VILLANOVA UNIVERSITY CATALOG

UNDERGRADUATE STUDIES 2004-2005

While this catalog was prepared on the basis of the best information available at the time of publication, all information, including statements of fees, course offerings, admissions, and graduation requirements, is subject to change without notice or obligation. Please consult the electronic catalog at www.catalog.villanova.edu for more recent information.

Note to Users: Because Villanova University makes frequent changes in its individual course offerings, we have not included the course descriptions in this version of the *Catalog*. An up-to-date listing of courses and course descriptions is available on-line at www.catalog.villanova.edu. Villanova University also publishes an expanded version of this *Catalog* that includes the course descriptions. To obtain a copy of the expanded version, contact the Admissions Office.

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VILLANOVA UNIVERSITY
June 1, 2003
An Equal Opportunity Educational Institution

General Information

The University campus is situated in Villanova, Pennsylvania, on Lancaster Pike (U.S. Route 30) six miles west of City Line Avenue in Philadelphia, Pennsylvania. The post office address is 800 Lancaster Avenue, Villanova, Pennsylvania 19085-1699. University offices are open Monday through Friday from 9 a.m. to 5 p.m. The telephone number is (610) 519-4500. The World-Wide Web address is www.villanova.edu.

Prospective students may obtain additional information by writing to the Director of Admissions, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085-1699.

Villanova University is an affirmative action institution, and it is the continuing policy of Villanova not to discriminate against any person on the basis of race, color, sex, religion, national origin, age, veteran status, non-job-related disability or any other basis prohibited by law.

NOTE: In order that programs offered by Villanova University reflect current advances and additions to knowledge and upgraded professional requirements, Villanova University reserves the right to change programs and requirements without prior notice. Students generally are bound to the requirements in effect for, and published on the world wide web in which their class begins its first year of study. Students who enter in fall 2002 should check the world wide web catalog for changes. Special requirements may be in effect for students who have left the University and are being readmitted.

Students are advised to check with the web catalog or with their college offices regarding changes that may affect them. Additional academic information may be obtained from the various college offices.

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Academic Cal endar: 2003-2004

Fall Semester (2003)

Aug. 18-19 (M-T)	Walk-In Registration (Part-Time Studies)
Aug. 21-24 (Th-Sun)	New Student Orientation and Registration
Aug. 23 (Sat)	Sat. Classes Begin - Part-Time Studies
Aug. 25 (M)	Classes Begin - Full-Time Studies
Aug. 29 (F)	Last Day for dropping and/or adding classes and last day
	for requesting Satisfactory/Unsatisfactory
Sept. 1 (M)	Labor Day - No Classes
Sept. 4 (Th)	St. Thomas of Villanova Day*
Sept. 26-28 (Fri Eve-Sun)	Parent's Weekend
Oct. 10 (F)	Mid-Term
Oct. 13 (M)	Semester Recess
Oct. 20 (M)	Classes Resume
Oct. 22 (W)	Grades Due (Noon)
Oct. 24 (F)	Advising Begins
Oct. 31 (F)	Registration Begins
Nov. 12 (W)	Last Day for Authorized Withdrawal without Academic
	Penalty (WX)
Nov. 25 (T)	Thanksgiving Recess Begins after last class
Dec. 1 (M)	Classes Resume
Dec. 9 (T)	Friday Class Day- Follows a Friday Schedule for UG Day
	Classes Only
Dec. 11 (Th)	Final Day of Classes
Dec. 12 (F)	Reading Day
Dec.13-19 (Sat-F)	Final Examinations (No exams on Sunday)

^{*}class schedule to be announced at a later date; evening classes will be held.

Spring Semester (2004)

Jan. 8 (Th)	Walk-In Registration (Part-Time Studies)
Jan. 12 (M)	Classes Begin
Jan. 16 (F)	Last Day for dropping and/or adding classes and last day
	for requesting Satisfactory/Unsatisfactory
Jan. 19 (M)	Martin Luther King Day (No classes)
Feb. 27 (F)	Mid-Term
Mar. 1 (M)	Semester Recess
Mar. 8 (M)	Classes Resume
Mar. 10 (W)	Grades Due (Noon)
Mar. 12 (F)	Advising Begins
Mar. 19 (F)	Registration Begins
Mar. 31 (W)	Last Day for Authorized Withdrawal without Academic
	Penalty (WX)
Apr. 7 (W)	Easter Recess begins after last class
Apr. 13 (T)	Classes Resume
Apr. 27 (T)	A Friday Class Day - follows a Friday, Schedule for UG
	Day Classes Only
Apr. 28 (W)	A Monday Class Day - follows a Monday Schedule for
	UG Day Classes Only
Apr. 29 (Th)	Final Day of Classes
Apr. 30 (F)	Reading Day
May 1-8 (Sat-Sat)	Final Examinations (No exams on Sunday, May 2; May 8,
	Examinations for Saturday Classes only)
May 15-16 (Sat-Sun)	Baccalaureate and Commencement

Academic Cal endar: 2004-2005

Fall Semester (2004)

Aug. 18-19 (W-Th)	Walk-In Registration (Part-Time Studies)
Aug. 21-24 (Sat-T)	New Student Orientation and Registration
Aug. 25 (W)	Classes Begin
Aug. 31 (T)	Last Day for dropping and/or adding classes and last day
	for requesting Satisfactory/Unsatisfactory
Sept. 6 (M)	Labor Day - No Classes
Sept. 9 (Th)	St. Thomas of Villanova Day*
Oct. 8 (F)	Mid-Term
Oct. 11 (M)	Semester Recess
Oct. 18 (M)	Classes Resume
Oct. 20 (W)	Grades Due (Noon)
Oct. 22 (F)	Advising Begins
Oct. 29 (F)	Registration Begins for Spring 2005
Nov. 10 (W)	Last Day for Authorized Withdrawal without Academic
	Penalty (WX)
Nov. 23 (T)	Thanksgiving Recess Begins after last class
Nov. 29 (M)	Classes Resume
Dec. 13 (M)	Final Day of Classes
Dec. 14 (T)	Reading Day
Dec. 15-21 (W-T)	Final Examinations (No exams on Sunday, Dec. 19)

^{*}class schedule to be announced at a later date; evening classes will be held.

Spring Semester (2005)

Spring Semester (2005)	
Jan. 13 (Th)	Walk-In Registration (Part-Time Studies)
Jan. 17 (M)	Martin Luther King Day (no classes)
Jan. 18 (T)	Classes Begin
Jan. 21 (F)	Last Day for dropping and/or adding classes and last day
	for requesting Satisfactory/Unsatisfactory
Mar. 4 (F)	Mid-Term
Mar. 7 (M)	Semester Recess
Mar. 14 (M)	Classes Resume
Mar. 16 (W)	Grades Due (Noon)
Mar. 18 (F)	Advising Begins
Mar. 23 (W)	Easter Recess begins after last class
Mar. 29 (T)	Classes Resume
Mar. 30 (W)	Registration Begins for Fall 2005
April 8 (F)	Last Day for Authorized Withdrawal without Academic
	Penalty (WX)
May 3 (T)	A Friday Class Day – follows a Fri. Class
	Schedule for UG Day Classes Only.
May 4 (W)	A Monday Class Day – follows a Mon. Class Schedule for
	UG Day Classes Only.
May 5 (Th)	Final Day of Classes
May 6 (F)	Reading Day
May 7-13 (Sat-F)	Final Examinations (No exams on Sunday, May 8)
May 21-22 (Sat-Sun)	Baccalaureate and Commencement

Background

For a century and a half, Villanova has been directed by the Order of St. Augustine, known as the Augustinians (http://heritage.villanova.edu/), one of the oldest religious teaching orders of the Catholic Church. The first American foundation of the order within the present limits of the United States was established in 1796 at old St. Augustine's Church in Philadelphia. Villanova University traces its lineage from this foundation and from St. Augustine's Academy, which was opened there in 1811.

In January 1842, the Augustinians resident at St. Augustine's took possession of Belle Air, the country estate of the Revolutionary officer and merchant John Rudolph. In accordance with the old Catholic custom, the new foundation was placed under the patronage of a saintly hero of the past. For their patron the Augustinians chose, St. Thomas of Villanova, a 16th century Spanish Bishop who was a distinguished Augustinian writer and educator. The school soon became known as Villanova and gave its name to the surrounding countryside.

Classes were opened in the old mansion house at Belle Air during the fall of 1843. On March 10, 1848, the Governor of Pennsylvania, Francis R. Shunk, signed the Act of the Legislature incorporating The Augustinian College of Villanova in the State of Pennsylvania and conferring on Villanova College the right to grant degrees in the Arts and Sciences.

The Liberal Arts College took its first step toward university status in 1905 with the establishment of what is now called the College of Engineering. The Science unit, inaugurated in 1915, is now an integral part of the present College of Liberal Arts and Sciences. In 1918, what is presently known as the Part-Time Studies Division came into being. The College of Commerce and Finance was founded in 1922, the College of Nursing in 1953, and the School of Law in 1953.

Villanova's development over the years into a complex institution of higher education received official sanction when, on November 10, 1953, pursuant to an act of the Legislature of the Commonwealth of Pennsylvania, its charter was amended to permit its being designated Villanova University.

Mission Statement

Villanova University is an independent coeducational institute of higher learning founded by the Augustinian Order of the Roman Catholic Church. The University is a community of persons of diverse professional, academic, and personal interests who in a spirit of collegiality cooperate to achieve their common goals and objectives in the transmission, the pursuit, and the discovery of knowledge. This community serves society by developing and sustaining an academic environment in which the potentialities of its members may be realized. Villanova is committed to those same high goals and standards

of academic integrity and excellence as well as personal and corporate achievement that characterize all worthy institutions of higher learning.

As a Catholic institution Villanova both emphasizes the values of the Judaeo-Christian humanistic tradition and concerns itself with all value systems. The University attempts to develop an environment in which students, faculty, and staff may experience a Christian intellectual and moral perspective, believing that the teachings of the Catholic faith are applicable in every area of human activity. Although Villanova functions as an independent institution in the conduct of its own affairs, in matters theological it recognizes its obligations to the Magisterium of the Church. Villanova looks to the Order of St. Augustine to preserve the University's Augustinian character through its presence and influence and by providing personnel and financial support. In turn, the University recognizes its special relationship to the Order of St. Augustine by showing appropriate preference to Augustinians in the initial appointment of faculty and staff.

Given its character and resources, Villanova is committed to offering such undergraduate and graduate programs as will best serve the needs of its constituencies. As a medium-sized comprehensive university, it offers programs in the humanities, in the natural and social sciences, and in professional areas such as business, education, engineering, law, and nursing. The University emphasizes undergraduate instruction and is committed to a liberal arts component in each of its undergraduate programs. In all academic departments, it encourages such research and scholarly work as are compatible with the faculty's other obligations to the University.

Villanova emphasizes the disciplines of philosophy and theology. Moreover, it seeks to add its influence to the search for world peace and justice by means of both its academic programs and the pastoral ministry it provides for the members of the University community. In like manner, the University has always encouraged and supported its faculty, students, and staff in providing public service to the community. Ultimately, all these programs and support are seen as a means of developing the total person: intellectually, emotionally, spiritually, culturally, socially, and physically.

Villanova attempts to enroll students with diverse social, geographic, economic, and educational backgrounds. Furthermore, in utilizing its financial aid resources to help achieve this diverse student body, Villanova recognizes its responsibility to use part of those resources to assist the economically and educationally disadvantaged.

Villanova welcomes students who consider it desirable to study within the philosophical framework of Christian humanism. Similarly, the University seeks to employ on all levels those who are sympathetic to and supportive of its character and identity. Accordingly, Villanova confidently expects that all students, faculty, administration, and staff will so comport themselves as to assure the continuance and enhancement of the University's high purposes and its moral and religious traditions. In accomplishing its purposes, the University fully complies with all the requirements of federal and state legislation with respect to equality of opportunity and non-discrimination.

Villanova encourages communication among all the elements of the academic community and operates on a policy that promotes easy access of students to faculty and of students and faculty to administrators. Furthermore, it seeks to involve students,

faculty and administrators in the development of University policy through appropriate structures of governance.

Finally, this community seeks to reflect the spirit of St. Augustine by the cultivation of knowledge, by respect for individual differences, and by adherence to the principle that mutual love and respect should animate every aspect of University life.

Academic Programs

Degree Programs

Programs of undergraduate study in the various colleges lead to the following degrees:

- ☐ College of Liberal Arts and Sciences (www.artsci.villanova.edu) Bachelor of Arts,
 Bachelor of Science, Associate of Arts, Associate of Science in Natural Science.
 ☐ College of Engineering (www.antinogring villanova.edu). Bachelor of Chamical
- □ College of Engineering (www.engineering.villanova.edu): Bachelor of Chemical Engineering, Bachelor of Civil Engineering, Bachelor of Computer Engineering, Bachelor of Electrical Engineering, Bachelor of Mechanical Engineering.
- ☐ College of Commerce and Finance (www.cf.villanova.edu): Bachelor of Science in Accountancy, Bachelor of Science in Business Administration, Bachelor of Science in Economics
- ☐ College of Nursing (www.nursing.villanova.edu): Bachelor of Science in Nursing
 To qualify for the Bachelor's Degree, the student must have completed successfully
 one of the four-year courses of study as specified by the University together with other

one of the four-year courses of study as specified by the University together with other work assigned. The awarding of the degree is conditioned not upon the attainment of any fixed number of credit hours, but upon the satisfactory completion of all the studies prescribed for the degree sought. Details are available in each college's sections of this Catalog.

Accreditation and Recognition

Villanova is approved by the Pennsylvania Department of Education and is accredited by the Middle States Association of Colleges and Secondary Schools. The degree program in computer science is accredited by the Computer Science Accreditation Commission of the Computing Sciences Accreditation Board, a specialized accrediting body recognized by the Council for Higher Education Accreditation. The Chemistry Program is certified by the American Chemical Society. Villanova University is recognized by the United States Navy as a training center for Reserve Officer Training (NROTC). All five degree programs of the College of Engineering have been accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Degree programs within the College of Commerce and Finance are fully accredited by the American Assembly of Collegiate Schools of Business (AACSB).

The College of Nursing is approved by the State Board of Nursing of the Commonwealth of Pennsylvania. Upon completion of the undergraduate program, graduates are eligible to take the licensing examination (NCLEX) for professional registered nurses. The undergraduate and graduate programs are both fully accredited by the National League for Nursing Accreditation Commission, and have received accreditation from the Commission on Collegiate Nursing Education.

Part-Time Studies (www.parttime.villanova.edu)

Villanova offers the opportunity for part-time study to a variety of students who are not able or do not wish to enroll as full-time matriculated students. Students may pursue Bachelor's Degrees on a part-time basis in: Accountancy, Business Administration, Communication, Computing Science, Information Science, Education (secondary), English, History, Human Services, and General Arts. Additionally, the Bachelor of Interdisciplinary Studies, a degree program for part-time adult students only, is offered with majors in Information Systems, Leadership Studies and General Studies. Details on these programs and requirements are to be found in the Part-Time Studies section of this Catalog.

International Studies and Overseas Programs

(www.internationalstudies.villanova.edu)

Students attending Villanova University are encouraged to incorporate international aspects of education into their academic plans. The Office of International Studies (OIS) assists students in identifying opportunities and facilitating the process of enrollment in overseas programs. The services offered to all full-time Villanova students include:

- ☐ Advising and administrative support services for summer, semester, and year long overseas study programs including direct enrollment in overseas institutions, service learning opportunities, internships, and/or exchanges with international programs worldwide.
- Administrative support for applications to Villanova's International Summer Programs at the Université de Bourgogne in France, Bocconi University in Italy, the Universidad de Cádiz in Spain, East China Normal University, the European Business School in Germany, the National University of Ireland, John Cabot University in Italy, the London School of Economics in England, Queen Margaret University College in Scotland, the Sprachinstitut in Germany, the University of Urbino and the Scuola Lorenzo de' Medici in Italy, the Universidad Católica de Valparaíso in Chile, the University of Warsaw in Poland, and in additional locations in Italy, Greece, and Russia.
- ☐ Advising for the fulfillment of the overseas requirements for Villanova's Area Studies Programs (Africana Studies, Arab & Islamic Studies, Latin American Studies, and Russian Area Studies).

Generally students study overseas in their sophomore or junior years. Seniors may be eligible with special permission. A minimum 2.75 GPA and full-time status are required by Villanova though some programs and overseas institutions may require a higher GPA. All undergraduate majors are eligible. Students may not apply for study

abroad while on academic or disciplinary probation. Transfer students must have completed 3 semesters at Villanova prior to participating in an overseas program.

Villanova University has special affiliations and/or exchange agreements with many institutions and organizations including: the American University Center of Aix-en-Provence, France; American University of Beirut, Lebanon; the American University of Cairo, Egypt; Al al-Bayt University, Jordan; Birzeit University, Palestine; the Center for Sustainable Human Development (CIDH), Costa Rica; College Year in Athens, Greece; Denmark International Studies (DIS); the National Universities of Ireland in Cork, Galway, and Dublin; the European Business School, Germany; INSTEP Cambridge University, England; the London School of Economics, England; Sophia University, Japan; the University of Cádiz, Spain; the University of Maastricht, the Netherlands; the University of Manchester, England; the University of Nizhni Novgorod, Russia; the University of Urbino, Italy; Queen's University, Belfast, Northern Ireland; the Council for International Educational Exchange (CIEE/Council); the Institute for the International Education of Students (IES); Arcadia University's Center for Education Abroad; the Institute for Study Abroad, Butler University; Boston University's Division of International Programs; Lexia International; the International Partnership for Service Learning (IPSL); the University of Virginia's Hispanic Studies Program; the School for Field Studies (SFS); and the School for International Training (SIT). VU's Office of International Studies is also an active member in NAFSA: Association of International Educators and the Pennsylvania Council for International Education (PaCIE).

Working with a representative of the OIS, all students who study overseas are required to submit a Prior Approval Form designating courses approved by appropriate faculty in order for overseas credit to transfer to Villanova. Credit for work completed overseas will appear on the Villanova transcript. With the exception of Villanova's International Summer Programs which earn regular letter grades, students must earn a minimum grade equivalent to a "C" or higher in order for credit to transfer. In place of a letter grade, the designation "T" will be assigned. A maximum of 60 credits are transferable (including Advanced Placement, Overseas Study, and summer credits earned at other institutions).

In addition to advising and administration, the Office of International Studies also sponsors pre-departure orientations for outbound students, welcome back events for returning students, a Fall study abroad fair, regular overseas study information sessions, monitors safety issues affecting Villanova students worldwide, and works with faculty and organizations both on and off campus to develop and improve overseas opportunities. Students wishing further information may contact the Office of International Studies and Overseas Programs in Middleton Hall, 2nd floor (610/519-6412).

Academic Advancement Program / Act 101

(www.multiculturalaffairs.villanova.edu)

The purpose of the Academic Advancement Program (AAP)/Act 101 is to provide an educational opportunity for students from Pennsylvania who meet the academic and economic criteria established by the Higher Education Opportunity Act of 1971, legislatively designated and publicly known as Act 101.

The AAP admits highly motivated students whose high school credentials suggest that they can, with academic support, successfully matriculate at Villanova University. At Villanova, these students are given support in counseling and tutoring to enable them to demonstrate their potential to succeed in college. The pre-college component now offers a 3-credit freshman English course, math, reading/study skills, and general sciences classes, and critical thinking workshops.

The Program is administered by the Office of Multicultural Affairs, 202 Vasey Hall, (610/519-4075).

NROTC (www.nrotc.villanova.edu)

Villanova University, in a long-standing relationship with the United States Navy, maintains one of approximately 60 Naval Reserve Officer Training Corps units in the United States. The objective of the Unit is to develop the character and educate prospective officers for service in either the Navy or Marine Corps. Commissions as Ensign or 2nd Lieutenant are awarded upon successful completion of prescribed naval science courses and graduation from the University. These commissioned officers will serve on active duty for a period of four to nine years, depending upon choice of warfare specialty.

Participation in the NROTC Unit is through either the Scholarship or College Programs. Students in the NROTC Scholarship Program (national selection competition) receive a substantial subsidy from the Navy, including tuition, books, fees, and a monthly subsistence allowance as follows: Freshman and Sophomores \$250.00, Juniors \$300.00, and Seniors \$350.00. They participate in three summer cruises on board various Navy ships and installations and receive active duty pay while on these cruises.

NROTC College Program students (Non-Scholarship) apply directly to the Villanova NROTC Unit, usually prior to or during the fall semester of their freshman year. Students in the College Program receive no government subsidy until their junior and senior years, during which they receive a monthly subsistence allowance of \$300.00 for Juniors and \$350.00 for Seniors. They participate in one summer cruise and receive active duty pay while on cruise. Scholarships are available each year to those NROTC College Program students who stand at or near the top of their College Program class in terms of overall academic performance and aptitude for commissioned service. The Professor of Naval Science nominates College Program students for these scholarships with the selection being made by the Chief of Naval Education and Training (CNET). Normally 60 to 70% of the freshmen College Program students receive a three year scholarship offer after their first year in the program.

In addition to the four-year programs described above, two-year NROTC Scholarship and NROTC College Programs are available. Students must apply for these programs early in the spring semester of their sophomore year (application packages are normally due to CNET by 31 March each year. Those selected for the two-year programs must successfully complete a six- week training course at Newport, RI, during the summer preceding their junior year. Upon enrollment in the NROTC Program at the beginning of their junior year, two-year program students have the same benefits (tuition, books, fees and stipend), and assume the same active duty obligation, as four-year program students.

All Scholarship and College Program students may select any major at the University. Midshipmen at Villanova study in a wide variety of majors in engineering, arts, sciences, business, and nursing. Detailed NROTC information may be obtained from the Naval Science Office, Room 103, John Barry Hall.

NOTE: Applicants for the NROTC Program are not relieved of the necessity for payment of the registration deposit required by their letter of acceptance for admission to Villanova University.

Army ROTC (http://muse.widener.edu/rotc/)

Villanova students are eligible to participate in the Army Reserve Officers Training Corps (ROTC) Program through a partnership agreement with the Widener University Department of Military Science. Army ROTC offers students the opportunity to graduate with a college degree and a commission in the United States Army, Army National Guard, or United States Army Reserve. All Army ROTC classes are conducted on the Villanova University campus.

The Army ROTC Program involves undergraduate courses taken during the freshman and sophomore years, and advanced courses taken during junior and senior years. Students may enroll in the introductory courses without incurring any military or financial obligation and may withdraw at any time, subject to Villanova University's course withdrawal policy. Students who participated in Junior ROTC in high school or have prior military service may receive placement into the advanced courses as determined by the Army Professor of Military Science. The introductory course requirements may also be satisfied through attendance at a five-week Army ROTC basic camp at the end of the sophomore year. Students in the advanced courses are required to attend a five-week Army ROTC Advanced Camp between their junior and senior years. Students enrolled in the advanced courses receive a stipend of \$135 to \$400 per month and may incur an active duty obligation of up to three to four years. National Guard and Reserve Forces options are also available.

Nursing students who complete the four-year or two-year program, obtain their Nursing Degree, and pass their Nursing Board Examinations are commissioned into the Army Nurse Corps.

Four-year, three-year, and two-year Army ROTC scholarships are available on a competitive basis. Scholarships also include payment of certain university fees, a \$600 book and school supplies subsidy, and a tiered \$250-400 per month stipend.

Applications for the three-year Army ROTC scholarships must be submitted early in the spring semester of the freshman year; applications for the two-year Army ROTC scholarships must be submitted early in the sophomore year. Applications for attendance to the Army ROTC Basic Camp must be submitted early in the spring semester of the sophomore year.

Detailed information may be obtained from the Professor of Military Science, Widener University, Chester, PA 19013, (610) 499-4098.

Air Force ROTC (www.csc.vill.edu/~afrotc/index.htm)

Villanova students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through a cross-enrollment agreement with Saint Joseph's University. All Aerospace Studies courses are held on the Saint Joseph's campus. The AFROTC program enables a college student to earn a commission as a Second Lieutenant in the U. S. Air Force while concurrently satisfying requirements for his/her baccalaureate degree.

The program of Aerospace Studies offers a one to four year curricula leading to a commission as a Second Lieutenant in the Air Force. Students are under no contractual obligation to the Air Force until they accept an Air Force scholarship as sophomores or higher or enter the Professional Officer Corps.

Air Force ROTC offers 1, 2, 3 and 4 year scholarships on a competitive basis to qualified applicants. Four-year scholarships are available to high school seniors in various fields. The scholarships are offered to cadets enrolled in the AFROTC program and to college entrants to AFROTC. All scholarships cover tuition, lab fees, reimbursement for books, plus a \$250-\$400 tax-free monthly stipend, depending on academic year.

Detailed information may be obtained from the Professor of Aerospace Studies, AFROTC Det 750, Saint Joseph's University, Philadelphia, Pennsylvania 19131, (610) 660-3190.

Academic Resources

Advising

Villanova takes seriously the responsibility of academic advising. Students are urged to consult with their academic advisers on a regular basis. Each College has its own advising system. For details, see the college sections that follow in this Catalog and consult the various college offices.

Augustinian Historical Institute

The Augustinian Historical Institute promotes the research and publication of studies in the history of the Augustinian Order and in the allied fields of theology, philosophy, missiology, and biography. Located in the Augustinian Room, 301 Old Falvey, the Institute maintains an exceptional collection of books, manuscripts, reviews and micro-copies pertinent to these studies. The collection of the Institute is open for use between the hours of 9:00 a.m. - Noon, and 1-4 p.m. Monday through Friday.

Dean's Lists

Each year the Dean of each college at Villanova honors those students who are deemed to have established an outstanding academic record as determined by the College

and its Dean. To qualify for the Dean's List, a student must be a full-time student with a semester average of 3.25 in the College of Engineering, 3.5 in the College of Nursing, 3.5 (for both semesters) in the College of Liberal Arts and Sciences, and 3.5 in the College of Commerce and Finance with no non-passing or missing grades on the semester report.

Honor Societies

In addition to the many honor societies appropriate to individual colleges and academic disciplines and departments, Villanova has chapters of these national honor societies:

- ☐ Phi Beta Kappa (www.pbk.villanova.edu)/ The Sigma Chapter of Phi Beta Kappa was established at Villanova in 1986. Membership in Phi Beta Kappa is an honor conferred primarily in recognition of outstanding scholarly achievement in the liberal arts and sciences. Details may be found under "Phi Beta Kappa" in the Liberal Arts and Sciences section of this Catalog.
- ☐ Phi Kappa Phi. Phi Kappa Phi is an honor society whose objective is the recognition and encouragement of superior scholarship in all academic disciplines. Qualified part-time juniors and seniors are eligible for election to membership. Admission is by invitation only and requires the nomination and approval by a chapter. Superior scholarship and good character are the criteria for membership.
- □ Alpha Sigma Lambda. The Mu Chapter of Alpha Sigma Lambda was established at Villanova University in 1958. The society honors those dedicated part-time and evening students who have completed at least 24 Villanova credits and who are from the highest ten per cent of their class with a minimum quality point average of 3.2

Information Technol ogies (www.unit.villanova.edu)

The Office for University Information Technologies (UNIT) provides computing, information, and network services to the entire campus community.

A campus-wide network for data, voice, and video communication provides phones, data and Cable TV connectivity for students, faculty, and staff. A state-of-the-art digital phone system offers students, faculty, and staff direct dial lines, voice messaging, mail boxes, and call transfer. The data network facilitates access to all on campus computing resources as well as access to remote computing resources via the INTERNET. Broadband cable facilitates video transmission to and from more than 100 classrooms for implementation of multi-media teaching technology into the curriculum.

UNIT maintains the University wide computing infrastructure for academic and administrative use, utilizing SUN Microsystem platform running the SUN Solaris operating system and 60+ servers running NOVELL and Microsoft-NT and 2000 throughout campus. All central and distributed computers and about 3000+ workstations and other devices are connected to the campus network providing each user with access to any computing resource. Every faculty and staff member has a Pentium 4 class PC or laptop connected to the campus network. Phone, cable and high-speed data connectivity is extended to all residence hall rooms. Citrix and Remote Access Service facilitate

access to network and World Wide Web resources from off-campus locations. In addition UNIT operates videoconferencing and multi media facilities in Tolentine.

In addition to many college and department-specific student computing labs, UNIT manages two public student labs located, in Mendel and Tolentine, equipment in Falvey Library, Connelly Center and Mendel lounges and Donahue Hall totaling of over 170 workstations. The labs are open 18-24 hours a day with consultants on duty to assist students. All computers support general-purpose applications such as word processing, spreadsheets, graphics and data base management systems (Microsoft XP suite) plus course-specific software.

User-ids are assigned to students prior to their arrival on campus that provides access to email, the WEB and other student designated computing resources. All students have a default Web page created for them and a personalized portal gives them access to their course schedules and course related materials and allows them to perform most administrative functions, such as registration or grade lookup on the Web.

The Computer Support Center (CSC) located in Vasey Hall assists students with University promoted laptop computers and other PCs. Technical support is complemented by Web based documentation. The use of the University owned/managed computing, information, and network resources are governed by policies included in the Student Handbook and accessible on the University's Web site. In addition to the CSC, UNIT operates the University Help Desk located in Mendel Hall and provides technical support and service from 8am to 8pm daily and extended hours support for critical systems until 2am.

UNIT offers a wide range of non-credit seminars that cover popular software packages as well as general computing and technology topics issues. The UNIT section of the University's publication Blueprints keeps the user community informed about new developments, upcoming seminars and other general computing and network topics.

The University Card Office provides students with a smart card (WildCard) that functions as a meal plan card, library card, access card to dorms, classrooms and labs, debit card for purchases on campus and selected off campus merchants and through the University's affiliation with a bank as an ATM card.

Library Resources and Services (www.library.villanova.edu)

Falvey Memorial Library is the gateway to information resources and services for students, faculty and staff. Information is available through more than 750,000 printed volumes, 6,000 current serial subscriptions, approximately two hundred electronic databases, several thousand full-text electronic journals, and extensive microfilm and audiovisual collections. Beyond Villanova's collection, the regional EZBorrow system in which the university participates provides one-stop searching and access to over 30 million books from academic libraries across Pennsylvania and New Jersey. In addition, materials can be requested from libraries world-wide through interlibrary loan. With Pulling Law Library, Falvey shares in a selective depository status for federal government documents.

The library provides a wide range of services to the university community, including reference and research assistance, interlibrary loan, course reserve materials (print and digital), and the acquisition, organization and maintenance of print & online

collections pertinent to university curricula and research activities. Reference librarians answer questions, recommend resources, assist with formulation of search strategies, and instruct in the use of electronic and print resources. Every librarian serves as a liaison with an academic department to facilitate library and departmental communication. The Falvey Student Advisory Council (FSAC) and the Faculty Library Committee advise the University Librarian of the changing information needs of the Villanova student and faculty. Display areas provide information on campus activities and programs as well as highlight Falvey's Special Collections. The historical record of Villanova University is available in University Archives on the fourth floor. Special Collections, located on the second floor, has examples of early printed books, the Joseph McGarrity Irish Studies Collection, Early Catholic Americana, and the Augustiniana Collection.

Collaboration between the library and academic departments to integrate information literacy into academic programs ensures that students have the necessary skills for lifelong learning. Quest, a formal information literacy tutorial, developed collaboratively with the Core Humanities Program, instructs first year students on the basic steps necessary to locate and retrieve the reputable resources in support of their research. Instructional Media Services (IMS) provides a wide variety of educational technology services to the university community, including support of classroom technology, and individual and group viewing (and listening) facilities for its collection of videotapes, CDs, audiotapes, & laser discs. Also through IMS, consulting and assistance is available in such areas classroom technology selection and use, graphic design, and video editing.

The Library Web page (www.library.villanova.edu/) provides access to the resources and services available through the library, and to information about policies, procedures and hours of operation. Web accessible library resource include VuCat (the online catalog), general and scholarly research databases and full-text journals and e books, email request forms, interact (chat-based) reference assistance, and subject-oriented research guides. Approximately fifty public workstations are available in the library, for searching the Web, sending and reading email, and using a wide variety of university-licensed software. The library also provides ports for connecting personal laptops to the network at a variety of locations throughout the building and is in the pilot stages of implementing wireless network access in key areas. Unique study opportunities are also available at Falvey Library, including comfortable couches and chairs which complement the tables and carrels for individual study. The Kolmer Group Study Rooms are available on the third and fourth floors. Study space is also available in the coffee shop, Holy Grounds at Falvey, on the ground floor. The Falvey Mug, available for purchase at Holy Grounds, enables students to take beverages throughout the building.

In addition to its primary mission of supporting the academic needs of students and faculty, the library also provides a wide range of "co-curricular" intellectual and cultural programming to the campus, including a lecture series that brings distinguished speakers into the stacks for informal talks, book and research talks at which faculty present the fruits of their intellectual labor to the Villanova community at large, occasional literary readings by regional and national poets and writers, and annual presentations of distinguished undergraduate research.

Mathematics Learning and Resource Center

(www.villanova.edu/mlrc)

The Mathematics Learning and Resource Center (MLRC) provides an environment where students can obtain help with freshman and sophomore level math classes, work on group projects, study independently, and use computer lab facilities. During its hours of operation (Monday - Thursday: 1:00 - 5:00 p.m. and Sunday -Thursday 6:30 - 9:00 p.m.), the MLRC is staffed by undergraduate and graduate Villanova students. The MLRC computer lab has 15 computers, capable of running the mathematical software currently being used in math courses offered at Villanova. There is also a comprehensive collection of tutorial software and a modest video library and three TV/VCR stations, which students may use for independent learning. The Center is located on the second floor of Old Falvey, tel. (610)519-MLRC or (610)/519-5193 for voice mail messages.

National Scholarships (www.honorsprogram.villanova.edu)

Villanova University provides comprehensive advisement for students who pursue prestigious national scholarship and fellowship opportunities, including the Truman, Goldwater, Udall, Fulbright, Marshall, Rhodes, Gates Cambridge, National Science Foundation, Hughes, Mellon and Ford Foundation. A mentoring program is administered by the Office of Undergraduate Grants and Awards, a, and begins as early as an undergraduate student's first year. In recent years, over sixty students have received formal recognition from these various national scholarship programs.

Writing Center (www.writingcenter.villanova.edu)

Writing Center tutors offer assistance to undergraduates, graduate students, faculty, and staff who are engaged in every kind of writing. Students are welcome to come to the Writing Center at any stage of their composing process. Walk-in appointments are welcomed, but scheduled appointments are strongly encouraged. An individual session takes approximately 45 minutes in length, and clients may request a specific tutor. The Center is located in the Dalton Room (202 Old Falvey Library) and is open Sunday through Thursday, from 11:30 a.m. to 7:30 p.m., and Friday, from 11:30 a.m. to 3:30 p.m. Phone: 610/519-4604.

Campus Life

Campus Ministry (www.campusministry.villanova.edu)

Reflecting the traditions of Roman Catholic and Augustinian spirituality, the Villanova Campus Ministry engages every aspect of University life through prayer, liturgy, community service, leadership development, and pastoral care. More specifically, Campus Ministry:

- □ Offers programs centered on Christian living, social justice, liturgy, and preparation for the sacraments with an emphasis towards σeating and eliciting Christian community on campus;
- ☐ Works with all members of the Villanova community to build spiritual awareness and growth, initiates programs in response to the gospel values of the Catholic Christian tradition; and
- ☐ Encourages the development of student leadership as a priority reflecting the student's significant role both now and for the future of the Church and society.

