisation, conventional forms, chord progressions, employing idiomatic jazz, articulations, major-minor and modal scales, altered scales and chords, extended forms, and practical applications to standard and jazz literature.

330 Jazz Ear Training, Transcription and Analysis 2 cr
The course is designed to train the student to recognize aurally the melodic, rhythmic, and harmonic elements of contemporary jazz. The devices used are sight-singing, keyboard work, and extensive dictation. Emphasis is placed on four, five and six-note chords, chromatically-altered chords and polychords.

340 Jazz Arranging 2 cr
A study of the basic techniques of scoring for individual instruments and jazz ensembles of various sizes, from small groups to studio orchestras. Analysis of scores by contemporary big band arrangers.

MUSIC THERAPY

107W Music Therapy Orientation 3 cr
An introduction to Music Therapy as practiced in a variety of rehabilitation settings. Observation followed by informal group discussions. Basic theory, history, practice and scope of various degrees and specializations. Intensive class participation and interaction.

109W Music Therapy in Context 3 cr
Focus on Music Therapy methods utilized in a variety of music therapy settings. Examination of the use of music and movement as therapeutic teaching tools to meet the needs of special persons.

306W Influence of Music on Wellness and Healing 3 cr
An examination of the impact of music and its effects on the mind, body, and spirit healing from a holistic point of view.

309W Directed Study 2 cr
Capstone Seminar in Music Therapy research. Student selects Music Therapy topic.

315 Piano Improvisation I 2 cr
Piano Improvisation I is open to all Music Education majors. In this course, students will learn basic improvisational skills and how to utilize improvisation in today's classroom and therapeutic settings. Course Prerequisite: Piano for Music Ed II or 2 years of Applied Piano instruction.

317 Guitar for Music Therapy I 2 cr
The scope of this course is designed to focus on developing an introduction to the skills needed for playing the guitar in a clinical setting. Special emphasis will be placed on performance and accompaniment, right and left hand techniques, fretboard visualization, sight reading, basic improvisational tools, introduction to chord voicing rhythmic studies and an increased awareness of music interpretation.

318 Guitar for Music Therapy II 2 cr
This course continues to expand the Guitar competencies completed in Guitar I with the addition of bar chord voicings. Emphasis will also be placed on the building of clinical repertoire.

374W Music and Movement for the Exceptional Person 3 cr
This course is experiential and didactic in its approach. The rationale of using music and movement as therapeutic teaching tools to meet the development needs of special persons will be explored.

SACRED MUSIC

101 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 accommodations, and choral literature. Students unable to enroll for this course will study this material in their applied music lesson.

112 Church Music Practicum 1 cr
Seminar in practical aspects of church music, establishing the music program in a church, graded choir systems, children's choirs, instruments in workshop, contracts, cantor systems, worship commissions, etc.
420 Hymnody 2 cr
A study of the church's heritage of song, the Psalms, the great hymns of the Medieval Church, the heritage of Luther, Calvin and their followers, English hymnody, American contributions, twentieth-Century hymnody with special emphasis on the theological framework for each major development in the history of hymns

421 Gregorian Chant 2 cr
The history, notation, and modal system of Gregorian chant. Class participation in the singing of chant. Chant as prayer and current liturgical application

431, 432 Organ Improvisation 2 cr each
A practical application of the basic tools of improvisation including harmonization of melodies at the organ, two and three part counterpoint, short ABA forms, and chorale preludes with emphasis on their liturgical application

451, 452 Organ Literature 2 cr each
A survey of organ literature and organ buildings as it relates to organ registration. The first semester treats organ music from the Renaissance through J. S. Bach. The second semester deals with the literature up to the present. Outside listening and readings will be required

470 Sacred Music Internship 2 cr
An exploration of the relationship of liturgy and the music which expresses the rituals of liturgy. Fifteen areas of liturgical celebration in the worship life of the church are analyzed, set into historical perspective, and evaluated as to their effectiveness in parish life including the demands of ritual, theology of the rites and their musical expression, and pastoral issues in their celebration

476 Organ Design and Maintenance 2 cr
A survey of organ literature and organ buildings as it relates to organ registration. The first semester treats organ music from the Renaissance through J. S. Bach. The second semester deals with the literature up to the present. Outside listening and readings will be required

SOUND RECORDING TECHNOLOGY TRACK

101 Introduction to Audio I 2 cr
Introduction to basic concepts of audio propagation both acoustically and electrically. Mathematics for audio concepts are covered in full. All concepts are then related to the audio

102 Introduction to Audio II 2 cr
The focus of this course is a presentation of more basic audio concepts both acoustically and electrically. An introduction and overview of the hardware and software used in the recording process is covered

145 Audio I 2 cr
Foundations of the digital recording process. Covered are all aspects of the recording chain and basic procedures for track and multi-track production. Lab required. Prerequisite Introduction to Audio II

146 Audio II 2 cr
An intensive study of the commercial recording process. Intensive hands-on and production projects. Lab required. Prerequisite Audio I I

149 Audio III 2 cr
Individual studio projects with instructor coaching. Prerequisite Audio II

155 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. Prerequisite Audio III

240 Advanced Audio Production 2 cr
Students gain experience in CEDAR (Computer Enhanced Digital Audio Restoration) techniques for the pure from 1750 to the present. Outside listening and readings will be required

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 mixing and mastering are covered. Sony 1630 operation and mastering is covered. Prerequisite Audio IV

311 MIDI Controller Techniques 1 cr
The study and application of unique performance techniques used with electronic instruments. Through analysis of acoustic and electronic performances and study of technical exercises, students will learn to control the nuance of performance on electronic instruments. Prerequisites: Computers for Musicians and Music Technology 105

320 Music Synthesis I 2 cr
An introduction to music synthesis and sound design. Advanced sequencer techniques on complex workstations, and SMPTE synchronization. Prerequisite: Music Technology 105

335 Introduction to Composition I 2 cr
An introduction to composition that focuses on the fundamentals of melody, harmonic content, rhythm, and compositional forms. Students will be divided into individual composition portfolios, then related to the audio

350 Electronic Chamber Music 2 cr
A continuation of computers for musicians courses, with more advanced applications of MIDI theory, computer notation and sequencing, and the history of electronic music (1945 to the present). Prerequisite: Computers for Musicians
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.

In 1986, the Graduate Nursing Program was opened to offer the Master of Science in Nursing. The School of Nursing continued to offer two separate degrees until 1964.

In 1991, a revised professional nursing program was designed to meet the specific needs of the registered nurse.

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.
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 comprise the nursing major, include theory and practice in the nursing care of individuals, families and aggregates. Learning opportunities are provided in hospitals, homes, health agencies and a variety of community settings. The Heyson Nursing Resource Center in the School provides students with access to computerized learning, media review, and simulations used in learning nursing skills. The School's Center for International Nursing, Center for Health Care Diversity and Inclusion, and Collaborative Center for Nursing Research with Allegheny General Hospital offer students an environment of cultural exchange and inquiry and research in nursing practice. The faculty of Nursing conducts all professional nursing courses and also provides and directs the practicum (clinical) learning experiences. Nursing students are assigned faculty mentors for career and professional development. A variety of hospitals and agencies collaborate with the School of Nursing to provide a wide selection of excellent practice settings.

Upon the successful completion of their program of studies, graduates are eligible to take the NCLEX-RN examination for licensure. Prior to graduation, students are required to successfully complete program requirements designed to prepare them for taking the NCLEX-RN exam. While completing their BSN, students have an opportunity to pursue a minor in select areas such as Spanish, Business, Psychology, Sociology, and Communications. A focus area in Music Therapy is also available.

The faculty reserves the right to make changes in the curriculum and program requirements which are believed to be in keeping with the changing health needs of society and/or the best interest of the students and the School to maintain quality professional nursing education. The undergraduate program of studies as fully approved by the State Board of Nursing (PO Box 2669, Harrisburg, PA 17105-2669, Phone 1-717-783-7142, http://www.dos.state.pa.us/boenurbd/menu.htm) and is fully accredited by the National League for Nursing (350 Hargett Street, New York, NY 10014, Phone 1-800-669-1656, Ext 146).

**Admission Requirements for BSN Students**

Students who are interested in applying for admission to the School of Nursing should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, PA 15282. The specific entrance requirements for admission are:

1. The applicant's high school curriculum must include a minimum of 16 units distributed as follows (1 unit = 1 year):
   - English: 4 years required
   - Social Studies: 3-4 years recommended
   - Language: 2 years recommended
   - Math & Science: 4 years required
   - Biology 1 year
   - Chemistry 1 year
   - Physics, Algebra, Computers, etc.

2. A candidate must have graduated from an approved secondary school in the upper two-fifths of the class, and must have demonstrated exemplary personal conduct in the institution. Students whose class rank is below the upper two-fifths are evaluated individually by the University Admissions Committee according to their overall academic achievement (i.e., high school quality point average and testing results are reviewed).

3. The primary consideration for admission is the candidate's personal conduct during the secondary school academic record.

4. A candidate must present satisfactory scores on the required College Entrance Examination Board Scholastic Aptitude Test in accordance with the standards to which the University adheres.

5. A personal interview with a representative of the School of Nursing may be requested prior to admission.

6. Letters of reference may be requested:
   - Individuals convicted of a misdemeanor, felony, or an illegal act associated with substance abuse(s) may be prohibited from licensure or relicensure as a registered professional nurse.
   - Individuals convicted of a misdemeanor, felony, or an illegal act associated with alcohol, or an illegal act associated with substance abuse(s) may be prohibited from licensure or relicensure as an RN in Pennsylvania (PA) by the PA State Board of Nursing. At the time of application to the School of Nursing, individuals are made aware that the School Board may inquire about any previous convictions.

Other additional School of Nursing requirements include evidence of physical and emotional health adequate to meet the demands of the program and compliance with the standards of personal conduct as outlined in the School of Nursing Standards of Personal Conduct Policy. Following notification of acceptance to the University by the Office of Admissions, the School of Nursing candidate must submit the following:

1. School of Nursing's required health forms to the University Health Services Department.
2. A signed School of Nursing Standards of Personal Conduct Statement.

In specific instances, and at the discretion of the Committee on Admissions, the equivalent of these requirements may be accepted in lieu of the aforementioned requirements. All applicants are evaluated based on individual potential and total profile with variances permitted as necessary and desirable.

**THE ACCELERATED BSN**

The accelerated BSN enables high school honor students to complete the BSN in 3 years including 3 summers. The curriculum is identical to the 4-year BSN program except for the accelerated pace. Once accepted, students will work closely with their advisor to develop an individualized program of study. Students enrolled in this program must maintain a 3.5 GPA. Advantages of the Accelerated BSN include earlier graduation and entry into nursing practice.

**Transfer Requirements for Accelerated BSN Students**

Applicants to the Accelerated BSN program must have an SAT score of 1100 or greater and a high school GPA of 3.5 on a 4.0 scale. Students must first be accepted into the BSN Program through the Office of Admissions. Acceptance of students who meet the admission criteria for the accelerated track will receive a letter of invitation from the Dean of Nursing and will be interviewed by the School of Nursing Chair or Designee.

**Transfer Student Requirements for Further University Requirements**

Applicants to the Accelerated BSN program must:

1. Complete chemistry and 1 unit of algebra, which can be from either a secondary school or post-secondary institution.
2. Personal interview with a representative of the School of Nursing and two letters of reference.
3. Compliance with the School of Nursing Standards of Personal Conduct Policy.
4. Evidence of physical and emotional health adequate to meet the demands of the program as indicated above.

**Provisions Affecting Placement**

1. Transfer student cannot be accepted into nursing clinical practicum courses during the first semester of attendance at Duquesne University.
2. Only courses taken within the past ten years will be evaluated for (RN) transfer credit, not courses in the natural sciences, the limit is five years. This time limit may be waived in specific instances.

**REGISTERED NURSE STUDENTS**

Duquesne University School of Nursing offers the registered nurse (RN) to baccalaureate degree (BSN) program for eligible registered nurses. Offered online, this program is designed to provide an opportunity to obtain a baccalaureate and master's nursing degree part-time or full-time. The program is available online for RNs in Pennsylvania (PA) by the PA State Board of Nursing. Acceptance into the program is contingent upon the RN's previous learning experience towards the requirements of the BSN degree.

Specific information concerning the acceptability of transfer credits, eligibility for CLEP testing, and challenge examinations can be obtained by contacting the Coordinator of RN to BSN/MSN Option.

**Admission Criteria for RN to BSN/MSN Option**

Students who are interested in applying for admission to the RN to BSN/MSN Option should request an application from the Office of Admissions or the School of Nursing, Duquesne University, Pittsburgh, PA 15282.

- High school diploma or equivalent
- Graduation from an accredited associate degree or diploma nursing program (2.5 QPA minimum)
- Verification of current licensure as a registered professional nurse
- Associate degree or diploma transcript
- Current or past clinical experience in nursing
- Verification of active required malpractice insurance
- Personal interview with the RN to BSN/MSN Option Coordinator in the School of Nursing
- Compliance with the Standards of Personal Conduct Policy
- Evidence of physical and emotional health adequate to meet the demands of the program as indicated above.

**Second Degree Students**

This option is available to college graduates who earned a baccalaureate degree in another discipline and who wish to earn a bachelor's degree in nursing at Duquesne University. A possible 38 credits may be transferred into the program. Other possible opportunities include challenge examinations and CLEP testing for University credit.
ment to the adult learner. The 68 credit accelerated portion of the curriculum comprising the nursing major courses is offered over an 18 month consecutive period beginning in July of each year. Specific information about this option can be obtained by contacting the coordinator of the Second Degree option within the School of Nursing.

Admission Requirements for Second Degree Students

Students who are interested in applying for admission to the Second Degree in Nursing Option should request an application from the Office of Admissions or School of Nursing, Duquesne University, Pittsburgh, PA 15282

- Graduation from a baccalaureate program in another discipline
- Personal interview with the coordinator of the Second Degree option within the School of Nursing
- Compliance with the Standards of Personal Conduct Policy
- Evidence of physical and emotional health adequate to meet the demands of the program

TEMPORARY TRANSFER

With prior written approval, a nursing student may take courses during the summer at an accredited college or university other than Duquesne University. Students wishing to do this will become a temporary transfer student, provided they receive the necessary clearance from both institutions.

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

2. Ordinarily, a student who has acquired 60 or more credits may not receive advanced standing for courses taken at accredited community or two-year colleges. Students desiring waiver of this policy must obtain the permission of the undergraduate student standing committee of the School of Nursing.

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

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

ADDITIONAL EXPENSES* AND REQUIREMENTS

Student Liability Insurance (Professional)

- Annual

$12.00

Uniforms, identification pin, shoes

$150.00

Transportation to and from clinical agencies (weekly)

$10.00

School of Nursing pin, upon graduation (if desired)

Cost varies

Physical examinations, diagnostic procedures, and immunizations

1st year

$200.00

2nd-4th year

$150.00

NCLEX Diagnostic Examination

$30.00-60.00

*All expenses are approximate

Traning in Cardiopulmonary Resuscitation (CPR) is a prerequisite for all nursing clinical courses. Students must show evidence of current CPR training prior to entering the clinical area and annually thereafter.

Predecession and periodic physical examinations, immunizations, and laboratory tests are required for all students in the School of Nursing. Students must complete these health requirements by the designated deadline date in order to register for the following semester courses or before proceeding to the clinical practicum. The School of Nursing provides information on required school uniforms to students prior to entrance into the clinical area. Nursing students enrolled in clinical courses must purchase liability insurance in the amount of $1,000,000/$6,000,000 professional coverage.

Each student is responsible for transportation to and from hospitals and other clinical agencies. Each student will be expected to have access to an automobile to permit experience with home care of clients and their families during the senior year.

STUDENT ORGANIZATIONS

Each nursing student is a member of the general student body and may select and participate in any of the campus organizations. There are numerous social sororities and organizations as well as professional organizations. These organizations exist for the promotion of the scholarly and professional interests of members.

Alpha Tau Delta (meaning "through force of character") is a national professional fraternity for persons in nursing. Theta Chapter was chartered on the Duquesne University campus on April 21, 1938. Eligibility is limited to full-time students who have completed a minimum of one semester in the School of Nursing with a cumulative quality point average of 2.5.

Kappa Alpha Beta, an undergraduate nursing sorority of Chi Eta Phi, Inc., was established in 1996. The purpose of this organization is to increase minority students in nursing and to foster continued education. While membership is predominantly African-American, individuals from other ethnic/racial groups, male nursing students, and others are invited to join.

Sagita Theta Tau International, Inc is the international honor society of nursing. The Duquesne University Nursing Chapter was officially chartered as Epistol Phi Chapter in March 1982. Membership is open to upper level students and community leaders who meet the international criteria.

Student Nurses Association of Pennsylvania: The Student Nurses Association of Pennsylvania (SNAP) is a constituent of the National Student Nurses Association, Inc. (NSNA). The purpose of SNAP is to promote the profession for contributing to the nursing profession, to provide programs representative of fundamental and current pre-professional interest and concern, and to aid in the development of the whole person. Active membership is open to undergraduate students enrolled in state approved programs leading to licensure as a registered nurse and registered nurses enrolled in undergraduate programs of nursing.

Class Organizations: Each class is an officially recognized organization in the School of Nursing. As such, each class elects its own representative and conducts such programs and affairs as its members deem desirable toward achieving its goals.

Nursing Alumni Association: Upon graduation, each graduate is cordially invited to join this organization as a School of Nursing Alumni.

HONOR AWARDS

In addition to graduation honors, the following awards and scholarships are available to eligible undergraduate students. Specific criteria for awards are available in the School of Nursing:

- Richard J. Behan Award
- Mary Tihon Gold Medal for General Excellence in Nursing
- Ruth Johnson Gold Medal for General Excellence in Nursing
- Faculty Award
- Bayer, Inc. Award for Excellence in Nursing Practice in the Acute Care Setting
- Lanza Award for Excellence in Nursing Practice in the Home Health Care Setting
- Air Force Leadership Award
- Community Health Education Project Award
- Nursing Alumni Association Award
- Sigma Theta Tau International, Epsilon Phi Chapter Award
- Connie Miller Endowed Scholarship
- Richard J. Behan Memorial Scholarship
- Spirit of Healing Award
- Army Nurse Corps Spirit of Nursing Award (in cooperation with the NSNA)

GRADUATION REQUIREMENTS

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

1. Successful completion of 126 credits and all clinical practicum courses
2. A minimum cumulative overall quality point average of 2.5
3. Completion of the required curriculum plan
4. Removal of I and F grades in all required courses
5. A candidate for the Bachelor's degree must complete a minimum of 30 credits toward the degree. Duquesne University Challenge credits are not included in this 30-credit requirement

The student must submit an application form provided by the Registrar for the degree

7. Successful completion of NCLEX-RN Diagnostic Exam(s) and formal and informal coursework designed to prepare students to take the licensing exam.

Degree requirements must be completed within 10 years after initial enrollment. At the end of the 10-year period, the student's record is re-evaluated and the student is advised of any additional requirements for graduation based on curriculum changes. The responsibility for fulfilling degree requirements rests with the student.
**Courses**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>N209</td>
<td>Nursing Practice</td>
<td>3</td>
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<td>N210</td>
<td>Health Assessment</td>
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<td>N302</td>
<td>Human Response and Health</td>
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<td>N304</td>
<td>Junior Synthesis Seminar</td>
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<tr>
<td>N315</td>
<td>Research Process</td>
<td>3</td>
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<tr>
<td>N404</td>
<td>Concepts and Issues of Professional Nursing</td>
<td>4</td>
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<tr>
<td>N409</td>
<td>Clinical Integration in Complex Settings</td>
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<tr>
<td>N406</td>
<td>Senior Synthesis Seminar</td>
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<td>Role Preparation</td>
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**Sophomore**

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<tr>
<td>N312</td>
<td>Pathology</td>
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<tr>
<td>N301</td>
<td>Human Response and Health Promotion in Chronic Illness</td>
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<tr>
<td>N310</td>
<td>Health Care Delivery &amp; Economics</td>
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<tr>
<td>125</td>
<td>Fundamentals of Statistics</td>
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**Senior**

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<td>Human Response and Health</td>
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<td>N403</td>
<td>Human Response and Health</td>
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**TOTAL = 126 credits**

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

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

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

**NURSING COURSE DESCRIPTIONS**

**N101 Professional Development Seminar 1 cr**

This course introduces the student to nursing as an academic discipline and human science profession according to the philosophy and conceptual framework of the School of Nursing. Students explore the assumptions about person, environment, health, and nursing. The concepts of health promotion and illness prevention are examined personally and professionally. Health care delivery systems and processes are introduced. Professional nursing is explored from a historical perspective as it relates to present and emerging roles. The role of the nurse is examined in the context of a profession. Professional nursing practice is explored from ethical and legal perspectives. Effective study skills and test-taking strategies are examined that are helpful to the student's progression through the nursing program. Career development exploration is initiated and strategies are identified to enable the student to work toward career goals.

**N102 Nurses' Ways of Knowing 2 cr**

This course introduces the student to the different ways in which nurses use information to make decisions, assess and further develop of intellectual capacities of student nurses as independent critical thinkers through the use of critical thinking exercises and other instructional strategies. Students will describe how they think and utilize concepts of logic in preparation for the critical thinking process and its components, and the basic research process. Through the process of critical thinking, this course provides a foundation that promotes open inquiry into assumptions, the development of professional roles, and the characteristics that characterize nursing. Nursing theory is introduced as a guide for ways of knowing. The course will provide a survey of nursing theories and their impact on nursing. The concept of nursing as an academic discipline and human science profession according to the philosophy and conceptual framework of the School of Nursing will be reinforced. Students are expected to have basic computer literacy skills and will learn how to utilize information retrieval systems, such as nursing and medical data bases, and informational Internet resources for accuracy and appropriateness will be included.

**N204 Lifespan Issues 4 cr**

This course builds upon the major concepts of person, environment, health, and nursing. The student will explore human development from conception through death. Emphasis is placed on an individual's psychological, cognitive, psychosocial, and spiritual development within the context of the family, society, and culture. This course provides the foundation for health assessment critical to nursing practice in all settings. It enhances the student's ability to utilize knowledge of body systems for the purpose of planning a holistic approach to nursing care.

**N215 Basic Pharmacology 3 cr**

This course will cover the basic principles of pharmacology and drug therapy necessary for general nursing practice. Concepts of drug effectiveness, pharmacokinetics, mechanism of action, and drug interactions will be examined. In most cases, the action of drugs will be on the pharmacological action of drugs on specific organ systems. Periodically, drugs will be discussed in relation to their clinical use in the treatment of specific disease conditions.

**N220 Conceptual Foundations of Nursing Practice 4 cr**

This course introduces the student to specific concepts as they apply to the practice of professional nursing. Concepts specific to the promotion of health and prevention of illness in all clients requiring nursing care will be presented. Specific needs and strategies for caring for the older adult will be the emphasis of this course. Students will study the nursing process which promotes critical thinking as a competency and allows nurses to make judgements and take actions based on reason. Home health nursing, community based care, and cultural care will be examined. Concepts, which include self-concept and sexuality, spiritual health, family, stress, anxiety, and adaptation, and loss and grief will be emphasized. Physiological concepts of safety, hygiene, body mechanics, sensory alterations, immobility, oxygenation, fluid, electrolyte, and acid-base balance, sleep, comfort, bowel and bladder elimination, immobility, skin integrity and wound care, infection control, perioperative nursing, and rehabilitation nursing are presented and serve as the foundation for future practice. Concepts of therapeutic communication and client education are integrated throughout.

**N290 Nursing Technologies 2 cr**

This course introduces the student to specific skills and technologies utilized when implementing nursing care. The course will consist of both a didactic and clinical component. Students are provided with the opportunity to perform these skills and technologies in the laboratory setting prior to utilizing them in the clinical setting.

**N291 Health Assessment 3 cr**

This course builds upon previously learned knowledge of natural and human sciences. A systems approach is utilized to teach students to perform a physical assessment across the lifespan. Students learn to critically evaluate assessment findings and differentiate between normal and alterations indicative of actual or potential health problems. Students are provided with the opportunity to perform physical assessments in the laboratory setting and to utilize these skills in the clinical setting. This course provides the foundation for health assessment critical to nursing practice in all settings. It enhances the student's ability to utilize knowledge of body systems for the purpose of planning a holistic approach to nursing care.

**N302 Human Response and Health Promotion in Mental Health Nursing 5 cr**

This course builds on previously learned knowledge of natural and human sciences, health assessment, conceptual foundations of nursing practice and skills and technologies required to practice professional nursing. The opportunity is provided to apply the nursing process to the care of adult clients in mental health settings. Increasingly complex concepts related to the integrity of biological, psychosocial, spiritual, and environmental health are presented. Concepts of cultural care, therapeutic nutrition, ethics, critical thinking and professional practice will be integrated throughout the course. Students explore ways to promote health through the referral and utilization of community resources. Previously learned and advanced nursing concepts reflecting the uniqueness of a person's health experience will be integrated to provide holistic nursing care to adult clients experiencing acute illness.

**N303 Human Response and Health Promotion in Chronic Illness 5 cr**

This course builds on previously learned knowledge of natural and human sciences, and on general, psychosocial, and physiological concepts specific to client care. This course will integrate and synthesize the concepts of adult client care presented in Human Response and Health Promotion in Mental Health & Illness as well as in Acute and Chronic Illness. The focus will be on developing strategies for assessing the person's health status in the context of the unique individual, family, community, and aggregate. The examination of the biopsychosocial model, with its emphasis on the role of the nurse in assessing and treating the holistic needs of clients, is elucidated. This is integrated throughout the course.
mothers and newborns are examined from ethical, biological, and psychological perspectives. The study focuses on selected nursing theories, knowledge of homeostasis and the mechanisms that disrupt this balance, and the impact of health policy. The student will learn about the role of the nurse in the promotion of health and prevention of illness, focusing on concepts of loss, grief, maternal and paternal role, and the promotion of health in children. The course considers current issues surrounding computing and the advantages and disadvantages of both are explored. Each step of the research process is examined. Application of the research process to clinical practice is reinforced. Emphasis is placed on bridging research and practice.

N401 Human Response and Health Promotion in the Childbearing Family 5 cr

The focus of the course is on health promotion with the family as it relates to childbearing and neonatal care. The course on nursing process, the student will focus on the practice of maternal-infant health nursing based on selected nursing theories, knowledge of normal and altered developmental processes relative to the pregnant client and newborns. Concepts of cultural care and sensitivity, therapeutic nutrition, ethics, critical thinking, and professional practice will be integrated throughout the course. The course of study includes the promotion and development of knowledge and skill relevant to leadership, management, and the professional role of the nurse. The course will address the concepts of power, change, decision-making, and delegation. The course of study includes the foundation for exploring leadership styles and the role of the nurse in the promotion of health for women from a historical and nursing perspective. Students will be given an opportunity to analyze selected ethical issues surrounding the care of mothers and newborns.

N402 Human Response and Health Promotion in Children's Health and Illness 5 cr

This course focuses on the role of the professional nurse as a consumer of research. Both qualitative and quantitative approaches are utilized to develop knowledge and understanding of children and aggregates. Health education for children will be explored and evaluated for possible changes that enhance the promotion of health. Opportunities for the development of knowledge and skills in the care of children will be provided, including community settings. The course will examine groups and aggregates within a variety of community settings. The student will investigate the multidimensional health needs of culturally diverse populations and identify the unique needs of children relative to their interrelationship. The purpose of the course is to provide a comprehensive assessment examination. Based on the results of the comprehensive assessment examination, students will develop a personal learning plan. All students must pass this examination with an 85% or higher in order to pass the course. Each student will have three opportunities to achieve this score on the examination. Achievement of an 85% or higher is required for course completion and graduation.