Campus Ministry is located on the lower level of St. Rita's Hall. Regular weekday office hours are 9 a.m. to 5 p.m. Appointments can be made in person or by phoning 610/519-4080. A recorded message giving the schedule of Liturgies is available at 610/519 4080. Detailed information on Campus Ministry activities, including programs for community service and leadership and for student involvement in liturgical celebrations, and information concerning other religious denominations' services and locations, can be found in on the website and in The Blue Book: The Villanova University Student Handbook.

Career Services (careers.villanova.edu)

The Career Services Office assists individuals with assessing career interests, planning careers, and developing the skills to successfully pursue career plans. Individual counseling is supplemented by workshops and career programs. Interest tests are administered and interpreted. The credentialing service allows students to develop a file of recommendations to be used for graduate school and job applications. Employment services are coordinated through the office website at www.careers.villanova.edu. These services include a campus interview program with over 350 employers, a resume referral system, and a job listing service. The Career Library provides extensive information on careers, materials for distribution on various job search topics, and registration materials for graduate school admission tests. The office is located in Corr Hall.

Counseling Center (www.studentlife.villanova.edu/counselingcenter)

The University Counseling Center, located on the Main Floor of the Health Services Building, offers psychological counseling, groups, consultation, referral, and study skills counseling. Except for emergencies, appointments are required and can be scheduled either by phone (610/519-4050) or by visiting the Center. Some examples of services are:

□ Personal and Psychological Counseling. Students can discuss personal concerns in a private, confidential setting. Individual counseling sessions are available, as are counseling groups. Doctoral psychologists help students deal with normal developmental adjustments common during the college years, and can also help students with issues such as: depression; anxiety; relationship concerns; eating disorders; self-defeating behaviors; family issues; and other problems that affect academic, social, or personal functioning. All contacts are completely confidential and are not recorded on the student's university records.

ш	Drug and Alcohol Counseling. Students who are concerned about their use of
	alcohol or other drugs are encouraged to seek help from our psychologist
	specializing in substance abused counseling.
	Consultation regarding other individuals. Students who are concerned about a
	family member, friend, or fellow student, may also consult the Counseling Center
	staff about how best to support that person.
	Referrals. Referrals are provided for students who prefer to obtain off-campus
	counseling, or whose counseling needs exceed the capacity of the Counseling
	Center.
	Study Skills Counseling. The study skills counselor helps students enhance their
	ability in the areas of: note taking; class preparation; test preparation; test taking;
	and time management. The goal of these services is to help students take better
	advantage of the academic offerings of the University. Individual appointments
	are available, as are group workshops on topics of common interest.

Diversity Initiatives

(http://www.studentlife.villanova.edu/diversityinitiatives)

The Office for Student Life Diversity Initiatives seeks to ensure that each student's educational experience at Villanova University takes place in the context of a welcoming, caring, just, and educationally purposeful community. The office pursues its primary goals through the promotion and facilitation of cross-cultural awareness by offering learning resources and structured learning experiences, and providing support to students and student organizations. The Office also engages in collaborate planning and research with all areas of the University, to assist the Villanova community in meeting its commitment to influencing the search for world peace and justice.

Students are encouraged to contact the office if they encounter any form of bias or discrimination at the University. Once reported, students will meet privately with office staff to develop strategies for remedying problems encountered with bias or discrimination. The office also offers opportunities for students to assist the office in achieving its goals by participating in student organizations to promote diversity. The office is located in Dougherty 108, tel. 610/519 7316.

Identification Cards

The official University identification card for students, staff, and faculty, is called the Wildcard. It is a photo ID with a magnetic stripe on the back. Photos are taken at the Wildcard Office on the first floor of Dougherty Hall (610/519-6202). Requirements for obtaining a Wildcard include a picture ID and proof of enrollment at Villanova. The Wildcard is necessary for student verification, student discounts, library borrowing, and for entrance into the library on weekends and weekday evenings.

International Students (www.students.villanova.edu/iss)

The International Student Adviser's Office is a service provided by the university to aid foreign students in becoming oriented to the university and the community and assists

them with U.S. immigration requirements. The office sponsors a variety of social and cultural programs in conjunction with the International Student Association. The office offers a comprehensive orientation program at the beginning of the Fall Semester.

The International Students Office offers a comprehensive ESL program in conjunction with the office of Continuing Studies. Classes are offered in the fall, spring, and summer terms.

All foreign students must register with the International Students Office each semester. Any change of address must be reported immediately. The office is located in Corr Hall, Ground Floor (610/519-4095). NOTE: Villanova University requires that all full-time students have health insurance. The International Student Office has information and policy forms available for students who do not have health coverage from their home countries.

Learning Disabil ities (learningsupportservices.villanova.edu)

The Office of Learning Support Services, in conjunction with faculty, is committed to providing "reasonable academic accommodations" for students with learning disabilities, other neurologically based disorders, and those disabled by chronic illnesses. Villanova students may request support services in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). Our goal is to ensure that students with disabilities have an opportunity to grow independently to their full potential at Villanova.

It is the responsibility of the student to identify themselves to the Coordinator of Learning Support Services and submit for review current documentation of their disability. Reasonable academic accommodations and support services are based on the assessment of the current impact of the disability on academic performance; therefore it is in the student's best interest to provide current and complete documentation. Given the specific nature of the disability, "reasonable academic accommodations" will be determined on an individual basis. Students must obtain a new accommodation request form for each term at Villanova in order to receive accommodations during the term.

The Office of Learning Support Services is located on the second floor of Kennedy Hall. For additional information about our services, contact 610-519-5636.

Multicultural Affairs (www.multiculturalaffairs.villanova.edu)

Through its multi-faceted programs and dimensions (Academic Advancement Program/Act 101, Affirmative Action Program, Volunteer/Outreach Programs, Coordinated Services for the Disabled, Friends Programs, Committee on Cultural Diversity, and Multicultural collaborative endeavors), the Office of Multicultural Affairs assists and supports the University in its mission of being a community of people who share common values and whose culture reflects the Augustinian spirit. The Office of Multicultural Affairs is located in Vasey Hall, Room 202, (610) 519-4075. The main programs are:

Affirmative Action. A major component of the Multicultural Affairs Office is Affirmative Action. Designated the Affirmative Action/Equal Employment Office, the Multicultural Affairs Office is responsible for insuring that the University complies with

local, state, and federal government mandates and remains committed to equal employment and educational opportunities. This office provides training, workshops and guidance on issues relating to affirmative action/equal opportunity, diversity, and sexual harassment.

Human Services. The Office of Multicultural Affairs coordinates volunteers to provide assistance to those in need. The University, with the active involvement of student volunteers, cooperates with agencies and programs that offer aid to the elderly, the disabled, and the underprivileged in Philadelphia and the suburbs. Student volunteers obtain practical experience in various areas of social justice and responsibility. The Project Sunshine Volunteer commitments provide an average of 31,200 volunteer hours per academic year (much of it in tutoring). The annual Sunshine Day mini-carnival for disadvantaged children and the Saturday Sunshine monthly program add further hours of outreach and opportunities (on and off campus) for students to volunteer. The annual Christmas Giving Program for elderly people or others who are disadvantaged extends the outreach opportunity to the entire Villanova community.

The Office also works with those among Villanova's population who are faced with physical challenges. The Office assists the University community in responding to the individual needs of these students, faculty, and staff members with regard to classroom environment, educational needs, accessibility arrangements, and basic support services. It should be noted that students with learning disabilities receive support from the Learning Support Services Office (http://learningsupportservices.villanova.edu).

Music Activities (www.music.villanova.edu)

The Music Activities Office promotes, maintains, and supervises the efforts of student performing groups on the Villanova campus. These groups include the University Bands (Concert, Marching, Pep and Jazz), String Ensemble; Twirlers, Dance Team, and Flag Squad; Villanova Singers, Villanova Voices, Gospel Ensemble, and Chamber Voices; Dance Ensemble and Nova Jhoom (Indian dancers); Student Musical Theater and Student Theater. Each organization is under the musical direction and supervision of a staff professional. Information about musical opportunities can be obtained by contacting the Music Activities Office on the lower level of St. Mary's Hall (610/519-7214).

Residential Facilities (www.reslife.villanova.edu)

The University maintains a variety of living facilities which are intended to serve as extensions of Villanova's learning environment. Approximately 3100 men and women are housed in 22 residence halls which vary in from home-type buildings for 30 students to modern multi-level structures housing over 500 students. An additional 1200 upperclassmen reside in on-campus, fully-furnished apartments.

Dining facilities for resident students are conveniently located in Dougherty Hall on the main campus, St. Mary's Hall on the west campus, and in Donahue Hall on the south campus. Lounge areas and laundry facilities are available to students in most residence halls.

Admission to the University as a resident and payment of the admission deposit guarantees placement in residential facilities for the freshman, sophomore, and junior

years. Commuters and transfers are eligible for on-campus residency only on a space-available basis.

All housing contracts are for a full academic year. Students who terminate their housing contracts prior to the end of the academic year, but who remain enrolled at the University will be assessed a Cancellation Fee of \$300. The fee is not applicable in the case of official withdrawal or removal by way of formal judicial action by the University.

More information on residential facilities may be obtained by contacting Residence Life, Kennedy Hall (610/519-4154).

Student Development (www.villanova.edu/studentdevelopment)

The Office of Student Development oversees the administration of over 100 student organizations at Villanova. Its aim is to provide a co-curricular program emphasizing leadership skills in order to help co-ordinate students' free time with their study and education. These organizations foster common interests among students and assist students in gaining leadership skills that complement the skills learned in the University academic programs. The interest areas represented at Villanova include: governance, programming, publications, politics, fraternities and sororities, academics, cultural activities, honor societies and special interest groups (yearbook, radio station, tech crew, etc.) A complete listing of organizations and information on how to join can be found in the Office of Student Development, 214 Dougherty Hall (610/519-4210).

Student Heal th Service (www.villanova.edu/healthandwellness)

The Villanova University Student Health Center (519-4070), is staffed by registered nurses 24 hours daily. The Student Health Center is open with limited hours during semester breaks and over the summer. Physicians and nurse practitioners are available weekdays by appointment. Gynecologic services are provided by the nurse practitioners by appointment. Registered nurses provide 24 hour care to students who require inpatient treatment and observation, as well as to students who require walk-in care. Other medical services include diagnostic laboratory testing, administration of allergy injections and immunizations. In the event that a student requires emergency care, transportation is provided to a local hospital. Though students are not billed for physician or nurse practitioner visits, they are financially responsible for some medication and all laboratory fees, as well as consultation with specialists.

University Senate

The University Senate is an advisory group to the University President and the Board of Trustees on policy. Representation includes faculty, administration, and students. The Senate meets at least three times each semester.

Veterans (www.registrar.villanova.edu)

The Registrar's Office (Room 202, Tolentine Hall) serves as a liaison between the University and the Veterans Administration, except in the case of Law students who deal with the Law School Registrar.

Students (veterans) who will be enrolling in the college for the first time must contact the Office of the Registrar to file their application with the Veterans Administration. After the student has registered for the appropriate courses, the enrollment certification will be forwarded to the Veterans Administration to secure payment of benefits to the veteran.

Veterans who transfer from another institution must complete the form "Request for Change of Program or Place of Training," available from the Office of the Registrar. The veteran must submit the completed form together with the course information to the Office of the Registrar. The enrollment certification will then be forwarded to the Veterans Administration to secure payment of benefits to the veteran.

Admission

(www.admission.villanova.edu)

General Policy on Admissions

Villanova seeks to enroll students who excel academically and possess wide interests and positive qualities of character. In selecting members of the freshman class from the large number of candidates who meet the minimum quantitative and qualitative requirements, the University undertakes to admit those who appear best prepared to profit from the programs of study currently offered.

The criteria used to assess academic potential are: the scholastic record as reflected by courses chosen in high school and the quality of performance; rank in class (where rank is reported); scores earned on such nationally standardized tests as the SAT I and ACT; participation in extracurricular and community service activities; guidance counselor recommendation; and the student essay.

Students are selected wholly on the basis of individual merit. The University does not discriminate against applicants seeking admission because of their race, color, national or ethnic origin, religion, sex, age, physical disability, or family financial status. There are no quotas for any of the groups mentioned, but in selecting candidates whose academic qualifications are approximately equal, some preference may be given to children of alumni or faculty members, athletes, and to residents of geographical areas not strongly represented in the student body.

In conjunction with the State of Pennsylvania, Villanova University considers applicants from Pennsylvania for admission under its Act 101 (Academic Advancement Program). The purpose of the act is to provide an educational opportunity for students

from Pennsylvania who meet the academic and economic criteria established by the Higher Education Opportunity Act of 1971, legislatively designated and publicly known as ACT 101. Interested and eligible applicants should note their desire to be considered for the Program on their application for admission.

Required and Elective Units for Admission

Although individual consideration is given to each applicant, it is expected that all applicants, except in most unusual circumstances, will minimally satisfy the unit requirements listed below for the college to which they make application. As used here, a unit represents a year's work in any subject.

College of Liberal Arts and Sc For Arts Curricula:	iences		
English	4	Mathematics	3
Foreign Language	2	Science	1
History or Social Science	2	Electives	3
3			
For Science and Mathematical	Sciences Curr	icula:	
English	4	Foreign Language	2
Chemistry	1	Physics	1
Mathematics	4	Electives	4
College of Commerce and Fina	ance		
English	4	Science	1
History	2	Electives	5
Mathematics	4		
College of Engineering			
English	4	Physics	1
Chemistry	1	Electives	6
Mathematics	4		
College of Nursing			
English	4	Mathematics	3
History	2	Electives	2
Biology	1	Other Science	1
Chemistry	1	Foreign Language	2
Elective units acceptable in all	-	G : 1 G 1	2
Latin	2	Social Studies	2
Foreign Language	2	Mathematics	2
History	2	Laboratory Science	2
Chemistry	1	Botany	1
Biology	1	Zoology	1
Physics	1		

Heal th Affiliation Program (www.healthprofessions.villanova.edu)

Villanova University has Health Science Affiliation programs with a number of institutions including the Drexel University School of Medicine, Thomas Jefferson University College of Health Professions, the University of Pennsylvania School of Dental Medicine, and the Pennsylvania College of Optometry. Applications to these programs must be received by the Office of University Admission no later than November 1. SAT I or ACT must be taken no later than October of the senior year. These programs are not available to transfer students.

Early Action

Early Action admission is awarded to those exceptional students who have outstanding high school records and correspondingly high SAT I or ACT scores as judged by the Committee on Admission. Applicants will be evaluated on the basis of their three-year record and scores on the SAT I or ACT scores taken prior to October of the senior year.

For Early Action, the completed application must be received by the Office of University Admission no later than November 1 of the senior year. Early Action selectees will be notified on December 20. These applicants need not apply only to Villanova. Unsuccessful applicants will also be notified, and will be included in the Regular Decision applicant pool. The Committee on Admission reserves the right to admit or defer any candidate for Early Action.

Regular Decision

Applicants for Regular Decision may file their credentials any time after the start of the senior year. The completed application must be received by the Office of University Admission no later than January 7. Applicants for Regular Decision will be judged on the basis of their three-year high school record (to include senior mid-year grades) and their scores on the College Board SAT I or ACT taken by December of their senior year. All information in support of an applicant's candidacy for admission should be on file by January 7. Every effort will be made to notify all applicants by April 1 of the following appropriate action: acceptance, waiting list, denial, scholarship award, loan assistance, and/or grant-in-aid. Accepted students must return a non-refundable \$700 deposit postmarked no later than May 1. Notification of acceptance is made to commuting students and applicants to the College of Nursing on a rolling admission basis after January 15.

Students who are admitted as resident students and pay the \$700 deposit by May 1st are guaranteed three consecutive years (freshman, sophomore and junior) of on-campus housing.

Application Procedure

To ensure proper processing of applications for admission, all candidates should follow the procedure outlined below:

Obtain applications from the Office of University Admission, Villanova University, 800 E. Lancaster Avenue, Villanova, PA 19085 (610)519-4000 or online at www.admission.villanova.edu.
 Upon receiving the application, the candidate must complete it, enclose a non-refundable \$70 application fee, and forward it to the high school guidance counselor. The completed application must be received by Villanova no later than January 7 for Regular Decision consideration.
 Take the SAT I or ACT no later than December of the senior year (for regular decision) and have the results sent to Villanova University (CEEB Code 2959).

Students accepting the University's offer of admission are advised to send their registration deposits by check, credit card, or money order payable to "Villanova University" as soon as possible. All deposits must be postmarked no later than May 1. The deposit is non-refundable and is applied toward the student's first semester account. Incoming freshmen designated with residency status who accept an offer of admission by submitting deposits postmarked no later than May 1 are guaranteed on-campus housing for three consecutive years (freshman, sophomore and junior).

Candidates for Early Action follow application procedures as given above, except that:

- ☐ The completed application must be received by Villanova on or before November 1.
- ☐ SAT I or ACT must be taken no later than October of the senior year and the results sent to Villanova University.

Information on admission requirements and procedures for Part-Time Studies can be found in the Part-Time Studies section of this Catalog.

Transfer Students

Candidates for full-time admission who have attended other colleges and universities should submit applications for transfer to the Office of University Admission of Villanova University no later than June 1 for the fall and November 15 for the spring semesters.

The transfer applicant must submit complete transcripts of secondary school and college records, standardized test scores, a list of courses in progress, a catalog describing courses completed at the college-level institution, or evidence of honorable withdrawal (Dean's Evaluation), and any other information the Admission Committee may require. Transfer students are required to choose an academic college at the time they apply. Admission criteria vary slightly contingent upon the college or academic program to which a candidate applies. A minimum cumulative grade point average of 3.0 is recommended for students interested in transferring into the College of Liberal Arts and Sciences or the College of Commerce and Finance. Students interested in transferring into the College of Nursing, or the College of Engineering, must have maintained at least a 2.75 minimum cumulative grade point average.

Transfer credit towards undergraduate degrees will, in general, be granted for appropriate academic work completed with a grade "C" (2.0) or better at an accredited institution. Credit may be granted for courses without direct Villanova equivalents when such courses are of clear academic merit. In the College of Liberal Arts and Sciences a

cumulative average of 3.00 and two semesters at the previous institution are prerequisites for acceptance. Quality-grade points for work taken elsewhere are not included in the calculation of the student's cumulative average used to determine advancement at Villanova and eligibility for graduation. The final thirty credits (senior year) of a degree program and at least half of all major courses must be taken at Villanova.

Candidates for admission from junior colleges, community colleges, or institutes are judged by the same regulations pertaining to applicants from four-year institutions. Credits will be granted, as above, for appropriate courses completed in a two-year program, provided that the institution is regionally accredited or a candidate for such accreditation. Transfer students from two-year programs should note that graduation after two years of study at Villanova cannot be guaranteed because of the complexities of scheduling and the fulfillment of the requirements of Villanova's program.

Applications for transfer of credit from non-accredited institutions are considered on an individual basis. Credit is granted for those courses that are of clear academic merit and in which the transfer applicant has earned grades. In all cases the University reserves the right to require a written examination in the course or courses in question before transfer credit will be granted.

Pre-Matricul ated College Credit Statement

College-level work done prior to high school graduation may be awarded transfer credits upon receipt of the following: (1) an official letter from the high school principal or guidance counselor describing the college-level program of study; (2) an official letter from the college/university stating that the courses were taught by members of the regular faculty, open to enrollment by and graded in competition with regularly matriculated undergraduates at the college, and a regular part of the normal curriculum published in the college catalog; and (3) an official, seal-bearing transcript from the college/university. Each supporting document is to be sent to the Dean of the College in which the student is enrolling.

International Students

Villanova University admits to its undergraduate program citizens from other countries who meet the appropriate criteria. International students are accepted to begin their studies in the Fall semester only. The final date for receipt of the application for undergraduate students is January 7.

To be considered for acceptance, international students must fulfill all the requirements of immigration, and achieve a minimum score of 213 on the Test of English as a Foreign Language (TOEFL).

All undergraduate international students should note that they must pay a non-refundable tuition deposit determined by the Office of University Admission after acceptance and submit a certification of finances form prior to the issuance of the I20 form. No need-based financial aid is available to international students from University sources. Also see the section above on International Students and Human Services.

Advanced Placement Programs

Villanova recognizes advanced placement from The College Board advanced placement program (AP) and from the International Baccalaureate Program (IB). Students who have taken these courses should report to their College Dean's office to verify Villanova's receipt of the scores, and to ensure that proper adjustments have been made to their academic records. The courses will be entered into the student's record with Villanova credit but without a grade. In some cases, the advanced placement course will allow the student to place out of a lower level course but will not be counted as credit.

The following AP courses will receive Villanova credit if a student receives a score of 4 or 5: American History (07); Art (14 or 15); Art /Art History (13); Biology (20); Calculus (66 or 68); Chemistry (25); Computer Science (31 or 33); Economics (34 or 35); English (36 or 37); Environmental Science (40); European History (43); French (48 or 51); German (55); Latin (60 or 61); Physics (80 or 82); Political Science (57 or 58); Psychology (85); Spanish (87 or 89); Statistics (90). A grade of 3 or higher is awarded credit as follows: Arts and Sciences and Engineering, tests 31, 66, 68; Commerce and Finance test 68, Nursing, tests 07, 25, 31, 43, 66, 68, 80, 82. Chemistry majors only receive credit for a score of 5 in test 25.

The following IB courses will receive Villanova credit if a student receives a score of 6 or 7: Anthropology; Biology; Chemistry; Computer Science H L; Computer Science Information Technology; French A; English; Economics; Geography; German A; History: Americas; History: Europe; Latin; Mathematics; Mathematics Further; Music; Philosophy; Physics; Psychology; Spanish A. Students also receive credit for a score of 5 in Computer Science H L, Computer Science Information Technology, English, Economics, Geography, and Mathematics Further.

Credit by Examination

Qualified matriculated students may test out of selected courses and receive full credit for them. Such courses are graded on a "Satisfactory/Unsatisfactory" basis; however, a failing grade will not appear on the student's transcript. Applications and information are available in room 450, St. Augustine Center.

Transfer within the University

When a student transfers from one college to another within the University, the Dean may delete from the computation of the Grade Point Average courses which are not applicable to the new program. However, if such a student returns to her or his previous college, the Dean of that College will notify the Registrar to reinstate those courses. The grades and any credits earned will again be computed in the Grade Point Average.

Tuition and Fees, 2003-2004

Undergraduate Colleges and Programs

Tuition (Per Year)

College	First Year Students	Second, Third &Fourth Year Students
Arts	\$26,300	\$24,480
Commerce and Finance (includes laptop)	\$27,400	\$25,700
Science and Nursing	\$26,300	\$25,100
Engineering (includes laptop)	\$28,180	\$25,580

Fees

Application Fee (Non-refundable)	\$60
Tuition Deposit (Non-refundable)	\$400 (\$250 for commuters)
(Deposit due upon acceptance; credited to account	
upon registration)	
Orientation Fee (New Students only)	\$125
Student Health and Wellness Fee	\$125/semester
General University Fees	\$150/semester
Room (Depending on Accommodations)	\$2,040-2,970semester
Board (Depending on Meal Plan)	\$1,075-2,245/semester
Reinstatement Fee	\$250
Late Payment Fee ²	Determined by balance due
Returned Check Charge	\$25
Monthly Service fee for Past-due Accounts	\$5/month
Parking Fee (Annually for students using University	\$75
parking lots)	

¹Subject to change at the discretion of the University Administration.

²A Late Payment fee is charged to any account which is not paid in full by the official first day of class.

Students may be billed for tuition and related costs up to the week before in-person registration. However, payments are due no later than the first day of class. This requirement applies to all students, including those who register too late to receive a bill. Registration or the release of academic records cannot be completed until all financial obligations have been settled with the Bursar's Office. In addition to the above expenses, students should include expenses for textbooks, laundry, clothing, personal effects, and travel between the University and their homes in their educational costs.

Tuition for International Studies

Villanova charges current students full tuition for all Fall and Spring term international studies programs. Villanova students will be eligible to use Villanova University financial aid (i.e. grants and scholarships) to assist with study abroad tuition costs as long as those funds do not carry policy constraints or conditions which would restrict their use for this purpose.

If a recipient institution's tuition exceeds Villanova's, the University is obligated to pay a maximum amount equal to that of the normal Villanova tuition for that academic term's undergraduate tuition. Villanova will not pay for room, board, travel, books, brokerage or associated non-academic fees of an international studies experience.

There are special considerations for students on tuition remission programs. These students should check with the International Studies program for details.

Part-Time Studies, Tuition and Fees, 2003-2004

Application Fee (Non-refundable)	\$25
Tuition (Evening Courses Only):	
Liberal Arts, Education	\$350 (per credit)
Science, Nursing, Non-matriculated, Visitors, Post graduates	\$365 (per credit)
Commerce and Finance ¹	\$395 (per credit)
Engineering	\$505 (per credit)
Tuition (Day Courses Only 1-11 Credits) ²	
Liberal Arts	\$535 (per credit)
Commerce & Finance	\$580 (per credit)
Science, Nursing, Non-matriculated, Visitors, Post graduate	\$560 (per credit)
Engineering	\$605 (per credit)
General University Fee	\$150/semester (day);
	\$15/semester (evening)
Technology Fee ³	\$100/semester
Reinstatement Fee	\$250
Late Payment Fee ⁴	Determined by balance due
Monthly Services Fee for Past-Due Accounts	\$5

Returned Check Charge	\$25
Parking Fee ⁵	\$40

¹ Beginning Fall 1999, a technology curriculum was instituted for all evening business administration and accountancy majors. Rental of a notebook computer is included in the tuition fee. Contact Part-Time Studies for details.

NOTE: Registration or the release of academic records cannot be completed until all financial obligations have been settled with the Bursar's Office.

Refunds

Refunds as a result of official withdrawal will be made according to the schedule listed below. Activities, library, and medical fees are not refundable. There will be no refund for unauthorized withdrawals. Students who do not register or who notify the Registrar's Office prior to the first week of class that they will not enroll are entitled to a full refund.

Segment of Semester	Refund
Up to first week	80%
Up to second week	60%
Up to third week	40%
Up to fourth week	20%
Beyond fourth week	No refund

Financial Assistance

(www.finaid.villanova.edu)

The cost of a college education is a major concern facing parents and students. Villanova University recognizes this fact and attempts to provide a comprehensive package of financial assistance consisting of grants, loans, and student employment. In addition to these need-based programs, Villanova offers several merit-based scholarships which are granted irrespective of students' needs.

² Any student carrying 12 or more credits of all day classes or 12 or more credits of any combination of day/evening classes will be charged at the applicable full-time undergraduate school rates. These rates are listed above.

³ For Non-matriculated and Post-graduate students taking business courses. Includes rental of notebook computer.

⁴ A Late Payment fee is charged to any account which is not paid in full by the official first day of class.

⁵ Annually for evening students. For students taking day courses, the fee is \$75.

Schol arships

Presidential Scholarships. Villanova University offers four-year full-tuition Presidential Scholarships to every incoming class based exclusively on academic merit. To be eligible for consideration for this full-tuition scholarship, students must score at least 1400 on the SAT I (with a minimum of 670 verbal and 670 math) or an ACT composite score of 32, rank in the top 5% of their high school class, or have a weighted grade point average of a 3.80 on a 4.0 weighted scale if the high school does not provide class rank. All class ranks and grade point averages are taken cumulatively at the end of the sixth semester, and all SAT I or ACT scores must be received by November 1. All applicants to the University who meet these criteria will be invited to submit an additional application for the scholarship. The scholarship selection committee also considers each applicant on the basis of his or her essay, interview, and high school and community involvement. Candidates who are selected as finalists and who are interviewed for the Presidential Scholarship but not selected as recipients, will be awarded a \$12,500 Villanova scholarship. Selections are based exclusively on merit, without regard for race, religion, gender, financial need, or secondary school. For more information, see the Honors Program section of the Catalog.

Villanova Scholarships. Each year candidates to each of the four colleges are reviewed by a scholarship committee in order to identify recipients of the Villanova Scholarship. This competitive program provides partial tuition scholarships that are renewable for a total of eight egular semesters. In the most recent applicant pool (students enrolling as freshmen in the fall 2004 semester), candidates considered for this scholarship achieved a minimum of 1350 on the SAT I (verbal and math minimum of 650) or an ACT composite score of 31 and ranked in the top 5 percent of their high school class or had a weighted grade point average of 3.80 on a 4.0 weighted scale if the high school did not rank. All ranks and grade point averages are taken cumulatively from the end of the sixth semester, and all SAT I or ACT scores must be received by January 7. Villanova Scholars awards must be used for tuition only.

Commuting Scholarships. Partial tuition scholarships are awarded each year to outstanding students commuting from their families' homes. In the most recent applicant pool (students enrolling as freshmen in the fall 2004 semester), candidates considered for this scholarship achieved a minimum of 1250 on the SAT I, ranked in the top 10% of their high school class (if rank is reported) at the end of the sixth semester and originally applied to the University as commuting students. Commuting Scholars awards must be used for tuition only.

Presidential Scholarships for Underrepresented Students. Villanova University seeks students of diverse social, racial, economic and educational backgrounds. Each year, based on the recommendation of the Scholarship Committee, students historically underrepresented within the Villanova University community, and show evidence of their ability to make significant and diverse contributions to the academic and social culture of the University, are offered the Presidential Scholarship for Underrepresented Students. These outstanding candidates must have exceptional high school credentials and must have scored a minimum of 1250 on the SAT I. This renewable award covers full tuition, textbooks, room and board charges for the eight consecutive semesters. Students who

wish to apply should contact the Office of Multicultural Affairs at 610-519-4075 for the Scholarship application. The application deadline is the last Monday in January.

St. Martin de Porres Grant. Villanova University provides grants valued at full tuition and general fee for traditionally underrepresented students from the Greater Philadelphia area. To be eligible for consideration, students must have exemplary high school records, correspondingly high SAT I or ACT scores, leadership roles, and active involvement through service to the community. The Greater Philadelphia area is defined as Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania; Burlington, Camden, Gloucester, and Salem counties in New Jersey; and New Castle County in Delaware.

McNair Scholarship. The Denise McNair Memorial Scholarship has been instituted in memory of Denise McNair who, on Sunday, September 15, 1963, died in the early days of the civil rights movement in a racially motivated bomb attack on the Sixteenth Street Baptist Church in Birmingham, Alabama. This Scholarship, valued at full tuition for eight consecutive semesters, will be awarded every four years to an entering freshman who is a U.S. citizen from a traditionally underrepresented population and, who has demonstrated outstanding academic achievement and a commitment to family, religious faith, peace and justice. Candidates should have an exemplary high school record and correspondingly high SAT or ACT scores.

Student Financial Aid

To apply for all types of student aid, prospective students must file the Free Application for Federal Student Aid (FAFSA) and the Villanova University Institutional Financial Aid Application. The FAFSA can be obtained from the high school guidance counselor or on the web at www.fafsa.ed.gov. Students wishing to complete the FAFSA on the web must request a PIN from the US Department of Education at least three weeks prior to completing the FAFSA. The student and at least one parent must have a PIN to file electronically. PINS may be requested from the US Department of Education at www.pin.ed.gov. The Villanova University Institutional Financial Aid Application can be downloaded from the financial assistance website at www.finaid.villanova.edu. To receive priority consideration for financial aid, applicants must file the FAFSA by February 7^h. Additionally, signed copies of the student's and custodial parents' and stepparent's (if applicable) prior year U.S. or Puerto Rico Tax Returns (no schedules are required), W-2 forms and the Villanova University Institutional Financial Aid Application must be submitted to the Office of Financial Assistance by February 7th. All returning undergraduate students wishing to reapply for financial aid must file the Renewal FAFSA. Returning students who are new financial aid applications must file an original FAFSA. Applicants who are not Pennsylvania residents should file the appropriate application for State Grant consideration in their home state. All returning students must also complete the Villanova University Institutional Financial Aid Application (available through the Office of Financial Assistance website) and return it to the Office of Financial Assistance (Kennedy Hall, second floor) with signed copies of the student's and custodial parents, and stepparent's (if applicable) prior year U.S. or Puerto Rico Tax Returns (no schedules are required) and W-2 forms by April 21. Late applications will be aided only if funds remain available.

Throughout the application process students are encouraged to check on the completeness and status of their application via NOVASIS. Additionally, award eligibility is posted to NOVASIS. Beginning with the 2004-2005 academic year the Office of Financial Assistance will be notifying students of their aid eligibility electronically. Students will be sent an email indicating their award is available to be viewed on NOVASIS.

Additional information regarding the financial assistance process may be obtained via the Office of Financial Assistance website at www.finaid.villanova.edu. Students and families may also address questions or concerns to the Office of Financial Assistance via phone at 1-610-519-4010, fax 1-610-519-7599 or email at finaid@villanova.edu.

In addition to assistance from federal and state sources, students attending Villanova University may be considered for aid administered by the university which is provided through the generosity of individuals and organizations.

Villanova University believes the primary responsibility for meeting educational expenses belongs to both the parents and the student. However, Villanova is committed to help meet the needs of families whom the federal need analysis determines cannot afford the full cost of a Villanova education with fair and equitable financial aid packages from the following federal, state, private, and university sources:

Villanova University Grant. This is an institutional grant based on financial need. Students must be accepted/enrolled in full time (minimum of 12 credits per semester) in the day college in an undergraduate degree program and pursing their first baccalaureate degree. All Villanova students must apply for need-based financial aid to be considered for this program. This award can be applied only to tuition charges billed by Villanova University. Villanova University Grants are awarded for four academic years (eight terms) and are not applicable to the summer term.

Federal Pell Grant Program. This is a federal grant for students demonstrating exceptional financial need and accepted/enrolled in an undergraduate degree program. Application for Federal Pell Grants may be made by submitting an initial FAFSA or a Renewal FAFSA.

Federal Supplemental Educational Opportunity Grant (SEOG). This is a federal grant administered by the educational institution based on financial need. Only undergraduate degree candidates are eligible. All Villanova students must complete the Villanova University Institutional Financial Aid Application and an initial FAFSA or the Renewal FAFSA to be considered for this program.

Federal Perkins Loan. This is a federal loan based on financial need for students accepted/enrolled in an undergraduate or graduate degree program. All Villanova students must complete the Villanova University Institutional Financial Aid Application and an initial FAFSA or the Renewal FAFSA to be considered for this loan program. The Perkins Loan is a 5% interest loan and becomes payable nine months after leaving the University, or nine months after the student is no longer enrolled at least half time. Exit interviews are required by federal law. A hold may be placed on a student's transcript if the student does not complete the exit interview or complete and sign all documents. No credits will be placed in the student's account in the Bursar's office until all documents, including the Master Promissory Note, have been completed by the student borrower and returned to the Office of Financial Assistance.

Federal Nursing Student Loan. This is a federal loan based on financial need for students accepted/enrolled in an undergraduate nursing program. All nursing students must complete the Villanova University Institutional Financial Aid Application and an initial FAFSA or the Renewal FAFSA to be considered for this loan program. The Nursing Loan is a 5% interest loan and becomes payable nine months after leaving the University, or nine months after the student is no longer enrolled at least half time. Exit interviews are required by federal law. A hold may be placed on a student's transcript if the student does not complete the exit interview or complete and sign all documents. No credits will be placed in the student's account in the Bursar's office until all documents, including the Promissory Note, have been completed by the student borrower and returned to the Office of Financial Assistance.

Federal Work Study (FWS). Federal employment program based on financial need for students who are accepted/enrolled in either an undergraduate or graduate degree program. All students must complete the Villanova University Institutional Financial Aid Application and an initial FAFSA or the Renewal FAFSA to be considered for this program. Students are given the choice to work on or off-campus with salaries set according to the job description. Students receiving work-study awards are limited to earning the amount of their initial allocation. Once that limit has been reached, students should contact a Financial Assistance counselor concerning further work study employment. Current work study job listings are posted on the Office of Financial Assistance website (www.finaid.villanova.edu/jobs).