NCOS 030 Computer and Information Literacy 1 cr

This course serves as an NCLEX-RN/CAT examination preparation course. Students will work individually as well as in cooperative learning groups. The course will include the examination of the ability to use technology. Students will be given an opportunity to analyze selected ethical issues surrounding the care of mothers and newborns.

N403 Human Response and Health Promotion in the Aggregate 4 cr

This course builds on previous learning and synthesizes that knowledge with a focus on the promotion of health and prevention of illness of groups and aggregates in community settings. The student will be introduced to the concepts of population-based community health nursing. This course will examine groups and aggregates within a variety of community settings. The student will investigate the multidimensional health needs of culturally diverse populations and identify the unique needs of children relative to their interrelationship. The purpose of the course is to provide a comprehensive assessment examination. Based on the results of the comprehensive assessment examination, students will develop a personal learning plan. All students must pass this examination with an 85% or higher in order to pass the course. Each student will have three opportunities to achieve this score on the examination. Achievement of an 85% or higher is required for course completion and graduation.
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. Several case management models are examined. 

499 Directed Study in Nursing 1-3 cr
This course, which can be taken for variable credits (one to three) in either clinical and/or non-clinical areas, is designed to provide students with a unique opportunity to pursue an area of interest in nursing that enriches and expands on 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.

Mylan School of Pharmacy

Administration
Dean of the Mylan School of Pharmacy
and Graduate School of Pharmaceutical Sciences
R. Pete Vanderveen, Ph.D.
Associate Dean
J. Douglas Bricker, Ph.D.
Assistant Dean for Administration
Stephen C. Morrison, M.A.

In 2000-2001, the School of Pharmacy at Duquesne University is celebrating its 75th Anniversary. The first Pharmacy class matriculated in September, 1925, under the leadership of the founding dean Dr. Hugh C. Muldoon. In May 2000, the Mylan School of Pharmacy will graduate the first entry-level Doctor of Pharmacy class.

The Mylan School of Pharmacy offers a six-year entry-level Doctor of Pharmacy program of study and an on-campus Non-Traditional Doctor of Pharmacy program for practicing pharmacists. The full-time on-campus Pharm D is configured in a two-year pre-professional and four-year professional curricular format. The faculty of the School has developed a competency-based, outcomes-oriented curriculum that will prepare future generalists and pharmacists to provide quality pharmaceutical care to patients. The new professional curriculum emphasizes critical thinking, problem solving, active learning, enhanced communication skills, an appreciation of ethical and spiritual values, and an understanding of personal, social, and professional responsibilities.

Integrated studies in the biological, chemical, pharmaceutical, administrative, behavioral, and clinical sciences will be taught, using traditional and innovative instructional techniques. It includes a multi-year, introductory-to-advanced level experiential component. Opportunities are provided for additional preparation in community pharmacy practice, institutional practice, management, nuclear pharmacy, industrial pharmacy, and for graduate study.

Duquesne Pharmacy graduates may work as community pharmacists, hospital pharmacists, consultant pharmacists, or pharmacists in government service. Many are employed as medical service representatives for drug manufacturers, while others enter the pharmaceutical industry in research, development, and manufacturing. Pharmacists may find positions in nuclear pharmacy and drug information/poison control. Pharmacists are employed as chemists or biologists in industrial and research organizations or, with advanced degrees, obtain research and teaching positions in academia.

APPLICATION AND ADMISSIONS

Students are accepted into the Mylan School of Pharmacy at the preprofessional and professional levels. For admission directly from high school, prospective Pharmacy students must apply to Duquesne University Office of Domestic Admissions, Administration Building, Pittsburgh, PA 15282.

Qualified high school students are admitted directly into the 0-6 Pharm D program of study. The minimum academic requirements for continuance into the four-year professional phase are:

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

Qualified external transfer students may be admitted into either the preprofessional year or the first professional year of the Pharm D program, with placement contingent on an evaluation of completed prior course work. The minimum academic requirements for transfer admission into the professional phase of the Doctor of Pharmacy program are:

1) Completion of the preprofessional course requirements.
<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Sem</th>
<th>Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology with Laboratory</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry with Laboratory</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry with Laboratory</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Calculus (or science or math majors)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>General Physics with Laboratory</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>English Composition and Literature</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>English Literature</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Religious Studies</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Modern U.S., European or World History</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Music or Art Appreciation</td>
<td></td>
<td>3</td>
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<tr>
<td>Economics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Computer Literacy (Applications)</td>
<td></td>
<td>3</td>
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<tr>
<td>Speech (Interpersonal Communication)</td>
<td></td>
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<tr>
<td>Psychology</td>
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**PROFESSIONAL PHARMACY CURRICULUM**

**First Professional Year**

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Sem</th>
<th>Hrs</th>
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<tbody>
<tr>
<td>Biochemistry I and II and Lab</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Human Physiology and Pathology I and II and Lab</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Immunology and Clinical Microbiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Pharmaceutical Principles and Drug Delivery Systems I and II</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Pharmaceutical Principles Lab I and II</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical and Biomedical Statistics</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Law and Ethics</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Professional Communications</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Clinical and Drug Information Skills</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Integrated Case Studies</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Experimental Education I</td>
<td></td>
<td>1</td>
</tr>
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<td>Total</td>
<td></td>
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**Second Professional Year**

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Sem</th>
<th>Hrs</th>
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</thead>
<tbody>
<tr>
<td>Autonomic and Neuropharmacology</td>
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<td>3</td>
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<tr>
<td>Medicinal Chemistry</td>
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<td>4</td>
</tr>
<tr>
<td>Biopharmaceutics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Biopharmaceutics/Pharmaceutical Analysis Lab</td>
<td></td>
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<tr>
<td>Pharmaceutical and Biomedical Analysis</td>
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<td>3</td>
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<tr>
<td>Clinical Skills I and II</td>
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<td>3</td>
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<tr>
<td>Drug Literature Evaluation</td>
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<td>2</td>
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<tr>
<td>Pharmacokinetics and Lab</td>
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<tr>
<td>American Health Care System</td>
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<td>3</td>
</tr>
<tr>
<td>Biomedical Sciences and Therapeutic I</td>
<td></td>
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<tr>
<td>Biomedical Sciences and Therapeutic V</td>
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<td>4</td>
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<tr>
<td>(Chemotherapy and Infectious Diseases)</td>
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<tr>
<td>Integrated Case Studies</td>
<td></td>
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<tr>
<td>Experimental Education II</td>
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**Fourth Professional Year**

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<tr>
<th>Course Requirements</th>
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<tbody>
<tr>
<td>Experiential Education IV, V, VI, VII</td>
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<td>16</td>
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<tr>
<td>Biomedical Sciences and Therapeutics VII</td>
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<td>3</td>
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<tr>
<td>Management Theory and Application</td>
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<tr>
<td>Quality Assessment Methods in Health Care</td>
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<tr>
<td>Pharmacy Practice Issues</td>
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<tr>
<td>Electives (+3 credits optional elective)</td>
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<td>5</td>
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<td>Total</td>
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**PROFESSIONAL ELECTIVES**

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<thead>
<tr>
<th>Course Requirements</th>
<th>Sem</th>
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<tr>
<td>Dental Remedies</td>
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<tr>
<td>Alternative/Complementary Therapies</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Dental Therapeutics and</td>
<td></td>
<td>3</td>
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<tr>
<td>Pharmaceutical Care</td>
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<td>3</td>
</tr>
<tr>
<td>Independent Study and Research</td>
<td></td>
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<tr>
<td>Pharmacy and Health Systems Informatics</td>
<td></td>
<td>3</td>
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<tr>
<td>Issues in Women's Health</td>
<td></td>
<td>2</td>
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<tr>
<td>Drug-Induced Diseases</td>
<td></td>
<td>2</td>
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<tr>
<td>Physical Assessment Practicum</td>
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<tr>
<td>Evidence-based Pharmacotherapy</td>
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<tr>
<td>Manufacturing Pharmacy and Lab</td>
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<tr>
<td>Pharmaceutical Formulation and Development and Lab</td>
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<tr>
<td>Regulatory Aspects of Industrial Practice</td>
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<td>Data Analysis and Modeling</td>
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<td>Advanced Pharmacokinetics I — Compartmental Modeling</td>
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<td>Advanced Pharmacokinetics II — Solids</td>
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<td>Pharmaceutical Unit Operations — Liquids</td>
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<td>Analytical Separation Methods</td>
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<td>Spectral Methods</td>
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<td>Chemometrics</td>
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<td>Clinical Toxicology</td>
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<td>3</td>
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<tr>
<td>Veterinary Pharmacy</td>
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John G. Rangos, Sr.
School of Health Sciences

PHILOSOPHY
The RSHS was founded in concert with the educational philosophy and objectives of Duquesne University students in the RSHS are exposed to a broad liberal arts education with emphasis on understanding the scientific, theoretical and theological constructs of the world. The academic programs focus on the scientific theories, which support the skills and the clinical practice of the various professions, coupled with a strong appreciation and understanding of spiritual values.

In recent years, health care in the United States has seen a transition to massive, complex health care delivery systems, which offer society choices to receive health care. A mixture of generalists and specialists practice in this sophisticated system to meet the growing health service demands of our society. To integrate our graduates into this system, the academic programs in the RSHS instill in-depth scientific and theoretical knowledge of health care practice, enhanced by a rich infusion of moral and spiritual values, necessary to prepare our graduates to be competent health care professionals. Through this preparation, students are encouraged to become cognizant of the needs of their patients, their colleagues, and the health care systems in which they practice. Students are also required to develop an understanding of the necessity for uncompromising, ethical practice to advance the body of knowledge in their respective professions through their research efforts.

All aspects of the students' education are coupled with an awareness and sensitivity of the human response to the functional limitations in various social and health care delivery contexts. The ultimate goal of the educational programs within the RSHS at Duquesne University is to educate truly outstanding health care professionals and citizens capable of explaining, investigating, and delivering the highest level of quality care with kindness, dignity, responsibility, and respect.

ACADEMIC PROGRAMS AND DEGREES

GENERAL INFORMATION
Bachelor's Degree Programs
The RSHS offers four-year bachelor's degree programs in athletic training (B.S. in Athletic Training) and health management systems (B.S. in Health Management Systems) which follow a traditional curricular design. The academic model for these programs is two years of liberal arts and science requirements followed by two years of professional education. In the case of the Health Management Systems program, students may also opt to stay for an additional year and pursue a Master of Health Management Systems.

Ph.D. Degree Program
The John G. Rangos Sr. School of Health Sciences will offer, upon approval from the Pennsylvania Department of Education, the Ph.D. (60 credits) and M.S. (36 credits) degree in rehabilitation science. The graduate program prepares students to be successful faculty in professional education programs typically housed in schools of health sciences. Students receive a background in research methods, foundations of rehabilitation science, and the pedagogy of professional, clinical education followed by courses and research experiences that develop a specific area of content expertise. Dissertation and thesis topics are diverse and consistent with faculty experience.

For further information, please contact David L. Somers, Ph.D., PT, Department of Physical Therapy at (412) 396-4772 or somers@duq.edu

Joint Degree Programs
The RSHS offers some joint degree programs to currently enrolled RSHS students. Students must formally apply for these programs. These joint degree programs are not offered to students seeking initial admission into the RSHS.

Majors in athletic training also have the opportunity to complement their degree with a Master of Science in Education. With this joint degree program, eligible 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. Both athletic training and physical therapy majors may apply for the joint degree program with the Department of Athletic Training. An application for this joint degree program will automatically be sent to all first semester freshmen in both athletic training and physical therapy.

There is also a joint degree opportunity for athletic training students to pursue physician assistant application for this joint program will automatically be sent to all second semester sophomore athletic training students.

The Department of Health Management Systems also offers a joint HNS/Pre-Health (Pre-Med) program.

Inter-School Majors and Minors
Should students decide to pursue an inter-school major or minor, they should carefully investigate the implications of an increased course and credit load, as well as ensure they will be able to complete all RSHS program requirements in time for entry into the professional phase of their respective program.

Inter-School Majors
At this time, there are no inter-school majors available to RSHS students

Inter-School Minors
Students interested in pursuing an inter-school minor within the McAnulty College and Graduate School of Liberal Arts or the Bauer School of Natural and Environmental Sciences should apply 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 or
ADMISSIONS POLICIES

Please note that admissions policies are subject to change at the discretion of the RSHS and the Offices of Domestic Admissions and International Affairs.

Students will only be considered for admission into one specific program, students are not able to apply to the RSHS as undecided.

New Students

All new incoming freshmen, transfer and second degree candidates (includes any student who is NOT currently enrolled at Duquesne University or who has ALREADY graduated from Duquesne University) must apply through the Office of Admissions. These students can request information and an appointment by writing to the Offices of Domestic Admissions and International Affairs, Duquesne University, Pittsburgh, PA 15282 or by calling (412) 396-5000 or (400) 456-9509.

Interviews and appointments for the unofficial evaluation of transfer credits may be arranged through the Offices of Domestic Admissions and International Affairs, but are not required for most programs.

Internal Transfer Students

All internal transfer students must apply through the RSHS. The RSHS considers an internal transfer student to be:

1. Any student seeking to transfer into the RSHS from another School or the Division of Continuing Education.
2. Any student within the RSHS who seeks to transfer to another program within the RSHS itself.

All prospective internal transfer students must schedule an appointment with a RSHS academic advisor, stopping in the Office of the Dean, Room 302, Health Sciences Building, or by calling (412) 396-6652.

Students with Disabilities

The University and the RSHS do not discriminate on the basis of nonperformance-related handicaps or disabilities. All students seeking admission to the RSHS will be expected to perform certain physical, mental and emotional tasks in order to complete graduation and professional requirements as measured by state and national certification, licensure and registration processes.

It is the student’s responsibility to notify the Office of Special Student Services if a physical or mental impairment will require accommodations to enable the student to complete academic and professional performance requirements or skills. Further, in limited cases, the student may be required to demonstrate the ability to perform certain “essential” tasks or techniques such as lifting equivalent to human body weight to the satisfaction of the faculty, prior to professional study.