PHEAA Grant. A Pennsylvania State Grant based on financial need for students who qualify for PA state residency and who are accepted/enrolled in an undergraduate program and enroll for at least six credits each semester. For State Grant consideration, students are required to file either an initial FAFSA or a Renewal FAFSA.

Other State Grants. Certain states allow residents to take their state grants into Pennsylvania for study at Villanova. Students are responsible for checking with the respective State Higher Educational Agencies as to the correct application necessary for state grant consideration.

Outside Awards. Organizations outside Villanova University may provide scholarships or financial assistance to Villanova students. Students are responsible for consulting the individual organization for the proper applications and deadlines and for sending transcripts to the scholarship committee if required. NOTE: State, federal, and University regulations prohibit over awards. All outside scholarships, whether based on academic merit or financial need, will be counted as a source of aid and will be added to the student's total aid package. This may result in a reduction of a Villanova Grant or federal aid. It is the student's responsibility to notify the Office of Financial Assistance concerning any outside aid received.

Any change in a student's financial or academic status may result in an adjustment to his or her aid. The Office of Financial Assistance retains the right to make any necessary changes.

Federal Stafford Student Loan Program. An educational loan available to students accepted/enrolled on at least a half time basis in an undergraduate degree program. Students must complete a Master Promissory Note (MPN) from their lender or State Higher Education Assistance Agency. They must also file the Villanova University Institutional Financial Aid Application and an initial FAFSA or the Renewal FAFSA.

Eligibility for a Federal Stafford Loan is based on cost of education, amount of other financial aid being received, as well as an expected family contribution towards educational costs. Students who demonstrate remaining financial need will qualify for the Federally Subsidized Stafford Student Loan. Students without remaining financial need will either need to make interest payments while enrolled or capitalize interest payments (i.e. add interest to the principal balance).

Repayment of the Federal Stafford Loan begins 6 months after the student leaves the University or is no longer enrolled at least half time. The student has up to 10 years to repay. The interest rate will be determined by the date of the student's first student loan. Disbursement will be made either through the issuance of check or electronic fund transfer (EFT). The loan check is made payable to both the student and the school and will be forwarded to the school in two equal disbursements. A guaranty fee and/or an origination fee may be charged on each loan. The maximum loan amount per year is \$2,625 for freshmen, \$3,500 for sophomores, and \$5,500 for juniors and seniors. Funds to be delivered via EFT will be directly deposited into the student's billing account.

All first time, first year borrowers are subject to delayed disbursement of the loan for the fall term. This means that the fall disbursement of the Federal Stafford loan will not be credited to the student account until thirty days (30) after the start of the fall term.

Information regarding the Stafford Loan Application.

New Borrowers at Villanova University. Once aid eligibility is determined, each applicant will receive a notice of aid eligibility from the Office of Financial Assistance. Included in the notice will be the amount of Federal Stafford Student Loan that the student is eligible to receive. This notice of eligibility will initiate the loan process by creating an electronic loan application. As a result of the electronic loan application, all students will receive an MPN from American Education Services (AES).

If you previously borrowed a Stafford loan at another institution and used AES as the guarantor, use the AES note with Villanova University pre-printed on the MPN to complete the application process.

If you borrowed through a guarantor other than AES contact the guarantor or your previous lender for the MPN and forward the MPN to the Villanova University Office of Financial Assistance.

NOTE: You may reduce the loan amount printed on the MPN by changing the amount directly on the MPN.

Previous Villanova University Borrowers. Once aid eligibility is determined, each applicant will receive a notice of aid eligibility from the Office of Financial Assistance. Included in the notice will be the amount of Federal Stafford Student Loan that the student is eligible to receive. This notice of eligibility will initiate the loan process.

Students who borrowed during the previous academic year and had a loan processed through AES will receive a notice of eligibility directly from AES. A Master Promissory Note will not be required. Stafford loan proceeds will be transmitted via Electronic Funds Transfer (EFT) and credited to the student account at the beginning of each academic term.

Villanova Financing Plan. The Villanova Financing Plan has been developed in order to provide students and families with a way through which they can manage the challenge of affording a Villanova education. The Financing Plan offers the family the opportunity to combine Interest-Free Monthly Payment Options offered by the Villanova

Tuition Payment Plan administered through Tuition Management Systems (TMS) with low cost loan options such as the Federal Parent Loan for Undergraduate Students (PLUS) and the PNC Bank Villanova Loan Program.

Villanova Tuition Payment Plan. The Villanova Tuition Payment Plan allows students to spread their balance out over ten months for a small fee. There is no interest charged on the plan and life insurance is included to cover the bill payer and provide a variety of other benefits. Tuition Management Systems (TMS) administers the program for Villanova. Information on this program can be obtained via their website at www.afford.com or by calling them directly at 1-888-895-9061.

Federal Parents Loan for Undergraduate Students (PLUS). Effective July 1, 1993, parents of dependent undergraduate students may be eligible to borrow up to Villanova's cost of education minus estimated financial assistance. Eligibility for this loan is based on creditworthiness and the interest rate is variable but will not exceed 9% interest and principal payments are monthly. The Federal PLUS Application and Master Promissory Note can be obtained from the Office of Financial Assistance. A Villanova University PLUS Application must also be completed. NOTE: For important information concerning aid payments and student rights and responsibilities, contact the Office of Financial Assistance.

The PNC Bank Villanova Loan. The PNC Bank Villanova Loan has been specially designed to provide a low interest loan program to students. This program may be used to bridge the gap between cost and traditional need-based and/or merit-based assistance. The PNC Bank Villanova Loan requires that the borrower (the student) and a co-signer be evaluated in order to determine if they meet the minimum standards of a credit check. Refer to the Villanova University Financial Aid website (www.finaid.villanova.edu) for the latest information regarding rates and terms of the loan.

Minimum Standards for Satisfactory Academic Progress for Financial Aid Applicants

Federal regulations require that an institution establish, publish, and apply reasonable standards for measuring whether a student, who is otherwise eligible for aid, is maintaining satisfactory academic progress in his or her course of study. The standards must be the same or stricter than the institution's standards for a student enrolled in the same academic program who is not receiving financial aid assistance. Listed below is the complete statement of Minimum Standards for Satisfactory Academic Progress for Financial Aid Recipients.

Villanova University Academic Maximum Time Frames for Completing Degree Requirements.

☐ Students are expected to complete their program of study (degree) in the number of semesters indicated in the catalog. Transfer students and students changing programs are placed in an appropriate semester on the basis of credits transferred. Such students are expected to complete their degree according to the remaining semesters in their program plus one additional semester to allow for scheduling difficulties.

The maximum time frame for completing Associate degree requirements is three
years for full-time students and six years for part-time students.
The maximum time frame for completing Baccalaureate degree requirements is
six years for full time students and twelve years for part time students. Transfer
credits earned at other institutions that are applicable to the student's program of
study will be considered in determining the student's maximum time frame for
program completion.
Students must make quantitative and qualitative progress toward their educational
goals each academic year to receive financial aid. The academic year consists of

Quantitative Standards. Full time students must successfully complete a minimum of 24 credit hours each academic year. Students admitted in January must successfully complete a minimum of 12 credits during their first Spring semester.

two regular semesters and the summer sessions.

Students enrolled on a three-quarter basis (9-11 credits per semester) must successfully complete a minimum of 18 credit hours each academic year.

Students enrolled on a half-time basis (6-8 credits per semester) must successfully complete a minimum of 12 credit hours each academic year.

Qualitative Standards. Students must maintain a Cumulative Grade Point Average (GPA) of 2.0 calculated at the end of the academic year in order to be considered a student in good standing.

Measurement of Academic Progress Requirements. Academic progress will be measured in May of each year. Measurement begins with the Fall semester and ends with the last summer session. Students who were enrolled during the Fall and/or Spring semesters and failed to meet the qualitative and quantitative requirements for academic progress can attempt to complete additional credits and bring up their GPA during the summer sessions. Upon completion of the additional credits, a new determination of academic progress will be made.

Transfer students are evaluated for academic progress in May, after the first Spring semester attended at Villanova University. Students that transfer in for the Fall semester are evaluated on their academic performance during their first Fall and Spring semesters. Students that transfer in beginning with the Spring semester are evaluated on their performance during their first Spring semester.

All financial aid applicants are subject to the satisfactory academic standards regardless of whether or not they received financial aid previously.

Failures and withdrawals are courses attempted, not completed. Incompletes are not counted toward credits completed until after the coursework is successfully completed and posted by the Registrar. Repeat courses will not count toward credits completed for satisfactory academic progress since the credits were already counted toward the quantitative standards the first time the course was completed.

When Minimum Standards of Academic Progress Are Not Achieved. A student who does not make satisfactory academic progress will be placed on financial aid suspension until the requirements are met. The student will be notified in writing of the financial aid suspension.

The student can appeal the decision to the Office of Financial Assistance. The appeal must be submitted in writing and specify the extenuating circumstances which prevented achieving satisfactory academic progress.

The following types of mitigating circumstances may be considered when a student appeals: extended illness, death in the family, and changes in educational objective. The Office of Financial Assistance may request additional documentation and/or require a personal interview with the student. After the review, the Office of Financial Assistance will notify the student in writing of the action taken.

If the Office of Financial Assistance determines that the academic progress standards can be waived for one semester, the student will be placed on Financial Aid Probation. At the end of the probationary semester, the Office of Financial Assistance will determine if academic progress requirements have been met. If requirements have been met, the probationary status will be removed. If academic requirements have not been met, the student will be placed on financial aid suspension.

Once financial aid has been discontinued, it will be reinstated provided:

- ☐ The student has successfully achieved the required number of credits and grade point average;
- ☐ The student has requested reinstatement in writing; and
- ☐ Funds are still available.

Reinstatement is not automatic. The student is responsible for making certain that the grades and credits completed have been properly posted with the Registrar prior to requesting reinstatement of financial aid. Students are encouraged to file all financial aid application forms by Villanova University's established deadline so that once reinstatement has been achieved, he or she can be considered for aid as quickly as possible.

A student who is denied aid based on qualitative or quantitative standards will be considered for aid when standards have been achieved. Under no circumstances will aid be awarded retroactively to the semester(s) in which standards were not met.

Return of Federal Title IV Aid If a student completely withdraws from the University and has utilized Federal Title IV funds (e.g., Federal Pell Grant, Federal Supplemental Educational Opportunity Grant [SEOG], Federal Perkins Loan, Federal Stafford Student Loan, Federal Parent Loan for Undergraduate Students [PLUS]) during the semester in which they withdraw. The University will observe the federally mandated process in determining what amount of money, if any, must be returned to the federal program(s).

Students who intend to withdraw from the University must complete the process as outlined in the University Catalog under the Academic Policies section. In cases where a student has received federal financial assistance during that semester, the Office of Financial Assistance will determine what, if any adjustment must be made. This determination will be based on the formula prescribed in the federal regulations for the return of Title IV funds. This determination is made on the basis of the number of the number of calendar days completed in the semester prior to the student's notification to withdraw, divided by the total number of days in the semester. If the resulting percentage is greater than or equal to 60%, no return of federal funds will take place.

If the percentage is less than 60%, this percentage will be used to determine the portion of Title IV aid that has been "earned". The remaining amount must be returned in the following order:

Unsubsidized Federal Stafford Loan Subsidized Federal Stafford Loan

Federal Perkins Loan Federal PLUS Federal Pell Grant Federal SEOG Other Title IV Aid

NOTE: Refunds as a result of official withdrawal or leave of absence will be made in accordance with the University's refund policies which appear in the Tuition and Fees section of this Catalog.

If the amount of money that must be returned to Title IV programs exceeds that which exists in the students account as a result of the University's refund policy, the student will be notified as to the amount of any grant money that must be repaid. This repayment must take place in order for a student to reestablish eligibility to receive federal funds in the future. Any loan proceeds must be repaid and will become part of the normal repayment procedures for the loan program.

Citizens and Eligible Non-Citizens

In order to receive financial assistance, a student must be a U.S. Citizen, a U.S. National, a U.S. permanent resident who has a Permanent Resident Card (Form I-551, since 1997) or Resident Alien Card (Form I-551, before 1997), or an otherwise eligible non-citizen with a temporary resident card (I-688); or must possess one of the following:

A Form I-94 (Arrival-Departure Record) with an appropriate endorsement;

A Form I-181 or I-181B that has been signed by an INS district director;

An official statement granting asylum in the US: or

Other proof from the U.S. Immigration and Naturalization Service that one is in the U.S. for other than a temporary purpose.

Students should check with the Financial Assistance administrator at Villanova to see what documents are required. Students in the U.S. on an F1 or F2 student visa only, or on a J1 or J2 exchange visitor visa only, may not receive student aid, nor can those who possess only a notice of approval to apply for permanent residence (I-171 or I-464A).

Verification

Verification is a requirement of the U.S. Department of Education and is the process of confirming information submitted on the various Federal Title IV Funds including the Federal Stafford Loan. Applicants should be aware that this federal regulation requires them to submit tax data and other requested information to the Office of Financial Assistance before the processing of student loan applications and/or the awarding of funds. Students must submit the required information to complete the verification process no later than 45 days before the last day of the student's enrollment.

Items to be verified include: adjusted gross income from the IRS form; U.S. income taxes paid; number of family members for whom parents provide more than half of their support; the number of children in post secondary schools who are enrolled at least half time; dependency status; untaxed income; eligible non-citizen status and any other item

for which conflicting information has been submitted to the Office of Financial Assistance.

Documents Required:

- ☐ (For dependent students): signed copies of custodial parents', stepparent's (if applicable) and student's U.S. or Puerto Rico income tax returns (no schedules are required), from the prior year and W-2 forms.
- ☐ (For independent students): signed copy of the student's (and spouse's if applicable) prior year U.S. or Puerto Rico income tax return (no schedules are required) and W-2 forms.
- ☐ If the student or custodial parent or stepparent (if applicable) did not file taxes, a signed non-tax filer statement and copies of all W-2 forms must be submitted. Non-taxable income verification such as VA Benefits, Social Security Benefits for all household members and Public Assistance Letters must be submitted to the Office of Financial Assistance.
- ☐ Villanova University Institutional Financial Aid Application.

Academic Policies

The following policies and regulations, along with those of the individual colleges and programs, govern academic life at the University. In order that the programs offered reflect current advances in and additions to knowledge and changes in professional requirements, the University and each of its colleges reserves the right to change program requirements without prior notice. Unless otherwise specified, students are bound by the policies and regulations in effect when their entering class begins its first year of study. It is the responsibility of the student to know and comply with the academic policies and regulations of the University and their respective colleges. Students should consult the individual college sections of this Catalog and the special publications and guidelines issued by the colleges and departments.

Academic Standing

Quality Point Averages. In addition to passing all courses taken the student is also required to maintain a specified grade average leading to graduation with a college degree. The average is derived from the grades and credit hours of the courses taken and is known as the quality-point average. It is determined by multiplying the number of credits for each course attempted by the allotted quality points for the grades received and dividing the total quality points by the total credit hours attempted. Quality points for grades are as follows: A=4.00; A=3.67; B+=3.33; B=3.00; B=2.67; C+=2.33; C=2.00; C-=1.67; D+=1.33; D=1.00; D-=.67.

Class Rank. A student's rank in class is determined by the cumulative quality-point average, which is computed each July for Juniors and Seniors. The rankings for seniors will appear on the transcript. Only credits earned with Villanova University or in formally approved inter-institutional programs will be considered in determining the

cumulative quality-point average. Credits and grades earned in the summer at other colleges are not counted in the quality point average.

Academic Progress. To qualify for a Bachelor's degree, a student, in addition to completing all the studies prescribed for the degree sought, must earn a cumulative quality-point average of at least 2.00. In circumstances involving those students who have entered Villanova University through the Academic Advancement Program, satisfactory progress of the student will be determined by the Academic Standing Committee and/or Dean of the college in which the student is matriculated. In the event that, due to poor high school preparation, additional time is necessary for the student to complete the requirements towards graduation, the student will be viewed as being in a five year program. Satisfactory progress will be viewed accordingly.

Academic Probation. The record of any student whose cumulative or semester quality-point average falls below 2.00 will be reviewed by the Academic Standing Committee for appropriate action. Students in science or engineering whose technical course quality-point average falls below 2.00 will also come before the committee (technical courses include all science, mathematics and engineering courses). Typically the student will either be placed on academic probation or dismissed.

A student on academic probation will normally be allowed only one semester to achieve the required quality-point average. While on academic probation, the student is limited to a schedule of five courses and is ineligible to participate in any extracurricular activities. In the College of Liberal Arts and Sciences a student on probation is limited to a schedule of four courses.

Honors. At graduation students receive honors of three kinds -- *summa cum laude, magna cum laude, and cum laude* -- after being approved for such honors by the faculty and administration of the University. To be eligible for these honors, students must attain a minimum cumulative quality-point average of 3.90, 3.75, 3.50, respectively, and at least sixty credits of course work (not including Satisfactory/Unsatisfactory courses) must have been taken at Villanova University.

Repeat Freshman Year. The Academic Standing Committee may allow a freshman student to declare academic bankruptcy and repeat the year with a new start on the cumulative average (though a record of the year's work will remain on the transcript).

Complaints about Faculty and Grades

Villanova University has a set of procedures for resolving student complaints about faculty performance or about grades. A student who has concerns about either of these issues should, if at all possible, discuss the problem directly with the faculty member. If this is not possible, the student should contact the faculty member's department chair or program director who will provide the student with a copy of the procedures and, if the student wishes, review the process involved. If the student is, for good reason, reluctant to contact the department chair, the student may also contact the Dean of the faculty member's college. A copy of the procedures is also available on request from the Academic Affairs Office, 103 Tolentine Hall, (610/519-4520).

Class Attendance

Class and laboratory attendance for first year students is mandatory with the following exceptions: approved athletic participation, approved field trips, certified serious illness, death in the immediate family, or approved placement activities. An absence card, available from the Office of the Dean of the student's college, must be completed and presented to the Dean no later than 4:30 p.m. on the day the student returns to classes. Excused absences allow the student to make up tests and do not count toward a failure in the course. Absence from class does not release the student from work assigned.

A first-year student will receive a grade of "Y" (failure) whenever the number of unexcused absences in a course exceeds twice the number of weekly class meetings for the course.

For students beyond the first year, attendance policies are determined by the instructors of the various courses. Enforcement of such attendance policies lies with those instructors. Of course, it always is a courtesy to inform one's professors about any absence.

Course Numbering

Courses of instruction are numbered according to the following system: courses designated 1000-6999 are given for undergraduate students only; courses numbered 7000-7999 are graduate courses ordinarily open to qualified undergraduates; courses numbered 8000-9999 are graduate courses not ordinarily open to undergraduates.

If a qualified senior wishes to enroll in a graduate course, written approval must be obtained from the student's adviser and undergraduate college Dean. The College of Liberal Arts and Sciences requires, in addition, approval of the instructor and departmental chairperson of the course involved.

Discipline and Academic Integrity

Academic honesty and integrity lies at the heart of the values expressed in the University's mission statement and inspired by the spirit of Saint Augustine. When one comes to Villanova, one joins an academic community founded on the search for knowledge in an atmosphere of cooperation and trust. The intellectual health of the community depends on this trust and draws nourishment from the integrity and mutual respect of each of its members.

formal Villanova University has a code of academic integrity (www.vpaa.villanova.edu), which discusses issues such as plagiarism and other unacceptable academic behaviors. This document is included in The Blue Book: Villanova University Student Handbook, which is distributed to all students. It is the responsibility of every student to be familiar with this code and to adhere to it. A student who violates the academic integrity code in a course will receive an F for the assignment or a more severe penalty up to an F for the course. In addition, the student will be expected to comp lete an educational program, supervised by the student's college dean, to help the student come to a fuller understanding of academic integrity. For the second

offense, the student will be dismissed from the University and a record of the reason for dismissal will be retained in the student's permanent file and will appear on the student's official transcript. A student who commits an academic integrity violation outside of a specific course will receive a penalty determined by the dean of the student's college.

Students who receive an academic integrity penalty may, if they believe that they have not committed an academic integrity violation, take their case to the Board of Academic Integrity. Detailed descriptions of the University's Academic Integrity Policy are available from department chairs and deans.

In keeping with its nature and goals as a private, church-related institution, Villanova University regards student life on campus as an integral part of the student's educational experience. Hence it is to be understood that the student, in joining the University community, accepts the regulations promulgated in the Student Handbook. The student should also become acquainted with and understand the responsibilities set forth in the Student Handbook, especially those in the sections on Policy and Regulations. Adherence to University regulations is expected and required for successful completion of the program of studies. Enforcement within the classroom of regulations regarding smoking, proper classroom attire, deportment, etc., is the responsibility of the faculty member.

Disclosure of Student Records

Villanova University, in accordance with the Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, has adopted this Student Records Policy to address the following issues: (1) disclosure of directory information; (2) confidentiality of personally identifiable information; and (3) student rights to inspect, review and seek amendment of their records.

- **I. Disclosure of Directory Information**. Information concerning the following items about individual students is designated by the University as directory information and may be released or published without the student's consent: full name; address (local, home or electronic mail); telephone number; photograph; date and place of birth; major field of study; dates of attendance; degrees and awards received (including Dean's list); most recent previous educational institution attended; participation in officially recognized University activities and athletics; and weight and height of members of athletic teams. Students who do not wish directory information to be released or made public must inform the appropriate office, in writing, at the time the information is originally sought.
- II. Confidentiality of Personally Identifiable Information. All personally identifiable information contained in student records other than directory information is considered confidential information. This information includes, but is not necessarily limited to: academic evaluations; general counseling and advising records; disciplinary records; financial aid records; letters of recommendation; medical or health records; clinical counseling and psychiatric records; transcripts, test scores, and other academic records; and cooperative work records. "Personally identifiable information" means that the information includes: (a)the name of the student; (b) the address of the student; (c) a personal identifier such as social security number; or (d) a list of personal characteristics or other information that would make the student's identity easily traceable.

The University will generally not disclose personally identifiable information to third parties without the written consent of the student. The consent should specify the records to be disclosed, the purpose of the disclosure, and to whom the records are to be disclosed. However, personally identifiable information may be disclosed, without the student's consent, to the following individuals or institutions, or in the following circumstances:

	University officials (or office personnel ancillary to the officials) who require
	access for legitimate educational purposes such as academic, disciplinary, health
	or safety matters. University officials may include, without limitation, the
	President, Vice Presidents, Deans, Directors, Department Chairs, Faculty
	Members, NROTC Commanding Officer, General Counsel, Deputy General
	Counsel, Judicial Officers, Counselors, Resident Advisers, Coaches and
	Admissions Officers. University officials also include individuals employed by or
	under contract to the University to perform a special task, such as an attorney or
	auditor, and individuals acting as official agents of the University who are
	performing a service on behalf of the University.
	Officials of other educational institutions to which the student seeks or intends to
	enroll (on condition that the student upon request is entitled to a copy of such
	records).
	Appropriate federal, state or local officials or authorities, consistent with federal
	regulations.
	Organizations conducting studies for, or on behalf of, educational agencies or
	institutions.
	Accrediting organizations to carry out their accrediting functions.
	Parents of a dependent student as defined in Section 152 of the Internal Revenue
	Code of 1986.
	Parents or guardians of a student, where the information pertains to violations of
	any federal, state or local law or of any University rule or policy governing the use
	or possession of alcohol or a controlled substance, and the student has committed
	a disciplinary violation.
	In connection with the student's application for, or receipt of financial aid.
	To comply with a judicial order or lawfully issued subpoena (on condition that a
	reasonable effort is made to notify the student of the order or subpoena, if legally
	permitted to do so).
	In case of an emergency, to protect the health or safety of students or other
_	individuals.
]	The University will inform a party to whom a disclosure of personally identifiable

information is made that it is made only on the condition that such party will not disclose the information to any other party without the prior written consent of the student.

III. Inspection and Review Rights; Right to a Hearing. A currently or previously

III. Inspection and Review Rights; Right to a Hearing. A currently or previously enrolled student has the right to inspect and review his or her educational records. This right does not extend to applicants, those denied admission, or those admitted who do not enroll. Offices may require that requests for access be submitted in writing, and may ask for, but not require, the reason for the request. The University will comply with requests to inspect and review a student's records that it has determined to honor within a

reasonable period of time, but in no case more than forty-five days after the request was made.

Records to which students are not entitled to access, include: ☐ Confidential letters and statements of recommendation placed in a student's record before January 1, 1975, or confidential letters and statements of recommendation to which students have waived their rights of access. ☐ Employment records of students as University employees. ☐ Campus law enforcement records created and maintained by the Public Safety Office, in accordance with the requirements of FERPA. Records that are made or maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her professional capacity or assisting in his or her paraprofessional capacity, and that are made, maintained, or used only in connection with treatment of the student and are not disclosed to anyone other than the individuals providing the treatment. These records may be reviewed, however, by a physician or other appropriate professional of the student's choice. ☐ Financial records of the parents of the student or any information contained in those records. ☐ Records of instructional, supervisory, and administrative personnel and educational personnel ancillary to those persons, that are in the sole possession of the maker of the record and are not accessible or revealed to any other individual except a temporary substitute for the maker. ☐ Institutional records of students which may be maintained by the University in a computer printout or similar format (so long as this computerized information is not intended to be distributed outside the University), as long as the original source of computer information is available in the office or department having original jurisdiction for the records. Records that only contain information about a person after that person was no longer a student at the University (e.g., information collected by the University pertaining to accomplishments of its alumni).

☐ Those portions of a student's records that contain information on other students.

Students may be invited but not required to waive their right of access to confidential letters of recommendation for admission, honors or awards, or employment. Failure to execute a waiver will not affect a student's admission, receipt of financial aid, or other University services. If a student signs a waiver, he/she may request a list of all persons making confidential recommendations.

A student who believes that any information contained in his or her educational records is inaccurate or misleading, or otherwise in violation of his or her privacy rights, may request that the University amend the records. The student should first discuss his or her concerns with the individual responsible for the office where the records are maintained. If the student is not satisfied with the resolution, the student should contact the individual to whom that person reports. If still not satisfied, the student may contact the appropriate vice president or designee. The final level of appeal is a formal hearing. To obtain a hearing, the student should file a written request with the Vice President for Student Life. The hearing will be conducted in accordance with the requirements of FERPA.

The substantive judgment of a faculty member about a student's work (grades or other evaluations of work assigned) is not within the scope of a FERPA hearing. A student may challenge the factual and objective elements of the content of student records, but not the qualitative and subjective elements of grading.

If as a result of a hearing the University determines that a student's challenge is without merit, the student will have the right, and will be so informed, to place in his or her records a statement setting forth any reasons for disagreeing with the University's decision.

Students have a right to file complaints concerning alleged failures by the University to comply with the requirements of FERPA and the implementing regulations. Complaints should be addressed to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, S.W., Washington DC 20202-4605. Students are encouraged to bring any complaints regarding the implementation of this policy to the attention of the General Counsel.

Final Examinations and Conflict

Final examinations are given in virtually all courses at a time and place designated. NOTE: It is the student's responsibility to contact the professor within 48 hours if an examination is missed. Provisions exist to alleviate scheduling problems caused by conflicts; i.e., if two of a student's examinations are scheduled at the same time or if three of his/her examinations are scheduled on the same day.

In the event of a conflict, the student must request in advance that a special examination be given by one of the instructors in accordance with the following directions.

□ G ₁	oup departmenta	l examinations	should take	precedence ov	er any othe	r.
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- ☐ Major or required courses should take precedence over electives.
- ☐ A regular course should take precedence over a repeat or make-up course.
- ☐ Extraordinary difficulties encountered in effecting such an arrangement will be resolved by the Dean of the respective college.

Grading System

At mid-semester and at the end of the semester grades are available to the student. The grade report at the end of the semester is part of the student's permanent record. Any inaccuracy on this record must be reported to the Registrar within two weeks of its receipt; otherwise, the record will stand as it is.

Grade Definitions

A the highest academic grade possible; an honor grade which is not automatically given to a student who ranks highest in the course, but is reserved for accomplishment that is truly distinctive and demonstrably outstanding. It represents a superior mastery of course material and is a grade that demands a very high degree of understanding as well as originality or creativity as appropriate to the nature of the course. The grade

indicates that the student works independently with unusual effectiveness and often takes the initiative in seeking new knowledge outside the formal confines of the course.

A-

B+ B

denotes achievement considerably above acceptable standards. Good mastery of course material is evident and student performance demonstrates a high degree of originality, creativity, or both. The grade indicates that the student works well independently and often demonstrates initiative. Analysis, synthesis, and critical expression, oral or written, are considerably above average.

B-

C+ C

Indicates a satisfactory degree of attainment and is the acceptable standard for graduation from college. It is the grade that may be expected of a student of average ability who gives to the work a reasonable amount of time and effort. This grade implies familiarity with the content of the course and acceptable mastery of course material; it implies that the student displays some evidence of originality and/or creativity, works independently at an acceptable level and completes all requirements in the course.

C-D+ D

denotes a limited understanding of the subject matter, meeting only the minimum requirements for passing the course. It signifies work which in quality and/or quantity falls below the average acceptable standard for the course. Performance is deficient in analysis, synthesis, and critical expression; there is little evidence of originality, creativity, or both.

D-

F Indicates inadequate or unsatisfactory attainment, serious deficiency in understanding of course material, and/or failure to complete requirements of the course.

N Incomplete: course work not completed.

S Satisfactory: Assigned in Satisfactory/Unsatisfactory courses (work must be equivalent to C or better).

SP Satisfactory Progress.

Transfer grade.

WX Approved withdrawal without penalty.

W Approved withdrawal with penalty.

U Unsatisfactory: Assigned in Satisfactory/Unsatisfactory courses

AU Audit

Y Unofficial withdrawal from course (or for freshmen, failure for excessive absences).

NG (Or Blank): no grade reported.

All grades are permanent, except N and NG, which are temporary grades used to indicate that the student's work in a course has not been completed. An N or NG grade

must be removed and a grade substituted by the instructor according to the following schedule:

For the Fall Semester: Students must submit all work to the instructor by the last Friday in January; grade changes must be submitted to the Registrar's Office by the second Friday in February

For the Spring Semester: Students must submit all work to the instructor by the last Friday in June; grade changes must be submitted to the Registrar's Office by the second Friday in July

Students should check the academic calendar for actual dates. NOTE: if a change is not reported, the N or NG grade automatically becomes an NF.

Without the approval of the instructor, the department chairperson, and the Dean, no grade higher than C may replace the N.

A student may also receive an N for missing a final examination if the student reports a serious medical reason (or other reason certified by the Dean as acceptable) within 48 hours of the time of the examination. Otherwise an F grade must be reported. The student may report the reason for absence to the instructor, the department chair, or the Dean.

The grade WX indicates an authorized withdrawal with the grade not considered in the calculation of the quality-point average. The grade W also indicates an authorized withdrawal, but the grade is calculated as an F in determining the quality-point average. Authorization for WX and W may be given only by the student's Dean. The grade Y is given when a student unofficially withdraws from a course. It is reflected in the average as an F.

Required courses carrying a final grade of F must be repeated unless the student transfers to another college of the University where the course for which an F grade was received is not a requirement for the degree. The reasons for student deficiencies are reported by the faculty member at mid-semester and at the end of the semester to the Dean of the student's college.

When a student who has failed in a course presents evidence of subsequently passing a like course in another institution, the University reserves the right to withhold credit for the course until the student shall have passed a qualifying examination given by the Faculty from which a degree is sought.

Students should recognize that failure in one course or more will usually make it impossible for them to graduate with the class in which they matriculated.

Audit. Courses may be audited with an adviser's consent. The student who has been granted audit status will not be responsible for the assignments and examinations required in the course, but must attend all class and laboratory sessions. Although no credit or grade is received, the same tuition and fees are charged for an audit as for a credit course. A student must declare audit status by completing the appropriate form in the Registrar's Office by the end of the drop/add period, and no change from credit to audit status or vice versa may be made after that period.

A class taken for audit may subsequently be taken for credit, but the student will be charged normal tuition and fees for the course.

Satisfactory/Unsatisfactory Option. For the regulations governing students eligible for the satisfactory/unsatisfactory option in the different colleges and the courses

that may be required, see the appropriate section of the catalog in which the college degree programs are listed. The following regulations apply to all colleges:

The substantially discussed will be shown on the transcript out will no
be reflected in the quality-point average.
The grade S is the grade C or better.
A student must declare election of the satisfactory/unsatisfactory option by the
end of the drop/add period.

☐ The satisfactory/unsatisfactory grade will be shown on the transcript but will not

Residence Requirement for Graduation

A student must complete the final 30 credit hours of an academic program at Villanova. With the permission of the College Dean, study as part of an approved International Studies program may count towards the residency requirement.

Schol astic Load

A student must take a minimu m of 12 credits a semester to be a full-time student. A normal scholastic load is defined by the program set forth in this catalog. Permission to take fewer than 12 credit hours or a course in excess of the normal load may be obtained in exceptional circumstances with the written approval of the Dean. All colleges require a 3.5 QPA (Engineering 3.00) for a student to be granted an overload.

Transfer of Credit from Another University

For students who are matriculated in degree programs at Villanova University and who seek to transfer courses taken at another university: (1) No course may be taken at another institution, domestic or foreign, for transfer of credit back to Villanova without pre-approval by the Dean of the student's college or his/her designee. (2) Villanova will not pre-approve courses, or transfer credits back to Villanova, for students who will be on a University leave of absence when they enroll in such courses.

Transcripts

Students may obtain transcripts of their records from the Office of the Registrar, Tolentine 202, either in person or by writing to the office. Telephone requests cannot be accepted. Two weeks' notice is required.

Official transcripts bear the seal of the University and the signature of the Registrar. Those given or mailed to the student, are stamped with a statement which points out this fact.

Transcripts will not be released for persons whose financial accounts are not clear in the Bursar Office.

Withdrawal from a Course

Until the final day for authorized withdrawal from courses, approximately three and one-half weeks after mid-term break (for an exact date, see the academic calendar @

http://www3.villanova.edu/calendar/), a student may withdraw from a course without penalty and will receive the grade of "WX." After that date, a student seeking authorized withdrawal without penalty must petition the Dean of his or her college, who has sole authority to grant withdrawals without penalty. Each college has different requirements, which may be found under "Withdrawal from a Course" in each college's section of this Catalog. Note that withdrawals without permission will receive a "W" grade, which is calculated as an "F" in computing one's quality point average.

Withdrawal from the University

Official withdrawal from the University must be authorized by the Dean of the appropriate college. In order to effect an official withdrawal, a student must submit to the Dean a formal letter, or the appropriate college form, and then have an interview with the Dean. The letter of withdrawal may be countersigned by the student's parents or legal guardian. The parents or guardians may, if they wish and if authorized by the student, submit the official letter of withdrawal. Applications for withdrawal must usually be made by the end of the fourth week of school.

Dear Villanovan,

It is with great pleasure that I present the fifteenth edition of the *Enchiridion*, the handbook for students in the College of Liberal Arts and Sciences. The *Enchiridion* is meant to be a ready reference for information on the College, its academic programs, regulations, and policies. I am sure you will find it most useful.

As a student in the College of Liberal Arts and Sciences, you are part of a learning community which draws upon the legacy of St. Augustine, whose own pursuit of knowledge was characterized by open, intelligent and respectful interaction with various points of view. The College offers its programs in the liberal arts and sciences in the hope that they will foster an awareness of moral, religious and humanitarian values which are necessary for the total growth of the individual. As St. Augustine reminds us:

Let knowledge be used as a kind of scaffolding to help build the edifice of love and understanding, which shall endure forever even after knowledge itself shall be destroyed.

(Epist. 55,22,39)

Please know that the faculty, staff and administration of the College, with your cooperation, are eager to help you attain these goals.

(Rev.) Kail C. Ellis, O.S.A.

Kail C. Eleis

DEAN

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Introduction

THE COLLEGE OF LIBERAL ARTS AND SCIENCES

Rev. Kail C. Ellis, O.S.A., Ph.D	Dean
	Associate Dean
John Doody, Ph.D.	Associate Dean for Core Curriculum
Edwin L. Goff, Ph.D	Associate Dean for Honors Program
	& Undergraduate Grants & Awards
Catherine M. Hill, Ed.D.	Associate Dean
Mario J. D'Ignazio, M.Ed.	Assistant Dean

History

The College of Liberal Arts and Sciences of Villanova University was founded by the Augustinian Order in 1842. The College traces its origins to old St. Augustine's Church in Philadelphia, which the Augustinians founded in 1796, and to its parish school, St. Augustine's Academy, established in 1811.

In 1842 the Augustinians purchased "Belle Air," the country estate of John Rudolph, a Revolutionary War officer and Philadelphia merchant. There they established the "Augustinian College of Villanova," under the patronage of St. Thomas of Villanova, a sixteenth-century Augustinian educator and Bishop of Valencia, Spain. Eventually the College came to be known as Villanova and gave its name to the town which grew up around it.

Classes for the new college began on September 18, 1843 when thirteen students embarked on a traditional liberal arts curriculum. At the outset, however, difficulties plagued the new college. The anti-Catholic "Know Nothing" riots in Philadelphia in 1844 resulted in the burning of St. Augustine's Church. The need to rebuild the church and maintain the new college created a financial crisis for the Order. As a result, the College closed its doors on February 20, 1845. It was able to reopen in September, 1846, with a student population of twenty-four; the first commencement took place on July 21, 1847. The following year, on March 10, 1848, the Governor of Pennsylvania, Francis R. Shunk, signed the Act of Legislature incorporating the College.

In 1857, Villanova College closed for a second time. Demands on the services of priests through the expansion of parishes in the area created staffing problems for the Augustinians, while the "Panic of 1857" brought on hard economic times. The onslaught of the Civil War in 1860 affected student enrollment and the College was not reopened until September, 1865. In the years that followed, the College prospered, increasing its student population and adding significantly to its physical facilities.

Although in the first fifty years of its existence the College concentrated exclusively on the liberal arts, it nevertheless remained open to the changes in the curriculum which were required to meet the needs of the time and the demands for specialization.

Today, the College continues to offer a variety of educational programs which are aimed at the total growth of the individual, and which prepare students for viable careers. Graduates of the College have taken their place in almost every field of endeavor, serving in education, business, government, law, medicine and research, where they make vital contributions to the communities and the world in which they live.

Objectives

The College of Liberal Arts and Sciences exists to provide an atmosphere of responsible learning to a varied group of students who are called to intellectual, moral and professional leadership. To fulfill these goals, the College seeks to promote intellectual curiosity and rigor within the university, to instill the fundamentals of critical insight, mature judgment and independent thinking, and to awaken in its students a sense of the importance of values and the moral responsibility of caring for others and working for the betterment of society.

Villanova has always openly and proudly declared that it is a Catholic institution of higher learning. The University maintains a strong respect for the beliefs of its diverse community of faculty, students, and staff. In keeping with its central place in a Catholic University, the College of Liberal Arts and Sciences has a special commitment to the Christian belief that creation is an expression of the divine truth through the redemptive life, death and resurrection of Jesus Christ, the incarnate Word of God. It also seeks to provide a Christian intellectual and moral environment, and believes that it is the common right of all to participate in creation, to seek truth and to apply such truth attained to protect and enrich personal and communal life.

Villanova's special Augustinian heritage enables the College to draw upon the dynamic legacy of St. Augustine whose passionate pursuit of wisdom, understood through the metaphor of one heart and one mind, inspires its own quest for knowledge in open, intelligent, responsible and mutually respectful interaction of points of view. This legacy is classically illustrated by the Augustinian Order's impact on the medieval universities, its distinguished cultivation of Renaissance art, and it's fostering of the scientific discoveries of Gregor Mendel. It is further expressed in the conviction that all authentic human wisdom is ultimately in harmony with Divine Wisdom, and it invites collaboration with other Christians and peoples of other traditions who might share at least the general features and dynamics of this Augustinian vision.

In light of this legacy, the College has developed a diversified academic program and a core curriculum which provide students with a scale of well-

defined universal values that equips them to be wise critics of the society in which they live, and which sustains a moral base and social consciousness that transcends economic barriers and questions of race, gender and creed.

Academic Mission

The academic mission of the College is intimately connected with its Core Curriculum. The courses in the Core Curriculum treat a broad range of disciplines from a variety of approaches; at the same time, the Core strives to ensure depth of study and intellectual sophistication while recognizing that learning implies different modes of inquiry. The objectives of the Core are to:

- a. Achieve a synthesis of knowledge that provides a basis for informed judgment, not simply "fact finding".
- b. Promote literacy as a foundation for intelligent discourse and the articulation of informed views.
- c. Advance culture in a broad sense, educating students to understand and to appreciate the interrelated patterns of customary beliefs and practices, social forms, aesthetics, and material traits that act to define a culture and its position within a larger historical and intellectual framework. The educational program does not simply look to the past, but acknowledges that culture is vibrant and continuously redefined.
- d. Challenge students to understand that the present is recognizably formed from past influences and that in order to assess our culture and arrive at a view of its future, students must be trained to scrutinize and bring into perspective the relationship of the present culture with that of the past.
- e. Prepare students to become active participants within society, to engage in the process of informed political debate, to discover the impact of new technologies, and to encourage an understanding and appreciation of the diversity of cultures and experiences, a respect for the individual, and the development of a multicultural and international perspective.
- f. Encourage personal development in preparing students to regard themselves as citizens living in a democratic society, as belonging to a world community, replete with communal responsibilities.

Mission To Its Students, Faculty and Staff

The College strongly adheres to the principles of the University Mission Statement which commits Villanova to "developing and sustaining an academic environment in which the potentialities of its members may be realized." In so doing, the College is guided by the teachings of Vatican II which emphasized that "the human spirit must be cultivated in such a way that there results a growth in its ability to wonder, to understand, to contemplate, to make personal

judgments, and to develop a religious, moral, and social sense" (*Pastoral Constitution on the Church in the Modern World*, 59).

In order to fulfill its academic mission of transmitting, pursuing and discovering knowledge, the College commits itself to the hiring and retaining of outstanding teacher-scholars and dedicated staff personnel whose academic and professional interests will develop and foster the goals of the University's Mission Statement. In hiring faculty and staff personnel, the College further commits itself to the goal of maintaining a richness of diversity by actively recruiting women and minorities. In all hiring strategies and decisions, the College strives to utilize procedures that will reliably determine the best qualified applicants.

While the College is committed to maintaining its Catholic identity, it does not seek a particular religious affiliation within its personnel. Rather, as formulated in the University's Mission Statement, it asks that all respect its "attempts to develop an environment in which students, faculty and staff may experience a Christian intellectual and moral perspective," and have a willingness to enter into the conversation that gives its mission life and character.

The College is strongly committed to academic freedom which makes open discussion and inquiry possible. It believes that open discussion among scholars and students is a self-correcting process that is intrinsic to academic freedom and that this process is in accord with responsible freedom, a central value of the Christian tradition, and of the thought of St. Augustine, the great theologian of Christian freedom.

The College seeks to encourage and equitably reward the valuable performance of its faculty and staff by offering competitive salaries and by making available opportunities which will enhance their professional development. It also seeks to promote a congenial work environment that is conducive to self-motivation. In recruiting students, the College seeks to ensure the best applicant pool possible. It strives to retain students by offering excellent academic programs and by providing them with quality campus activities.

Part I: Matriculation Requirements

A. Required Units for Admission

Although individual consideration is given to each applicant, it is expected that all applicants, except in the most unusual circumstances. Will minimally satisfy the unit requirements listed below. A unit represents a year's work.

For Arts and Education Curricula:

English	4	Mathematics	3
Foreign Language	2	Science	1
History or Social Science	2	Electives	3

For Science and Mathematics Curricula:

English	4	Foreign Language 2
Chemistry	1	Physics 1
Mathematics	4	Electives

B. Advanced Placement and International Baccalaureate Credit

Students who have taken Advanced Placement or International Baccalaureate tests at the conclusion of high school should report to the Dean's Office to verify Villanova's receipt of the official scores and to ensure that proper adjustments have been made to their academic record. The guidelines for granting credit for courses that are equivalent to Advanced Placement courses are shown on the following page. Please consult the Dean's Office for guidelines regarding equivalency for International Baccalaureate courses. The following is the list of Advanced Placement Tests and scores and their application to the baccalaureate degree:

ADVANCED PLACEMENT	SCORE OF 3		SCORE 4 OR 5	
SUBJECT-TEST NUMBER	Courses	Cr.	Courses	Cr.
AMERICAN HISTORY –(07)		•	HIS 1000	3
			HIS 1001	3
Studio Art – (14)	PLACEMENT ONLY		PLACEMENT ONLY	
Studio Art – (15)	PLACEMENT ONLY		PLACEMENT ONLY	
BIOLOGY – (20)	PLACEMENT (PLACEMENT ONLY (BIO 1505)		4
				4
CALCULUS AB – (66)	MAT 1500	4	MAT 1500	4
			MAT 1505	4
Calculus BC – (68)	MAT 1500	4	MAT 1500	4
	MAT 1505	4	MAT 1505	4
CHEMISTRY – (25)			CHM 1103	1
			CHM 1104	1
			CHM 1151	4
			CHM 1152	4
Classics: Virgil – (60)			LAT 2031	3
CLASSICS: HORACE CATULLUS – (61)			LAT 2032	3
COMPUTER SCIENCE A – (31)			CSC 1051	4
COMPUTER SCIENCE AB – (33)			CSC 1051	4
ECONOMICS: MICRO – (34)			ECO 1001	3
ECONOMICS: MACRO – (35)			ECO 1002	3
ENGLISH LANGUAGE AND COMPOSITION – (36)	PLACEMENT ONLY		ENG 1050	3
English Literature & Composition – (37)	PLACEMENT ONLY		ENG 1050	3
EUROPEAN HISTORY – (43)			HIS 1021	3
Environmental Science – (40)			BIO 1555	4
HISTORY OF ART – (13)			AAH 1101	3
			AAH 1102	3
Modern Language French – (48)	PLACEMENT ONLY		FRE 1121	3
OR (51)			FRE 1122	3
Modern Language German – (55)	PLACEMENT ONLY		GER 1121	3
			GER 1122	3
Modern Language Spanish – (87) or (89)	PLACEMENT () NLY	SPA 1121	3
2.15			SPA 1122	3
Physics C: Mechanics – (80)			PHY 1100	3
			PHY 1101	1
Physics C: Electromag – (82)			PHY 1102	3
B. (57)			PHY 1103	1
POLITICAL SCIENCE – (57)	-		PSC 1100	3
POLITICAL SCIENCE – (58)			PSC-1200	
Psychology – (85)			PSY 1000	3
STATISTICS – (90)	<u> </u>		MAT 1230	3
WORLD HISTORY – (93)	PLACEMENT (JNLY	HIS 1050or	3
	<u> </u>		His 1040	

C. Pre-matriculated College Credit Prior to HS Graduation

College-level work done prior to high school graduation may be awarded transfer credits upon receipt, in the Dean's Office, of the following three documents:

- 1) an official letter from the high school principal or guidance counselor describing the college-level program of study;
- 2) an official letter from the college/university stating that the courses were taught on its campus by a member of the regular faculty, open to enrollment by and graded in competition with regularly matriculated undergraduates at the college, and a regular part of the normal curriculum published in the college catalog;
- 3) an official, seal-bearing transcript from the college/university.

D. Foreign Language Placement

All students who decide to continue their study of French, German, Italian, or Spanish from high school in order to fulfill the Core Curriculum requirement of two courses at or above the intermediate-level are required to complete the online language placement examination for the language in which they will enroll by June 30.

The online language placement examination consists of questions on vocabulary, grammar, and reading comprehension and generally takes about 25 minutes to complete. Based on the results of the test and a number of other factors (such as the number of years of study of the language in high school, study or time abroad, etc.) you will be placed by professors of the language of your choice and you will automatically be registered for the course in which you have been placed.

Please note that if you **have never studied the language for which you are registering**, you must register for 1111 for the language which the first semester introductory course. You do not have to take the online placement examination. <u>But remember that in this case you must successfully complete 4 semesters of that language.</u>

For important additional information on the online placement exam and to take the online examination, please refer to the following Web site:

http://www.artsci.villanova.edu/langtest/

E. Transferring to the College of Arts and Science from another college or university.

Students wishing to transfer to he College of Liberal Arts and Sciences after having attended another college or university must submit a formal application to the Villanova University Office of Admissions.

Transfer students will be considered for admission if the have completed a minimum of eight courses of three credits or more with a grade of "C" or better; and have a grade point average (gpa) of at least 2.5. Students who meet the eight course requirement but do not have a 2.5 gpa will be considered if their high school academic profile (SAT scores, gpa and class standing) match the academic profile of the middle 50% of the most recent entering freshman class to the College of Liberal Arts and Sciences.

Students who have taken college courses at another institution prior to attending Villanova, must present the necessary course descriptions and other documentation as needed to the Dean's Office before or during their first semester at Villanova. Courses will be given consideration for transfer credit only upon receipt of a seal-bearing, official transcript sent by mail to the College, and, upon request, an official course description (e.g., from a course catalog). If such courses are not presented for evaluation during the first year, no future possibility for evaluation or credit will exist. Transfer credit will be awarded only for approved courses in which a student earns a grade of "C" or better. The actual grade received at the other institution (earned either before attending Villanova or earned during a summer) is not calculated into the student's cumulative grade point average.

Part II: The Baccalaureate Degree

A. General Requirements

The Baccalaureate degree is awarded when the curriculum prescribed by the College for one or more of the various degree programs has been satisfied. Although a minimum of 122 credits are required to graduate, there is no minimum number of credits which, once attained, will automatically allow a student to receive a Bachelor's Degree. Candidates for graduation also must meet all of the following six requirements;

- A minimum of 40 courses of three or more credits and 2 labs (science degrees vary according to major), which includes the successful completion of the Core Curriculum, and academic major requirements and electives.
- 2) a cumulative GPA of at least 2.000. (Science students must also have a minimum technical grade point average of at least 2.000), and
- 3) at least sixty-one credits must be earned at Villanova University, and
- 4) at least half of the Core Curriculum requirements must be fulfilled at Villanova University, and
- 5) at least half of the requirements for the major must be fulfilled at Villanova University, and
- 6) the final thirty credits of the degree program must be earned at Villanova University.

B. Degree Programs:

The College offers the following undergraduate degree programs:

Bachelor of Arts in:

Art History Humanities
Classical Studies Human Services

Communication Italian
Criminal Justice Philosophy
Economics Political Science
English Psychology
French Sociology
Geography Spanish

German Theology and Religious Studies

History

Bachelor of Arts, Honors Program

Associate of Arts

Bachelor of Science in Astronomy and Astrophysics

Bachelor of Science in Biology

Bachelor of Science in Chemistry

Bachelor of Science, Comprehensive Science Program

Bachelor of Science in Computer Science

Bachelor of Science in Education

Bachelor of Science, Honors Program

Bachelor of Science in Information Science

Bachelor of Science in Mathematics

Bachelor of Science in Physics

Associate of Science in Natural Science

C. Concentrations

In addition, interdisciplinary concentrations are available in:

Africana Studies
Arab and Islamic Studies
Business
Military Science (ROTC)
Cognitive Science
East Asia Studies
Environmental Studies
Ethics
Latin American Studies
Military Science (ROTC)
Peace and Justice
Russian Area Studies
Women's Studies
Writing and Rhetoric

Irish Studies

Elementary Education (in conjunction with Rosemont College)

Minors are available from most academic departments in the College. See Part IV for detailed information on requirements for each of these degrees.

D University Policy on Academic Integrity

Each student in the College of Liberal Arts and Sciences is responsible for the completion and presentation of work which is the result of an individual effort. Academic integrity is at the heart of the values expressed in the University's mission statement. A Villanova student agrees to accept this responsibility as a member of an academic community which was founded in the spirit of St. Augustine's search for knowledge in an atmosphere of cooperation and trust. The intellectual health of this community depends on and draws nourishment from the integrity and mutual respect of each of its members. Academic integrity is vital, therefore, to any university community.

Students receive credit for doing their own work. Students who use someone else's work or ideas without saying so, or who otherwise perform dishonestly in a course, violate a trust. Such dishonesty, manifested in cheating, fabrication, plagiarism, multiple submission of work, or assisting in or contributing to dishonesty, threatens the integrity not only of the individual student, but also of the university community as a whole. A complete statement on the University Code of Academic Integrity is presented in Appendix I of the *Enchiridion*.

Ordinarily, matters involving academic integrity in the classroom are handled by the faculty member in charge of the course. Whenever a faculty member believes a student has violated the Code of Academic Integrity, and when sufficient evidence warrants, that faculty member may assign a penalty which may range from a failure for the work in question to a failure for the course. The faculty member will notify the student, the faculty member's chairperson and Dean, and the Dean of the student's college concerning the action taken. A record will be maintained in the student's file in the office of his or her Dean until the student graduates or otherwise severs all relationship with the University.

If the faculty member judges that a particularly egregious violation has occurred, the faculty member may file a written complaint according to the provisions of the University Academic Integrity Policy. The Academic Integrity Code Policy and Procedures are posted on the Academic Integrity Homepage at http://www.VPAA.Villanova.Edu/academicintegrity

E. College Policy on Integrity

The College Of Liberal Arts and Science incorporates all elements of the University Code on Academic Integrity. We take particular note of item G. Other Forms of Dishonesty which states" Acting dishonestly in an academic setting

includes more than being honest in one's academic assignments; students are expected to be honest in all dealings with the University."

Misrepresenting one self or one's circumstances to an instructor, a chairperson, an academic administrator or a dean in order to seek consideration for a waiver of policy or procedure will be a basis for implementing the procedures outlined in the University's Code of Academic Integrity.

F. Dean's List

At the end of the fall semester and at the end of the spring semester the College of Liberal Arts and Sciences officially recognizes its best students by including their names on the Dean's List. Inclusion on the list is a tribute to a student's hard work and superior academic performance. In an effort to retain the honor which is integral to membership on the list, the requirements for inclusion are justifiably rigorous.

In order to be named to the Dean's List a full-time student in the College of Liberal Arts and Sciences must maintain a minimum semester grade point average of 3.50. All students included on the list will receive a congratulatory letter from the Dean following the conclusion of the fall and spring semesters.

G. Graduation Honors

Graduation honors will be noted on the degrees of graduating students meeting the following requirements:

- 1) Summa cum laude minimum cumulative GPA of 3.90
- 2) Magna cum laude minimum cumulative GPA of 3.75
- 3) Cum laudeminimum cumulative GPA of 3.50

H. Medallion of Excellence

Each department in the College of Liberal Arts and Sciences may nominate one graduating senior each year to receive a Medallion of Excellence. Generally, to be eligible for nomination, students must have earned a minimum of three-fourths of their degree at Villanova in the College of Liberal Arts and Sciences and must have a minimum cumulative grade point average of 3.50.

Each department has named its medallion either for a luminary from the past who has deeply affected the discipline or an outstanding person who helped to shape the course of study at Villanova University.

Part III: Academic Mentoring and Advising

The College of Liberal Arts and Sciences is the oldest and largest of Villanova's four undergraduate colleges. At the undergraduate level the College offers 30 majors and 18 interdisciplinary concentrations to approximate by 3800 fulltime and 150 part time students. Central to the curriculum for all arts and science students is a 21 course integrated liberal arts core with an emphasis on writing, critical thinking, intellectual sophistication, and cultural understanding. The College's core curriculum is the largest required of almost any college in the country and a hallmark of our mission to the liberal arts and sciences.

Each year the College enrolls about 900 new and first year students. Most science students enter with a declared major; the option of entering with an undeclared science focus in the non biological sciences is also available. All arts students enter undeclared, thus providing options for them to explore academic possibilities. The College requires all students to declare a major by the end of sophomore year. To properly mentor and advise these students is a complex and challenging task. Consequently, the College has defined a two phase system of mentoring and academic advising to meet students' needs.

The first phase of mentoring and academic advising (for undeclared freshman and sophomore arts and science students) is provided through the Academic Advising Office located on the fourth floor of the Saint Augustine Center for the Liberal Arts. To support an intensive system of academic mentoring, the Center provides technical and qualitative training for faculty and student mentors. Committed faculty implement a comprehensive program that assists students in defining academic, career, and personal goals--with an emphasis on integrity and responsibility.

Developing an appropriate academic plan to insure degree progress is a core enterprise of the Center. Unlike the curriculum of Villanova's professional schools, the initial three semester curriculum for arts students involves choices in course selection whereby they can explore and individualize coursework so as to clarify their academic and career goals. Furthermore, faculty and staff members of the Advising Center engage students as early as possible in thoughtful discussions about academic and other opportunities such as interdisciplinary concentrations, internships, service learning courses, and study abroad. Clearly, this requires significant knowledge, skill, and sophistication on the part of faculty mentors. Hence, the College commits significant resources to faculty and student mentor training.

Well trained and tooled faculty are also able to provide students with informed access to the vast array of University services such as the College's Math Learning Resource Center, the Writing Center, language tutors made available by the Department of Modern and Classical Languages, as well as the University's Center for Learning Support, Career Services Center, Counseling Center, and Campus Ministry.

A full time Director and Assistant Director, 40 faculty mentors, a fulltime secretary, a graduate assistant and 10 student mentors staff the Academic Advising Office and implement its goals. By design, everyone connected with the College's Academic Advising Office except secretaries and the graduate assistant have teaching responsibilities.

For the benefit of students' academic and personal growth, The Office's directors and other staff members promote working linkages with the Director of Internships, College advisors for professions in health and medicine, law and business; and with the College Director of Undergraduate Grants and Fellowships. To support the career choice discussions, the Advising Center staff in collaboration with Career Services and other University offices provide workshops and services tailored specifically for Arts and Sciences students. For example, students may need structured assistance in career preference testing, career attainment strategies, time management, interviewing skills and resume development.

The second phase of the College's program occurs once the student selects an academic major. At that time, the chosen department assigns a faculty advisor who will guide the student in completion of requirements for the major. The discussions and planning begun at the mentoring level continues, and goals and plans are refined as the student approaches graduation. Departmental faculty advisors have access to training provided by the Academic Advising Office; they are also able to provide the expert advice to students in their chosen disciplines.

For many Arts and Science students, their career path does not lead immediately to the market place; rather, many choose to pursue advanced degrees within or outside of their major areas of study. To this end, the members of our various departments provide direction, advice and resources aimed at helping students make appropriate choices involving graduate education. Plus, the Director of Grants and Fellowships provides services and support to prepare students to compete for the most prestigious graduate scholarships and fellowships such as Marshall, Gates, Fulbright and Rhodes.

Beginning in the summer incoming students are introduced the College's comprehensive mentoring and advising system via telephone contact. The faculty caller welcomes the student and reviews academic choices such as math and social science, language placement, the results of advancement placement test scores and answers other questions that may arise. The principal motive for this contact is to initiate what will become a personal relationship between student and mentor before the student arrives on campus. This relationship is the hallmark of our program.

Get to know your faculty mentor. He or she can help you to adjust to university life or at least point you in the right direction. You should consult with your mentor <u>at least</u> once a semester during pre-registration to ensure proper course selection and advancement in your academic program. The mentor can be of assistance in sorting out major/minor and graduation requirements at pre-registration time, although these are things that you should come to master.

Your mentor and academic advisor may be called upon for assistance in making decisions, but it is ultimately your responsibility to understand the requirements of the chosen degree program and to plan for the orderly fulfillment of graduation requirements.

While the best advisee/advisor relationships are long term, students facing difficulties in an advisement relationship may request a change. The new advisor must come from within the College advising pool. If the change is acceptable to the new proposed advisor (and chairperson in the case of a student with a declared major) the relationship is made official by changing the student's record on the University student record system.

The dean, associate deans, and assistant dean also are available to assist you. If you have an academic or personal concern which you do not feel comfortable discussing with your advisor, make an appointment to speak with one of these individuals. Requests for leaves of absence and other extraordinary actions must be submitted in writing and approved by a dean.

A. Primary Mentoring and Advising Contacts

Undeclared Arts Students

Academic Advising Office, 451 St Augustine Center Dr. Nancy Kelley, Director Karima I.A. Bouchenafa, M.A., Assistant Director a&sadvising@villanova.edu 610-519-4661

• Health Professions Advisor

Dr. John Friede 143 Mendel Hall healthprofessions.villanova.edu 610-519-4833

• Law School Advisor

Karen M. Graziano, J.D. 463 St. Augustine Center 610-519-7427

• Master's in Business Administration (MBA) Advisor

Dr. Charles Cherry 464 St Augustine Center 610-519-6957

• Internships

Dr. John O'Leary, Director 451 St Augustine Center 610-519-4232

• Study Abroad

International Studies Office Mr. Lance Kenney, Director Middleton Hall, Second Floor international studies @villanova.edu 610-519-6412

• National Scholarship Advisement

Office of Undergraduate Grants and Awards Ms. Jane Morris, Director 138 St Augustine Center, 610-519-5928

Part IV: The Core Curriculum

Every degree program in the College of Liberal Arts and Sciences is made up of three components: the Core Curriculum, courses in the Major, and Electives.

The courses in the Core Curriculum treat a broad range of disciplines from a variety of approaches; at the same time, the Core strives to ensure depth of study and intellectual sophistication while recognizing that learning implies different modes of inquiry. Fact learning alone is not enough to justify the existence of a Core Curriculum; rather the purpose of the core is to achieve a synthesis of knowledge that provides a basis for informed judgment. The Core also seeks to promote literacy as a foundation for intelligent discourse and the articulation of informed views.

The Core aims to advance culture in a broad sense, training students to understand and to appreciate the interrelated patterns of customary beliefs and practices, social forms, aesthetics, and material traits that act to define a culture and its position within a larger historical and intellectual framework. This educational program does not simply look to the past, but acknowledges that culture is vibrant and continuously redefined. The Core challenges students to understand how the present is recognizably formed from past influences, and that in order to assess our culture and arrive at a view of its future, students must be trained to scrutinize and bring into perspective the relationship of the present culture with that of the past

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In fostering active participation in learning, the Core prepares students to become active participants within society, to engage in the process of informed political debate, and to encourage an understanding and appreciation of the diversity of cultures and experiences, a respect for the individual, and the development of a multi-cultural and international perspective. The Core thus encourages personal development in preparing students to regard themselves as citizens living in a democratic society, as belonging to a world community, and as therefore having communal responsibilities.

A. Summary of Core Curriculum Course Requirements

1)	Core Humanities Seminar	2 courses
2)	College Ethics	1 course
3)	Fine Arts	1 course
4)	Foreign Language	2 courses
5)	History	2 courses
6)	Literature	2 courses
7)	Mathematics	1 course
	Mathematics/Computing Science	1 course
8)	Philosophy	2 courses
9)	Theology and Religious Studies	
10)	Social Sciences	
11)	Natural Sciences	

B. Explanation of Course Requirements

In general, once a sequence of courses is begun in a particular discipline, a student may not revert to a lower level course in that same discipline to fulfill a core requirement without prior approval from the Dean's Office. Courses or sections of courses that are approved to fulfill Core requirements are designated as such in the Pre-registration Master Schedule issued at pre-registration each semester. Retroactive approval of a course taken previously for fulfillment of a core requirement is not possible.

C. Listing of Core Course Requirements

1) Core Humanities Seminar (2 courses)

• The following two courses must be taken by all students during the first year of study:

CHS 1000 Ancient, Medieval and Renaissance Thought CHS 1001 Modern Thought: Enlightenment to the Present

NOTE: Students are not allowed to drop or withdraw from Core Humanities Seminars courses without academic penalty.

2) College Ethics (1 course)

• This course is normally taken during the sophomore year. ETH 2050 Ethical Traditions and Contemporary Life

3) Fine Arts (1 course)

• Each student is required to take one course in Fine Arts. The purpose of the Fine Arts Requirement is to develop an understanding and appreciation of artistic creativity encompassing both the creative processes that go into making a work of art as well as analysis and interpretation of the products of that artistic creativity. Special designated courses in Theater, Studio Art, Art History, English and Communication (Rhetoric/Performance and Media/Film Studies) fulfill this requirement. Consult Novasis each semester at preregistration time for a list of courses that will fulfill this requirement. Scroll down to the fine arts requirement under the Attributes window. Please note that not all Studio Art courses meet the fine arts requirement.

4) Foreign Language (2 courses)

• LANGUAGE OPTION A

Most students are required to complete at least two courses in the same foreign language at or above the intermediate level. The following courses will fulfill the language requirement:

FRE 1121/1122Intermediate French I and I1
FRE 1131/1132 Conversation and Composition I and II
GER 1121/1122Intermediate German I and II
GER 1131/1322 Conversation and Composition I and II
ITA 1121/1122 Intermediate Italian I and II
ITA 1131/1132Grammar&Composition and Conversation&Comp.
SPA 1121/1122 Intermediate Spanish I and II or
SPA 1131/1132 Conversation and Composition I and II
LAT 2031/2032 Intermediate Latin Land II

NOTE: For most students this requirement will involve a two-semester continuation of a language studied in high school. A student may elect to study a new language which will entail completing two semesters of the language at the introductory level in addition to satisfying the intermediate level course requirement. In these cases, the two introductory level courses will be counted as electives.

• Language Option B:

The language requirement may also be satisfied with two semesters of study at the introductory level for Arabic, Chinese, Greek (ancient), Japanese or Russian as follows:

ARB 1111/1112	Intensive Basic Modern Arabic I and II
CHI 1111/1112	Intensive Basic Chinese I and II
GRK 1001/1002	Introductory Greek (Ancient) I and II
JPN 1111/1112	Intensive Basic Japanese I and II
RUS 1111/1112	Introductory Russian I and II

• Language Option C:

International students (for whom English is a second language) **may choose** to fulfill their language requirement in their native language by **choose** to fulfill their language requirement in their native language by taking two <u>advanced literature</u> courses in the language.

Or they may choose to fulfill the language requirement by taking a total of four English courses (ENG-1050 and three advanced literature courses at the 2100 level or above) to fulfill both the literature and foreign language core requirements.

International students always have the option of selecting a third language for study.

NOTE: The credit value of language courses varies from three to six credits. Regardless of the number of credits, a language course counts for only one course.

5) History (2 courses)

- HIS 1040.....Themes in Pre Modern World History or HIS 1050....Themes in Modern World History
- A second history course, with a course number of 2000 or higher, chosen from the History departmental course offerings.

6) Literature (2 courses)

- ENG 1050...... The Literary Experience
- A second English literature course, with a course number of 2100 or higher, chosen from the English departmental course offerings, or a literature course in another language offered by the Department of Classical and Modern Languages.

7) Mathematical Sciences/Computing Sciences (2 courses)

- two courses from the Department of Mathematical Sciences (MAT)
- <u>one course</u> from the Department of Mathematical Sciences and <u>one course</u> from the Department of Computing Sciences (CSC).

All courses for which a student has the appropriate pre-requisites or equivalent experience may be used to satisfy this requirement. Beginning a course in a particular series does not obligate a student to finish that series. For example, a student taking MAT 1320 (Calculus I for the Liberal Arts) is not required to take MAT 1325 (Calculus II for the Liberal Arts).

Note: Students intending to apply to medical, dental or veterinary medicine schools must take two semesters of Calculus. For additional information, contact Dr. Friede (Health Professions Advisor, x94833) Students anticipating a Business Concentration should take Introductory Statistics: MAT 1230 and 1235.

8) Philosophy (2 courses)

- PHI 1050 Introduction to Philosophy
- A second philosophy course, with a course number of 2000 or higher, chosen from the Philosophy departmental course offerings.

Education Majors may count EDU 4290, Philosophy of Education fulfilling their upper level Philosophy requirement

9) Theology and Religious Studies (2 courses)

- THL 1050 or THL 1051Christian Theology: An Introduction or Christianity in History
- A second Theology and Religious Studies course, with a course number of 2000 or higher, chosen from the Theology departmental course offerings

10) Social Sciences (3 courses)

• Each student is required to take <u>three social science courses</u>; one introductory course in each of two distinct disciplines, and one advanced course (2000 level or above) in one of those two disciplines. The Social Sciences disciplines are: Economics, Geography, Political Science, Psychology, and Sociology.

11) Natural Sciences (2 courses with 2 labs)

Each student is required to complete two semesters of natural sciences with accompanying laboratories **by the end of the sophomore year**. Each student may choose Option A or Option B as described below:

Natural Sciences Option A

A year-long sequence (two courses with two labs) in one scientific discipline consisting of an introductory course followed by a theme course for which an introductory course is a prerequisite. *These courses have been designed for non-science majors*. The following sequences may be used to satisfy this option:

1)	Natur	al Sciences Option A:	Sequence 1
1)	•		Planet Earth I and Lab
			and
	•	AST 1052/1053	Planet Earth II and Lab
2)	Natu	ral Sciences Option A	A: Sequence 2
	•	AST 1072/1073	The Birth and Death of Stars and Lab
			and
	•	AST 1074/1075	Planetary Skies and Landscapes and Lab
3)	Natu	ral Sciences Option A	
	•	BIO 1505	Biology for Today
			and
	•	One of the following	
		BIO 1605	Heredity and Human Affairs
			Human Physiology: Body Works
			Life in the Sea
		BIO 1785	Special Themes in Biology

Note: Offerings will vary from year to year. The required BIO 1505 is an introductory survey course that is suitable for any student. In special cases, a Theme course may be substituted for this course with permission from the Dean.

4) Natural Sciences Option A: Sequence 4 One of the following theme courses: CHM 1054/1004...Chemistry Themes: Environmental Chemistry/Lab CHM 1057/1007 Chemistry Themes: Criminalistics and Lab 5) Natural Sciences Option A: Sequence 5 ENV 1050 Environmental Science I and ENV 1051 Environmental Science II Courses required for Environmental Studies Concentration 6) Natural Sciences Option A: Sequence 6 and PHY 1052.....Nature's Laws II 7) Natural Sciences Option A: Sequence 7 PHY 1020/102..Great Ideas in Physics: Aristotle to Einstein I & Lab and • PHY 1022/1023...Great Ideas in Physics Aristotle to Einstein II & Lab NATURAL SCIENCES OPTION B A year-long sequence (two courses with labs) in one scientific discipline. These courses are generally taken by science majors. The following course sequences satisfy this option: 1) Natural Sciences Option B: Sequence 1 AST 2121/2133 Solar System Astronomy and Lab AST 2122/2134Galaxies and Cosmology and Lab 2) Natural Sciences Option B: Sequence 2 BIO 2105General Biology I and Lab BIO 2106......General Biology II and Lab

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3) Natural Sciences Option B: Sequence 3

4) Natural Sciences Option B: Sequence 4

• CHM 1151/1103......General Chemistry I and Lab

and

• CHM 1152/1104.....General Chemistry II and Lab

5) Natural Sciences Option B: Sequence 5

- PHY 2410/2411...... University Physics: Mechanics and Lab
- PHY 2412/2413...... University Physics: Electricity and Magnetism and Lab

or

PHY 2414/2415......University Physics: Thermodynamics and Lab

C. Core Curriculum Distribution Requirements

In addition to satisfying the curricular requirements listed above, students are required to satisfy certain distribution requirements. The distribution requirements may be satisfied by courses used to satisfy either core, major or elective requirements. Additionally, a single course may satisfy more than one of the distribution requirements.