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 may seek additional 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 may not be offered positions for the current academic year. Each Department will determine any courses which can be challenged, and each Department is responsible for determining the availability of the RSHS.

Candidates should have:

1. 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.
2. A class rank in the top two-fifths of their graduating class for Physical Therapy candidates a class rank in the top one-fifth of their graduating class.
3. A Q.P.A. of at least 2.75. For Physical Therapy, Physician Assistant, and Speech-Language Pathology candidates a Q.P.A. of at least 3.0.
4. A total SAT score of at least 1100 or a composite ACT score of at least 24.

Although volunteer experience in the field to which they are applying is not required for the admission of freshmen applicants, it is highly recommended.

Please note that once enrolled, RSHS students may be required to participate in volunteer experiences in the professional phases of their respective program.

Credit by Examination/Challenge Examinations

Under NO circumstances may any clinical education course be taken through credit by examination, and in general, the courses within the RSHS professional phase are not available through these examinations. Each Department will determine which courses may be challenged, and each Department is responsible for administering its own examinations.

It is the student’s responsibility to contact the Department involved to determine the availability of these examinations.

University-Level Courses Taken While in High School

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

1. The courses are recorded on an official transcript from an accredited institution of higher education.
2. The grades are "C" or better.

Advanced Standing Freshmen

Any student who indicates any past or current college history (excluding advanced placement, CLEP credits or University-level courses taken while in high school) who will have earned 12 or fewer non-science transferable credits at the point of matriculation will be considered as potential advanced standing freshmen. Students admitted as advanced standing freshmen may not exceed these credit restrictions prior to matriculation, fail to comply with this policy may result in rescinding the student's acceptance.

ADMISSION OF FRESHMEN

Admissions Deadlines for Freshmen:
1. All early action applications to the physical therapy and physician assistant programs must be completed and postmarked by December 1. This is the only deadline for these programs.
2. Admission to the athletic training, health management systems, occupational therapy, and speech-language pathology programs is by EITHER Early Decision or Regular Decision.
   a. Early Decision applications must be completed and postmarked by November 1.
   b. Regular Decision applications must be completed and postmarked by July 1.
3. All qualified students whose applications are submitted by January 10 of their senior year will be considered for enrollment consideration.

Admissions Criteria for Freshmen:

Freshmen admissions will be on selective basis as long as space permits. Prospective freshmen should have graduated from an accredited secondary school and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school but who hold a High School Equivalency Diploma issued by their state department of education.

The Offices of Domestic Admissions and International Affairs will review all freshmen applications submitted on the following guidelines established by the RSHS:

Credit by Examination/Challenge Examinations:

Under NO circumstances may any clinical education course be taken through credit by examination, and in general, the courses within the RSHS professional phase are not available through these examinations. Each Department will determine which courses may be challenged, and each Department is responsible for administering its own examinations.

It is the student’s responsibility to contact the Department involved to determine the availability of these examinations.

University-Level Courses Taken While in High School:

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

1. The courses are recorded on an official transcript from an accredited institution of higher education.
2. The grades are "C" or better.

Advanced Standing Freshmen:

Any student who indicates any past or current college history (excluding advanced placement, CLEP credits or University-level courses taken while in high school) who will have earned 12 or fewer non-science transferable credits at the point of matriculation will be considered as potential advanced standing freshmen. Students admitted as advanced standing freshmen may not exceed these credit restrictions prior to matriculation, fail to comply with this policy may result in rescinding the student’s acceptance.

ADMISSION OF INTERNAL TRANSFER, TRANSFER AND SECOND DEGREE CANDIDATES

Admissions Deadlines for Internal Transfer, Transfer and Second Degree Candidates:

Admissions Deadlines for Internal Transfer, Transfer and Second Degree Candidates:
1. All applications to the physical therapy and physician assistant programs must be completed and postmarked by December 1.
2. All applications to the athletic training, health management systems, occupational therapy, and speech-language pathology programs must be completed and postmarked by July 1.

Students may transfer into any program at any level, based upon their credentials, courses completed at other institution(s), credit earned, and other factors, prior to professional study.

Prospective Internal Transfer, Transfer and Second degree candidates should carefully investigate the...
financial implications of entering any RSHS program

Admissions Criteria for Internal Transfer, Transfers, and Second Degree Candidates

In order for applications to be considered "complete," all applicants must submit/have the following by the application deadline:

1. The application form
   a. Internal Transfers - Must contact a RSHS academic advisor in the RSHS Office of the Dean for an Internal Transfer Application
   b. Transfers and Second Degrees - Must contact the Offices of Domestic Admissions and International Affairs for the standard undergraduate admissions application (excluding the personal statement on the back of the application and the initial letter of reference). Applicants to the master’s program in Health Management Systems should contact the Department of Health Management Systems at (412) 396-4772

2. The addendum

3. A minimum cumulative Q.P.A. of at least a 2.5 for athletic training and health management systems programs, and a minimum cumulative Q.P.A. of at least a 3.0 for occupational therapy, physical therapy, physician assistant, and speech-language pathology

4. A "C" or better in all courses

5. GREs 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 Q.P.A. OR WELL ABOVE, HAVE "A" AND "B" GRADES IN COURSE WORK AND HAVE EXTENSIVE VOLUNTEER/PROFESSIONAL EXPERIENCE

READMISSION

Students who are no longer enrolled, but had previously attended or graduated from Duquesne University, must fill out the "Application for Readmission" available through the Offices of Domestic Admissions and International Affairs

Students who have completed 12 credits or less at another institution(s) since leaving Duquesne, are handled by the Offices of Domestic Admissions and International Affairs

by the University under one classification (i.e., as a junior), but academically considered by the RSHS under another classification (i.e., as a second-year student in a different program). For example, if a student has 64 credits completed upon 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 phase as a first-year student). 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,

Second Degree Students

All transfer and second degree candidates should carefully investigate the financial implications involved with matriculating into the RSHS, these students entering any of the RSHS programs as undergraduates if they 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 consult with the Office of Financial Aid regarding their eligibility for aid as graduate students, particularly in light of the high credit loads and summer course work involved in the final year of the professional phase.

PROGRAM AND CURRICULUM INFORMATION

IMPORTANT NOTE: The material contained herein is subject to change from time to time and this publication cannot be considered an agreement or contract between individual students and the School. The Rangos School of Health Sciences reserves the right to alter or amend the terms, conditions, and requirements herein, and to eliminate programs or courses as necessary. Once enrolled students should refer to the RSHS Academic Student Handbook for specific information regarding academic policies pertaining to their respective program.

The following interdisciplinary courses may be required by some of the programs.
relevant questions. Prerequisites: HLTSC 320/320L, or permission of the instructor.

**HLTSC 330 Physiology I** 4 crs
This course presents the normal functions of the human body, with additional emphasis on histologic organization and histophysiology. Molecular and physical mechanisms are highlighted at all levels of structural organizations, from cells to organ systems.

**Topics in this first part of a two-course sequence range from the structure and function of cells and tissues, to homeostatic regulation by the major control systems.**

Prerequisites: BIOL 111/113 and 112/114, CHEM 131 and 132 or CHEM 121 and 122, or permission of the instructor.

**HLTSC 331 Physiology II** 4 crs
This course continues the presentation of normal functions of the human body, with additional emphasis on histologic organization and histophysiology. Pertinent examples of pharmacologic and pathophysiologic mechanisms are used to reinforce concepts of normal physiologic design.

**Topics in this second part of a two-course sequence include all of the major systems that perform coordinated and integrated functions.**

The goal for the student is to achieve a good understanding of total body function based upon the organization, functional mechanisms, and interactions of these systems. Prerequisites: HLTSC 330 and HLTSC 320/320L.

**HLTSC 360W/460W Sociocultural Diversity in Treatment** 3 crs
Therapeutic considerations in all aspects of multicultural diversity and implications for health care service delivery. Prerequisite: Permission of the instructor.

**HLTSC 400 Independent Study** 1-3 crs
With the guidance of a faculty member, a student may pursue an in-depth study of a subject area or develop an individual project in an area of interest related to their professional goals. Prerequisites: Endorsement of the supervising faculty member and approval of the Department Chair.

**HLTSC 403 Neuroscience** 4 crs
This course introduces the central nervous system in the context of clinical problem solving. The course begins with an overview of neuroanatomy, moves to functional systems within the nervous system, and finishes with a description of vasculature and the clinical ramifications of regional vasculature insufficiency. Throughout the course, case histories are presented with emphasis on clinical problem solving. Prerequisites: HLTSC 320/320L and 321/321L, HLTSC 330 and 331, or permission of the instructor.

**HLTSC 420/520 Topics in Pharmacology** 3 crs
This course is designed to provide students with information regarding indications, contraindications, side effects, drug-drug and drug-food interactions of medications utilized in health care. Prerequisites: CHEM 131 or 121, HLTSC 320/320L and 321/321L.

**HLTSC 425/425L Therapeutic Modalities** 4 crs
This course is designed to acquaint the students with various physical agents and electrotherapy modalities used to treat patients in a clinical setting.

**Prerequisites:** HLTSC 420/420L and 421/421L.

**HLTSC 430 Principles of Research** 2 crs
Introduces students to each phase of the research process. Discussions focus on the design, conduct, analysis, and interpretation of clinical research studies. Prerequisite: MATH 225.

**HLTSC 431W Research Seminar** 1 cr
Overview of qualitative, evaluative, and single-subject research design and development. Prerequisites: HLTSC 430.

**HLTSC 431W-01 Research Seminar** 1 cr
A step-by-step approach to critical reading of the medical literature is discussed and applied to selected current publications. Corequisite: HLTSC 430.

**HLTSC 437/438 Functional Kinesthetics**
**Biomechanics Lab** 3 crs
This course is designed to study, in detail, the elements of normal human motion. Prerequisites: PHYS 201 or 202, HLTSC 320/320L.

**HLTSC 441 Medical Sciences I** 3 crs
An overview of common medical diagnoses is conducted utilizing various disease images and incorporating discussion of current issues in medicine. Prerequisite: Permission of the instructor.

**HLTSC 442 Medical Sciences II** 3 crs
This course is a continuation of Medical Sciences I. Prerequisite: Permission of the instructor.

**DEPARTMENT OF ATHLETIC TRAINING (AT)**
Chair: Paula Sammarone Turow, Ed. D., ATC

**Sports Medicine** is a popular general term that refers to the care and services necessary to maintain the overall health and performance of athletes and those who are physically active. Certified Athletic Trainers play a major role in the field of sports medicine. In 1991, the profession of athletic training was recognized as an allied health profession by the American Medical Association (AMA), however, athletic trainers have been providing care and services for athletes and other physically active individuals for more than 50 years.

The responsibilities of the athletic trainer are prevention of injury and/or illness, recognition, evaluation, and assessment, immediate care for injuries or illnesses, treatment, rehabilitation, and reconditioning, organization and administration, and professional development and responsibility. Athletic trainers work under the supervision of physicians and have found employment in athletic programs, schools, hospitals, sports medicine clinics, and private industry.

The CAAHEP-accredited (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 college, secondary, professional, and clinical settings, as well as work with athletes and physically active individuals of the opposite gender and with varying levels of skill.

A student enrolled in this program also has the option to complement the bachelor's degree with a Master of Science in Education. Through this joint degree opportunity, students may become eligible for teaching certification in the areas of Mentally and Physically Handicapped, Elementary Education, Secondary General Science, and/or Secondary Biology. 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 or with the Department of Physician Assistant leading to a Master of Physician Assistant.

**ATHLETIC TRAINING CURRICULUM**
A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSHS at (412) 396-6652.

**COUSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE**

**ATHTR 201 Essential Concepts & Techniques in Athletic Training** 3 crs
An introduction to the basic and essential elements of athletic training including prevention, emergency management, recognition, evaluation and follow-up care for injury and illness. Environmental effects on the body, treatment protocols, taping techniques, and other fundamental concepts relating to athletic injury care are discussed as they relate to prevention. Corequisites: BIOL 207/208.

**ATHTR 302 Art & Science of Athletic Training I** 3 crs
This course provides students with opportunities to learn evaluation techniques, recognize common pathologies associated with the lower extremities and internal organs, as well as information on tissue types, methods of palpation, medical record notation, use of evaluation technology, manual muscle techniques, and neurological function assessment. Prerequisites: ATHTR 201, Corequisite: HLTSC 320/320L.

**ATHTR 303 Art & Science of Athletic Training II** 3 crs
This second part of the course is designed to provide the students with learning experiences in evaluation techniques, recognition of common pathologies, and initial management procedures associated with the upper extremity, head and spine. Skills learned in ATHTR 302 will be reinforced during this course. Prerequisites: ATHTR 302, HLTSC 320/320L.

**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. Students are taught to recognize specific pathologies, provide emergency care in appropriate situations, and to make proper referral of conditions outside the scope of practice of athletic training. Implications for physical activity are discussed with each condition. Prerequisites: BIOL 111/113, HLTSC 320/320L.

**ATHTR 306 Therapeutic Exercise & Reconditioning in Athletic Training** 4 crs
In this course, students learn the theory and application of knowledge needed to develop comprehensive rehabilitation programs and to address the rehabilitation and reconditioning needs of the physically active. Topics include use of functional testing equipment, core strengthening techniques, immobilization techniques, ambulatory aids, exercise progressions and protocols. Prerequisites: HLTSC 320/320L, 425, ATHTR 302, 305W.

**ATHTR 315 Clinical Practicum in Athletic Training I** 2 crs
This practicum incorporates "hands-on" work in an athletic training room setting where students will be responsible for the health care of the athletes during practice, games, and in the rehabilitation setting of the athletic training room. Psychomotor skills and class discussions also are included in this course. Prerequisites: All Pre-Professional requirements, ATHTR 201.

**ATHTR 316 Clinical Practicum in Athletic Training II** 3 crs
This is a continuation of the previous practicum, however, students now apply knowledge gained from previous course work and experiences to the care of the athletes. Comprehensive emergency medical techniques, as well as preparation for future endeavors in sports medicine, are discussed in this course. Prerequisites: ATHTR 302, 315, HLTSC 330, 320/320L.