1) Writing Requirement (8 courses)

Each student must take at least four courses that are designated as <u>Writing Intensive</u>; and at least four additional courses that are designated as <u>Writing Enriched</u>. These designations will appear in the Master Schedule available during pre-registration each semester.

NOTE: The Core Humanities Seminars (CHS 1000 and CHS 1001) and the Introductory Literature course (ENG 1050) fulfill three of the four Writing Intensive course requirements. The fourth Writing Intensive course requirement is to be taken in the student's major area. College Ethics (ETH 2050) fulfills one of the four Writing Enriched requirements.

Writing Intensive Course Characteristics

- At least 20 pages of assigned writing, a portion of which should be polished prose reflecting disciplinary conventions
- Much of the writing for the course is the result of a revision process involving discussion and un-graded evaluation of student texts
- A significant portion of class time is devoted to disciplinary prose
- Writing intensive courses are limited to 15-17 students

Writing Enriched Course Characteristics

- At least 10 pages of writing in response to at least two assignments
- At least one revision in response to evaluative feedback on rough drafts
- At least some attention to rhetorical dimensions of the disciplines

2) Integrative Sequences (2 sequences of 2 courses each)

• Integrative courses enable a student to examine a topic or theme from the perspective of several disciplines. One of these sequences is to be in the humanities and the other is to be in the sciences. The two Core Humanities Seminars fulfill the former and the Natural Science core requirement fulfills the latter.

3) Diversity Requirement (2 courses)

 Each student is required to select one course in two of the following three areas:

• Diversity (1):

Courses which provide a focus on studies emphasizing ethnic and minority experiences in the United States.

• Diversity (2):

Courses which provide a focus on women's experiences and highlight the ways in which gender influences experience.

• Diversity (3):

Courses which provide a focus on the culture, economics, politics or ecology of societies and nations other than those of Europe and the United States.

NOTES:

- 1.) A student may not use a single course to fulfill more than one category of the diversity requirement.
- 2.) The diversity requirement cannot be fulfilled by independent study or a senior thesis.
- 3.) Language courses cannot fulfill the requirement, although literature courses in a foreign language can fulfill the requirement provided they focus on appropriate material.

Part VI: Academic Policies and Procedures

It is the responsibility of the student to know, and to comply, with the academic regulations of the University and their respective colleges. University Academic policies can be found in the Villanova University Catalog, Undergraduate Studies that is located at http://catalog.villanova.edu/

The Registrar's Office (Tolentine Hall 202, 610-519-4030) is responsible for registration processes, course and student records, transcripts, enrollment reports, and similar documents. Any changes in your personal data such as permanent or local address, phone numbers, etc., should be reported to this office.

A. Academic Progress

The record of any student who's cumulative or semester quality-point average falls below 2.00 will be reviewed by the Academic Standing Committee for appropriate action. Students in science whose technical course quality-point average falls below 2.00 will also come before the committee (technical courses include all science, mathematics and engineering courses). Typically, the student will either be placed on academic probation or be dismissed.

A student on academic probation will normally be allowed only one semester to achieve the required quality-point average. While on academic probation, a student's course load may be limited to four courses plus any associated laboratories. A student on academic probation may not participate in any extra-curricular activities.

The Academic Standing Committee may place on academic probation a student who is not making significant progress towards a degree due to excessive course drops or withdrawals even if the quality-point average is above 2.00

B. Academic Records

The Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the Buckley Amendment, prohibits access to student records by any third party without written authorization from the student. The University Policy is located at http://catalog.villa.nova.edu/policies/index.html or at http://www.registrar.villanova.edu/docs/student_confid.html.

From time to time, parents call the Dean's Office inquiring about a grade report or the academic progress of their son or daughter. While an academic advisor can engage in general conversation about a student's progress, no specific grades or other information can be provided by the advisor without the student's permission or proof of the dependent status of the student as required by FERPA.

Since determining dependent status of each individual student is a difficult undertaking, the University provides a consent form which, when completed, permits parental access. The form, if completed, will be included in the student's academic folder in the Dean's Office, and the information will also appear on BANNER on the form "SPACMNT". If a consent form is not signed, parents will not be allowed access to the student's academic record unless the parent can show that the student is a dependent of the parent for tax purposes or the student gives written permission for the disclosure.

.... Students are under no obligation to sign a consent form. If a form is completed, a student may revoke the consent in writing at any time. Upon revocation, the parent would again be required to establish the student's dependent status or obtain the student's permission in order to have access to academic records.

C. Attendance Policies

A first-year student will receive a grade of Y (failure) whenever the number of unexcused absences in a course exceeds twice the number of weekly class meetings for the course. Class and laboratory attendance for first year students is thus compulsory, with the following exceptions: approved placement activities, approved athletic participation, field trips, serious illness certified by a doctor's letter which includes a description of the illness and specific diagnosis with the date of onset and prognosis and ability to return to class, or death in the immediate family certified by documentation naming the deceased and the date of death. Regular class attendance is expected. All professors will inform you at the beginning of the semester of their attendance policy. It is always a courtesy to inform your professors about any absence. If an emergency arises and it is necessary to leave campus your Dean's Office can assist you by providing official notices to your professors. An absence card, available from the Dean, must be completed and presented to the Dean's office no later than 4:30 p.m. on the day the student returns to classes. Excused absences allow the student to make up tests. Absence from class does not release the student from work assigned.

Students beyond the first year are subject to the attendance policy set forth in the syllabus of each individual course in which they are enrolled. The Dean's Office will not issue excused absences forms to upper class students.

D. Auditing a Course

No academic credit is earned for auditing a course. However, the audited courses are noted on the student's official record. Students are not permitted to audit a required course; or to officially register for a course after it has been audited. Students who wish to audit a course must indicate their intention of

doing so by completing the proper form in the Registrar's Office, Tolentine Hall Room 202, before the end of the drop/add period (the first week of class).

E. Class Status

Officially, class status is determined by the number of credits earned as follows:

Freshman 0-23 credits
Sophomore 24-57 credits
Junior 58- 87 credits
Senior 88+ credits

E. Class Rank

A student's rank in class is determined by the cumulative quality-point average, which is computed at the end of the summer following a student's junior year. Only credits earned through Villanova University or in formally approved inter-institutional programs will be considered in determining the cumulative quality-point average. Credits and grades earned in the summer at other colleges are not counted in the quality point average.

F. Closed Sections

Students will <u>not</u> be permitted to enroll in closed sections! Exceptions to this rule will be made only by the chairperson of the academic department offering the course. If other sections or other courses are available to satisfy the degree requirements, the exception will not be granted. Student employment conflict is not a legitimate reason for admittance to a closed section.

G. Course Pre-registration

Each semester the Registrar's Office offers an opportunity to register for courses for the following semester on line using the student's Novasis account. Pre-registration for courses requires a pin number obtained from the student's faculty advisor following an advisement meeting.

There is no guarantee that a student will have available to them a particular professor or a course section offered at a particular time. To ensure appropriate degree progress students are encouraged to register for courses and sections within a reasonable amount of time from the pre-registration date and time assigned to them by the Registrar's Office.

H. Drop/Add (course adjustment)

During the first week of each semester students are given the option of dropping or adding courses by using the pin number and going online through

Novasis; or by completion of a paper form available in the Dean's Office. The form must be signed by the student's academic advisor. See Withdrawal

I. Final Examinations

Final exams are scheduled in every course and must be taken at times published by the Registrar in the Master Schedule available at the time of pre registration. If a student has two or more exams at the same time; or three in one day the student must see the instructor for a time change to be made according to the following priorities:

- 1) group departmental examinations take precedence,
- 2) major or required courses should take precedence over electives,
- 3) regular courses should take precedence over repeat courses.

Absence from a semester examination, except for a conflict resolved in advance, requires written permission from the instructor. Unexcused absence from a final exam is sufficient grounds for failure in the course. Students must contact the professor within 48 hours of a missed exam.

J. Grade Reports

Grade reports are computed at the middle and end of each semester. These reports are available to you on line through your Novasis account. Mid-term grades are not a part of your permanent record. Students are directed to http://catalog.villanova.edu/ for a complete description of the University Grading System.

K. Incomplete Grades

All grades are permanent, except N and NG which are temporary grades used to indicate that a student's work in a course has not been completed. An N or NG grade must be removed and a grade substituted according to the following schedule:

For the Fall Semester: Students must submit all work to the instructor by the last Friday in January; grade changes must be submitted to the Registrar's Office by the second Friday in February.

For the Spring Semester: Students must submit all work to the instructor by the last Friday in June; grade changes must be submitted to the Registrar's Office by the second Friday in July.

Students should check the academic calendar for actual dates. NOTE: if a change is not reported, the N or NG automatically becomes an NF.

Without the approval of the department chairperson, and the Office of the Dean, no grade higher than C may replace the N.

A student may also receive an N for missing a final examination if the student reports a serious medical reason (or other reason certified by the Dean as acceptable) within 48 hours of the time of the examination. Otherwise an F grade must be reported. The student may report the reason for absence to the instructor, the department chair, or the Dean. University policy is located at http://catalog.villanova.edu/policies/index.html.

L. Overloads and Underloads

Students who wish to take overload (greater than 5 courses excluding labs during the fall and spring semesters, and greater than 12 credit hours during the summer) must request permission by completing the Overload Request Form available in the Office of the Dean. *In order to be granted permission to overload, a student must have a cumulative average of at least 3.5, (3.0 for summer) or have achieved senior status and be in need of a course to fulfill graduation requirements.* Students who are enrolled in an extra course without the proper permission will be dropped from that course at the discretion of the Dean.

Students who wish to take less than 4 courses a semester as an underload must also seek approval from their academic advisor and from the Dean.

M. Repeat Freshman Year

The Academic Standing Committee may allow a freshman student to declare academic bankruptcy and repeat the year with a new start on the cumulative average (though a record of the year's work will remain on the transcript.)

N. Satisfactory/Unsatisfactory Option

Sophomores, juniors, and seniors may take one elective course a semester on a satisfactory/unsatisfactory basis. The "S" grade is the equivalent of a grade "C" or better. The satisfactory/unsatisfactory grade will be shown on the transcript but will not be reflected in the quality-point average. Failures in the satisfactory/unsatisfactory option need not be repeated.

The satisfactory/unsatisfactory option may not be used for courses that fulfill core, major, or minor requirements but individual departments may offer the major seminar on a satisfactory/unsatisfactory basis. A student must declare election of the satisfactory/unsatisfactory option by the end of the drop/add period in the Office of the Registrar. Only one course a semester may be taken S/U.

O. Transcripts

If you need a copy of your transcript, you must apply in person or in writing to the Registrar. Phone calls or third party requests will not be honored.

You may fax your request to: 610-519-4033.

In your request you must include:

- Your Name
- Your dates of attendance at Villanova
- Your Social Security Number
- Your degrees (if any)
- The address to which you would like the transcript sent

Currently there is no charge for transcripts. Please allow two weeks for delivery of your transcript.

P. Withdrawal From a Course

Students are allowed to withdraw from a course, without academic penalty, until a date published each year by the Registrar, that is usually two days after the close of pre registration for the forthcoming semester, and receive the grade of "WX". The grade of WX does not affect a student's grade point average but does appear on the transcript.

After this period, students may request an authorized withdrawal from any course, up to the commencement of final examinations, by providing to the Dean a written statement of justifiable cause for withdrawal as well as the written recommendation of the instructor and the student's chairperson. Withdrawal from the course will be contingent upon the Dean's approval. Justifiable cause is a reason such as illness, which is extrinsic to the nature or difficulty of a course, and which would prevent a student from completing the substantial requirements of the course. The proper form for this procedure may be obtained in the Dean's office, Saint Augustine Center, Room 105.

Students who do not have a justifiable cause to withdraw from a course without academic penalty, may still withdraw from the course and receive a grade of "W". The grade of "W" is equivalent of an "F" grade and is included in computing the student's quality point average.

Q. Withdrawal from the University

A student seeking an official withdrawal from the University must submit the request in writing to the Dean. The Dean may authorize refunds for tuition according to a schedule of 80%, 60%, 40%, and 20% over a four week period of last class attendance. Students who have officially withdrawn and who subsequently wish to return must submit the request in writing to the Deans in order to be considered for readmittance

Matriculated students who fail to register for or attend classes in any given semester will be considered to have unofficially withdrawn from the College. To be considered for readmission the student must submit the request in writing to the Dean.

R. Probation, Academic Standing and Dismissal from the College

The College Academic Standing Committees meet at the end of each regular semester to review the academic records of any student in the College who is on academic probation or experiencing academic difficulties. The Committees recommend corrective actions to the Dean that range from Letters of Concern to Probation to a Dismissal from the College. While on academic probation, a student's course load may be limited to four courses plus any associated laboratories, and the student on academic probation may not participate in any extra-curricular activities.

There is no requirement that a student must receive a Letter of Concern or Probation prior to being dismissed. Each student deserving corrective action will receive a letter from the Dean's Office stating the action taken.

The Academic Standing Committee may dismiss a student who is not making sufficient progress towards a degree due to excessive course drops or withdrawak even if the quality-point average is above 2.00

A Dismissal from the College may be appealed in writing. University policy does not permit students who have been dismissed by the University to attend summer sessions.

Matriculated students who fail to register for or attend classes in any given semester will be considered to have unofficially withdrawn from the College. To be considered for readmission the student must submit the request in writing to the Dean.

S. Leave of Absence

Students who desire to take an authorized leave of absence from the College must submit such a request in writing to the Dean. The request should indicate the reason for the leave and the anticipated length. Students on leave are not allowed to transfer credit from other institutions for course work taken while on leave except by written permission from the Office of the Dean.

T. Suspension

Students placed on suspension are not allowed to transfer credit from other institutions for course work taken while on suspension.

U. Credit by Examination

To encourage independent study and recognize personal knowledge and mastery of a subject matter, Villanova University provides qualified matriculated students with the opportunity to "test out" of certain courses. The student who successfully passes such an examination satisfies the requirements of and earns the credit for the respective course.

For more information, contact: Mr. Mario D'Ignazio, Assistant Dean, Office of the Dean, 105 St. Augustine Center, and Phone: 610-519-4600.

V. Graduate-Level Courses

A fourth-year student with a minimum cumulative grade point average of 3.0 may enroll in a graduate course with the written approval of:

- 1) his/her academic advisor.
- 2) the chairperson of the department offering the course, and
- 3) the Dean

before submitting the request to the Dean of the Graduate School. Courses numbered 7000-7999 are graduate courses ordinarily available to qualified undergraduates for undergraduate credit.

W. Internship Credit

The College of Liberal Arts and Sciences provides its students with the opportunity to earn course credit in departmentally related and academically creditable internships. Internships for academic credit must be directly related to a student's major, minor, or concentration. Internships are not restricted to the Delaware Valley, and might take place in Washington, DC, as well as other parts of the country. Qualified juniors and seniors with a 3.0 QPA are eligible to participate in the program. Internships last for the semester and can be either full-time or part-time. They are also available during the summer sessions. Internship credit for International Programs (study abroad) is significantly restricted.

Internship Program details are available from Dr. John O'Leary, the Internship Director, St. Augustine Center, Room 451 (610/519-4661).

X. On Line and Distance Learning Courses

The availability of DL courses for current Arts and Science undergraduate students is limited to sophomores, juniors and seniors with a GPA of 3.0 and above.

The College will <u>accept up to a maximum of four courses</u>, commonly referred to as distance learning or online courses, taken at Villanova or at another accredited college or university towards a degree program within the college. The College reserves the right to test the student in order to assess the outcome of

that course. The prior approval form to allow students to take DL courses is available in the Dean's Office, 105 St. Augustine.

Y. Summer School At Villanova

In order to accommodate students wishing to accelerate or enrich their studies, Villanova offers three summer sessions. Courses taken in Villanova Summer School are treated the same as those taken during the regular year. Prior to enrollment in Villanova Summer School, students in the College of Liberal Arts and Sciences must secure a pin number from their advisor. A student may take at most 12 credits in the summer. Requests for summer courses in excess of 12 credits during the summer will be considered an overload and subject to the Overload Policy

Z. Summer School At Other Institutions

Students in the College of Liberal Arts and Sciences may be permitted to take summer school courses at institutions other than Villanova University. A student may take at most 12 credits in the summer. Requests for summer courses in excess of 12 credits during the summer will be considered an overload and subject to the Overload Policy

In all cases permission to enroll in such courses must be obtained from the student's adviser and from the Dean's Office before enrolling in the course(s). Transfer credit will not be accepted without having been approved before the student registers the class. If the summer courses are to be taken abroad permission is also required by International Studies Office.

Students seeking prior approval must complete the form, *Request To Enroll in Summer Courses At Another Institution*, available in the Dean's office and attach a copy of the course description(s) usually available on the institution's web site. The form and descriptions must be submitted to the Dean's office for approval no later than May 15th.

Courses will generally be approved if they are taken at accredited four year colleges or universities and if they are equivalent to course offerings at Villanova. Upon completion of the course it is the student's responsibility to see that an official, sealed transcript is sent to the College of Liberal Arts and Sciences at Villanova.

Transfer credit will be awarded on the Villanova transcript only for pre-approved courses in which a student earns a grade of "C" or better. The actual grade received at the other institution does not transfer and is not calculated into the student's cumulative grade point average.

AA. Study Abroad

In order to qualify for study abroad, a student must have a 2.75 or better GPA, good health, and receive the prior approval Transfer students to Villanova are required to have completed three semesters on campus before leaving for overseas studies. The Prior Approval Form, available in the International Studies Office, requires the approval of the various department chairs for courses in their subject area that the student whishes to take abroad and transfer, of the appropriate Foreign Language Coordinators for foreign language courses, of the departmental chairperson of the student's major, of the Director of International Studies, and the Office of the Dean.

No student will receive study abroad transfer credit for any course that has not received prior approval. Students on Leave of Absence, Suspens ion or Unofficial Withdrawal will not receive study abroad transfer credit.

Courses taken abroad (except for Villanova courses) are considered transfer credit and require a "C" grade or better in order for the credits to transfer. The actual grades received at the other institution are not calculated into the student's cumulative grade point average. Students wishing further information should contact the Director of International Studies in Middleton Hall, Second Floor (610-519-6412).

BB. Transfer Credit

A student who has taken college courses at another institution prior to attending Villanova, must present the necessary course descriptions and other documentation as needed to the Dean's Office before or during their first semester at Villanova. Courses will be given consideration for transfer credit only upon receipt of a seal-bearing, official transcript sent by mail directly to the Office of the Dean, and, upon request, an official course description (e.g., from a course catalog). If such courses are not presented for evaluation during the first year, no future possibility for evaluation or credit will exist. Transfer credit will be awarded only for approved courses in which a student earns a grade of "C" or better. The actual grade received at the other institution (earned either before attending Villanova or earned during a summer) is not calculated into the student's cumulative grade point average.

CC. Transfering into A&S from Other Villanova Colleges

Students seeking to transfer from the Colleges of Engineering, Nursing and Commerce and Finance into the College of Liberal Arts and Sciences must do so in writing by completing the form, *Application to Enter the College Of Liberal Arts and Sciences*, available in the Office of the Dean, 105 St. Augustine Center. Distance Learning and Fast Forward courses may not always transfer and will be reviewed on a case by case basis.

Students seeking to transfer from the Part Time Studies Division must do so in writing by completing the form *Application to Enter the College of Liberal Arts and Sciences from the Part Time Studies Division* available in the Office of the Dean. Students seeking to transfer into the College from the Part Time Studies Division will have to be accepted into a major in order to transfer.

Internal transfer students may not register for business, engineering or nursing courses while enrolled in the College of Liberal Arts and Sciences without permission from the Dean's Office. The only exception is courses taken toward the Business Minor once the student has been accepted into that program.

Arts and Sciences grades for courses that have been taken while enrolled in another college at the university and which have been deleted from the computation of the student's GPA while in that college will be reinstated upon transfer to the College of Liberal Arts and Sciences. The Arts and Sciences grades and credits earned will be computed in the student's Liberal Arts and Sciences GPA and will be used to determine the student's academic standing in the College.

Once a student has successfully completed two consecutive semesters in the College of Liberal Arts and Sciences and has attained a GPA greater than or equal to 2.50 in each semester, grades for courses that do not ordinarily apply to the student's new Arts and Sciences curriculum may be excluded from the calculation of the student's GPA. This exclusion is not automatic. Students must petition the Dean's Office for the exclusion.

Part V: Requirements for Majors

Interdisciplinary Concentrations and Minors

The following information is designed to give students a brief introduction to the requirements of the various degree programs in the College of Liberal Arts and Sciences. A significant number of courses required for Interdisciplinary Concentrations can fulfill Core Curriculum requirements. Please contact individual departments for additional information about a particular program.

Aerospace Studies Program (Air Force ROTC)

FACULTY: HOPKINS, ALZATE, BOYD, SUTTON
WERSITE: WWW.CSC.VILL.EDU/~AFROTC/INDEX.HTM

Air Force Reserve Officer Training Corps participation is available through a cross-enrollment agreement with St. Joseph's University. Participation in a one through four-year program leads to a commission as a Second Lieutenant in the Air Force. Scholarships are available in any major. Contact AFROTC Detachment 750 at (215) 871-8324 for further details.

Africana Studies Concentration

DIRECTOR: DR. MAGHAN KEITA

OFFICE: 448 ST. AUGUSTINE CENTER, TEL. 610/519-4640
WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/AFRICANASTUDIES/

CONCENTRATION: The Africana Studies program combines an introductory core with a number of electives. Concentrators are required to take two courses (six credits) from the introductory core. Each of these courses must be from a

different discipline. In addition the student is required to take fifteen credit hours of approved electives. The list of approved electives is available from the Africana Studies office St. Augustine 484.

MINOR: For the Africana Studies minor, a student is required to take two courses (six credit hours) from the introductory core. Each of these courses must be from a different discipline. In addition the student is required to take nine credit hours of approved electives.

INTRODUCTORY CORE:

COM 2700	BLACK RHETORIC
ENG 2505	AFRICAN AMERICAN LITERATURE: POETRY
ENG 2510	AFRICAN AMERICAN LITERATURE: NOVEL
ENG 2515	AFRICAN AMERICAN LITERATURE: DRAMA
HIS 2291	AFRICAN AMERICAN HISTORY DURING SLAVERY
HIS 2292	AFRICAN AMERICAN HISTORY SINCE SLAVERY
HIS 4115	THE ROOTS OF AFRICAN CULTURE
HIS 4120	THE EMERGENCE OF MODERN AFRICA

SAMPLE ELECTIVES:

SAMI LE LLECTIVES.	
ECO 1103	THE ECONOMICS OF SOCIAL ISSUES
GEO 3700	AFRICA
HIS 4130	SOUTHERN AFRICA IN HISTORICAL PERSPECTIVE
HIS 4470	THIRD WORLD REVOLUTION
HIS 4490	TOPICS: RACISM AND JUSTICE IN THE AMERICAS
HON 4050	AFRICANA INTELLECTUALISM
HON 5700	URBAN REALITIES/SUBURBAN PERSPECTIVES
HON 5702	PHILOSOPHY, ISSUES OF RACE
P J 5000	RACE/CLASS/GENDER
PSC 3500	CIVIL RIGHTS AND CIVIL LIBERTIES
PSC 4700	AFRICA
PSC 5500	AFRICA IN WORLD POLITICS
THL 5700	BLACK RELIGIOUS EXPERIENCE
SOC 3600	RACE RELATIONS AND ETHNIC RELATIONS

The number of electives, and therefore students' choices, will vary from year to year.

Arab and Islamic Studies Concentration

DIRECTOR: DR.

OFFICE: 456 ST. AUGUSTINE CENTER, TEL. 610/519-4786
WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/ARABISLAMIC/

CONCENTRATION: AIS 4100; ARB 1111, 1112, 1121, 1122; HIS 4031, 4041; PSC 4900 or 5900; THL 5150; and one elective from the courses listed below.

MINOR: ARB 1111, 1112; HIS 4041; PSC 4900 or 5900; and two electives. NOTE: Students are advised to enter the program no later than the first semester of their junior year in order to complete the requirements. Approval of the program director must be obtained to enter the program. The Center for Arab and Islamic Studies is located in 456 St. Augustine Center (610/519-4786).

Art History

CHAIR: DR. ADELE LINDENMEYR

OFFICE: 403 ST. AUGUSTINE CENTER, TEL. 610/519-4660 WEBSITE: WWW.HISTORY.VILLANOVA.EDU/ARTHISTORY/

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/ART HISTORY.HTML

The Art History major and minor are administered by the Chair of the History Department.

MAJOR: 10 courses

Art History majors must complete:

- AAH 1101, History of Western Art, Ancient to Medieval
- AAH 1102 Renaissance to Contemporary World
- AAH 2000 Ancient Art
- AAH 2001 Early Christian and Medieval Art
- One Renaissance/Baroque course from the following;

AAH 2002.Renaissance art

AAH 2003, Age of Rembrandt and Bernini

AAH 2008, Spirit of the Renaissance

• One Modern Arts Course from the Following:

AAH 2004, Modern Art

AAH 2005, Modern Architecture

AAH 2009, Contemporary Art

AAH 3003, Romanticism to Post Impressionism

AAH 4001, American Architecture

• One Studio Art Course from the Following:

SAR 1000. Introduction to Art

SAR 2020, Basic Watercolor

SAR 2021, Basic Drawing

SAR 2022, Basic Oil Painting

SAR 4007, Icon History and Making

SAR 5000. Art Restoration

SAR 5004, Print Making

- AAH 4010, Interpreting Art
- AAH 4000, Senior Thesis
- One Upper Level Art History Elective: AAH 2000 to AAH 4999

Majors in Art History have the opportunity to do internships at nearby museums, auction houses, or historical sites; or to participate in the Villanova-Rosemont Summer Program in Siena Italy which Places a Strong Emphasis on Art History.

MINOR: Students seeking a minor in Art History are required to earn at least 15 credit hours in art history, six of which must be the two survey courses (AAH 1101 and 1102), plus 3 credit hours in Studio Art.

Astronomy and Astrophysics

CHAIR: DR. GEORGE P. MCCOOK

OFFICE: 457 MENDEL, TEL. 610/519-4820
WEBSITE: WWW.ASTRONOMY.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/ASTRONOMY.HTML

MAJOR: AST 2120, 2121, 2122, 2133, 2134, 3141, 3142, 3152, 3162, 4121, 4122; MET 2001; CSC 4630; MAT 1500, 1505, 2500, 2705; PHY 2410,

2411, 2412, 2413, 2414, 2415, 2416, 2417, 2601, 2603, 4100, 4200, and 3 Physics courses (9-12 credits) numbered above 3000. Recommended are PHY 4000, 4002.

MINOR: 22 credits, including:

- PHY100 and PHY1102 (Biology Physics), or PHY 2400and PHY 2402, or above
- Two Semesters Of calculus, MAT 1310, Mat 315 or above: AST 2120, AST 2121, AST 2122,
- Two Courses from; AST 2133, AST 2134, AST 3141, AST 3142 AST 3153, AST 3162, MET 2001 (Check with instructor for possible prerequisite.)

Biology

CHAIR: DR. RUSSELL M. GARDNER
OFFICE: 147 MENDEL, TEL. 610/519-4830
WEBSITE: WWW.BIO.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/BIOLOGY.HTML

MAJOR: Thirty-six credits in Biology, including BIO 2105, 2106, 3351, and 5100. Cognate requirements include: CHM 1151/1103, 1152/1104, 2211/2201, 2212/2202; MAT 1310/1315; PHY 1100/1101 and 1102/1103. In addition, Biology majors must select a minimum of five laboratory science electives from the Biology departmental offerings (five courses including laboratories) numbered 3000 and higher. At least one course with laboratory must be chosen from each of the following areas: Population Biology, Organismal Biology, Cellular/Molecular Biology. NOTE: Courses numbered below 2000 will not apply toward a major in biology.

MINOR: Twenty-three credits Biology, including BIO 2105 and 2106. Additional elective courses from Biology departmental offerings numbered 3000 and higher. These Biology electives must include at least 3 lab science courses. Minors must complete at least 12 of their Biology credits at Villanova and achieve a minimum QPA of 2.0 in those courses.

NOTE: Courses numbered 7000 to 7999 are open to undergraduates with advanced standing and a QPA of 3.0 or higher. See the Biology listings in the Graduate School of Liberal Arts and Sciences Catalog.

Business Minor

COLLEGE OF COMMERCE & FINANCE DEAN: COLLEGE OF COMMERCE & FINANCE DR. STEPHEN A. STUMPF, DEAN

PHONE: 610-519-4330

LOCATION: 1045 BARTLEY HALL (DEAN'S OFFICE)

Students enrolled in the College of Liberal Arts and Sciences may seek a general business minor upon application to, and approval by, the Dean of the College of Commerce and Finance. Acceptance is competitive and based on review of original credentials and current cumulative G.P.A. Please note Business Concentrators are required to have a laptop computer with a configuration specified by the College of Commerce and Finance. Information concerning this requirement may be obtained from the Computer Support Center, Vasey Hall, Room No. 101 (610-519-6646).

Course Sequence Requirements for the Minor:

- - 2* ECO 1001/1002......Principles of Economics I & II
 - 3* DIT 1006......Introduction to MIS
 - 4* ACC 1101.....Principles of Accounting I
 - 5* FIN 1113......Principles of Finance*
 - BL 1090.....Legal Environment of Business
 - MGT 1102.....Organization and Management
 - MKT 113.....Principles of Marketing

*Math 1235, ECO 1001, ECO 1002, DIT 1006, ACT 1101 are all prerequisites for FIN 1113. Those who have completed a calculus course may take DIT concurrently with FIN 1113

Since laptops in the College of Commerce and Finance's laptop computer program are updated every two years, students are encouraged to delay their business courses to the last two years of study to take full advantage of laptop usage. Advising for Business Concentration students is available in the Office of the Dean of the College of Commerce and Finance, Bartley Hall 1045.

A general business minor may be attained through the Villanova Summer Business Institute. Complete details on the program and the application process

necessary to gain admission may be obtained from the Institute's office in Bartley Hall, Room 1045, by telephone at (610) 519-4341 or via e-mail at sbi@villanova.edu. Applications are accepted beginning on January 2 each year and should be received by April 1. Applications received after April 1 are treated on a space available basis. Admission decisions are made on a rolling basis; interested students are therefore encouraged to apply early, as space is limited. Once the Institute is full, no further applications can be accepted regardless of the date of submission. Enrollment by College of Liberal Arts and Science Students is subject to the College's Overload Policy and Procedure.

Chemistry

CHAIR: DR. BARRY S. SELINSKY

OFFICE: 215 MENDEL HALL, TEL. (610) 519-4840
WEBSITE: WWW.CHEMISTRY.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/CHEMISTRY.HTML

MAJOR: CHM 1000; 1311/1301; 1512/1502; 3511/3501; 3211/3201; 3212/3202; 3311/3301; 3411/3403; 3412/3404; 4611; MAT 1500/1505; PHY 2410/2411; 2412/2413. In addition, Chemistry majors must select a minimum of two Chemistry electives and one Chemistry lab elective.

MINOR: CHM 1151/1103; 1152/1104; 2211/2201; 2212/2202. In addition, Chemistry minors must select a minimum of three courses (along with appropriate laboratories) from any 3000 level course or higher. See www.chemistry.villanov.edu/programs/minor.htm for details

BIOCHEMISTRY CONCENTRATION: The curriculum is identical to the Chemistry major except for the following: CHM 4611 and one Chemistry elective are replaced by CHM 4621/4622/4603. Three semesters of Biology are required: BIO 2105; 2106; and a molecular based biology course.

RESEARCH OPPORTUNITIES: The Chemistry Department offers two mechanisms for participation in research by the undergraduate major. Departmental fellowships for 810 weeks of summer research are funded by industrial and government sources. Recipients of these fellowships carry out a research project under the direction of a faculty member. In addition, students are encouraged to enroll in research for academic credit during the school year (CHM 4801, 4802, 4803).

Classical Studies

CHAIR: DR. SILVIA NAGY-ZEKMI

OFFICE 303 St. Augustine Center, 610/519-4680

WEBSITE: WWW.CLASSICALMODERNLANGLIT.VILLANOVA.EDU/

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/LANGUAGES.HTML

MAJOR: A major in Classical Studies generally requires a minimum of 12 courses (minimum 36 credits) in Latin or Greek. Once a sequence of language courses has begun, a student may not revert to a lower level course. Up to 2 Classics courses (taught in English: Archaeology, Mythology, etc.) may be included in the 12 course total. Classics 3001, Independent Study, will be considered a Latin or Greek course when the study is done in those languages.

MINOR: A minor in Classical Studies generally requires a minimum of 6 courses (minimum 18 credits) in Latin or Greek. Up to 2 Classics courses (taught in English: Archaeology, Mythology, etc.) may be included in the 6 course total. Classics 3001, Independent Study, will be considered a Latin or Greek course when the study is done in these languages.

The Department also offers courses in foreign literatures in English translation. Such courses may be used to fulfill a Humanities elective; however, they may not be used toward credit requirements for a foreign language major or minor.

Cognitive Science Concentration

DIRECTOR: DR. CHARLES L. FOLK

OFFICE: 252 TOLENTINE HALL, 610/519-7464

WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/COGSCIENCE/

Cognitive Science is a basic and applied science with the primary goal of explaining intelligent behavior, whether exhibited by humans, animals, or machines. The purpose of the Cognitive Science Program is to offer an interdisciplinary course of study related to intelligent systems emphasizing the perspectives of psychology, computer science, philosophy, and biology. The program offers both a concentration and a minor to students in all of the University's undergraduate colleges.

Requirements for Concentration: All five courses from Categories A and B. At least two additional courses from Category C.

Requirements for Minor: Two of the three courses in Category A At least three additional courses selected from Categories A, B, or C. Note: Course selections for the minor must include approved courses in three of the following four disciplines: Psychology (PSY), Computer Science (CSC), Philosophy (PHI), and Biology (BIO).

CATEGORY A:

PHI 4650 PHILOSOPHY OF MIND PSY 4500 COGNITIVE PSYCHOLOGY

CSC 4500 INTRODUCTION TO ARTIFICIAL INTELLIGENCE

CATEGORY B:

CSC 1051 ALGORITHMS AND DATA STRUCTURES I

CGS 5900 COGNITIVE SCIENCE SEMINAR

CATEGORY C;

BIO 3011 ANIMAL BEHAVIOR BIO 4605 NEUROBIOLOGY

BIO 6409 SENIOR THESIS (WITH COGNITIVE SCIENCE PROGRAM APPROVAL)
BIO 6509 DIRECTED RESEARCH (WITH COGNITIVE SCIENCE PROGRAM

DIRECTED RESEARCH (WITH COGNITIVE SCIENCE FROOKAIVI

APPROVAL)

BIO 7921 SENSORY BIOLOGY

CSC 4170 THEORY OF COMPUTATION
CSC 4380 INFORMATION VISUALIZATION

CSC 4730	HUMAN-COMPUTER INTERACTION
CSC 5900 &	SPECIAL TOPICS (WITH COGNITIVE SCIENCE PROGRAM APPROVAL)
CSC 5930	
CSC 5993	INDEPENDENT STUDY (WITH COGNITIVE SCIENCE PROGRAM
	APPROVAL)
ECE 3420	EXPERT SYSTEMS PROGRAMMING
ECE 5545	INTRODUCTION TO NEURAL NETWORKS
HON 6002	SENIOR THESIS II (WITH COGNITIVE SCIENCE PROGRAM
	APPROVAL)
PHI 2015	LOGIC AND CRITICAL THINKING
PHI 2950	TOPICS IN PHILOSOPHY (WITH COGNITIVE SCIENCE PROGRAM
	APPROVAL)
PHI 3400	THEORIES OF KNOWLEDGE
PHI 4200	PHILOSOPHY OF LANGUAGE
PHI 4975	INDEPENDENT STUDY & RESEARCH (WITH COGNITIVE SCIENCE
	PROGRAM APPROVAL)
PSY 2300	PERCEPTION
PSY 2800	HUMAN FACTORS
PSY 3000	SPECIAL TOPICS (WITH COGNITIVE SCIENCE PROGRAM APPROVAL)
PSY 4050	RESEARCH METHODS
PSY 4200	PHYSIOLOGICAL PSYCHOLOGY
PSY 5100	ANIMAL LEARNING AND COGNITION
PSY 5900	UNDERGRADUATE RESEARCH (WITH COGNITIVE SCIENCE
	PROGRAM APPROVAL)

Note: Cognitive Science students who do not have the prerequisites for an approved course should apply through the Cognitive Science Program to have the prerequisites waived. Decisions will be made on a case-by-case basis by the course instructor or, in some instances, by the Director of the Cognitive Science Program after considering the particular student's background. In the case of courses that are required by the Cognitive Science Program, it is expected that the prerequisites will be able to be waived for Cognitive Science students. A waiver of prerequisites is also possible in other courses.

Communication

CHAIR: DR. BRYAN CRABLE

OFFICE: 203 St. Augustine Center, 610-519-4750 **WEBSITE:** WWW.COMMUNICATION.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/COMMUNICATION.HTML

Acceptance: COM 1000, Survey of Communication Studies, and COM 1100, Public Speaking, are prerequisites which must be taken in the sophomore year.

MAJOR: Thirty Communication Credit Hours are required; COM 5000, Communication Research should be taken in the Junior year prior to taking Com 5050, Senior Project.

After enrolling in the required prerequisites, COM 1000 and COM 1100 and declaring the Communication major, students will consult their academic advisers and choose one of three areas of emphasis: Rhetoric & Performance Studies (2000-2950), Media & Film Studies (3000 -3950), and Interpersonal and Organizational Studies (4000 - 4950). They will take three courses in the area of emphasis, one course in each of the other two areas, and one additional course in an area of their choice to complete the major. A complete listing of courses divided by area of emphasis is available in the Communication office.

Communication majors who choose internships may use three credits to satisfy major requirements. If more internship credits are taken, they must be free electives.

MINOR: Survey of Communication Studies (COM. 1000), plus four Communication courses from any of the three areas of emphasis. Students from the Colleges of Commerce & Finance, Engineering and Nursing must have a 3.0 gpa to apply.

Comprehensive Science

DIRECTOR: DR. FREDERICK HARTMANN

OFFICE: 451 ST. AUGUSTINE CENTER, 610-519-4661
WEBSITE: WWW.COMPREHENSIVESCI. VILLANOVA.EDU

MAJOR: The Comprehensive Science program is designed to allow students interested in the physical and life sciences to get a broad based and thorough exposure to a full spectrum of scientific concerns and practices. The information provided here is a basic outline of the comprehensive science requirements. The elective courses taken may vary based upon special concentrations selected by the student.

The following courses are required of Comprehensive Science majors:

CSC 1051 ALGORITHMS AND DATA STRUCTUR I

BIO 2105, 2106 GENERAL BIOLOGY I AND II

CHM 1151, 1152 GENERAL CHEMISTRY I AND II WITH LABS
CHM 1103/1104 GENERAL CHEMISTRY I AND II LABORATORY
MAT 1500/1505/2500 MATHEMATICAL ANALYSIS I, II AND III
PHY 2410/2411 UNIVERSITY PHYSICS: MECHANICS AND LAB

PHY 2412/2413 UNIVERSITY PHYSICS: ELECTRICITY & MAGNETISM & LAB

OR

PHY 2414/2415 UNIVERSITY PHYSICS: THERMODYNAMICS AND LAB

ONE MATHEMATICS SELECTED FROM THE FOLLOWING:

MAT 2310 STATISTICS FOR EXPERIMENTERS

MAT 2705 DIFFERENTIAL EQUATIONS WITH LINEAR ALGEBRA

MAT 4310 STATISTICAL METHODS

At least SEVEN upper level science electives with appropriate laboratories chosen in consultation with the student's advisor.

The degree program allows for students to design a concentration in a particular discipline or an interdisciplinary field. Some sample concentrations follow:

BIOLOGICAL-CHEMISTRY BIOLOGY

CHEMISTRY COGNITIVE SCIENCE

ENVIRONMENTAL STUDIES GEOGRAPHY
MATHEMATICS METEOROLOGY
PRE-MEDICAL PRE-OPTICAL
PHYSICS PRE DENTAL

Computer Science

CHAIR: DR. ROBERT E. BECK

OFFICE: 161 MENDEL SCIENCE CENTER, TEL. 610/519-7307

WEBSITE: WWW.CSC. VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/COMPUTING.HTML

Two separate majors are offered by the Department of Computing Sciences. The Computer Science Major emphasizes the theory, abstraction and application of computing. Central to computer science is the investigation of algorithms, their complexity and the data structures on which they operate. The Information Science Major focuses on the acquisition, representation, storage, indexing, manipulation, retrieval and management of information in all its forms--text, audio, video, image, animation, and hypermedia.

COMPUTER SCIENCE MAJOR: CSC 1051, 1052, 1200, 1300, 1600, 1700, 1800, 2053, 4170, 4700, and 4790, plus four departmentally approved elective courses; MAT 1500, 1505, and 2310; PHI 2180; a two-semester science sequence with corequisite laboratories selected from an approved set of courses in Astronomy, Biology, Chemistry or Physics; and one more approved science or engineering course. A specific list of approved electives and approved science/engineering courses can be obtained from the department web site www.csc.villanova.edu. A total of 26 credits in science and mathematics is required. The major in computer science is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

CSC MINOR: CSC 1051, 1052, 1200 or ECE 2490, CSC 1300, CSC 1700, CSC 2053, and two elective courses chosen from the list of approved courses available from the department office.

Criminal Justice

DIRECTOR: DR. WILLIAM WAEGEL

OFFICE 204 ST. AUGUSTINE CENTER, 610/519-4740
WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/CRIMINALJUSTICE/

Acceptance: To be accepted as a Criminal Justice major applying students must have completed 30 credit hours and have a 2.75 minimum GPA.

The Criminal Justice Major is an interdisciplinary program designed to provide students with an understanding of the causes, social functions, societal reactions, nature and application of criminal law. Rather than a technical program which focuses on applied skills (e.g. vocational skills), our program will emphasize the justice component. This program will educate students in diverse theories exploring the many social dimensions of crime and effectiveness (and implications) of current criminal justice policies.

EIGHT	(8)REQUIRED	COURSES:
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CRJ 1000	INTRODUCTION TO CRIMINAL JUSTICE
SOC 3000	CRIMINOLOGY
CRJ 3200	POLICE AND SOCIETY
CRJ 3300	CRIMINAL COURTS
CRJ 3400	PENOLOGY AND CORRECTIONS
PHI 2140	PHILOSOPHY OF CRIMINAL JUSTICE
TWO OF THE FOLLOWING:	
SOC 5200	CJ RESEARCH, METHODS AND STATISTICS
SOC 5300	DATA ANALYSIS FOR SOCIAL SCIENTISTS

THREE ELECTIVES FROM THE FO LLOWING:

SOC 5400

CRJ 3320	CRIMINAL LAW AND THE COMMUNITY
CRJ 3350	CRIMINAL PROCEDURE
CRJ 3500	CAPITAL PUNISHMENT
SOC 3700	WHITE COLLAR CRIME
CRJ 3800	VICTIMOLOGY
SOC 2000	SOCIAL PROBLEMS
SOC 2200	SOCIOLOGY OF DEVIANCE
SOC 3100	JUVENILE DELINQUENCY
SOC 3300	SOCIOLOGY OF LAW
SOC 3600	RACE AND ETHNIC RELATIONS

APPLIED RESEARCH METHODS

East Asia Studies Concentration

DIRECTOR: DR. A. MARIE TOYODA

OFFICE: 268 St. Augustine Center, tel. 610/519-45969 WEBSITE: WWW.EASTASIANSTUDIES.VILLANOVA.EDU

The East Asia Studies Program is an interdisciplinary program that provides a concentration that is open to students in all degree programs and in all four undergraduate colleges.

Academic Program Overview: Students are required to take a minimum of 24 credit hours in the following areas:

- Minimum of two semesters of an Asian language at the intermediate level from the list below.
- One of the core courses that provide an overview of the region
- Five Elective courses (15 credits) from the list below.
- Senior research capstone seminar in Asia/Pacific studies

CORE COURSES: ONE OF THE FOLLOWING

HIS 4395 TOPICS IN ASIAN HISTORY

CHI 11111

PSC 4500 JAPAN AND CHINA (CONTEMPORARY EAST ASIA)

LANGUAGE COURSES: TWO AT THE INTERMEDIATE LEVEL

BEGINNING CHINESE I

CIII IIIII	BEGINNING CHINEBET
CHI 1112	BEGINNING CHINESE II
CHI 1121	INTERMEDIATE CHINESE I
CHI 1122	INTERMEDIATE CHINESE II
CHI 1131	ADVANCED CHINESE I
CHI 1132	ADVANCED CHINESE II
JPN 1111	INTRODUCTORY JAPANESE I
JPN 1112	INTRODUCTORY JAPANESE II
JPN 1121	INTERMEDIATE JAPANESE I
JPN 1122	INTERMEDIATE JAPANESE I
JPN 1131	ADVANCED JAPANESE I
JPN 1132	ADVANCED JAPANESE II
SPA 2214	SPANISH AMERICAN NOVEL
SPA 2215	SPANISH AMERICAN SHORT STORY
SPA 3822	SPANISH AMERICAN POETRY

ELECTIVES: FIVE FROM THE FOLLOWING	
CHI 2143	CHINESE CULTURE
CHI 2144	CHINESE LITERATURE IN TRANSLATION
GEO 3900	GEOGRAPHY OF ASIA
HIS 4315	CHINA AND JAPAN TO 1850
HIS 4320	CHINA AND JAPAN SINCE 1858
HIS 4330	CHINA IN THE 20 TH CENTURY
HIS 4335	JAPAN IN THE 20 TH CENTURY
HIS 4850	THE WAR IN VIETNAM
JPN 2100	JAPANESE LITERATURE IN TRANSLATION
JPN 2142	JAPANESE CULTURE AND CIVILIZATION
PHL 4500	ASIAN PHILOSOPHIES
THL 5260	MYSTICISM: EAST AND WEST
THL 5270	RELIGION IN INDIA AND SOUTHEAST ASIA
THL 5280	RELIGION IN CHINA AND JAPAN
THL 5285	BUDDHIST TRADITION
PSC5850	EAST ASIA'S POLITICAL ECONOMY

Economics

CHAIR: DR. PETER A. ZALESKI

OFFICE: 2015 BARTLEY, TEL. 610/519-4370
WEBSITE: WWW.CF.VILLANOVA.EDU/ECONOMICS/

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/ECONOMICS.HTML

BACHELOR OF ARTS IN ECONOMICS: Students in the College of Liberal Arts and Sciences who specialize in Economics earn the degree of Bachelor of Arts in Economics. Such students must take Calculus (MAT 1330 or equivalent) either to satisfy their math requirement or as a free elective. They should take ECO 1001 and ECO 1002 as two of the three social science courses in the Sophomore year. In addition, students must successfully complete: ECO 2101, 2102, 2137 (or equivalent), 4132; and 15 elective Economics credits. Students may receive a Specialization certificate by choosing to specialize in one of the following areas – (Business Economics, Global Economics, Human Resource Economics, or Pre-Law) by taking, as part of their 15 elective credits, three courses within their specialty and focusing their seminar paper (ECO 4132) on that specialty area.

MINOR: Students must take Calculus (MAT 1330 or equivalent), and complete a total of 18 credits consisting of ECO 1001, 1002, 2101, 2102, and 2 elective courses with course numbers ECO 3000 or above.

For a list of economics courses, please see the Economics listing in the College of Commerce and Finance section of University Catalog.

Education, Secondary

CHAIR: DR. CONNIE TITONE

OFFICE 302 St. Augustine Center, tel. 610/519-4620

WEBSITE: WWW.EDUCATION.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/EDUCATION.HTML

The Department of Education and Human Services secondary teacher education program seeks to develop prospective teachers able to meet the demands of teaching in a variety of school environments, public and private, urban and suburban. Provisions for professional competencies and teacher certification include a thorough grounding in the liberal arts, a substantial concentration in an area of specialization and a study of the foundations, principles and methods of education. NOTE: Courses marked with an * in the University Catalog are for education majors and students from other departments who have been accepted into the Teacher Education Program. Education majors and minors must come to the Department each semester for advising.

MAJOR: Secondary Education majors are required to earn a total of 37 credit hours in Education courses. These 37 hours include a Senior Seminar and a 12 credit Student Teaching experience which is open only to students of the senior year who have completed all the subject matter courses in the field of specialization. Students are required to maintain a QPA of 3.0. Students are also required to successfully complete the state mandated Praxis Series of Examinations. These examinations are usually completed during the senior year.

MINOR: A minor in Education requires at least 16 credits. Distribution requirements are: EDU 2202, 3251, 3254, 4290. An additional three credits must be earned from among the following: EDU 2201, 3258, 3260, 3262 3263, 4301.

English

CHAIR: DR. EVAN RADCLIFF

OFFICE 402 ST. AUGUSTINE CENTER, TEL. 610/519-4630

WEBSITE: WWW.ENGLISH.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/ENGLISH.HTML

MAJOR: Thirty-three hours in advanced English courses (numbered 2000 or above) in the junior and senior years, including:

- Two courses in British literature pre-1800 from two of three areas: (1) Medieval; (2) Renaissance (to 1649); (3) Restoration and Eighteenth Century.
- One course in American literature to 1900 or one course in nineteenthcentury British literature.
- One course in American literature after 1900 or British/Irish literature after 1900.
- Senior Seminar
- Six electives

British Literary Tradition 1 and 2 (2101, 2102) and American Literary Tradition 1 and 2 (2103, 2104) are not required for the major, but can operate as free electives with a maximum of two permitted toward the major (including any survey course taken as a Core literature requirement).

MINOR: Fifteen hours including:

- At least one course from the British/Irish literature offerings.
- At least one course from the American literature offerings.
- At least three electives from the English departmental offerings (2000 to 4999).

ENGLISH AS A SECOND LANGUAGE: English 0990 (ESL 1), and English 0095 (ESL 2). For those foreign students who need to strengthen their oral and verbal skills in English, the ESLP provides two courses: ENG 0990 and ENG 0095. The courses will concentrate on improving students' basic grammar, as well as their pronunciation, conversation, reading comprehension, and writing skills.

Environmental Studies Concentration

DIRECTOR: DR. JOHN OLSON

OFFICE: 152 MENDEL, TEL. 610/519-4837

WEBSITE: HTTP://WWW.ARTSCI.VILLANOVA.EDU/ENVSTUDS

The Environmental Studies Concentration promotes an interdisciplinary approach to environmental issues through both coursework and independent study/internship experience. Several requirements of the Concentration also fulfill requirements in the student's major and/or in the Core Curriculum. The Concentration is open to students from all colleges and all majors.

Concentration: Students take all of the courses in Category A-REQUIRED, including ENV 1050, ENV 1051, ENV 4000, PHI 3820, an independent study course (internship or senior thesis or independent /group project) in student's major, and one course each in statistics (e.g., MAT 1230, 1235, 1250, 2310,4310 or BIO 3105) and calculus (several possible). In addition, students take at least one course in each of three categories: Category B-NATURAL SCIENCE AND GEOGRAPHICAL TECHNIQUES (BIO 3255, GEO 1500, 4050, 4101, 4250, 4300), Category C-POLICY AND MANAGEMENT (GEO 5100, 5200, 5300, ECO 1104, PSC 2600, 2625, 3800), and Category D-ENVIRONMENTAL SOCIAL SCIENCES & HUMANITIES (GEO 2000, 2100, 2200, 2300, HIS 2276, PHI 2160, 2430, PJ 2200, SOC 3750).

A modified curriculum is available for students in Civil and Environmental Engineering Please see the Director and visit the website for advice on completing the Concentration.

Ethics Program and Concentration

DIRECTOR: DR. SARAH VAUGHAN BRAKMAN

OFFICE: 485 St. Augustine Center, tel. 610/519-4692

FAX: 610-519-8026

WEBSITE: WWW.ETHICS.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/ETHICS.HTML

The University believes that issues of ethics and values are at the heart of every human endeavor. In addition to regular requirements in the sciences and humanities, the College of Liberal Arts and Sciences and the College of Commerce and Finance require each student to take a special multidisciplinary course in ethics, typically in the sophomore year. The purpose of this course is to give students the opportunity to examine and discuss both ethical theories and their applications to contemporary moral issues. This course is designed to contribute to the implementation of Villanova's mission statement which states that, as a Catholic institution Villanova both emphasizes the values of the Jewish and Christian humanistic traditions and concerns itself with all value systems.

CONCENTRATION: The Ethics Concentration offers students an opportunity to pursue in-depth an intellectual discipline that studies human character and conduct. Each student in the concentration selects one of four tracks: Ethics and Health Care; Ethics, Politics and Law; Ethics Economics and Public Policy; or Ethics, Science, Technology and Environment. Concentrators must also fulfill the service requirement.

Service component: a minimum of 100 hours of approved service, including work with the poor or otherwise marginalized members of our society and/or work related to building a sustainable world environment. This component affords students the opportunity to engage in practical moral inquiry. The student, in conjunction with the program director, will arrange and design the service with the goal of enhancing comprehension of applied ethical issues in the track selected by the student.

REQUIRED COURSES:

- ETH 2050, ETHICAL TRADITION AND CONTEMPORARY LIFE
- ETH 2051, SERVICE LEARNING PRACTICUM
- ETH 4000, INTEGRATING SEMINAR

Track 1: Ethics and Health Care

- PHI 2115, Ethics for the Health Care Professional
- THL 4200, Ethics of Life and Death

01

THL 5950, Death and Dying

Two Electives from list of approved track courses

Track II: Ethics, Politics and Law

- PHI 2400, Social and Political Philosophy
- PHI 3650, Philosophy of Law

or

PJ 5000. Meanings of Justice

• Two electives from list of approved track courses

Track III: Ethics, Economics and Public Policy

• PHI 2450/PJ2600, Catholic Social Thought

or

THL 4320, The Social Teachings of the Christian Churches

SOC 2950/PJ 5200 Perspectives on US poverty

۸r

ECO4200/PJ 2000 Economics of Catholic Social Thought

Two electives from list of approved track courses

Track IV: Ethical Issues in Science, Technology and the Environment

• PJ 2000, Caring for the Earth

or

PHI 3820, Environmental Ethics

• HIS 4527. Frankenstein to Artificial Life

or

THL 5400, Science and Religion

• Two electives from approved track courses

Foreign Languages and Literature

DEPARTMENT OF MODERN AND CLASSICAL LANGUAGES AND LITERATURE.

CHAIR: DR. SILVIA NAGY-ZEKMI

OFFICE 303 ST. AUGUSTINE CENTER, 610/519-4680

WEBSITE: WWW.CLASSICALMODERNLANGLIT.VILLANOVA.EDU/
COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/LANGUAGES.HTML

MAJORS: Majors in French, German, Italian, or Spanish are required to take ten courses above the intermediate level. Once a sequence of language courses has begun, a student may not revert to a lower level course. French 2144 is required of all majors in French; Italian 3211 and 3212 are equired of all majors in Italian; Spanish 1138 and 2100 are required of all majors in Spanish. In addition, majors in French, German, Italian, and Spanish are required to take a research seminar: French 3950, German 3950, Italian 3950, or Spanish 3950. A major in Classical Studies generally requires a minimum of 12 courses (minimum 36 credits) in Latin or Greek. Up to 2 Classics courses (taught in English: Archaeology, Mythology, etc.) may be included in the 12 course total. Classics 3001, Independent Study, will be considered a Latin or Greek course when the study is done in those languages.

MINORS: Students may minor in Arabic, Chinese, French, German, Italian, Japanese, Russian or Spanish. Minors in Arabic, Chinese, Japanese, and Russian must complete six courses in the language. For Minors in French, German, Italian and Spanish four courses above the intermediate level in the language are required. A minor in Classical Studies generally requires a minimum of 6 courses (minimum 18 credits) in Latin or Greek. Up to 2 Classics courses (taught in English: Archaeology, Mythology, etc.) may be included in the 6 course total. Classics 3001, Independent Study, will be considered a Latin or Greek course when the study is done in these languages.

The Department also offers courses in foreign literatures in English translation. Such courses may be used to fulfill a Humanities elective; however, they may not be used toward credit requirements for a foreign language major or minor.

Students may obtain up to six credits through Villanova summer programs abroad in France, Chile, Germany, Italy and Spain.

French

CHAIR: DR. SILVIA NAGY-ZEKMI

OFFICE: 303 St. Augustine Center, 610/519-4680

WEBSITE: WWW.CLASSICALMODERNLANGLIT.VILLANOVA.EDU/COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/LANGUAGES.HTML MAJORS: Majors in French are required to take ten courses above the intermediate level. Once a sequence of language courses has begun, a student may not revert to a lower level course. French 2144 is required of all majors in French. In addition, majors in French are required to take a research seminar: French 3950.

MINORS: For a minor in French four courses above the intermediate level in the language are required.

The Department also offers courses in foreign literatures in English translation. Such courses may be used to fulfill a Humanities elective; however, they may not be used toward credit requirements for a foreign language major or minor.

Students may obtain up to six credits through the Villanova summer program abroad in France.

Geography

PROGRAM DIRECTOR: DR. J. HAROLD LEAMAN

OFFICE: 202 St. Augustine Center, tel. 610/519-4710

WEBSITE: WWW.GEOGRAPHY.VILLANOVA.EDU/

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/GEOGRAPHY.HTML

The geography major and minor are administered by the Political Science department.

The geography major focuses on the interaction of human and physical environments within a spatial context. Individual programs are formed around major geographic problems and world regions. The department offers course work in four areas (1) human systems analysis; (2) geographical techniques; (3)

regional analysis; and (4) environmental analysis. Students are encouraged to explore closely related academic fields and interests.

MAJOR: At least 24 credits in geography. The distribution of these credits is: GEO 1000 introductory courses (6 credits); GEO 3000 regional courses (3 credits); GEO 4000 techniques courses (3 credits); GEO 6000 seminar and independent study courses (3 credits); and 9 credits for any combination remaining of the 1000, 2000, 3000, 4000, 5000, and 6000 series courses.

Majors and Minors who meet certain academic standards are eligible for membership in The Eta Lambda chapter of Gamma Theta Upsilon, the International Geography Honors Society, which annually sponsors activities, lectures and field trips. Internships designed for geography majors are also available.

MINOR: Requirements are: GEO 1000 introductory courses (3 credits); GEO 3000 regional courses (3 credits); and 9 credits from any combination of the 1000, 2000, 3000, 4000, 5000, and 6000 series courses.

German

CHAIR: DR. SILVIA NAGY-ZEKMI

OFFICE 303 St. Augustine Center, 610/519-4680

WEBSITE: WWW.CLASSICALMODERNLANGLIT.VILLANOVA.EDU/

 $\textbf{Course descriptions}: \quad \text{www.artsci.villanova.edu/courses/languages.html}$

MAJOR: Majors in German are required to take ten courses above the intermediate level. Once a sequence of language courses has begun, a student may not revert to a lower level course. Italian 3211 and 3212 are required of all majors in Italian. In addition, majors in German are required to take a research seminar: German 3950.

MINOR: For a minor in German four courses above the intermediate level in the language are required.

The Department also offers courses in foreign literatures in English translation. Such courses may be used to fulfill a Humanities elective; however, they may not be used toward credit requirements for a foreign language major or minor.

Students may obtain up to six credits through the Villanova summer program abroad in Germany.

History

CHAIR: DR. ADELE LINDENMEYR

OFFICE: 403 St. Augustine Center, tel. 610/519-4660

WEBSITE: WWW.HISTORY.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/HISTORY.HTML

MAJOR: HIS 1040 or 1050 plus 27 additional credits in history including: HIS 5501 (Historical Methods); at least six credits in United States history (2000 level courses) at least three credits of which must be HIS 2000 or HIS 2001; at least six credits in European history (3000 level courses); at least three credits in Latin American, Middle Eastern, African, or Asian history (4000-4500 level courses); and nine credits of history electives. One of the European history courses must be in a period before 1750.

MINOR: At least 18 credit hours in history. For students in the College of Liberal Arts and Sciences, the 18 credit hours must include HIS 1040 or 1050.

Honors Program

DIRECTOR: DR. EDWIN L. GOFF

OFFICE: 103 ST. AUGUSTINE CENTER, TEL. 610/519-4650
WEBSITE: WWW.HONORSPROGRAM.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/HONORS.HTML

Acceptance: Admission to the Honors Program is by invitation or by application to the Director. Members of the Program are expected to take Honors courses at least every other semester, and to maintain high academic standards. Individual Honors courses are open to all Villanova students who have at least a 3.0 overall QPA or will bring a special expertise to the course, contingent upon class size limitations. Admission to all Honors courses requires the permission of the Director.

The Villanova Honors Program is a comprehensive four-year curriculum of small seminars designed to foster the free and open exchange of ideas among students and faculty. Honors courses emphasize extensive reading and writing, and attempt to develop the critical abilities of judgment and analysis. Innovative courses include team-taught seminars and seminars given by visiting professors. All Honors courses are enriched by a variety of lectures, cultural events, and social activities. Students in the College of Liberal Arts and Sciences may receive the degree of B.A or B.S. Honors Program. The Honors Program Sequence in Liberal Studies (the Honors Program concentration) is open to students in all colleges.

B.A.H. DEGREE: Twelve Honors courses, including the Humanities or Social Science Seminar, a five-credit or six-credit senior thesis, and three upper-level courses (HON 2500 or above) not used to fulfill core requirements.

B.S.H. DEGREE: Ten Honors courses, including the Natural Science Seminar, a five-credit senior thesis, and three upper-level courses which may be used to fulfill core requirements. (Two Honors laboratory sections are the equivalent of one course.)

HONORS PROGRAM SEQUENCE (CONCENTRATION) IN LIBERAL STUDIES: Eight courses in Honors, at least three of which must be upper-level.

All Honors Program certifications require a minimum overall QPA of 3.33. Honors classes may be used to fulfill Arts, Science and Business requirements and electives. For first- and second-year students, the Program offers Honors seminars in place of the core curriculum introductory courses in the humanities, social sciences, and natural sciences. Some students are invited to take multi-credit, team-taught interdisciplinary seminars (HON 1000, 1050, 2000 series) which examine the major works of Western Civilization in place of regular core requirements. This Honors core culminates with specially-designed seminars on methodology, current issues, and ethical questions in the humanities, social sciences, or natural sciences. On the advanced level, the Honors Program offers a variety of seminars that include traditional themes of enduring significance, timely issues of concern, and interdisciplinary studies not available elsewhere in the college. All have in common small student enrollment, active class participation, and intensive writing requirements. Specific offerings change from semester to semester to reflect the interests of faculty and students in the Program. All upper-level seminars also fulfill major and minor requirements in specific academic disciplines.

Humanities

CHAIR: DR. THOMAS SMITH

OFFICE: 415 ST. AUGUSTINE CENTER, TEL. 610/519-6165 WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/HUMANITIES

Acceptance: The Humanities major is offered by the department of Humanities and Augustinian traditions. A minimum GPA of 2.75 is required to declare humanities as a major. Students not meeting this requirement can petition the Chair for acceptance into the program.

MAJOR: This interdisciplinary major affords students the opportunity to pursue a course of studies which integrates a number of disciplines by focusing on the human person from a variety of perspectives. Students must complete:

- a gateway course, HUM 2000: Sex, Birth, Love and Death,
- after that 18 credits in which they can craft their course of studies in conversation with the Chair of the department, and
- HUM 6900: Senior Pro-Seminar

Students may select one of the following three areas of study;

- 1. The Person in the Humanities: consists of six non-excluded upper level electives beyond the core requirements from within the following disciplines: Art History, Classical Studies, Communications, Education, English, French, German, History, Peace and Justice, Philosophy, Theology and Religious Studies, Spanish, Theater, and appropriate honors courses.
- 2. The Person in Science and Social Science: consists of six non-excluded upper level electives beyond the core requirements from within the following disciplines: Biology, Criminal Justice, Economics, Geography, Political Science, Psychology, Sociology, and appropriate honors courses.
- 3. Independent Studies Concentration: enables students to design an intellectually challenging and coherent program while preserving the freedom to define their educational programs and goals. Students interested in this concentration will submit to the Chair of Humanities an essay describing the goals and proposed course of study for the two-year period

MINOR: HUM 2000 and 4 electives from one of the concentrations.

Human Services

CHAIR: DR. CONNIE TITONE

OFFICE 302 ST. AUGUSTINE CENTER, TEL. 610/519-4620

WEBSITE: WWW.EDUCATION.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/HUMANSERVICES.

HTML

The Human Services program is administered by the Department of Education and Human Services and is designed for students who desire a degree in liberal arts while pursuing a course of study which includes an experiential component as well as training for a specific career. Specialization within the Human Services program will allow the student to concentrate on specific areas related to government and human service agencies.

MAJOR: The requirements for a major in Human Services include a Total of 27 credits in Human Services and minors in Psychology and Sociology. The 24 credits include a 3 credit HS Seminar and 6 credit Practicum. The practicum is open only to students in their senior year who have completed the following required courses: HS 2000, 2200, 3000,3100, 3600. Students follow a course sequence in both Psychology (PSY 1000,2200,2500,2600 and one elective) and Sociology (SOC 1000, 2200, 2300, 3600 and one elective) earning minors in each field.

MINOR: A minor in Human Services requires a total of 15 credits. Distribution requirements are: HS 2000, 2100, 3000, 3100. An additional three credits must be earned from one of the following: HS 3500, 3600 or 3700.

Information Science

CHAIR: DR. ROBERT E. BECK

OFFICE: 161 MENDEL SCIENCE CENTER, TEL. 610/519-7307

WEBSITE: WWW.CSC.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/COMPUTING.HTML

Two separate majors are offered by the Department of Computing Sciences. The Computer Science Major emphasizes the theory, abstraction and application of

computing. Central to computer science is the investigation of algorithms, their complexity and the data structures on which they operate. The Information Science Major focuses on the acquisition, representation, storage, indexing, manipulation, retrieval and management of information in all its forms--text, audio, video, image, animation, and hypermedia.

INFORMATION SCIENCE MAJOR: CSC 1051, 1052, 1200, 1300, 1600, 2053, 2500, 3400, 4140, 4480, 4700, and 4800; MAT 1500, 1505, and 2310 plus three departmentally approved elective courses in information science; PHI 2180; a two-semester science sequence with corequisite laboratories, selected from an approved set of courses in Astronomy, Biology, Chemistry or Physics. A specific list of approved electives and approved science courses can be obtained from the department web site www.csc.villanova.edu

ISC MINOR: CSC 1051, 1052, 1300, 2500, 3400, 4480 and two elective courses chosen from the list of approved courses available from the department office.

Irish Studies Concentration

DIRECTOR: DR. JAMES J. MURPHY

OFFICE: 467 ST. AUGUSTINE CENTER, TEL. 610/519-4676
WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/IRISHSTUDIES/

Irish Studies explores the history and culture of the Irish people from different perspectives -- literature, history, art, politics, and folklore. The program is open to students from all colleges. Interested students may also study in Ireland either in a Semester Abroad program or with the Villanova-in-Ireland Summer program at University College Galway. Details are available in the Irish Studies Office.

CONCENTRATION: Fifteen credits including two core courses, ENG 2500 and HIS 3216, and any three of the following: AAH 3007; ENG 2450, 2460, 2500, 2700, 3615; HIS 3215, 3216; HON 5601; PSC 4950, 6875; or SOC 6500

Italian

CHAIR: DR. SILVIA NAGY-ZEKMI

OFFICE 303 St. Augustine Center, 610/519-4680

WEBSITE: WWW.CLASSICALMODERNLANGLIT.VILLANOVA.EDU/
COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/LANGUAGES.HTML

MAJOR: Majors in Italian are required to take ten courses above the intermediate level. Once a sequence of language courses has begun, a student may not revert to a lower level course. Italian 3211 and 3212 are required of all majors in Italian. In addition, majors in Italian are required to take a research seminar: Italian 3950.

MINOR: For a minor in Italian four courses above the intermediate level in the language are required.

The Department also offers courses in foreign literatures in English translation. Such courses may be used to fulfill a Humanities elective; however, they may not be used toward credit requirements for a foreign language major or minor.

Students may obtain up to six credits through the Villanova summer programs abroad in Italy.

Latin American Studies Concentration

DIRECTOR: DR. SATYA PATTNAYAK

OFFICE: 273 ST. AUGUSTINE CENTER, TEL. 610/519-4773
WEBSITE: WWW.LATINAMERICANSTUDIES.VILLANOVA.EDU

The Latin American Studies Program is an interdisciplinary program that provides courses, a minor, and a concentration in Latin American Studies. It is open to students in all degree programs and in all four undergraduate colleges.

MINOR: Two courses in Spanish language training at or above the intermediate level, LAS1100, and any four additional courses (total 21 credits) from the following list below of core and/or elective courses

Concentration: Two courses in Spanish language training beyond the intermediate level, LAS 1100, and any combination of five courses (total 24 credits) from the list below of core and/or elective courses.

PROGRAM CORE:

PROGRAM COR	E:
ECO 4200	SPECIAL TOPICS: THE ECONOMICS OF LATIN AMERICAN AND THE
	CARIBBEAN
HIS 4405	THE AMERICAS AND SPANISH CONQUEST
HIS 44L0	COLONIAL LATIN AMERICA
HIS 4415	REVOLUTIONARY LATIN AMERICA
HIS 4420	CONTEMPORARY LATIN AMERICA
HIS 4495	TOPICS IN LATIN AMERICAN HISTORY
HON 4000	LATIN AMERICAN THEMES
LAS 1100	LATIN AMERICAN SEMINAR
LAS 3412	SPECIAL TOPICS
PSC 4750	LATIN AMERICAN POLITICS
S OC 6500	SEMINAR IN SOCIOLOGY: MODERNIZATION AND DEVELOPMENT:
	LATIN AMERICA
SPA 1121	INTERMEDIATE SPANISH I
SPA 1122	INTERMEDIATE SPANISH II
SPA 1131	CONVERSATION AND COMPOSITION
SPA 1132	ADVANCED CONVERSATION AND COMPOSITION
SPA 1138	ADVANCED GRAMMAR
SPA 2143	SPANISH AMERICAN CIVILIZATION
SPA 2212	SURVEY OF SPANISH AMERICAN LITERATURE
SPA 2213	SPANISH AMERICAN THEATER
SPA 2214	SPANISH AMERICAN NOVEL
SPA 2215	SPANISH AMERICAN SHORT STORY
SPA 3822	SPANISH AMERICAN POETRY
THL 5990	RELIGION IN LATIN AMERICA
ELECTIVE COU	
HIS 4490	TOPICS IN WORLD HISTORY: RACISM AND JUSTICE IN THE
	AMERICAS
LAS 5000	INTERNSHIP
LAS 6000	INDEPENDENT STUDY RESEARCH
PSC 5800	POLITICS OF INTERNATIONAL ECONOMICS
PSC 6875/	MODERN POLITICAL HISTORY OF THE SOUTHERN CONE*
HIS 4490*	
SOC 3600	RACE AND ETHNIC RELATIONS
SOC 3750	HUMAN POPULATIONS
SOC 4000	SOCIAL CHANGE IN SOUTH AMERICA*
SPA 1133	BUSINESS SPANISH I

SPA 1134 BUSINESS SPANISH II
THL 3740 LIBERATION THEOLOGIES

THL 4600 NORTH/SOUTH DEVELOPMENT ETHICS

*OFFERED ONLY THROUGH VILLANOVA SUMMER PROGRAM IN VALPARARISO, CHILE.