**ATHTR 402W 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 may influence the performance of a physically active individual. Information on eating disorders, weight management, special dietary considerations, and ergogenic aids also are discussed. Prerequisites: CHEM 131, ATHTR 407W.
ATHTR 404W Psychology of Sport 3 crs
This course incorporates basic and applied psychological principles to discuss topics such as mental imagery, psychology of injury, self-esteem, self-efficacy, stress management and burnout, pain tolerance, gender roles, performance enhancement, and the interrelationships between coaches, athletes, parents, and the medical community. Prerequisites: PSYCH 103, ATHTR 315, 316

ATHTR 407W Physiology of Exercise 3 crs
This course prepares students to understand, assess, and manipulate the physiological components of metabolism, muscular activity, and cardiorespiratory function to enhance performance. Students are required to develop a year-round physical conditioning program to maximize performance in a specific active population. Students are also introduced to the standard physiological evaluation equipment. Prerequisites: BIOC 111/113, HLTSC 320/320L, CHEM 131

ATHTR 410W Clinical Practicum in Athletic Training III 4 crs
Building on past experiences, students are deemed as the Head Student Trainers for the assigned sports teams. Students are responsible for the total care of the assigned sports teams, including the design and implementation of rehabilitation and conditioning programs. Advanced psychomotor skills and preparation for employment and graduate education are discussed. Prerequisites: ATHTR 303, 306, 316, HLTSC 425

ATHTR 411 Advanced Clinical Practicum in Athletic Training 3 crs
During this practicum, students may receive experiences in either a traditional or non-traditional athletic training setting. Preparations for the National Athletic Trainers' Association Exam - Board of Certification are made during this semester. Advanced psychomotor skill, job interview techniques, and a mock comprehensive examination are required in this course. Prerequisites: ATHTR 303, 306, 316, HLTSC 425

ATHTR 412 Organization & Administration in Athletic Training 3 crs
This course provides students with information to enhance their ability to function effectively as a certified Athletic Trainer in regard to administrative, professional, and legal issues pertaining to the field of Athletic Training. Topics include budget management, facility design, record keeping, professional organization, and liability. Professional, multi-media presentations and computer-assisted project development are essential components of this course. Prerequisites: ATHTR 316

ATHTR 414W Medical Perspectives in Athletic Training 2 crs
This course is designed to expose students to a variety of medical topics to include orthopedics, OBGYN, dental, family practice medicine, podiatry, physical therapy, dermatology, and radiology. Professionals from each of the respective areas provide information to enhance the interdisciplinary approach of the responsibilities of an athletic trainer. Prerequisites: ATHTR 303, 306W, 410W

ATHTR 416 Applied Science of Physical Performance 3 crs
Expanding upon the basic principles learned in Physiology of Exercise, Kinesiology and Biomechanics, and Therapeutic Exercise and Reconditioning in Athletic Training, students are expected to research and present, via peer teaching, information on sport skill training, biomechanical analysis of common chronic and acute injuries, and physiological requirements for the sports of football, volleyball, soccer, wrestling, basketball, lacrosse, baseball, track and field, swimming, tennis, ice hockey, and many others. This course also requires participation in all physical activities. Prerequisites: ATHTR 306, 407W, HLTSC 320/320L, 437/438

DEPARTMENT OF HEALTH MANAGEMENT SYSTEMS (HMS)
Chair: Joan M. Kiel, Ph.D.
Health Management Systems concerns itself with the two most evolving fields — healthcare and computers. The healthcare environment is challenged to provide cost-effective quality care coupled with managed care. To meet this challenge, innovative business strategies, data analysis, and new technologies are being utilized.
This health professional possesses a unique blend of skills in health sciences, business administration, and information technology. Health sciences aid communication with other medical professionals and in understanding the patient perspective. Business administration strategies are needed to manage and make decisions about data and information. Information technology is utilized to collect, manipulate, and transmit data to aid in the delivery of cost-effective healthcare services. The combination of information analysis and computer technology will help professionals to meet the future healthcare challenges.
These integrated skills can be applied in a variety of healthcare and related settings that range from the acute care hospital, research, and clinical, software development to companies, and health insurers.
The Bachelor of Science in Health Management Systems has the following tracks:
- HEALTH MANAGEMENT SYSTEMS gives students the ability to interface in medical and technical settings.
- REGISTERED HEALTH INFORMATION ADMINISTRATOR concentrates on administrative and technical aspects of managing health information, data, and medical records.
- HEALTH MANAGEMENT SYSTEMS/PRE-HEALTH gives future physicians technology and business acumen. This is a freshman entry program.

PROJECT EXPERIENCE
Undergraduate students will be required to complete two unpaid 360 hour projects, one in the junior year and one in the senior year. Students are able to obtain experience in a variety of health management systems settings in the Pittsburgh area or throughout the country. It is intended that their experiences be suitable for inclusion in the student's portfolio or resume. Placement is on an individual basis given the student's needs and career goals.

HEALTH MANAGEMENT SYSTEMS CURRICULUM
A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSHS at (412) 396-6652.

COUSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

HLTMS 305W/S05W Healthcare Management 3 crs
This course covers the management functions such as planning, organizing, controlling, and decision-making. In addition, organizational structures, leadership, motivation, and social responsibility in relation to the dynamic healthcare industry are examined. This writing intensive course requires essay examinations, case studies, and a group project based on a real world situation.

HLTMS 310/510 Elements of Health Information Science 3 crs
Introduction to the creation of interactive healthcare applications on the World Wide Web. Topics include hypertext markup language, scripting languages, methodologies, and standard tools and standards for accomplishing and managing World Wide Web content. Students will undertake Web-based projects.

HLTMS 315/515 Clinical Processes I 3 crs
This course focuses on the student's personal anatomy and physiology experience, examines disease processes and their related procedures and tests. This course follows a review of systems and case study approach.

HLTMS 316W/516W Clinical Processes II 3 crs
This course builds on the material learned in Clinical Processes I. It will focus on further review of systems and various related components such as laboratory and pathology. This writing intensive course requires essay examination and case studies.

HLTMS 320/520 Healthcare Delivery & Organizations 3 crs
The purpose of the course is to introduce students to the various organizations and entities that comprise the healthcare delivery system. Students will also address current healthcare trends, quality assurance, cost containment, the use of information technology, reengineering efforts, and the purpose and role of accrediting and regulatory agencies in the healthcare environment.

HLTMS 325/525 Healthcare Human Resource Management 3 crs
This course reviews the human resource process from the planning phase through recruiting, interviewing, hiring, training, and to the separation phase. Ancillary topics such as compensation and benefits, unions, negotiations, and conflict will also be covered.

HLTMS 330/530 Health Information Science 3 crs
Introduction to event-driven object-oriented computer application creation using a visual development environment in the context of trends in the healthcare information systems industry. Topics include data types, control structures, objects, properties, values, and program debugging. Prerequisite: HLTMS 330/530.

HLTMS 340W/540W Health Policy 3 crs
As the healthcare industry continues to evolve, one must understand how research, information, and data impact the policy process. This course covers the four phases of the policy process in relation to data and information—analysis, formulation, implementation, and evaluation. This writing intensive course requires an essay examination, case studies, a policy position paper, and a group project. Prerequisite: HLTMS 320/520.

HLTMS 445 Health Management Systems Seminar 1 cr
This forum will examine topics related to contemporary issues in healthcare and the impact of these forces on the management of healthcare enterprises.

HLTMS 451/551 Data Base Design & Management 3 crs
Being able to take raw data and create an organized data base to generate reports and manage an organization is a key skill which the course focuses on. Students will learn Access and develop data bases for real world clients. Conceptual matters of data base design and management in relation to client needs will also be discussed. Prerequisite: QMSIS 183.
Occupational therapists treat and consult with persons to promote an individualized, self-determined balance of the three occupations throughout the life-span. Occupational competence is developed by treating the "whole person" including physical, psychological, emotional, social and cultural competencies, as influenced by the occupational environment. Occupational therapists promote self-determination by involving persons in choosing the activities which promote performance during service delivery. The enhancement of person-environment interaction through the various occupations is the primary focus of occupational therapy. This includes not only the individual performance components but also, removal of environmental barriers that hinder performance, and provision of reasonable accommodations, such as rehabilitation technology or assistive living devices.

Occupational therapy directs indirect service delivery contexts are exceedingly diverse. They include but are not limited to acute care, industrial rehabilitation, physical rehabilitation, mental health, long-term care, home care, case management, consultation, school systems, early intervention, community services, education, disease prevention and health promotion. Important related concepts, such as quality of life, productive function, independent living, full access, social-political integration, multiculturalism, spirituality, and balanced lifestyles are central to occupational therapy practice. As a result, graduates of this program must be able to evaluate emerging information, anticipate new practice opportunities, develop new knowledge, participate in research, use critical thinking and problem solving to guide professional decisions, cooperate effectively with a variety of groups, and serve as professional leaders and community advocates. These competencies are the essence of occupational therapy service delivery and underscore the principles that guide this program.

The occupational therapy program at Duquesne University is an entry-level master's degree program offered in a traditional academic model. Graduates of this program are eligible to sit for the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT) and apply for state licensure, if required.

This program is fully accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). Information regarding the accreditation status of the program is available from the ACOTE, 4720 Montgomery Lane, PO Box 31220, Bethesda, MD 20824-1220 (301) 652-2682.

OCCUPATIONAL THERAPY CURRICULUM

A sample course plan for the professional phase of the curriculum can be obtained from the RSHS at (412) 396-6652.
using a variety of therapeutic modalities specific to practice. Prerequisites: OCCTH 305, HLTS C 320/320L, 437/438.

OCCTH 455 Clinical Reasoning & Fieldwork IA 2 crs Transformation of didactic learning into clinical reasoning with a focus on evaluation, treatment planning, and implementation. This course includes 40 hours of practicum. Prerequisites: HLTS C 403, 441, 460W.

OCCTH 456 Clinical Reasoning & Fieldwork IB 2 crs Transformation of didactic learning into clinical reasoning with a focus on establishing therapeutic interactions. Clinical observation, case study methodology, and includes 40 hours of practicum. Prerequisites: OCCTH 410, 435, 440, 445.

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 Chair.

OCCTH 541 Evidence Based Practice 2 crs Students work with a faculty mentor to research the evidence for various occupational therapy and related interventions. Prerequisites: HLTS C 430, OCCTH 432.

OCCTH 545/545L Occupational Performance Perspectives 3 crs Synthesis of material from previous treatment courses emphasizing provision of service within various systems through case study methodology. Prerequisite: OCCTH 456.

OCCTH 546 Cognition & Perceptual Function 3 crs The influence of cognitive, perceptual rehabilitation, and motor learning theories and approaches on evaluation and treatment is discussed. Prerequisites: OCCTH 420, HLTS C 403, 441, 442.

OCCTH 550/550L Environmental Adaptations & Rehabilitation Technology 3 crs Assessment and modification of the physical environment to enhance occupational performance including computer resources, assistive technology, home health, environmental controls, and occupational environmental adaptability. 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. Advance learning in several specialty areas will be included. Prerequisites: OCCTH 555, 556, 557.

OCCTH 555, 556, & 557 Level IIA, B, C: Fieldwork 8 hrs, 4 hrs & 4 hrs 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 six or 12 weeks. Prerequisite: OCCTH 456.

OCCTH 561 Occupational Therapy Administration 3 crs Introduction to the basic principles of organization and management of occupational therapy programs. Prerequisites: OCCTH 456, 454.

OCCTH 562 Leadership 1 cr Analysis of leadership approaches in practice, management, and education. Prerequisites: OCCTH 555, 556, 557.

OCCTH 564 Special Topics 2 crs Small group discussions of contemporary interventions. Prerequisite: Permission of the instructor.

OCCTH 565 Community & World Health Care Issues 3 crs Focus will be on community resources, health promotion, disease prevention, and future directions in national and international health care. Prerequisites: OCCTH 456, 545, HLTS C 460W.

OCCTH 570, Fieldwork Proposal 1 cr Students develop a proposal for a research project while on Level II Fieldwork. Prerequisites: OCCTH 456, 440, 445.

OCCTH 580 Psychopathology 2 crs Overview of psychopathology in terms of symptoms, diagnoses, pharmacology, behaviors, and prognosis.

OCCTH 585 Human Motion and Movement 4 crs Analysis of movement using motor learning, motor development, kinesiological theories, and applied principles that contribute to functional human motion.

DEPARTMENT OF PHYSICAL THERAPY (PT)

Chair: Robert C. Morgan, Ph D., PT

Physical therapists assess and treat patients with a variety of diagnoses. They work to prevent, detect, evaluate, correct, treat, and alleviate pain, movement dysfunction, and muscle imbalances. Their work includes the administration, interpretation and evaluation of tests, and physical examinations. They work to prevent, reduce, and/or limit the incidence and severity of physical disability and pain.

On a very limited basis, physical therapy students may enroll in the joint degree program with the Department of Athletic Training, leading to a Master of Science in Athletic Training, and a Master of Physical Therapy.

There are two Clinical Education Matriculation Examinations that students must pass before they are permitted to enter into clinical education. These examinations are done in order to determine that students have reached a level of proficiency necessary to safely work with patients. The first examination is given prior to Clinical Education I, near the end of Spring semester, fourth year. The second examination is given prior to Clinical Education III, near the end of Spring semester, fifth year. Students who do not pass all parts of the examination will not be permitted to continue in the program. This will result in students sitting out of the program for one year and re-taking the matriculation examination the following year. If all parts of the examination are not successfully completed the second year, students will be dismissed from the program.

PHYSICAL THERAPY CURRICULUM

A sample course plan for the pre-professional and professional phase of the curriculum can be obtained from the RSFH at (412) 396-6652.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

PHYTH 201 Introduction to Physical Therapy 1 cr This course provides the physical therapy major with an opportunity to learn the expectations of a student in the professional portion of the curriculum and what the actual practice of physical therapy entails. Students will be expected to become well versed in medical terminology and the "generic abilities" of professional practice.

PHYTH 411 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: HLTS C 320/320L, 321/321L, 330, 331, 403, 425, 457/458, 441, 442, PHYTH 421W, 422, 430, 431, 432, 447, 448, 464, 490, and successful completion of all elements of the Clinical Education Matriculation Examination.

PHYTH 421W PT Seminar I 1 cr This course will be devoted to clinically-related discussions with special emphasis on state practice acts, delegation to and supervision of support personnel, and ethical practice. An introduction to documentation is also presented. Students are required to write several papers for this course.

PHYTH 422 PT Seminar II 1 cr This course is a clinically-related seminar with an emphasis on documentation and the acute care patient. Prerequisite: PHYTH 421W.

PHYTH 431 Evaluation Methods I 3 crs This course is designed as an introduction to basic evaluation and documentation techniques, which can be used with any patient diagnosis. It will draw heavily on previous classes, emphasis on anatomy and physiology. Topics to be included are the models of disablement, bony and soft tissue palpation, vital signs, reflex and sensation testing, basic balance and coordination testing, manual muscle testing, range of motion and goniometry, length and girth measurements, postural analysis. This course also addresses the special needs of the patient with HIV or an oncologic diagnosis. This includes, but is not limited to a general overview of the disease process and progression, influence of medical interventions on physical therapy treatment plans, confidentiality issues, dealing with concerns when working with the patient who is immune suppressed or terminally ill. Prerequisites: HLTS C 320/320L, 321/321L, 330 and 331.

PHYTH 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: PHYTH 431.

PHYTH 447 PT Science I 4 crs An introduction to basic procedures in physical therapy common to all areas of practice. Emphasis will be placed on body mechanics, gait, functional activities, safety, basic manual techniques, wound care, and basic exercise programs. Prerequisites: HLTS C 320/320L, 321/321L, 330, 331.

PHYTH 448 PT Science II 4 crs This second course in the PT Science sequence will cover the theories and management of musculoskeletal dysfunction with an emphasis on upper quarter dysfunction. Prerequisite: PHYTH 447.

PHYTH 464 Special Topics in Geriatrics 2 crs This course will focus on the normal changes which occur with aging and how the physical therapist should modify their approach to examination, assessment, and program planning. Based on these changes, physical therapy issues will be discussed. This course will also discuss common pathological changes of aging such as osteoporosis, dementia and Type II diabetes will be addressed as well as current topics in geriatric care, including reimbursement and psycho-social concerns.
PHYTH 490 Grand Rounds I 0 cr
Invited clinicians, faculty and selected students will present a weekly case study to the physical therapy students. An interactive format is planned with the objective to enhance the students' clinical problem solving capabilities.

PHYTH 502 Wellness & Nutrition 1 cr
This introductory course provides basic information on the nutrition and disease management principles as they relate to the general patient population. General weight training, flexibility development, and cardiovascular improvement principles and techniques are covered in this course.

PHYTH 505 Exercise in Health & Disease 3 cr
An in-depth study of the body's physiological functions during exercise and its capacities within the context of disease prevention and rehabilitation. Pre-requisites HLTSC 330 and 331.

PHYTH 511 Clinical Education II 4 cr
This is an intermediate level clinical experience which will build on the skills attained in Clinical Education I. Prerequisites PHYTH 411, 502, 523, 533, 534, 549, 560, 561W, and 568.

PHYTH 514 Clinical Education IIIA 5 cr
During this final phase of clinical education, the students will complete their professional training and become members of the health care team. Prerequisites HLTSC 420/520, PHYTH 505, 511, 550, 551, 562W, 566, 567, 570, 575, 580, 590 and successful completion of all elements of the Clinical Education Maturation Examination II.

PHYTH 515 Clinical Education IIIB 5 cr
A continuation of clinical education at a different site from Clinical Education IIIA. Prerequisite PHYTH 514.

PHYTH 523 PT Seminar III 1 cr
Through a variety of speakers, this course addresses issues that may impact upon the delivery of services, including psychosocial, legal and ethical issues. Prerequisite PHYTH 422.

PHYTH 533 Evaluation Methods III 3 cr
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 PHYTH 432.

PHYTH 534 Evaluation Methods IV 3 cr
This course is an introduction to Neuro rehabilitation. It emphasizes evaluation of the neuromuscular systems, including standardized assessments and outcome measures. Analysis of movement dysfunction and normal and abnormal systems will be evaluated. Co-requisite PHYTH 533.

PHYTH 549 PT Science III 3 cr
The third course in the PT Science sequence will cover the theories and management of movement dysfunction in the lower quarter. Prerequisite PHYTH 448.

PHYTH 550 PT Science IV 4 cr
This course serves as a continuation of neurologic rehabilitation introduced in Evaluation IV. The focus is on developing treatment rationale and plans. The student will have the opportunity to develop treatment skillearn laboratory and clinical settings. Prerequisites HLTSC 403, PHYTH 534, 549, 568.

PHYTH 551 Special Topics in Clinical Neuroscience 4 cr
This course will provide the students with an in-depth understanding of pathophysiology, clinical signs and symptoms, and treatment of common neurologic disorders. Prerequisites PHYTH 534, 550.

PHYTH 560 Grand Rounds II 0 cr
Invited clinicians, faculty and selected students will present a weekly case study to the physical therapy students. An interactive format is planned with the objective to enhance the students' clinical problem solving capabilities.

PHYTH 562W Research Project 2 cr
This course examines the process by which research is performed and analyzed. Research designs and the statistics used to analyze them are presented using actual examples from published research. Prerequisite HLTSC 430.

PHYTH 566 PT Management 3 cr
A thorough examination of the position of Manager of Physical Therapy Service/Department will be undertaken.

PHYTH 567 Patient & Consumer Health Education & Consultation 2 cr
This course 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.

PHYTH 568 Therapeutic Considerations in Development 3 cr
This course will cover the theories of motor control, motor development, and motor learning. It will also provide the student with knowledge of issues during early development. Different pediatric topics will be addressed including special examination and intervention considerations for special diagnoses.

PHYTH 570 Ergonomics & Environmental Considerations 3 cr
This course is designed to study the environmental barriers that are impediments to normal function in the home and workplace. Prerequisites HLTSC 437/438.

PHYTH 575 Orthotics & Prosthetics 3 cr
This course will provide students with an in-depth understanding of normal and pathologic gait, limb prosthetics and orthoses, the preprosthetic and preorthotic phases of rehabilitation for people with amputations, and the use of orthoses in rehabilitation. Prerequisite HLTSC 437/438.

PHYTH 580 Practice in the Modern Health Care Environment 2 cr
This course will serve as a capstone course for physical therapy students. Integration of previously learned concepts will be applied to complex clinical situations. In addition, a current review of practice, reimbursement, and regulations will be analyzed in detail. Prerequisite PHYTH 550.

PHYS 400W Introduction to the PA Profession 1 cr
The history, role, practice scope and professional and personal development of the physician assistant can be explored in lectures, literature and group discussion.

PHYS 401/402/520 Clinical Medicine I/II/III 3 crs (each)
Fundamental principles of disease, diagnosis, intervention and management are discussed (includes case-based laboratory).

PHYS 403 Clinical History Skills & Practice 2 crs
The skills of communication with the patient and documentation are explored in the context of the medical history.

PHYS 406 Clinical Lab Methods 3 crs
Indications, technique, and interpretation of a variety of common clinical lab tests are discussed.

PHYS 409 Clinical Pharmacology 4 crs
The mechanisms of actions of medications are discussed. Correlation with specific disease processes are covered.

PHYS 410/411 Applied Clinical Methods I/II 3 crs (each)
Cognitive understanding and technical performance of medical procedures are emphasized (includes laboratory).

PHYS 413/505/506 Clinical Seminar I/II/III 3 crs (each)
The integration of didactic sciences with patient problems is accomplished in case-based discussions.

PHYS 415 Basic Pathology 4 crs
Principles of basic pathology and the mechanisms of physiologic responses associated with selected human disease processes are discussed.

PHYS 418 Fundamentals of Pediatrics 3 crs
Childhood diseases are discussed in-depth, including diagnosis, treatment, and prognosis (includes case-based laboratory).

PHYS 419 General Medical Topics 2 crs
An in-depth introduction to medical issues is combined with discussion of related aspects including genetics, human sexuality, public health and epidemiology, and medical legal issues.

PHYS 420/421 History & Physical Examination I/II 3 crs (each)
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 (includes laboratory).

PHYS 515 Fundamentals of Surgery 3 crs
Lecture series addresses preoperative, perioperative and postoperative patient care and management (includes case-based laboratory).

PHYS 524 Patient Counseling and Education 1 cr
Emphasizes basic considerations and techniques needed for effective communication with patients regarding their health problems, with emphasis on enhancing patient compliance with medical therapy.

PHYS 529-536 Clinical Externships I-VIII 24 crs (total)
A coordinated series of supervised clinical externship assignments in a wide variety of clinical areas.

PHYS 541 Master's Research 3 crs
An independent research project is completed with ongoing faculty support and recommendations.
DEPARTMENT OF SPEECH-LANGUAGE PATHOLOGY (SLP)
Chair
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 persons 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 or helping 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 disorders.

COURSE DESCRIPTIONS FOR THE PROFESSIONAL PHASE

SLP 101 Introduction to Communication Science & Disorders 3 crs
This course offers a survey of the field of human communication disorders. Students will learn about normal and disordered communication across the life span.

SLP 205 Normal Speech & Language Development 3 crs
Students will learn about the stages of speech and language development in normal infants and children through participation in lectures and observation. Theories about semantic, syntactic, phonological, and pragmatic development will be reviewed. Course content will prepare students to differentiate normal from disordered communication development. Prerequisite SLP 101 or permission of the instructor.

SLP 250 Anatomy & Physiology of Speech & Hearing 4 crs
This course will examine the anatomy of those parts of the human body which are involved in speech and hearing. Anatomical structures will be studied with a physiological and clinical reference pertinent to communication and its disorders. Prerequisites BIOL 207/208, SLP 101, or permission of the instructor.

SLP 310 Speech Science 4 crs
This course reviews the characteristics of sound as a physical phenomenon and speech as one type of sound, considering its generation, transmission, and perception. The scientific study of speech sounds will include acoustic characteristics and perceptual features of specific sounds and the feedback systems used to monitor production of these sounds. Methodological procedures for studying speech, including instrumentation and research techniques, will also be presented. Prerequisites SLP 250 or permission of the instructor.

SLP 320 Phonetics 3 crs
In this course, students will learn to transcribe normal and disordered speech using the International Phonetic Alphabet (IPA). This skill-based course combines traditional lecture with multiple listening, production, and experiential activities. Students will learn the role of the transcription-based activities in the clinical management of clients of all ages. Prerequisite SLP 101 or permission of the instructor.

SLP 350 Introduction to Observation & Clinical Procedures 3 crs
This course will introduce students to various aspects of working with clinical populations through lecture and guided community-based clinical observations. Students will also be introduced to basic clinical procedures in preparation for their first clinical practicum. Upon completing this course, students will have completed at least 25 hours of clinical observation. Prerequisites SLP 101, 205, 310, and 320 or permission of the instructor.

SLP 400 Independent Study 1-6 crs
Individually directed study in a special area of speech-language pathology. Prerequisite Permission of the instructor.

SLP 410 Diagnostics 3 crs
This class will introduce principles of assessment for a wide variety of communication disorders encountered in clinical practice. Students will develop a knowledge of norms and standardized testing techniques, interviewing and chart review procedures, informal diagnostic tools and techniques, as well as methods for interpreting and summarizing results. Case studies will be used to illustrate key concepts.

SLP 425 Voice Disorders 3 crs
This course includes the study of the processes and systems of normal voice production. Incidence, etiologies, and symptoms of voice disorders across the life span including organic, behavioral, and psychogenic disorders will be discussed. Instrumental and non-instrumental techniques for assessment of voice disorders and medical and non-medical management techniques for voice disorders will be reviewed.

SLP 435 Language Disorders 1 3 crs
This course will introduce students to knowledge about language disorders affecting children, with an emphasis on differential diagnosis, assessment, and treatment. By the end of this course, students will have experience in working with various language samples, will demonstrate competence in selecting and justifying treatment goals and procedures, and will engage in multiple clinical problem-solving activities.

SLP 445 Introduction to Audiology 3 crs
This course will introduce students to clinical audiology theories of hearing, hearing impairment, and clinic methods for the screening and measurement of hearing. Students will learn to use audiometric procedures for screening and measurement of hearing as well as to demonstrate competence in selecting and justifying treatment goals and procedures.

SLP 450W Research in Speech-Language Pathology 3 crs
The purpose of this course is to stimulate an appreciation for and an interest in basic and clinical research in speech-language pathology, and to develop skills that students will need to become voice consumers and potential producers of research. Students will have an opportunity to both examine and critique existing research literature and to participate in the research process. This is a departmental writing intensive course.

SLP 455 Fluency Disorders 3 crs
This course will introduce students to stuttering and other disorders of fluency in children, adolescents, and adults. By the end of this course, students will have practical experience in the analysis of stuttering, will demonstrate competence in selecting and justifying treatment goals and procedures, and will have engaged in multiple clinical problem-solving activities.

SLP 460 Speech-Language Pathology in the Medical Setting 4 crs
This course will introduce students to principles and procedures in the clinical management of a variety of communication disorders encountered in the medical setting. Issues specific to the pediatric patient, the geriatric patient, and the complex medical patient will be addressed.

SLP 500 Independent Study 1-6 crs
Individually directed study in a special area of speech-language pathology. Prerequisite Permission of the instructor.

SLP 505 Articulation & Phonology 3 crs
The purpose of this course is to provide students with fundamental knowledge of a) normal and disordered patterns of phonological development, b) methods of analyzing phonological data, and c) assessment and treatment of articulation and phonological disorders in children. By the end of the course, students will have practical experience in the organization and interpretation of complex speech data, will be competent in the administration of articulation assessment instruments, and will present treatment goals and procedures, and will perform case studies in the clinical problem-solving activities.