Liberal Arts Program

DIRECTOR: DEAN'S OFFICE

OFFICE 105 St. Augustine Center, tel. 610/519-4600

WEBSITE: WWW.LIBERALARTS.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/LIBERAL.HTML

NOTE: This program is only available for those students who have already enrolled in the program as of Spring Semester 2002. No other students will be accepted into this program. Students who are interested in an interdisciplinary major in the Humanities may contact Dr. Thomas Smith, Chair of the Department of Humanities and Augustinian Traditions, about the new Humanities Major administered by the Department of Humanities and Augustinian Traditions.

GENERAL REQUIREMENTS: A minimum of eight advanced courses are chosen for the Liberal Arts major. The normal fourth Core Writing Intensive course is satisfied with the Liberal Arts Seminar (LA 5001). Under special circumstances outlined by the Director and upon written request a student may substitute a research project (LA 6001) for the seminar. Courses which may not be used for the major in Liberal Arts include all courses numbered from 1000 to 1999 (except for Art and Art History) as well as certain specific courses numbered 2000 and above found listed in the Enchiridion or at the Office of Special Programs. The Liberal Arts degree may not be part of a double major.

CONCENTRATIONS:

- The Humanities Concentration: (1) Seven non-excluded upper level electives beyond the core requirements from within the following disciplines: Art History, Classical Studies, Communication Arts, Education, English, French, German, History, Peace and Justice, Philosophy, Religious Studies, Spanish, Theatre, and appropriate Honors courses; and, (2) the Liberal Arts Seminar (LA 5001).
- <u>The Social Sciences Concentration:</u> (1) Seven non-excluded upper level electives beyond the core requirements from within the following disciplines: Criminal Justice, Economics, Geography, Political Science,

Psychology, Sociology, and appropriate Honors courses; (2) the Liberal Arts Seminar (LA 5001).

• Independent Studies Concentration: (1) Seven non-excluded upper level electives beyond the core requirements from within a combination of the humanities and social sciences. This affords the student the freedom to define their educational program and goals through the design of an intellectually challenging and coherent program. Students interested in this concentration must submit to the Director of Liberal Arts an essay describing the goals and proposed program of study. With the approval of the Director and in cooperation with the student, a faculty mentor will be assigned. (2) Unless waived in lieu of a special seminar or research project (LA 6001) the student must also take the Liberal Arts Seminar (LA 5001). Students may use this option for concentrations in family studies, environmental studies, medieval thought, Catholic studies, psychology of learning, etc.

Mathematical Sciences

CHAIR: DR. DOUGLAS NORTON

OFFICE: 305 St. Augustine Center, tel. 610/519-4850

WEBSITE: WWW.MATH.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/MATH.HTML

FRESHMAN CALCULUS: Prospective first year Villanova students who have completed a year's study of calculus in high school should take the CEEB Advanced Placement test for possible credit for the first course at Villanova.

MAJOR: MAT 1500, 1505, 2500, 2600, 2705, 3300, 3400, 3500, and 5900; an approved analysis elective course, plus four additional mathematics courses numbered 3000 or higher; a two-semester natural science sequence with laboratory, e.g. PHY 2410/2411 and 2412/2413; a third science course, e.g. CSC 1051 (all science courses must be at the science-major level).

MINOR: MAT 1500, 1505, 2500, 2600, plus four courses chosen from MAT 2705, 2710, and courses numbered 3000 or higher. Students may petition to substitute an approved upper division course (e.g., CSC 4170, ECE 3720, PHY 4202, CEE 3702) in his/her major for one of these four courses. To graduate

with a minor, students must have at least a 2.0 Q.P.A. in their Mathematics courses.

NOTE: The University offers multiple versions of calculus and of statistics. One cannot receive credit for two similar versions of calculus or statistics without prior approval. Please contact the department for more information.

Military Science Program and Concentration (Army ROTC)

FACULTY: LIEUTENANT COLONEL LATSHA, MAJOR KEITH KARBEL, MAJOR

THOMAS ANDERSON, MASTER SARGENT ROBERT SEWALL

610-499-4098

ARMY ROTC PROGRAM: By agreement with Widener University's Department of Military Science, Villanova offers a program of study leading to a commission as a Second Lieutenant in the United States Army or Army Reserve. Details are found in the general University section of the Undergraduate Catalog

Naval Science Program and Concentration (Navy ROTC)

CHAIR: COL. J. BRUCE HULICK, USMC
OFFICE: 103 JOHN BARRY, TEL. 610/519-7380
WEBSITE: WWW.NROTC.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/NAVAL.HTML

Eligibility for a commission in the U.S. Navy or the U.S. Marine Corps through the NROTC Program is contingent upon successful completion of required University and naval professional courses of study. Courses required by the NROTC program are as follows:

1. Navy Option: NS 0100, 1000, 1100, 2100, 2200, 3100, 3200, 4100, 4200 plus six credits each of calculus (completed by end of Sophomore year), and physics (completed by the end of Junior year). Also three credits each of Computer Science, American military affairs, and English. All courses must be approved by the Naval Science Advisor.

- **2. Marine Option:** NS 0100, 1000, 1100, 3500, 3600, 4100, 4200 and three credits of American military affairs, approved by the Marine Option Advisor.
- **3. Nurse Option:** NS 0100, 1000, 1100, 4100, 4200, and six credits of English, approved by Naval Science Advisor.

MINOR: (Navy Option) NS 0100, 1000, 1100, 2100, 2200, 3100, 3200, 4100, 4200. (Marine Option) NS 0100, 1000, 1100, 3500, 3600, 4100, 4200.

Peace and Justice Concentration

DIRECTOR: DR. WILLIAM WERPEHOWSKI

OFFICE GROUND FLOOR, SULLIVAN, TEL. 610/519-4499
WEBSITE: WWW.PEACEANDJUSTICE.VILLANOVA.EDU/
COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/PJ.HTML

CONCENTRATION: Twenty-four 24 credit hours, including all requirements for the minor plus two additional courses from Peace and Justice seminar categories or cross-listed by Peace and Justice.

MINOR: Eighteen credit hours, including either PJ 1100 or 5300; at least three courses from two different Peace and Justice seminar categories (2000, 3000, 4000, 5000); and two courses from the remaining Peace and Justice seminars or from those courses cross-listed as Peace and Justice courses.

Philosophy

CHAIR: DR. HELEN LANG

OFFICE: 108 St. Augustine Hall, tel. 610/519-4690

WEBSITE: WWW.PHILOSOPHY.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/PHILOSOPHY.HTML

MAJOR: In addition to fulfilling the College Core Requirements (PHI 1050, and one upper division philosophy elective), a Philosophy major must take nine additional philosophy courses including:

• One course in Ancient Philosophy from the following:

PHI 2500History of Ancient Philosophy
PHI 3000Plato and Aristotle

An Honors or Philosophy Topics course in this area. (This course must be approved by the Chair in order to fulfill the ANCIENT requirement.)

• One course in Medieval Philosophy from the following:

PHI 2510	History of Medieval Philosophy
PHI 3100	An Introduction to St. Augustine
PHI 3120	Augustine in Western Thought
PHI 3130	Augustine and the Existential Tradition
PHI 3160	Islamic Philosophy
PHI 4600	Introduction to St. Thomas Aquinas
Honors or Philosophy	Copies course in this area (This course must

An Honors or Philosophy Topics course in this area. (This course must be approved by the Chair in order to fulfill the MEDIEVAL requirement)

• One Course in Modern Philosophy from the following:

PHI 2520History of Modern Philosophy An Honors or Philosophy Topics course in this area. (This course must be approved by the Chair in order to fulfill the MODERN requirement.)

• **An additional six courses** from the Philosophy departmental offerings including either:

two-PHI-5000 Advanced Seminars

or

one PHI-5000 Advanced Seminar & one-PHI-6000 Research Seminar.

NOTE: Students may take one of two paths within the major. In the Track Path students will select a track and take 3 courses as part of that track. One or two of these courses may be advanced seminars. The track will serve as a focus within the major. The Five Tracks are Cultural Studies, Pre-law, Social and Political Philosophy and Ethics, History of Philosophy, Continental Philosophy. Details for these tracks may be requested from the Department of Philosophy. In the Thesis Path students will treat 5 courses as free electives, one of which must be an advanced seminar. The sixth course will be PHI 6000, the thesis, and is required of all students in this path. The thesis will provide a focal point for the student's work and development in philosophy.

A student with majors in Philosophy and another discipline may, with the approval of the Chair of the Philosophy Department, count up to two cognate related courses (six credits) from the second major toward fulfilling the Philosophy major

.

Minor: Any five electives from the Philosophy departmental offerings. These may include all of the courses completed to satisfy the core requirement in philosophy, but no more than two courses from the following

list may be applied to the philosophy minor.

PHI 1050	Introduction to Philosophy
PHI 2015	Logic
PHI 2130	Business Ethics
PHI 2115	Ethics for Health Care Professionals
PHI 2150	Engineering Ethics

Physics

CHAIR: DR. PHILIP MAURONE

OFFICE: 347 MENDEL, TEL. 610/519-4860
WEBSITE: WWW.PHYSICS.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/PHYSICS.HTML

MAJOR: PHY 2410/2411, 2412/2413, 2414/2415, 2416/2417, 2601/2603, 3310/3311, 4000/4001, 4002/4003, 4100/4102, 4200/4202, 5100, 5200, 5300; CHM 1103, 1151/1152; MAT 1500, 1505, 2500, 2705. In addition, Physics majors must select a minimum of one elective from the Physics departmental offerings and three science courses chosen from courses for Science, Mathematics or Computer Science Majors.

MINOR: Successful completion of an introductory sequence in Physics, plus a minimum of 15 credits from the upper level Physics courses numbered above 3000. Physics minors are open to all science and engineering students.

Applied Minor: All Math Courses required for a Math degree, plus MAT 4310, PHY 2410/2411, PHY 2412/2413, PHY 2414/2415, PHY 2416/2417, PHY 3310/3311, PHY 4301 and PHY 4303.

Political Science

CHAIR: DR. CRAIG WHEELAND

OFFICE: 202 St. Augustine Center, tel. 610/519-4710

WEBSITE: WWW.PSC. VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/PSC.HTML

MAJOR: Thirty credit hours in political science courses are required for a major including the two introductory courses PSC 1100 and PSC1200 and a senior seminar (PSC 6900, restricted to Political Science senior majors).

Elective courses are divided into three areas:

- American Government and Public Law (2000 and 3000 level)
- Comparative Government and International Relations (4000 and 5000 level), and
- Political Theory and Behavior (6000-6800).

The political science major must complete three courses from at least one area, two from another area, and one from the remaining area. One additional course must be taken for a total of ten courses.

Political science majors are encouraged to take two economics courses, more than the minimum number of courses in languages, at least one geography course, and the two introductory statistics courses to complete their core math requirement (MAT 1230 and MAT 1235).

CONCENTRATION WITHIN THE MAJOR: A political science major may choose to earn one or more *concentrations* within political science. Each concentration consists of nine credits in Political Science beyond the thirty credited required fro the major. A course taken to the area distribution within the major will not be recorded as fulfilling a concentration requirement. Furthermore, credits earned for internships and transferred courses will not count toward a concentration. They do count for the area distribution within the major. There are four concentrations: Pre-Law, Public administration, Political theory and International Studies. Students earning a concentration receive a certificate.

MINOR: Fifteen credits consisting of the two introductory courses, PSC 1100 and PSC 1200, plus any three advanced courses numbered PSC 2000 and above will earn a student a minor in Political Sciences. Courses taken on a satisfactory/unsatisfactory basis cannot be used to satisfy requirements for the minor.

Psychology

CHAIR: DR. THOMAS C. TOPPINO

WEBSITE: WWW.PSYCHOLOGY.VILLANOVA.EDU/

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/PSYCHOLOGY.H

TML

MAJOR: PSY 1000 plus 28 additional credits including PSY 4000, 4050, 4100, 4150, 4200, 4500, and 12 elective credits (four electives). PSY 4000 and 4050 are prerequisites for many upper level Psychology courses (PSY 4200 and above). Students who contemplate majoring in psychology may begin the major early by taking PSY 1000, plus any elective courses for which PSY 1000 is the only prerequisite.

To choose psychology as a major, a student must have earned a "C+" or higher in General Psychology (PSY 1000) or have a cumulative QPA of 3.00 or better. Because of course prerequisites, students should expect that completion of the major will require at least four semesters after their formal declaration of the major.

MINOR: PSY 1000 plus any combination of 12 undergraduate credits in psychology.

Courses taken on a satisfactory/unsatisfactory basis cannot be used to satisfy requirements for the major or minor. PSY 1000 is a prerequisite for all other courses in psychology.

Russian Area Studies Concentration

DIRECTOR: DR. JEFFREY HAHN

OFFICE: 484 St. Augustine Center, tel. 610/519-4640

WEBSITE: WWW.ARTSCI.VILLANOVA.EDU/RUSSIAN/

The Russian Area Studies Concentration is open to all students enrolled in the University. The purpose of the concentration is to provide students with a multi-disciplinary comprehension of an exciting, important, and complex part of the world.

CONCENTRATION: Two semesters of Russian at the intermediate level, or demonstrated proficiency at an equivalent level, plus fifteen credit hours selected from among the following: HIS 3240; HIS 3241, 3242; PSC 4401, 5351, 5950; RUS 1131, 1132, 3412, 3717, 3718, 3810, 3818, 3819; SAR 4007; THL 5510; and appropriate special topics courses in Economics and approved by the director. In addition students are required to take RAS 6000, a multi-disciplinary intensive investigation of a topic in Russian studies, generally taken in the senior year.

Students are encouraged to study in Russia for a summer or semester, either at Nizhny Novgorod State University in Central Russia (which has an exchange agreement with Villanova), or at another approved Russian university. Contact the Russian Area Studies Office or the International Studies Office for further details on available programs and transfer of credits.

Sociology

CHAIR: DR. THOMAS ARVANITES

OFFICE: 204 St. Augustine Center, tel. 610/519-4740

WEBSITE: WWW.SOCIOLOGY.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/SOCIOLOGY.HTML

Acceptance: To select Sociology as a major a student must have earned a "C" or better in SOC 1000, Introduction to Sociology. Because of the requirements of the major students must allow three full semesters after the declaration of the major to complete all requirements.

MAJOR: The Sociology major requires completion of 10 courses. Four courses are required of all majors, while the remaining six are selected by students on the basis of their interests or career aspirations. Introduction to Sociology (Soc 1000) is required of all majors and is the first course that students should take. In addition, 3 courses are required in the theory-methods area (5000 level courses). There are 3 sociological theory course offerings (Soc. 5000, 5050, and 5100) and 3 research methods course offerings (Soc. 5200, 5300, and 5400). Students can take 2 courses from one group and 1 course from the other group or take Soc. 6500 (Senior Seminar) as their 2nd theory or 2nd methods.

MINOR: SOC 1000 and four other courses chosen from the offerings of the department. The student must inform the chair of his or her intention to minor and request certification of the minor when it has been completed.

A student may take an internship in a field setting in the second semester of the junior year or during the senior year. Students should consult with the Chair and Director of the Internship Program.

Spanish

CHAIR: DR. SILVIA NAGY-ZEKMI

OFFICE 303 ST. AUGUSTINE CENTER, 610/519-4680

WEBSITE: WWW.CLASSICALMODERNLANGLIT.VILLANOVA.EDU/
COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/LANGUAGES.HTML

MAJOR: Majors in Spanish are required to take ten courses above the intermediate level. Once a sequence of language courses has begun, a student may not revert to a lower level course. Spanish 1138 and 2100 are required of all majors in Spanish. In addition, majors in Spanish are required to take a research seminar: Spanish 3950.

MINOR: For a minor in Spanish four courses above the intermediate level in the language are required.

The Department also offers courses in foreign literatures in English translation. Such courses may be used to fulfill a Humanities elective; however, they may not be used toward credit requirements for a foreign language major or minor.

Students may obtain up to six credits through Villanova the summer program abroad in Chile and Spain.

Studio Art and Music Program

OFFICE: 205 St. Augustine Center, tel. 610/519-4760
COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/SAR.HTML

COURSES IN STUDIO ART AND MUSIC ARE ADMINISTERED BY THE CHAIR OF THE THEATRE DEPARTMENT.

Theatre Minor

CHAIR: REV. PETER M. DONOHUE, O.S.A.

OFFICE: 205 St. Augustine Center, tel. 610/519-4760

WEBSITE: WWW.THEATRE.VILLANOVA.EDU/

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/THEATRE.HTML

MINOR: Students may fulfill a Theatre Minor by completing five theatre courses (three required/two elective) and a theatre practicum. Interested students should request further information through the Theatre Department Office in St. Augustine Center for the Liberal Arts, Rm. 205.

Students majoring in Communication may declare Theatre as their Area of Emphasis. Students majoring in Education may declare an English/Communication concentration with Theatre as the Area of Emphasis.

Any student may educate himself/herself in the art and craft of theatre through Electives and through participation in the department's Theatrical Productions. Auditions and backstage positions are open to all undergraduates for the entire academic theatre season.

Theology and Religious Studies

CHAIR: DR. BERNARD PRUSAK,

OFFICE: 107 St. Augustine Center, tel. 610/519-4730

WEBSITE: WWW.THEOLOGY.VILLANOVA.EDU

COURSE DESCRIPTIONS: WWW.ARTSCI.VILLANOVA.EDU/COURSES/THEOLOGY.HTML

MAJOR: Thirty credit hours exclusive of the required introductory course, THL 1050 or THL 1051, which students in the College of Liberal Arts and Sciences and the College of Commerce and Finance normally take in the Freshman year.

Eighteen credit hours are to be taken from among the following:

- One Course in Biblical Studies: any course numbered from THL 2000 to THL 2480.
- One Course in Historical studies: any course numbered from THL 2500 to THL 2900.
- Theological Studies: THL 3200, Understanding Jesus
- One Course in Studies in Christian Living: Any Course numbered from THL 4100 to THL 4690.
- one Course in religious and Cultural Studies: Any Numbered course from THL 5100 to THL 5285.
- Advanced Seminar, THL 6500
- 12 credit hours from other departmental Offerings in consultation with the student's Academic Advisor.

MINOR: Eighteen credit hours inclusive of the required introductory course (see above). Normally, a minor should be declared in the sophomore year or no later than the second semester of junior year. All courses required for the major are highly recommended for minors, especially THL 2725 and 2726; at least one Scripture course; THL 3500; and a selection from among THL 5100, 5150, 5260, 5270, 5280, 5700.

THL 1050 is a prerequisite for all other courses in Theology and Religious Studies.

Women's Studies Concentration

DIRECTOR: DR. SHERYL BOWEN

OFFICE: 243 ST. AUGUSTINE CENTER, TEL. 610/519-6142

ADMINISTRATIVE OFFICE; TBA ST. AUGUSTINE CENTER.

610/519-6142

WOMEN'S RESOURCE CENTER: 130 ST. AUGUSTINE CENTER.

WEBSITE: WWW.VILLANOVA.EDU/WOMENSTUDIES/
COURSE DESCRIPTIONS: WWW.VILLANOVA.EDU/COURSES/WS.HTML

The Women's Studies Program is an interdisciplinary program providing courses, a minor and a concentration in Women's Studies. It is open to students in all degree programs.

MINOR: an Integrating Seminar and five additional courses of which at least two must be from those listed below. The Integrating Seminar is required of all students and is offered every spring.

CONCENTRATION: An Integrating Seminar and 7 additional courses of which at least 3 must be from those listed below. The Integrating Seminar is required of all students and is offered every spring.

COM 4150	GENDER AND COMMUNICATION
ENG 2300	WOMEN IN LITERATURE
HIS 2296	CHANGING ROLES FOR WOMEN IN AMERICAN SOCIETY
	OR
HIS 3360	EUROPEAN WOMEN'S HISTORY TO 1800
PHI 2425	PHILOSOPHY OF WOMEN
PJ 5300	RACE, CLASS AND GENDER
SOC 3500	SOCIOLOGY OF GENDER ROLES
THL 5850	WOMEN IN RELIGION AND SOCIETY
WS 2050	INTRODUCTION TO WOMEN'S STUDIES
WS 5000	INTEGRATING SEMINAR
WS 3000	INDEPENDENT STUDY
TOPICS	COURSES IN SEVERAL DEPARTMENTS ARE OFFERED EACH
	SEMESTER. (PLEASE SEE MASTER SCHEDULE)

Writing and Rhetoric Concentration

DIRECTOR: DR. KARYN HOLLIS

OFFICE: 458 ST. AUGUSTINE CENTER, TEL. 610/519-7872

WEBSITE: WWW.WRITINGPROGRAM.VILLANOVA.EDU/CONCENTRATION

ACCEPTANCE: Students must have a 3.0 average or better to enroll in the concentration. An entrance essay must be submitted and will be scored in terms of purpose, content, style and organization. A base score must be attained.

The Concentration in Writing and Rhetoric provides students with a programmatic option for developing excellence in writing and speaking skills. The Concentration is open to students from all colleges in all majors.

CONCENTRATION: By the end of the first semester in the Concentration students will have studied for and passed a self-administered WebCT exam covering principles of Standard Edited English, a style sheet such as that of the Associated Press, and other rules of grammar, punctuation and mechanics.

By the end of the student's senior year a "capstone" portfolio will be submitted to the director representing the range and quality of the student's writing. This portfolio will be in the format of a "clip book" suitable for presentation to potential employers.

To successfully complete the Concentration students must achieve a 3.0 average in their Concentration courses. Students must complete 24 credit hours comprising 8 courses. All courses are to be writing enriched or writing intensive including:

- Three courses in Writing Practice at the intermediate or advanced level from the list of approved courses. At least one must be in expository or journalistic writing.
- Two courses in theory of composition , history of language , rhetorical theory or history and critical theory
- Two writing enriched or writing intensive upper level English courses which include a rhetorical approach (broadly defined) All writing enriched and writing intensive literature courses 2100 or above.
- One practicum course

MINOR: Students must complete 18 credit hours comprising 6 advanced courses, numbered 2000 or above. All courses are to be Writing Enriched or Writing Intensive. Three courses in writing practice from the approved list. Two courses in theory of composition, rhetorical theory or critical Theory. One Writing Enriched or Writing Intensive English literature course at the 2100 level or above. See website for list of approved courses and additional requirements.

Part VII

Important University Opportunities & Resources

A. Campus Ministry

Campus Ministry nourishes the development of religious faith and practice in the Roman Catholic, Augustinian Tradition. Campus Ministry seeks to empower the members of the university community to proclaim the gospel of Jesus Christ while respecting all religious traditions.

Reflecting traditions of Roman Catholic and Augustinian spirituality, Campus Ministry engages in University life through prayer, liturgy, community service, and pastoral care. Campus ministry encourages the integration of personal faith into the academic environment, promoting the Augustinian ideal of an intellectual community seeking both wisdom and a fuller spiritual life.

Campus Ministry fosters the development of leadership in service to the poor and education for justice. Campus Ministry programs reflect the charisms of Augustine and Thomas of Villanova who lived lives based on the search for truth, wisdom, charity, and justice.

B. Career Services Office

Nancy Dudak, Director, Corr Hall......610-519-4060 careerservices@villanova.edu

In addition to seeking out advice from professors, faculty advisors, deans and counseling advisors, career counselors are available at the Office of Career Services. Interest inventories are administered for assistance in choosing a major or exploring career options. Other services and programs are offered to help individuals plan a career and develop the skills essential to pursue a career plan successfully. Individual counseling is supplemented by workshops such as resume writing and interview skills.

Counselors understand that the career interests of Arts and Sciences majors are varied and numerous. They work with students to create an individual who maximizes the employment services: a campus interview program with over 350 employers, an online resume database, and job listings. These services are coordinated online at http://www.careers.villanova.edu. Registration materials

for graduate school admission tests are available and students may establish Credential Files to house letters of reference and materials for application to graduate programs.

C. Computer Support Center (CSC)

101 Vasey Hall 610-519-7777

support@villanova.edu

The Computer Support Center (CSC) provides computer support to Villanova students and faculty through walk-in service, phone support, online help and written documentation. The CSC is staffed by trained computer consultants and students who assist users with network connection, e-mail, application programs and the sale of Connectivity Kits. Students can report problems with network connections, network accounts, and residence hall wiring problems through the CSC. In addition, the CSC is a Dell, Hewlett Packard and IBM laptop service center with certified on-site technicians to assist users with warranty and non-warranty repairs. Campus computing information, frequently asked questions (FAQ's), help files, freeware and shareware applications are available through the CSC web site at www.unit.villanova.edu/support. You can email any questions to support@Villanova.edu or call (610) 519-7777.

D. Counseling Center

Dr. Joan G. Whitney, Director, 206 Health Services Building 610-519-4050

univers itycounselingcenter@villanov,edu

The Counseling Center helps students deal with personal concerns and decisions. We provide a setting in which to discuss the emotional impact of events that commonly occur during a student's normal developmental process. All contacts are confidential and private and are not recorded on the student's university records. Services available include: consultation, individual counseling, and group programs. The Center also provides assistance with study skills through the development of better approaches to study skills, time-management, and self-motivation.

E. Dean of Students

Mr. Paul Pugh, Dean 213 Dougherty Hall,

610-519-4200

www.student.life.villanova.edu/dean

The Dean of Students Office is a resource for student concerns, supports students in all aspects of their lives, and assists students in their development as individuals and as members of the community. The Dean of Students Office is

comprised of the Dean of Students, the Assistant Dean of Students for Judicial Affairs, the Assistant Dean of Students for Alcohol and Drug Intervention, and an Administrative Assistant

The Dean of Students Office promulgates standards and expectations for the student community (see Student Handbook), monitors student behavior, administers the Code of Student Conduct and oversees the University's judicial process. The Dean of Students Office also oversees the International Student Human Services Office and the office that works with students with physical Disabilities.

The Dean of Students Office serves as liaison with various University constituents including parents, public safety, residence life, and local township officials and civic associations. In its role as liaison with the local community, The Dean of Students Office publishes Crossroads – A Student Guide to Living Off Campus to assist students with this important transition.

The Dean of Students Office is also responsible for coordinating the University's Commencement Exercises and coordinating the selection of senior students for Who's Who in American Universities and Colleges.

F. Falvey Memorial Library

Mr. Joseph Lucia, University Librarian and Director,.....610-519-4290

Falvey Memorial Library is the gateway to print and electronic information resources and services available to students, faculty and staff in their academic endeavors. Its more than 650,000 volumes, 5,400 current serial subscriptions, approximately 250 electronic indexes, several thousand full-text electronic journals, and extensive microfilm and audiovisual collections support the informational and research needs of the Villanova community. The Falvey Library homepage on the World Wide Web provides access to many of the services as well as describing policies and procedures of the library.

FLASH (Falvey Library Academic Search) is accessible at: http://www.library.villanova.edu.

A friendly, knowledgeable staff provides reference, interlibrary loan, instructional media, circulation, reserve materials, cataloging and acquisition services. Reference librarians answer specific questions, suggest appropriate sources, assist in the formulation of search strategies, and offer instruction in the use of electronic resources. Interlibrary Loan makes available the resources of libraries throughout the country. Instructional Media Services offers viewing and listening stations for films, CD's, tapes, as well as transparency, lettering and production services.

Library hours during semesters: (Hours var	ry when classes are not in session)
Monday	8:00 A.M 2:00 A.M.
Tuesday-Thursday	8:00 A.M 12:00 P.M.
Friday	8:00 A.M 8:00 P.M.
Saturday	9:00 A.M 8:00 P.M.
Sunday	
Library hours are extended hours during fi	

Library hours are extended hours during final exams.

G. Field Study Opportunities

There are many opportunities for Villanova students to participate in summer field study in the areas of anthropology, archaeology, astronomy, biology, ecology and marine science. Academic departments should be contacted for information on these programs.

H. Health Professions Advisor

Dr. John Friede, Advisor, 143 Mendel Science Center610-519-4833 www.healthprofessions.villanova.edu

Those students planning to apply to any health sciences or allied health science graduate or professional school program (Medical, Dental, Veterinary, Optometry, Physical Therapy), etc. should contact Dr. Friede for information on entrance requirements, entrance examinations and application procedures. Informational meetings are held throughout the academic year (www.healthprofessions.villanova.edu/meetings.htm).

I. International Student Advisor

Connelly Center, 2 nd floor	
Mr. Stephen McWilliams, senior Advisor	610-519-4095
Mr. Hubert Whantong, Advisor	610-519-8017
Ms. Debbie K. Hoover, Advisor	610-519-7827
internationalstudentoffice@villanova.edu	

The International Student Advisor's Office is a service provided by the university to aid foreign students in becoming oriented to the university and the community. All international students must register with the International Student Adviser each semester. The International Student Office assists with matters relating to the Bureau of Citizenship and Immigration (BCIS) Services.

There are a variety of social and cultural programs sponsored through this office in conjunction with the International Student Association. In addition, the office offers a comprehensive orientation program at the beginning of the Fall

Semester and a full English as a Second Language (E.S.L.) program for non-native speakers.

J. International Studies and Overseas Programs

Mr. Lance Kenney, Director, Middleton Hall, second floor, 610-519-6412

Email: internationalstudies@villanova.edu (www.internationalstudies.villanova.edu)

Students attending Villanova University are encouraged to incorporate international aspects of education into their academic plans. The Office of International Studies (OIS) assists students in identifying opportunities and facilitating the process of enrollment in overseas programs. The services offered to all full-time Villanova students include:

- Advising and administrative support services for summer, semester, and year long overseas study programs including direct enrollment in overseas institutions, service learning opportunities, internships, and/or exchanges with international programs worldwide.
- Administrative support for applications to Villanova's International Summer.
- Advising for the fulfillment of the overseas requirements for Villanova's Area Studies.

Sophomores with permission of their college deans, juniors and first semester seniors are eligible for overseas study. A minimum 2.75 GPA and full-time status are required by Villanova though some programs and overseas institutions may require a higher GPA. All undergraduate majors are eligible. Students may not apply for study abroad while on academic or disciplinary probation. Students on Leave of Absence may not participate in overseas programs while on leave. Transfer students must have completed 3 semesters at Villanova prior to participating in an overseas program. Villanova University has special affiliations and/or exchange agreements with many institutions and organizations overseas and students are encouraged to explore the options available that meet VU's criteria for overseas study.

Working with a representative of the OIS, all students who study overseas are required to submit a Prior Approval Form designating courses approved by appropriate faculty in order for overseas credit to transfer to Villanova. Credit for work completed overseas will appear on the Villanova transcript. With the exception of Villanova's International Summer Programs which earn regular letter grades, students must earn a minimum grade equivalent to a "C" or higher

in order for credit to transfer. In place of a letter grade, the designation "T" will be assigned. A maximum of 60 credits are transferable (including Advanced Placement, Overseas Study, and summer credits earned at other institutions).

In addition to advising and administration, the Office of International Studies also sponsors pre-departure orientations for outbound students, welcome back events for returning students, a fall study abroad fair, and regular overseas study information sessions, monitors safety issues affecting Villanova students worldwide, and works with faculty and organizations both on and off campus to develop and improve overseas opportunities. The Office of International Studies is also an active member in NAFSA: Association of International Educators and the Pennsylvania Council for International Education (PaCIE).

Students wishing further information may contact the Office of International Studies and Overseas Programs in Middleton Hall, 2nd floor (610/519-6412).

K. Learning Support Services

Nancy Mott, KENNEDY, 2ND Floor,610-519-5636 Nancy.Mott@Villanova.Edu

The Office of Learning Support Services, in conjunction with faculty, provides reasonable academic accommodations for students with disabilities, in accordance with Section 504 of the Rehabilitation Act of 1973 and the ADA. Students with learning disabilities, other neurologically based disorders, and those disabled by chronic illnesses requesting assistance with academic concerns and/or accommodations should contact Nancy Mott. Current documentation is required for classroom accommodations.

Students with physical disabilities with questions or concerns about access and support services should contact Steve McWilliams, Human Services, 610-519-4095.

L. Math Learning Resource Center

To Be Named, Director, Second Floor, Old Falvey,......610-519-6951 mlrc@villanova.edu

The Mathematics Learning and Resource Center (MLRC) is a center for student learning excellence. The MLRC is located on the second floor of Old Falvey, next to the Writing Center. At the MLRC, students gather to discuss mathematics, to work on group projects or to study independently. During its hours of operation (Monday - Thursday: 1:00 - 5:00 p.m. and 6:30 - 9:00 p.m.

and Sunday: 6:30 - 9:00 p.m.), the MLRC is staffed by tutors who help students with all first and second year math courses.

The MLRC at Villanova University is not merely a tutoring center. Our computer lab has 15 computers, capable of running the mathematical software currently being used in math courses offered at Villanova. There is also a comprehensive collection of tutorial software in algebra, trigonometry, calculus, statistics and differential equations, which students may use for independent learning. Most of this software is multi-media and entertaining to use. In addition to this extensive collection of computer software, the lab is also networked and connected to the Internet. A modest video library and three TV/VCR stations round out the offerings of the MLRC.

It is our goal to create a stimulating environment for Villanova students to enrich their mathematical understanding of the world. Call the MLRC at 9-5193 or email nakia.rimmer@villanova.edu.

M. Multicultural Affairs Office

Dr. Terry Nance, Associate Vice President, Dougherty Hall,610-519-4075 multiculturalaffairs@villanova.edu

The Office of Multicultural Affairs assists the University in providing an inclusive educational experience founded on Augustinian principles. The Office of Multicultural Affairs provides a welcoming atmosphere and services to support the University's mission of respecting individual differences and adhering to the principle that mutual love and respect should animate every aspect of University Life.

Through its multi-faceted programs and dimensions (Academic Advancement Program, Affirmative Action Program, Volunteer/Outreach Programs, Mentoring Program, International Student Services, and Multicultural collaborative endeavors) the Office undertakes the challenge of meeting many goals stated in Villanova's Strategic Plan. At the forefront is the goal which calls us to be "...a community diverse in race, gender, ethnicity, culture and socioeconomic background."

N. Music Activities

Mr. John Dunphy, Director, St. Mary's Hall Ground Floor610-519-7214 musicactivitiesoffice@villanova.edu

. The Office of Music Activities promotes, maintains and supervises the efforts of student performing groups on the Villanova campus. These groups include the String Ensemble, Percussion Ensemble, University Band (Concert, Marching, Pep, and Jazz), the Villanova Dance Team (sports), Twirlers, Silks,

Dance Ensemble, Nova Jhoom (Indian Dancers), The Villanova Singers, Villanova Voices, Gospel Ensemble, Chamber Singers, Student Theater, Student Music Theater, and Music Activities Stage Crew. Each student organization is student run under the direction of a staff professional. In addition, the Office of Music Activities sponsors the Villanova Jazz Festival and the St. Mary's Chapel Chamber Music Series.