SLP 520 Aural Rehabilitation 3 crs
This course will discuss the effects of hearing impairment on speech and language in children and adults. Theoretical and methodological issues in the habilitation, rehabilitation, and counseling of hearing impaired individuals will be discussed. Prerequisite SLP 445.

SLP 525 Motor Speech Disorders 3 crs
This course focuses on motor speech disorders in adulthood. Neuroanatomical and neurophysiological mechanisms underlying motor speech disorders will be addressed. Students will demonstrate knowledge and understanding of diagnosis, and treatment of motor speech disorders.

SLP 530 Aphasia 3 crs
This course will review the neurophysiology and clinical management of communication disorders that result from damage to the language-dominant hemisphere of the brain. Students will learn about the theoretical approaches to the study of aphasia. They will also learn to differentially diagnose and describe aspects of the aphasia syndrome.

SCHOOL OF HEALTH SCIENCES
the acute and long-term management of these disorders will be addressed. Prerequisites SLP 530 or permission of the instructor.

SLP 536 Language Disorders II 3 crs

This course expands the foundational information presented in Language Disorders I. Additional topics in this course include language abnormalities, language and literacy, multicultural considerations in the assessment and treatment of language disorders, and language disorders in special populations. Prerequisites SLP 435

SLP 550 Dysphagia 3 crs

This course is designed to provide students with basic information about the anatomy and physiology of the normal swallowing mechanism as well as the characteristics and physiology of the abnormal swallow (dysphagia). Information about medical conditions associated with dysphagia will be presented. Students will learn to identify symptoms of abnormal swallowing and nutritional intake using observation and specialized evaluation procedures. They will also learn a variety of treatment approaches for dysphagia. Functional issues related to integrating dysphagia management into clinical practice will be discussed.

SLP 555 Alternative & Augmentative Communication 3 crs

This course will introduce students to the history of Augmentative and Alternative Communication (AAC), models of AAC intervention, assessment principles and procedures, components of augmentative communication strategies and technologies, language, symbolization, cognitive, and literacy issues, team approaches to assessment and intervention, and, interventions across the age and disability spectrum. Outcomes include measurement, funding, consumer rights, and service delivery issues will also be addressed. Students will be required to participate in technology lab activities.

SLP 556 Head, Neck & Craniofacial Disorders 3 crs

This course reviews a number of related clinical problems including cleft lip and palate, laryngeotmy, tracheotomy and ventilator dependency in medical speech pathology issues, methods, and philosophies related to teaching esophageal speech, TEPP voice, and use of mechanical instruments as means of providing voice to laryngectomized individuals. Students will be required to participate in technology lab activities. Also discussed are issues related to the use of tracheotomy tubes and tracheotomy speaking devices for patients who may be ventilator dependent. Principles and methods of assessment and treatment within an interdisciplinary rehabilitation framework will be reviewed. Prerequisite SLP 425 or permission of the instructor.

SLP 557 Advanced Clinic Instrumentation 3 crs

This course will review how to conduct instrumental testing of speech production and how to understand and utilize the data collected. The course will include an introduction to fundamentals of electronics and test instrumentation including instrumentation specific to speech and hearing science. Labs will introduce both computer and non-computer based systems.

SLP 558 Multicultural Issues in Speech-Language Pathology 3 crs

This course will include a review of the major cultural groups in the United States with particular reference to factors that have an impact on the assessment and treatment of communication disorders. It will also address the role of culture on specific communication disorders, and how diagnostic and treatment protocols may need to differ when providing clinical service to cultural groups different from one’s own.

SLP 560 Gerontology in Communication 3 crs

This course will address the effects of normal and abnormal aging on communication abilities. Students will gain an understanding of the aging process as a complex interplay of social, psychological, and physiological factors. Basic concepts, theoretical perspectives, current research, and clinical applications will be introduced through lectures, films, group activities, and presentations from community service providers.

Clinical Seminars

SLP 470 Clinical Seminar I 1 cr
SLP 471 Clinical Seminar II 1 cr

These seminars will present a range of topics specific to the student’s area of specialization. The topics will focus on the procedural management of communication disorders.

Speech-Language Pathology Seminars

SLP 573 Speech-Language Pathology Seminar I 1 cr
SLP 574 Speech-Language Pathology Seminar II 1 cr
SLP 575 Speech-Language Pathology Seminar III 1 cr

These seminars will focus on a wide variety of professional content including the management of disorders not addressed in traditional courses.

Clinic Series

SLP 440 Clinic I 1 cr Prerequisite Documentation of 25 hours of clinical observation.
SLP 441 Clinic II 2 crs Prerequisites SLP 440
SLP 542 Clinic III 2 crs Prerequisites SLP 441
SLP 543 Clinic IV 5 crs Prerequisites SLP 542
SLP 544 Clinic V 5 crs Prerequisites SLP 543
SLP 545 Clinic VI 3 crs Prerequisites SLP 544

This clinic series offers the student a broad scope of clinical practicum experiences. At least the first five hours of clinic practicum experience will be gained under the direct supervision of Duquesne University faculty. Principals and methods of assessment and treatment within an interdisciplinary rehabilitation framework will be reviewed. Prerequisite SLP 425 or permission of the instructor.

SLP 700 Thesis 1-3 crs

Students may choose to engage in thesis based research.

SCHOOL OF HEALTH SCIENCES

RESERVE OFFICERS’ TRAINING CORPS (ROTC)

Army Reserve Officers’ Training Corps (ROTC)

DEPARTMENT OF MILITARY SCIENCE

The Army Reserve Officers’ Training Corps (ROTC) program supporting Duquesne University is located at the University of Pittsburgh. It exists to train the future officer leadership of the United States Army and offers opportunities and challenges that can put college students on the fast track to success in life. ROTC provides a combination of academics and important hands-on training, in addition to physical and mental challenges that will help students succeed in college and beyond. Through the training in ROTC, students will develop the confidence, self-esteem, motivation and leadership skills they will need regardless of their career plans.

THE FOUR-YEAR PROGRAM

The traditional Four-Year Program is divided into two parts: The Basic Course is taken in the freshmen and sophomore years. There is no commitment for non-scholarship students at this level. Upon successful completion of the Basic Course, students are eligible for the Advanced Course, taken in the junior and senior years. At the beginning of the Advanced Course, students must decide whether or not they wish to become officers in the Army and enter into a formal contract. During the summer between the junior and senior years, students are required to attend Advanced Camp. Upon successful completion of a University degree and the Army ROTC program, students are commissioned into the United States Army as a Second Lieutenant.

THE TWO-YEAR PROGRAM

If the first two years of ROTC are not taken, students can attend Camp Challenge during the summer between the sophomore and junior year. This camp will qualify students to begin the Advanced Course in their junior year or in the first year of a two-year graduate program. Or, if a student has served in the active duty military, attended a military academy for one year, or participated in JROTC for three years or belong to a National Guard or Army Reserve unit, they already qualify for entrance into the Advanced Course.

ARMY ROTC SCHOLARSHIPS

Army ROTC offers four, three and two-year scholarships of up to $16,000 per year with additional annual allowances of $450 for books and $1,500 for spending. At Duquesne, this scholarship is increased with up to a $5,000 bonus for room and board if academic standards are met. High school, undergraduate and incoming two-year graduate students are eligible to apply. For application information call ROTC, at the University of Pittsburgh at (412) 624-6197/6198/6199 or visit our web page at www.cm.edu/rotc/armyrotc.

THE ARMY ROTC NURSE PROGRAM

Nursing students may take Army ROTC along with their other studies and begin their professional careers as officers in the Army Nurse Corps. Nursing students are exposed to the professionalism of Army Nursing through a special Nurse Summer Training Program.

THE SIMULTANEOUS MEMBERSHIP PROGRAM (SMP)

This program allows students to become members of the Army National Guard or the Army Reserves while enrolled in Army ROTC. Students in the Advanced Course who are SMP are paid for their Guard/Reserve training plus a $1,500 allowance each year from ROTC. The benefits of this program is that students in the Advanced Course are able to act as Army officers in their National Guard or Reserve unit, receiving valuable leadership experience.

SUMMER PROGRAMS

Include Advanced Camp, Camp Challenge, Nurse Summer Training Program (NSTP) and Army Adventure Training.

EXTRACURRICULAR ACTIVITIES

Include Rangers, Scabbard & Blade, Rho Tau Chi, and Color Guard.
Air Force Reserve Officers Training Corps (AFROTC)

DEPARTMENT OF AEROSPACE STUDIES
The Air Force ROTC program is administered by the Department of Aerospace Studies at the University of Pittsburgh. This program is available to undergraduate and graduate students by cross-enrollment through agreement with the University of Pittsburgh. Completion of the four-year or two-year AFROTC program leads to a commission as a Second Lieutenant in the US Air Force. AFROTC courses are open to all students, regardless of whether they are enrolled in a commissioning program.

In the four-year commissioning program, a student takes the general military course (GMC) during the freshman and sophomore years, attends a four-week summer training program, and then takes the professional officer course (POC) in the junior and senior years. In the two-year commissioning program, a student begins by attending a five-week summer training program prior to his or her junior year and then enters the POC or accepting an Air Force Scholarship. In addition to the academic portion of the curriculum, each student attends a one-hour leadership and management techniques course each week. This lab utilizes a student organization designed for the practice of leadership and management techniques. Two to three and a half-year scholarships are available on a competitive basis to qualified students. Many AFROTC scholarships may cover all costs of tuition, incidental and lab fees, books, plus pay each recipient $200 per month.

GENERAL MILITARY COURSE (GMC)
The subject matter for the freshman and sophomore years is developed from a historical perspective and focuses on the scope, structure, and history of military power with emphasis on the development of air power. The freshman courses explore the role of U.S. military forces, and the Air Force in particular, through a study of the total force structure, strategic offensive and defensive forces, general-purpose forces, and support forces. The sophomore courses include an introduction to the history of air power with emphasis on the development of concepts and doctrine governing the employment of U.S. air power.

PROFESSIONAL OFFICER COURSE (POC)
The Professional Officer course, taken during the cadet's junior and senior years, concentrates on three main themes: the concepts and practices of management, leadership, and national defense policy. During the first term of the junior year, the course concentrates on a study of the management functions of planning, organizing, coordinating, directing, and controlling. Basic and advanced management techniques, as found in the military and industrial environment, are explored. The second term deals with the application of general concepts of leadership to Air Force situations. As a basic study of human behavior, human relationships, and professional ethics, the course emphasizes the similarities between the problems encountered in the military and civilian environment. The first term of the senior year concentrates on selected elements of the U.S. government and national security processes engaged in producing national strategy as well as various elements of U.S. military forces, doctrine, and employment capabilities. During the second term, the course concentrates on the strategic options available to the U.S. and on the manner in which policy choices are made. The course also includes a review of the military justice system.

For details about the two programs as well as information on the courses, scholarship, and flying programs, interested students are encouraged to contact the Air Force ROTC detachment at (412) 624-6396, or contact the Professor of Aerospace Studies, Air Force ROTC, University of Pittsburgh, 2925 Cathedral of Learning, Pittsburgh, PA 15260-0001. Alternatively, see our website at www.rotc.pitt.edu.

Naval Reserve Officers’ Training Corps (NROTC)

DEPARTMENT OF NAVAL SCIENCE
Colonel Wayne A. Clemmer, USMC
Office 415 Forbes Ave
Phone (412) 268-5109

The Department of Naval Science was established on December 16, 1987. Carnegie Mellon’s Naval Reserve Officers Training Corps (NROTC) is designed for young men and women who are seeking a challenging academic experience and who desire to serve their country as officers in the Navy or Marine Corps after graduation.

NROTC midshipmen lead the same campus life as other Carnegie Mellon students. They make their own arrangements for room and board, choose a preferred area of study and participate in extracurricular activities. Midshipmen wear civilian clothes to classes but wear uniforms for a day of the week. NROTC students are active in all facets of university life. Many are in positions of leadership in student government, on varsity and intramural sports teams, in campus clubs, and other student organizations. The NROTC program seeks students who are bright, ambitious, enthusiastic leaders whose lives are enriched by their education at Carnegie Mellon and by their involvement in NROTC.

FOUR-YEAR SCHOLARSHIP PROGRAM
The four-year scholarship program provides full tuition, fees, textbooks, uniforms, and a $200 per month tax-free subsistence allowance to students selected through nationwide competition. Midshipmen must complete the university-approved curriculum of their choice, including courses in calculus and calculus-based physics, and specified courses in naval science subjects. Paid summer training periods are also provided. Scholarships are awarded on the basis of a nationwide competition before the start of the freshman year. A limited number of scholarships may be awarded by the NROTC unit on campus. Midshipmen commissioned through the scholarship programs become officers in the Navy or Marine Corps and incur a four-year active duty obligation in a selected area of the naval service.

THREE-YEAR SCHOLARSHIPS
Three-year scholarships are available on a competitive basis to those qualifying college program (non-scholarship) NROTC students who have demonstrated leadership and academic excellence during their freshman year and are nominated for the scholarship by the Professor of Naval Science. Active duty obligation is four years upon commissioning.

TWO-YEAR SCHOLARSHIP PROGRAM
The two-year scholarship program provides the same benefits as the four-year program for a period of 20 months. Students must apply for this program no later than the beginning of their junior year. Students selected for this program attend the Naval Science Institute during the summer before their junior year to complete required naval science course material. A paid summer training period is provided between the junior and senior years. Commissioning in a four-year active duty obligation upon graduation.

COLLEGE (NON-SCHOLARSHIP) PROGRAMS IN NROTC
Qualified students may participate in NROTC as college program (non-scholarship) midshipmen and earn commissions in the Navy or Marine Corps. After graduation, the active duty obligation for the college program is four years or two years. Students receive all naval science textbooks, uniforms, and during their junior and senior years a tax-free subsistence allowance of $200 per month. A paid summer training period is provided between the junior and senior years. College program students may also compete for a limited number of merit scholarships.

CURRICULUM
The sequence of Naval Science courses is the same for all officer candidates for the first two years. Upon graduation, the active duty obligation for the college program is four years or two years. Students receive all naval science textbooks, uniforms, and during their junior and senior years a tax-free subsistence allowance of $200 per month. A paid summer training period is provided between the junior and senior years. College program students may also compete for a limited number of merit scholarships.

Descriptions of the course requirements for each candidate classification (scholarship/college program) may be obtained from the Department of Naval Science office.

All scholarship and college program students are required to attend a weekly two-hour Naval Laboratory (32-100) where military drill, physical fitness, and leadership are emphasized.

Naval Science courses are open to all students. Since these are required courses for NROTC students, they will be given priority in enrollment. Remaining spaces will be filled through the normal university registration process.
School of Leadership and Professional Advancement

**SUMMARY STATEMENT OF PHILOSOPHY**

Credit Programs

The School of Leadership and Professional Advancement (412-396-3034) addresses the needs of adult learners. Through the School, adult students have access to undergraduate courses offered within the University on Saturdays, online or in the evening. Entry requirements are that the individual be twenty-one (21) years of age or older and have a high school diploma or GED equivalency. The student population of the School includes working adults and other non-traditional students whose preference is to pursue a degree through day, evening, weekend or online study, on either a full or part-time basis.

Professional Development Programs

With the Professional Development Programs, the School of Leadership and Professional Advancement is committed to education for the changing workplace. A wide range of courses, workshops, certificate programs and seminars is offered to provide participants with the skills, knowledge, and techniques they need to develop in order to meet the demands of the changing world of work.

**CREDIT PROGRAMS**

I. Saturday Undergraduate Degrees

Adult students have the opportunity to earn a degree by attending classes only on Saturday. Five eight-week terms comprise the accelerated academic calendar. Students earn a Bachelor of Science in Professional Studies or a Bachelor of Science in Business Administration.

The School of Leadership and Professional Advancement recognizes that students enrolled on weekends demand the same intellectual integrity in their academic programs as those attending the University in a more traditional manner. Hence, the baccalaureate curricula on Saturday 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. It is a rigorous program with a competitive and high admissions standard. Students are considered for admission according to one of the following sets of criteria:

a) Applicants with prior college course work must have a cumulative GPA of 2.5 for full admission. Prospective admission is possible for students with a cumulative GPA less than 2.5, based upon the quality of the overall application.

b) Applicants with no prior college course work must take a series of placement tests to document the skills necessary for college level work. Results of the placement tests determine whether remediation at the community college level is necessary prior to entering the program.

Due to the challenging nature of this unique, accelerated degree program, all applicants are required to have a personal interview.

A) Bachelor of Science in Professional Studies Degree (4 Concentrations)

Students earn a Bachelor of Science in Professional Studies (BSPS) Professional Studies is the term that describes the four (4) interdisciplinary concentration areas: Professional Communication, Organizational Leadership, Organizational Behavior, or Computer Technology. A minimum of 120 total credits is required to complete this degree. Components of the degree are as follows:

**Concentration Areas - 36 Total Credits**

Four (4) areas of interdisciplinary study, called a Concentration, comprise the backbone of the BSPS. Students are required to select two (2) of the concentration areas, from Organizational Leadership, Professional Communication, Organizational Behavior, or Computer Technology.

**Concentration Area I - Organizational Leadership - 18 Total Credits**

**Concentration Area II - Professional Communication - 18 Total Credits**

**Concentration Area III**

Organizational Behavior - 18 Total Credits

**Concentration Area IV**

Computer Technology - 18 Total Credits

**Electives - 27 Total Credits**

Electives provide a balance to the required course work. Through the electives, the student achieves the well-rounded quality education which is the hallmark of a Duquesne University degree.
D) Bachelor of Science in Business Administration—Accounting Degree

A Bachelor of Science in Business Administration with an Accounting Concentration is available on Saturdays. Please refer to the School of Business section of this catalog for a complete degree description. In addition to the listed curriculum, the Adult Transition Seminar is required for the Saturday degree.

II) The Master of Arts in Leadership and Liberal Studies (Saturday and Online)

Duquesne University’s Graduate School of Liberal Arts has partnered with the School of Leadership and Professional Advancement to create the innovative and exciting program for individuals who wish to be or become effective leaders. Rooted in the liberal arts, the Master of Arts in Leadership and Liberal Studies (MLLS) emphasizes the importance of integrity and social responsibility in leaders. This approach to leadership education focuses on the dimensions of human behavior and human nature as illuminated by some of the great thinkers of the past and present. The MLLS program also emphasizes the self-assessment and development of skills that are crucial to the leader’s role, as well as an examination of the world in which today’s leaders will function.

This award-winning program is designed for busy adults who wish to earn their master’s degree without interrupting their careers. Courses are offered on alternate Saturdays in the morning and afternoon, or completely online. Students who take two courses per semester in the Fall, Spring and Summer semesters can complete their master’s degree in two years.

Thirty-six (36) credits are required to earn a Master of Arts in Leadership and Liberal Studies. The curriculum has three components.

Liberal Studies Core — 12 Total Credits

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>701</td>
<td>Leadership and Liberal Studies</td>
<td>3 Cr</td>
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<tr>
<td>702</td>
<td>The Humanistic Perspective</td>
<td>3 Cr</td>
</tr>
<tr>
<td>703</td>
<td>Leadership and Liberal Studies</td>
<td>3 Cr</td>
</tr>
<tr>
<td>704</td>
<td>Social, Political &amp; Economic Issues</td>
<td>3 Cr</td>
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<tr>
<td>705</td>
<td>Leadership and Liberal Studies</td>
<td>3 Cr</td>
</tr>
<tr>
<td>706</td>
<td>The Ethical and Spiritual Dimensions</td>
<td>3 Cr</td>
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<tr>
<td>707</td>
<td>Leadership and Liberal Studies Colloquium</td>
<td>3 Cr</td>
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Leadership Core Curriculum — 15 Total Credits

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<tr>
<td>710</td>
<td>Introduction to the Graduate Study of Leadership (required)</td>
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<td>711</td>
<td>Organizational Communication</td>
<td>3 Cr</td>
</tr>
<tr>
<td>712</td>
<td>Decision Making and Problem Solving for Leaders</td>
<td>3 Cr</td>
</tr>
<tr>
<td>714</td>
<td>Conflict Resolution</td>
<td>3 Cr</td>
</tr>
<tr>
<td>715</td>
<td>Valuing a Diverse Workforce</td>
<td>3 Cr</td>
</tr>
<tr>
<td>716</td>
<td>Public Policy and Legal Issues for Leaders</td>
<td>3 Cr</td>
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Electives - 9 Total Credits

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<tr>
<th>Course</th>
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<tr>
<td>731</td>
<td>Science, Technology and Society</td>
<td>3 Cr</td>
</tr>
<tr>
<td>732</td>
<td>The Shaping of the Contemporary World</td>
<td>3 Cr</td>
</tr>
<tr>
<td>733</td>
<td>Economics and the Modern World</td>
<td>3 Cr</td>
</tr>
<tr>
<td>734</td>
<td>Comparative Political Systems</td>
<td>3 Cr</td>
</tr>
<tr>
<td>735</td>
<td>Human and Financial Resources</td>
<td>3 Cr</td>
</tr>
<tr>
<td>736</td>
<td>Information Technology for Modern Organizations</td>
<td>3 Cr</td>
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III) Evening Bachelors’ Degrees

Several Bachelor's degrees are available in a convenient evening format. Options include a Bachelor of Science in Business Administration with concentrations in Accounting, Management, Marketing, or a Bachelor of Arts in Psychology. See the School of Business or Liberal Arts portions of this catalog for more details or call (412) 396-5600. A Bachelor of Science in Professional Studies is also available. Please see curriculum below.

The Bachelor of Science in Professional Studies Degree

Adult students are provided the opportunity to customize plans of study to meet personal and professional goals by pursuing their BPS in an evening format. The degree provides a strong foundation in both business and the liberal arts. Students can individually design two major areas of study, designated as concentrations. Concentrations are designed in conjunction with an academic advisor and are available in a wide range of liberal arts and/or business subjects.

A minimum of 120 total credits is required to complete degree requirements, which are listed below.

University Core Curriculum — 30 Total Credits

The University Core Curriculum for the evening BPS is the same as that for the BPS in Saturday format, outlined above on page 178.

Concentrations — 30-48 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, two-thirds of which must be above the 300 course level.

Duquesne University's Professional Certificate Program provides examples of integrated, professional oriented course work that may be modeled as concentrations.

Students must complete 60 credits, including all required freshman and sophomore business courses, prior to enrolling for 300 or 400 level business courses. A maximum of 12 credits from the School of Business may be applied to concentrations or electives.

Electives — 18-36 Total Credits

Electives provide the opportunity for students to select courses based on their areas of interest. Consultation with an academic advisor is recommended to fully benefit from the wide variety of electives available.

IV) Professional Certificate Programs

Professional certificates are designed for individuals interested in learning about a focused area of professional knowledge. Certificates are available in evening, Saturday and online formats. Professional Certificates include between five and nine (5-9) 3-credit courses. Candidates for the professional certificates usually have an Associate's or Bachelor's degree and typically enroll in a certificate program in order to enter a new profession or to advance in their current careers.

Some of these certificate programs have prerequisites. Please call (412) 396-5600 for a complete catalog with all prerequisites and course work specifics.

Professional certificates are available in the following areas:

- **Accounting Certificate**: This certificate is a nine-course, 27-credit program.
- **Banking and Financial Services Certificate**: This certificate is a 12-course, 36-credit program.
- **Business Ethics Certificate**: This certificate is a six-course, 18-credit program.
- **Entrepreneurship Certificate**: This certificate is a nine-course, 27-credit program.
- **International Business Certificate**: This certificate is a nine-course, 27-credit program.
- **Management Information Systems Certificate**: This certificate is a 12-course, 36-credit program.
- **Marketing Certificate**: This certificate is a six-course, 18-credit program.
- **Organizational Leadership Certificate**: This certificate is a nine-course, 27-credit program.
- **Project Management Certificate**: This certificate is a nine-course, 27-credit program.
- **Sports Management Certificate**: This certificate is a nine-course, 27-credit program.
- **Supply Chain Management Certificate**: This certificate is a nine-course, 27-credit program.

Multimedia Technology

Earning the Certificate in Multimedia Technology requires that you complete the four foundation courses and one additional multimedia tools course for a total of 15 credits. You may also register for these courses in a non-credit capacity. This certificate is available at the undergraduate and graduate level.

For more information, please call (412) 396-5600.

Information Technology

This certificate is an eight-course, 24-credit program of the following courses:

- **Computer Programming C++**: 3 credits
- **Information Systems I**: 3 credits
- **Information Systems II**: 3 credits
- **Programming for Information Processing**: 3 credits
- **Database Systems**: 3 credits
- **Networking**: 3 credits
- **Operating Systems**: 3 credits
- **Web Development**: 3 credits

For more information, please call (412) 396-5600.
Information Technology (cont)

385 Computer Systems
386 Systems Analysis and Design
387 Database Management
388 MIS Project
389 Networks and Telecommunications

Marketing:
This certificate consists of seven undergraduate courses that comprise a focused area of professional knowledge. All courses are taught by faculty through the AACSB accredited School of Business Administration. Required Courses

371 Introduction to Marketing 3 Cr
373 Sales Administration 3 Cr
375 Business Logistics 3 Cr
377 Consumer Behavior 3 Cr
378 Strategic Marketing Planning 3 Cr

V) Online
The School offers a Master of Arts in Leadership and Liberal Studies entirely online. Please see section II above for complete details. Some undergraduate courses are also available online. Please call (412) 396-5600 for more information.

PROFESSIONAL DEVELOPMENT PROGRAMS

The Paralegal Institute
A paralegal is a trained professional who works under the direction of an attorney. With the changing needs of the legal profession, it is one of the nation’s fastest growing professions in America today. Paralegals are employed in public law firms, banks, corporations, public service organizations, and in state and federal government. A paralegal’s job responsibilities include client and witness interviews, legal research, drafting correspondence, pleadings and other legal documents, conducting and analyzing data, preparing and reviewing legal briefs, and rendering direct assistance to lawyers, clients, and the courts.

In response to the demand for highly trained, well qualified paralegals, the School of Leadership and Professional Advancement at Duquesne University prepares professionals for career opportunities. The Institute is the only program in the Pittsburgh area with the American Bar Association approval. A certificate in Paralegal Studies is awarded upon successful completion of nine courses. These include five core courses: Introduction to the Legal System and Paralegalism, Legal Research, Legal Writing and Case Analysis, Computer Assisted Legal Research and Professional Responsibility, and Paralegal Practice. Students then may choose an area of specialization in corporate law, civil litigation or employee benefit plans.

Center for Leadership Development
The Center for Leadership Development provides customized consulting and professional development through innovative and accessible delivery systems with a fundamental commitment to client success. For more information about the Center, please call (412) 396-1643.

Exam Preparation Courses
GMAT, GRE and LSAT review courses are offered for individuals interested in preparing to sit for examinations required for graduate school admittance. Each preparation course will enable you to take the selected exam with confidence and skill. Learn how to approach and analyze complex questions and discover the most effective ways to use your test time — identify and strengthen your weak areas.

Instructors are professional local University faculty. Please call (412) 396-1643 for more information and a schedule of upcoming courses.

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Ph.D., University of Arizona
Major Routes to the Duquesne Campus

Duquesne University is easily accessible by plane, bus, rail or car. The campus is a 10-minute walk from downtown, where both Greyhound and Trailways bus and Amtrak train stations are located. If you are arriving by plane, the Pittsburgh International Airport is located only 30 minutes from downtown Pittsburgh via bus, cab, rental car or limousine. For those arriving by car, major interstate and state routes lead to Duquesne from all points north, south, east and west. Interstate 79 runs north and south of the campus where it intersects with I-279. From the east, the Pennsylvania Turnpike and state routes 22 and 30 intersect with 376. Both I-279 and 376 lead to downtown Pittsburgh.