O. National Scholarship Advisement

Ms. Jane Morris, Director, Unde rgraduate Grants and Awards, 138 St. Augustine Center, 610-519-5928.

Villanova University provides comprehensive advisement for students who pursue prestigious national scholarship and fellowship opportunities, including the Truman, Goldwater, Udall, Fulbright, Marshall, Rhodes, National Science Foundation, Hughes, Mellon and Ford Foundation. A mentoring program is administered by the Office of Undergraduate Grants and Awards, and begins as early as an undergraduate student's first year. In recent years, nearly over 125 students have received formal recognition from these various national scholarship programs.

P. Residence Life

Mr. Tom DeMarco, J.D., Director, Kennedy Hall,.....610-519-4155 residencelife@villanova.edu

This office collaborates with a variety of offices to provide a clean, safe, attractive, and educationally purposeful living environment for resident students.

Q. Student Health Service

Health Services Building......610-519-4070

The Villanova University Student Health Center (519-4070) is staffed by registered nurses 24 hours daily. The Student Health Center is open with limited hours during semester breaks and over the summer. Physicians and nurse practitioners are available weekdays by appointment. Gynecologic services are provided by the nurse practitioners by appointment. Registered nurses provide 24 hour care to students who require inpatient treatment and observation, as well as to students who require walk-in care. Other medical services include diagnostic laboratory testing, administration of allergy injections and immunizations. In the event that a student requires emergency care, transportation is provided to a local hospital. Though students are not billed for physician and nurse practitioner visits, they are financially responsible for some medication and all laboratory fees, as well as consultation with specialists.

R. University Information Technologies (UNIT)

UNIT provides computing, information and communication services to the entire campus community. A campus wide network for data, voice, cable TV and video communication is available for students, faculty and staff. In addition to many college or department-specific student computing labs, UNIT manages labs located in Mendel and Tolentine with over 200 workstations. The student labs are open 18-24 hours a day with consultants on duty to assist students. In addition to course specific software all personal computers support general purpose applications such as word processing, spreadsheets, graphics, data base management systems and world wide web browser. All students are assigned a user-id and password that gives them access to the University's electronic mail system and their own web site. Non-credit seminars are available through UNIT dealing with computer related topics. UNIT's articles in Villanova University's paper, Blueprints, and on the web, provides information about innovative upgrades to computer services, and helpful hints to computer users as well as general information to keep the campus well informed. All residence halls and most classrooms have high speed network access and cable TV. If you bring your own computer to the campus, you will be able to purchase a connectivity kit to connect your computer to the University network. Students also have the option to purchase a network ready notebook directly from UNIT. Once connected, you will have access to all computing resources on campus and the INTERNET.

S. Vice President for Student Life

Rev. John P. Stack, O.S.A., 202 Dougherty Hall610-519-4550 vpforstudentlife@villanova.edu

The Vice President for Student Life oversees the Division of Student Life and the Center for Health and Wellness at Villanova University. The Division of Student Life offers numerous services for students through various offices, including: Office of Residence Life, Student Health Center, Dean of Students Office, Counseling Center, Office of Career Services, Learning Communities, Office of Student Development, Music Activities, New Student Orientation and the Center for Multicultural Affairs. The Vice President also serves as an advocate for students on a variety of University committees.

T. Writing Center

The Writing Center provides assistance to all Villanova students, staff and faculty for every kind of writing. Walk-in or appointment assistance is available Sunday 3:30-7:30 p.m.; Monday-Thursday 11:30 a.m. -3:30 p.m.; and Friday 11:30 a.m. -3:30 p.m.

......Tutors will work with you at any stage of the writing process from brainstorming ideas, to evaluating first drafts, to proofreading for grammar and punctuation errors. You should especially consider the use of the Center while completing the Core requirements for Writing Intensive and Enriched courses.

Appendix I: Academic Integrity

(http://www.vpaa.villanova.edu/academicintegrity/)

June 15, 1998, University Senate Resolution #9798-7-1,

Approved April 17, 1998. Revised January 15, 2000

Statement of Purpose

Academic integrity is vital to any university community for many reasons. Students receive credit for doing assignments because they are supposed to learn from those assignments, and the vast majority do so honestly. Anyone who hands in work that is not his or her own, or who cheats on a test, or plagiarizes a paper, is not learning, is receiving credit dishonestly and is, in effect, stealing from other students. As a consequence, it is crucial that students do their own work. Students who use someone else's work or ideas without saying so, or who otherwise perform dishonestly in a course, are plagiarizing or cheating. In effect they are lying. Such dishonesty, moreover threatens the integrity not only of the individual student, but also of the university community as a whole.

Academic integrity lies at the heart of the values expressed in the University's mission statement and inspired by the spirit of Saint Augustine. When one comes to Villanova, one joins an academic community founded on the search for knowledge in an atmosphere of cooperation and trust. The intellectual health of the community depends on this trust and draws nourishment from the integrity and mutual respect of each of its members.

Code of Academic Integrity

The following are some rules and examples regarding academic dishonesty. Since academic dishonesty takes place whenever anyone undermines the academic integrity of the institution or attempts to gain an unfair advantage over others, this list is not and cannot be exhaustive. Academic integrity is not simply

a matter of conforming to certain rules; it must be understood in terms of broader academic purposes of a Villanova education.

A. Cheating:

While taking a test or examination, students shall rely on their own mastery of the subject and not attempt to receive help in any way not explicitly approved by the instructor; for example, members shall not try to use notes, study aids, or another's work.

Such cheating includes trying to give or obtain information about a test when the instructor states that it is to be confidential. It also includes trying to take someone else's exam, or trying to have someone else take one's own exam.

B. Fabrication:

Students shall not falsify, invent, or use in a deliberately misleading way any information, data, or citations in any assignment.

This includes making up or changing data or results, or relying on someone else's results, in an experiment or lab assignment. It also includes citing sources that one has not actually used or consulted.

C. Assisting in or contributing to academic dishonesty:

Students shall not help or attempt to help others to commit an act of academic dishonesty.

This includes situations in which one student copies from or uses another student's work; in such situations, both students are likely to be penalized equally severely. (If the assisting student is not enrolled in the particular course, the Hearing Panel will formulate a suitable and equivalent penalty.) Students are responsible for ensuring that their work is not used improperly by others. This does not include team projects where students are told by their instructor to work together.

D. Plagiarism:

Students shall not rely on or use someone else's words, ideas, data, or arguments without clearly acknowledging the source and extent of the reliance or use.

The most common way to acknowledge this reliance or indebtedness is to use footnotes or other documentation. It is the students' responsibility to show

clearly when and where they are relying on others - partly because others may wish to learn from the same sources from which the original writer learned. Since this indebtedness may be of many kinds, some definitions and examples of plagiarism are listed below.

Using someone else's words without acknowledgment. If you use someone else's words, not only must you give the source, but you must also put them within quotation marks or use some other appropriate means of indicating that the words are not your own. This includes spoken words and written words, and mathematical equations, whether or not they have been formally published.

Using someone else's ideas, data, or argument without acknowledgment, even if the words are your own. If you use someone else's examples, train of thought, or experimental results, you must acknowledge that use. Paraphrasing, summarizing, or rearranging someone else's words, ideas, or results does not alter your indebtedness.

Acknowledging someone else in a way that will lead a reader to think your indebtedness is less than it actually was. For example, if you take a whole paragraph worth of ideas from a source, and include as your final sentence a quotation from that source, you must indicate that your indebtedness includes more than just the quotation. If you simply put a page number after the quotation, you will lead the reader to think that only the quotation comes from the source. Instead, make clear that you have used more than the quotation.

The examples above constitute plagiarism regardless of whom or what the source is. The words or ideas of a roommate or of an encyclopedia, or notes from another class, require acknowledgment just as much as the words or ideas of a scholarly book do. Introductions and notes to books also require acknowledgment.

The examples above constitute plagiarism even if you simply forget to include a reference, forget that you used a certain source, or forget that you found certain ideas or a certain argument or certain data in a source. You are responsible for taking careful notes on sources. Notes must clearly identify the information you have obtained and where you acquired it, so that later you can acknowledge your indebtedness accurately. Do not look at a source without having something handy with which to take such notes.

You need not provide footnotes for items that are considered common knowledge. What constitutes common knowledge, however, varies from academic field to academic field, so you should consult with your instructor. In

general, the harder it would be for someone to find the fact you have mentioned, the more you need to footnote it.

E. Multiple Submissions of Work:

Students shall not submit academic work for a class which has been done for another class without the prior approval of the instructor.

In any assignment, an instructor is justified in expecting that a certain kind of learning will be taking place. Handing in something done previously may preclude this learning. Consequently, if a student hands in work done elsewhere without receiving his or her instructor's approval, he or she will face penalties.

F. Unsanctioned Collaboration:

When doing out-of-class projects, homework, or assignments, students must work individually unless collaboration has been expressly permitted by the instructor. Students who do collaborate without express permission of their instructor must inform the instructor of the nature of their collaboration.

If the collaboration is unacceptable, the instructor will determine the appropriate consequences (which may include treating the situation as an academic integrity violation).

Many Villanova courses involve team projects and out of class collaboration, but in other situations, out of class collaboration is forbidden. Students should assume that they are expected to do their work independently unless cooperation is specifically authorized by the teacher.

G. Other Forms of Dishonesty

Acting honestly in an academic setting includes more than just being honest in one's academic assignments; students are expected to be honest in all dealings with the University. Certain kinds of dishonesty, though often associated with academic work, are of a different category than those listed above. These kinds of dishonesty include (but are not limited to) the following:

Misrepresenting oneself or one's circumstances to an instructor (for example) in requesting a makeup exam or a special due date for an assignment, or in explaining an absence).

Forging parts of, or signatures on, official documents (including both university documents, such as drop-add slips or excused absence slips, and relevant outside documents, such as doctors' notes).

Taking credit for work in a team-project even when the student has made little or no contribution to the work of the team.

Stealing or damaging library books.

Unlawfully copying computer software.

These serious offenses will be handled by the University's disciplinary procedures.

H. Procedure:

If a faculty member suspects that a student has committed an academic integrity violation, the faculty member shall discuss the matter with the student allowing the student an opportunity to respond. Faculty members who have questions about whether an incident constitutes an academic integrity violation are urged to consult with their chair, dean, or with the chair of the Academic Integrity Board. If the faculty member remains convinced that a violation has occurred, the faculty member assigns an appropriate grade, typically an F for the course, an F for the assignment, or some other grade that the faculty member judges appropriate. At the sole discretion of the faculty member, the faculty member may also offer the student an opportunity to redo the work or complete an alternate or additional piece of work. The faculty member must report in writing to his or her chair or program director that an academic integrity violation has occurred. A form is available for reporting violations or faculty members may write a letter. The letter should give a brief account of the matter and, where appropriate, should include copies of the assignment and other documentary evidence. The faculty member may also make a recommendation as to whether the violation should be treated as a *Class I violation or as a Class II violation*. Typically, violations of the Academic Integrity Code are treated as Class I violations, but in cases which are less serious or where there are mitigating circumstances, the violation may be treated as a Class II violation. The faculty member's dean makes the final determination of the level of the violation. If a student has previously received a Class II violation, all subsequent violations will normally be held to be Class I violations.

In cases that are particularly complex or especially egregious (for example, cases involving the theft of an examination, or the selling of materials to other

students), the faculty member may also recommend to the dean that the matter be referred to the Board of Academic Integrity. If the dean has questions about the case, the dean may refer the case back to the faculty member and the department chair for further discussion and clarification. After the dean has received the letter, and, if necessary, has discussed the matter further with the faculty member and the chair, the dean sends a letter to the student informing the student that the student has been found to have committed an academic integrity violation. The letter to the student should include a copy of the materials submitted by the faculty member and a copy of the academic integrity policy, and should be sent registered mail with return receipt requested. Copies should also be sent to the faculty member, the faculty member's chair, the dean of the student's college (if different from the faculty member's college), and the chair of the Board of Academic Integrity.

The student shall respond in writing to the faculty member's dean within five business days of receipt of the notice of complaint (excluding university holidays), explaining his or her action and either admitting the violation or asserting innocence. Failure to respond will be construed as admission that a violation has occurred. The faculty member's dean will send copies of the student's letter to all of the parties indicated above. If the student admits that a violation has occurred but asserts that there are extenuating circumstances, the student should explain this in the letter to the dean. If the student denies that an academic integrity offense has occurred, the dean will refer the matter to the chair of the Board of Academic Integrity, with notification of this to the other parties. In cases that are especially egregious or where other circumstances warrant it, the dean may refer the matter to the Board of Academic Integrity even when the student admits that a violation has occurred.

Upon receiving notice from the dean, the chair of the Board of Academic Integrity will assemble a panel consisting of faculty and student members of the Board of Academic Integrity. The panel will make a determination of whether academic dishonesty has occurred and will convey its finding to the dean. If the panel finds that no violation has occurred, or that the facts are inconclusive, the faculty member's dean will return the issue to the faculty member for regarding (on the premise that no violation has occurred), and notification will be sent to all parties. If the panel determines that a violation has occurred, the original grade assigned by the faculty member will stand. If a student believes that the grade assigned is inappropriate, and if the course syllabus does not clearly specify the penalty for academic integrity violations, the student may appeal the grade through the normal procedure for handling complaints concerning grades. The complaint process will only consider whether the penalty is too severe, and will not review the panel's decision that an academic integrity violation has occurred.

If it has been determined that a violation has occurred (either by admission of the student or by a decision of the panel) the faculty member's dean sends a notification to all parties. The student's dean may mandate an educational program to help the student come to a fuller understanding of academic integrity, e.g., the student may be asked to complete a written exercise or participate in an academic integrity educational program supervised either by the college or by the Board of Academic Integrity, or participate in other actions that will help the student come to an understanding or academic integrity and its seriousness in the academic community. The student's dean may also impose or recommend additional disciplinary penalties.

The complete file will be maintained in the office of the student's dean until the student graduates or otherwise severs all relationship with the University. At that point, if there has been no second offense, the letter will be removed from the student's file. If there is a second offense, the student' dean will notify the vice President for Academic Affairs, the student will normally be dismissed from the University, and a record of the reason for dismissal will be retained in the student's permanent file and will appear on the student's official transcript.

Students who believe that an integrity violation has occurred should report the suspected violation to the faculty member. If the faculty member does not act on the report, the student may also report the matter, in writing, directly to the faculty member's dean, who will then make a judgment as to whether an academic integrity violation has occurred, and, if so, will follow the process described above.

I. Summary of Procedure

The detailed statement of procedures is available from the VPAA, on the VPAA Oracle Bulletin Board, and on the Academics Home Page (www.villanova.edu/academic/homepage.htm)

- The VPAA appoints the Chair of the Board of Academic Integrity and a panel of faculty members and students representing all four undergraduate colleges.
- 2. The Chair assembles hearing panels for individual cases. The panel will include six individuals: the chair (non-voting), three faculty members (with at least one from the faculty member's college), and two students. The student presents evidence to the panel. The faculty member may attend but is not required to do so.

- 3. The panel makes its decisions by secret majority vote.
- 4. Appeals are to the faculty member's dean, and are only permitted in the case of defects in the process or new evidence.

Appendix II

University Procedures for Handling Student Complaints about Faculty

The following procedures concerning complaints by students about faculty performance and about matters of grading should be observed by the College of Liberal Arts and Sciences, the College of Commerce and Finance, the College of Nursing, the College of Engineering, the Graduate School of Liberal Arts and Sciences and University College.

The purpose of these Guidelines is to provide a mechanism for the review of student complaints regarding faculty performance and grading within the framework of existing University, College and Department policies and rules. For this reason University, College or Department policy and rules may not themselves be the proper subject matter of a complaint under these Guidelines.

Normally, the resolution of complaints will proceed by the following route:

- l. to the Chairperson of the department (Program Director of the program in the College of Nursing) involved, then, if necessary,
- 2. to the committee constituted to handle complaints, and finally if necessary,
- 3. to the Dean of the College or where appropriate the Graduate Dean of Liberal Arts and Sciences.

The University, however, believes that each student and faculty member is an individual who deserves to be treated as an individual. Consequently, it is impossible to develop a policy that will govern or control every situation. The following Procedures were created to apply in most situations that may occur; however, where the faculty member, Dean of the College and the Vice President for Academic Affairs believe that the circumstances may require special consideration, e.g. where the complaint is of a very personal and sensitive nature, the Procedures may not be followed or used in every respect. In no event, however, shall a deviation from these Procedures be permitted with respect to the obligation of the committee under Section III to rely in its decision making only upon information which has been communicated to the faculty member thus permitting the faculty member the opportunity to respond. These Procedures may be modified at the University's discretion according to the University's norms and procedures.

In the sequel, Chairperson shall also imply Program Director, and Dean of the College shall likewise imply Graduate Dean of Liberal Arts and Sciences or University College where appropriate. These Procedures apply to student complaints. Individuals who are not University students may not utilize these procedures.

I. Faculty Performance Complaints

- A. Student complaints concerning an instructor's handling of a class, classroom presentation, professional demeanor, or course policies should be directed to the Chairperson of the faculty member involved. If the complaint is against the Chairperson, these procedures shall be modified such that the Dean of the College shall undertake the responsibilities of the Chairperson under the Guidelines and the Vice President for Academic Affairs (or his or her designate) shall undertake the responsibilities of the Dean under these Guidelines.
- B. Identified Complaints: When a person makes a complaint and provides her or his name, the Chairperson will advise the individual to approach the faculty member. The Chairperson's goal will be to arrange a meeting of the parties. If the complainant does not agree to a joint meeting, the Chairperson will advise the faculty member of the details. If the complainant requests that his or her identity remain confidential or the Chairperson considers it appropriate, the identity of the complainant will remain confidential. The Chairperson will inform the complainant of the results of the meeting with the faculty member.
- C. Anonymous Complaints: The Chairperson should express displeasure with any anonymous complaint and point out that such complaints (if made by telephone) will not be accepted. If an anonymous written complaint arrives, the Chairperson should inform the faculty member of the details of the complaint.
- D. The faculty member shall be presumed to have acted appropriately unless otherwise determined in accordance with these guidelines.
- E. The Chairperson shall make reasonable efforts to mediate the complaint. The Chairperson may consult with others in connection with his or her review of the complaint. In the event that the complaint cannot be amicably resolved in the Chairperson's judgment, the Chairperson may make such disposition of the complaint as the Chairperson deems warranted. The Chairperson shall ordinarily communicate his or her disposition of the complaint to the student initiating the complaint and the faculty member.

F. If either the student or the faculty member is dissatisfied with the Chairperson's disposition of the complaint, she or he may contact the department committee constituted to handle complaints. This elected or appointed standing committee of the department should be duly constituted following the department's own policy. If a department has too few members to form reasonably such a committee the department, less the faculty member involved, shall constitute a committee of the whole. The student or faculty member should present her or his complaint via a formal written and signed statement to the committee within seven days of the Chairperson's disposition of the matter. The committee shall consider the complaint in accordance with the procedures described in Section III below.

II. Grade Complaints

- A. Student complaints concerning a grade should be directed to the Chairperson of the faculty member involved. The Chairperson shall urge a student who brings a complaint about a grade in the first instance to try to resolve the matter with the course instructor. That failing, the Chairperson should attempt to resolve the issue between the student and instructor. The Chairperson may consult with others in connection with his or her review of the complaint. If the complaint is against the Chairperson, it should be directed to the Dean of the College and these procedures shall be modified such that the Dean of the College shall undertake the responsibilities of the Chairperson under these Guidelines and the Vice President for Academic Affairs (or his or her designate) shall undertake the responsibilities of the Dean under these Guidelines.
- B. In the event that the complaint cannot be amicably resolved in the Chairperson's judgment, the Chairperson may make such disposition of the complaint as the Chairperson deems warranted. The Chairperson shall ordinarily communicate his or her disposition of the complaint to the student initiating the complaint and the faculty member.
- C. In a particularly difficult case the Chairperson may elect to refer the matter to the departmental committee for fact finding and recommendations. The committee shall consider the Chairperson's referral of the matter in accordance with the procedures described in Section III and send its recommendations in writing to the Chairperson. The Chairperson shall be guided in his or her determination by widely accepted professional norms of academic freedom which normally make the instructor the locus of authority in determining grades.

The Chairperson shall communicate his or her determination of the complaint to the Dean of the College, the faculty member involved and the complainant.

III. Department or College Committee

- A. Upon a referral from the Chairperson in the case of a grade complaint, or upon a written complaint from a student or faculty member dissatisfied with a Chairperson's disposition of a faculty performance complaint, the committee shall meet within a reasonable time to determine how best to handle the review of the particular matter. The committee may convene hearings appropriate in its judgment to the particular situation presented. The committee procedures may include by example and not by limitation, individual interviews, closed hearings and review of documentation. The committee is not bound, however, by the rules of judicial or administrative hearing procedures or by formal rules of evidence. All interviews and hearings shall be conducted in appropriate University facilities designated by the committee and shall be closed to the public. Every committee member need not attend every interview or hearing session. The University does not permit legal counsel to participate in hearings or interviews of the committee on behalf of the student or faculty member. Only information which has been communicated to the faculty member, thus permitting the faculty member an opportunity to respond thereto, shall be relied upon by the committee in reaching its conclusions. The committee shall reach its decision by majority vote.
- B. In the case of a grade complaint, the Committee shall provide its findings of fact and written recommendations to the Chairperson for consideration in the Chairperson's determination of the matter. In making its recommendation to the Chairperson the Committee shall base its decision on clear and convincing evidence and on the principle that the locus of authority in determining grades normally is placed with the instructor. In the case of a faculty performance complaint, the committee shall provide its findings of fact and written decision to the student, faculty member and chairperson. The Committee shall make its decision based on the preponderance of evidence it has reviewed.
- C. New material evidence not reasonably available at the time of the committee or Chairperson's review of the matter.

All written deliberations concerning the complaint shall be forwarded to the Dean to aid in the decision. In the course of his or her review of the appeal, the Dean may, but shall not be required to, consult with others, interview the

complainant, faculty member, Chairperson, committee members or others. The decision of the Dean shall be final.

These procedures supersede, University Policy No. 140 titled "Procedural Norms for Deans or Chairpersons in Case of Complaints Against Faculty."

IV. Appeals Process.

In the extraordinary case when a student or faculty member is unwilling to accept the decision of the Chairperson with respect to a grade complaint or the departmental complaint committee with respect to a faculty performance complaint, she or he may appeal the decision in writing to the Dean of the College within seven days of that decision but only on the following basis:

- A. material procedural defect in the Committee, or
- B. material procedural defect in the Chairperson's handling of the matter, or
- C. new material evidence not reasonably available at the time of the committee or Chairperson's review of the matter.

All written deliberations concerning the complaint shall be forwarded to the Dean to aid in the decision. In the course of his or her review of the appeal, the Dean may, but shall not be required to, consult with others, interview the complainant, faculty member, Chairperson, committee members or others. The decision of the Dean shall be final.

These procedures supersede, University Policy no. 140 titled "Procedural Norms for Deans or Chairperson in Case of Complaint Against Faculty."

V. Complaints Involving Sexual Harassment.

Cases of grade complaints or faculty performance complaints which may constitute sexual harassment under the University's Sexual Harassment Policy shall be referred, with the complainant's permission, to the University's Sexual Harassment Officer for resolution under the Sexual Harassment Guidelines.

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Always be dissatisfied with what you are, if you want to arrive at what you are not yet. Always add some more. Always keep on walking. ALWAYS FORGE AHEAD!

St. Augustine, SERMON 169, 18

History

The College of Commerce and Finance was founded in 1922 by Father Joseph C. Bartley. Father Bartley served as dean until is death in 1962. The College was reorganized in 1964 to meet the exigencies of the ever changing business community. Since that time, it has attracted outstanding undergraduate and graduate students from across the nation and the world. Today it offers undergraduate degrees in accountancy, economics and business administration. Graduate programs include the Executive MBA, Professional MBA, Full-time Equivalent (FTE) MBA, Master of Taxation, Master of Accountancy and Professional Consultancy (MAC), Master of Technology Management (MTM), and a JD/MBA program offered jointly with the Villanova Law School.

The undergraduate and graduate business programs of the College are fully accredited by AACSB International - the Association to Advance Collegiate Schools of Business. In addition, the accounting program is separately accredited by the AACSB and, as such, is among a select number of accounting programs so designated.

The College faculty consists of 95 full-time professors, with over ninety percent holding the terminal degree in their area of expertise. Approximately 25 adjunct professors drawn from industry are also part of the faculty contingent. The faculty is widely recognized for its excellence in teaching, research, and professional service.

Mission

The College of Commerce and Finance seeks to be a leader among business schools in fostering a learning environment that enables members of our community to develop the knowledge, experience, values, and capabilities needed for a lifetime of learning consistent with the moral vision of St. Augustine. Strengthened by our liberal arts foundation, we also strive to collaborate with the business and academic communities to create, share, and apply knowledge.

We value and support: ☐ the rich tradition of Catholic Social Teaching and the guidance it provides for all College activities an environment of mutual respect, professional development, and continuous improvement a quest to achieve educational distinctiveness in the markets in which we choose to compete ☐ active partnership with other units of the University ☐ the mutually supportive activities of teaching, research, and service ☐ innovation and experimentation by faculty and staff in achieving continuous improvement in the educational delivery process ☐ all dimensions of scholarship, including teaching, discovery, integration, and application □ stakeholder-based perspectives in decision-making ☐ life-long relationships with our graduates ☐ the creation of a learning environment the end product of which is adaptive problem solvers ☐ diversity of opinion and thought, as they relate to the development of operational strategies and tactics chosen to accomplish our mission

Objectives

We seek to develop students who are responsive to new and changing environments, effective in crafting creative solutions to complex problems; in essence, adaptive problem solvers. The six strategic initiatives form the curriculum framework for the development of *The Learning Environment* within the College.

- **Technological Competence**: Ability to use the processes and tools of information management in problem-solving such as computer hardware and software.
- Ethics and Social Responsibility: Set of moral principles and values governing individual conduct and fulfilling obligations to society.
- **Experiential Learning**: Active participation in events or activities leading to the accumulation of knowledge and skill.
- **Integrated Curriculum**: Presenting business principles in a cross-functional manner so as to create connections across disciplines with an integrated view of life.
- Communication Skills: Exchange of thoughts, information, and ideas through various media.
- Multicultural & Global Perspective : Comprehensive, worldwide view.

Degree Programs

The College of Commerce and Finance awards both undergraduate and graduate degrees signifying the accomplishment of an education that empowers the student to compete effectively in the global marketplace. Attaining a Bachelor of Science degree in Accountancy, Economics, or Business Administration; a Master of Accountancy and Professional Consultancy, Master of Business Administration, Master of Technology Management or Master of Taxation degree clearly identifies the holder as a technologically competent, internationally aware, ethically and socially responsive, adaptive problem solver who is skilled in the effective and efficient use of communication arts and strengthened through practical experience.

Undergraduate Degrees Offered

The College of Commerce and Finance offers the following undergraduate degrees: Bachelor of Science in Accountancy; Bachelor of Science in Economics; and Bachelor of Science in Business Administration with majors in Finance, Management, Management Information Systems, and Marketing. In addition, an International Business Co-major is also available and must be taken in conjunction with another business major.

Baccalaureate Degree Requirements

The Bachelor of Science degree in the College of Commerce and Finance has the following requirements:

- □ Completion of all *core curriculum* requirements, *academic major course* requirements, and *elective* requirements for the degree with an overall cumulative quality point average (QPA) of not less than 2.00. Beginning with the class of 2008, a minimum technical GPA of 2.0 is also required. Students transferring into the College of Commerce and Finance must attain a QPA of 2.0 or better for all work attempted at Villanova University.
- ☐ At least 50% of the business credit hours and 50% of major course credit hours required for degrees in the College must be completed at Villanova University. (Transfer students only.)
- ☐ No more than 60 credits (20 courses) may be transferred into a program including AP, transfer, and study abroad.
- ☐ The final 30 hours of one's academic program must be completed at Villanova (residence requirement). With permission of the College Dean, a student may study abroad during the first semester of senior year.
- ☐ Successful completion of the Communication Portfolio requirement (BA 2500 in sophomore year and BA 4500 in the senior year)
- ☐ Discharge of all financial obligations to Villanova University.

Students are responsible for the degree requirements in effect at the time of their initial enrollment. If they are formally readmitted to the College, they must meet the requirements of their new graduating class. Transfer students' degree requirements are determined at time of transfer.

A student's eligibility for graduation is determined by the Dean. NOTE: it is the personal responsibility of the student to ensure that all requirements for graduation are met.

Basic Curricul um

The curriculum outlined below provides a suggested sequence to complete the baccalaureate degree requirements. It incorporates some modifications based on particular majors. However, this suggested sequence should not be viewed as limiting since individual adjustments are made to meet desired educational objectives.

FRESHMAN YEAR		Credits
ACC 1101	Principles of Financial Accounting	3
BL 1090	Legal Environment of Business and Society	3
CHS 1000	Ancient Medieval Renaissance Thought	3
CHS 1001	Modern Thought: Enlightenment to Present	3
DIT 1006	Intro to MIS	3
ECO 1001, 1002	Intro to Microeconomics/Macroeconomics	6
ENG 1010	Composition	3
MAT 1330, 1335	Quant Analysis Bus I, Quant Analysis Bus II	6
PHI 1050	Intro to Philosophy	3

Group A	Group B
ACC 1101	BL 1090
DIT 1006	ENG 1010
CHS 1001	CHS 1000
ECO 1001	ECO 1001
MAT 1330	MAT 1330
	PHI 1050

Either Group A or Group B is taken in the fall semester and the remaining courses in the spring semester. Students taking a language in the fall, take courses listed in Group B and defer either ENG 1010 or PHI $1050 \cdot$ Students continuing their language in the spring should also defer ENG 1010 or PHI 1050 to the next semester.

SOPHOMORE YEAR		Credits
ACC 1102	Principles of Managerial Accounting	3
COM 1101 ¹	Business & Professional Communication	3
DIT 2010	Business Statistics	3
ENG 1050	The Literary Experience	3
ETH 2050 ^{2 & 9}	Ethics	3
FIN 1113 ³	Principles of Finance	3
HIS xxxx ⁴	History Elective	3
MGT 1102	Management Essentials	3
MKT 1137	Principles of Marketing	3
THL 1050	Christianity Theology or Christianity in History	3
Or THL1051		
BA 2500	Communication Portfolio I	0

College of Commerce and Finance

JUNIOR YEAR		Credits
Behavioral Science		3
Elective ⁵		
ECO 3109	International Economics	3
DIT 1141	Operations Management	3
Humanities Elective ⁶		3
Major Courses		9
Natural Science ⁷		3
Social/Natural		3
Science ⁸		
Non-Business		3
Electives		

SENIOR YEAR		Credits
Major courses		9
MGT 3301 ⁹	Policy Formulation and Administration	3
THL xxxx ¹⁰	Theology Elective	3
Free Electives 11		15
BA 4500	Communication Portfolio II	0

¹ Internal transfer students who have taken COM 1100 may use COM 1100 to substitute for the required COM 1101.

² Economics major take ECO 2101 & ECO 2102 in the sophomore year and defer ETH 2050 and HIS xxxx elective to the junior year.

³ ACC 1101, ECO 1001/1002, DIT 1006/2010 are prerequisites of FIN 1113. DIT 2010 can be taken concurrently with FIN 1113.

⁴HIS xxxx: choose any offering from the History department.⁵ Behavioral Science: choose from SOC 1000, 2100, 2200, 2400, 2500, 2600, 2700, 2800, 2900 or PSY 1000.

⁶ Humanities: choose from Art & Art History, Classical Study, English, Modern Languages, Philosophy, Studio Art & Music, or Theater.

Natural Science: choose from Astronomy & Astrophysics, Biology, Chemistry, or Physics.

⁸ Social/Natural Science: choose from Geography, History, Political Science, Psychology, Sociology, or the Natural Sciences.

⁹ ETH 2050 and MGT 3301 must be taken at Villanova.

¹⁰ THL xxxx: choose any THL elective other than THL 1050 or THL 1051.

¹¹ BL 2185 is recommended for ACC majors who want to sit for CPA certification.

Special Programs

Business Minors

(1) MINORS FOR NON-BUSINESS MAJORS:

A. General Business Minor (Traditional Track; spread over several semesters)

Students enrolled in other colleges of the University may seek a General Business Minor upon application to, and approval by, the Dean of the College of Commerce and Finance. Acceptance is determined on a competitive basis. Required business courses are ACC 1101, BL 1090, DIT 1006, ECO 1001, ECO 1002, FIN 1113, MGT 1102, and MKT 1137. In addition to the business courses, a statistics sequence is also required. The statistics requirement may be fulfilled by successfully completing:

- MAT 1230 and MAT 1235 or
- DIT 2010 (or ECO 2137 or MAT 2310 or MAT 4310) if a student has completed a calculus course or
- Statistics requirement is waived for Engineering and Math majors.

Students in the General Business Minor program are required to either purchase the College laptop or purchase the necessary software programs for their pre-owned laptops. Students who complete the General Business Minor may then minor in Accounting, Economics, Entrepreneurship, Finance, International Business, Management Information Systems, or Marketing. (See course requirements listed under Minors for Business Majors).

B. Villanova Summer Business Institute (One full summer – 10 weeks)

The Villanova Summer Business Institute (SBI) is an innovative, intensive program seeking to provide the motivated, non-business student with broad exposure to the major foundational areas of modern business and is recognized as a general business minor by the College. The SBI's unique aspect is the integrated, cross-functional teaching approach employed. Faculty from each of the subject areas follow a truly interdisciplinary teaching approach. Specific modules included are:

□ SBI 1107 Financial Decision Making I
 □ SBI 1108 Strategic Analysis & Implementation
 □ SBI 1110 Financial Decision Making II
 □ SBI 1112 Ethical Business Leadership

Recognizing the pervasive influence of law, , appropriate topics of business law and ethics are included in SBI 1108 – Strategic Analysis & Implementation. Applicants may come from any college (except business) of the University or any other college or university. An applicant must have completed his/her freshman year, usually 30 credits and be in good academic standing. Because of the computational aspects of several of the SBI modules, students are encouraged to take MAT 1230, 1250, DIT 2010, or their equivalent at their home institution. These courses are not prerequisites; students may apply without having taken any of these courses. Applications are accepted beginning December 1 each year and must be received by April 15. Decisions are made on a rolling basis on all complete application packages, so early submission of applications is encouraged. Space is limited; applications will continue to be accepted until April 15 or the SBI is full. Complete details and applications are available from the Villanova

College of Commerce and Finance

Summer Business Institute, (610) 519-6715, or email at sbi@villanova.edu or on the web at www.cf.villanova.edu/sbi.

Students who successfully complete a general business minor through either the SBI or the General Business Minor may also pursue a minor in the following business areas: Accounting, Economics, Entrepreneurship, Finance, International Business, Management Information Systems, and Marketing. (See course requirements below under Minors for Business Majors).

(2) MINORS FOR BUSINESS MAJORS:

Students in the College of Commerce and Finance may pursue a minor in the following business areas with the requirements listed below:

Accounting: ACC 1101: Principles of Financial Accounting

ACC 1102: Principles of Managerial Accounting

Plus any three (3) accounting courses from the

following list:

ACC 2310: Intermediate Accounting I ACC 2320: Intermediate Accounting II (prerequisite: ACC 2310)

ACC 2430: Auditing (prerequisite: ACC 2320)

ACC 2450: Advanced Accounting (prerequisite: ACC 2320)
ACC 2460: Federal Income Taxes I

ACC 2470: Cost Accounting

ACC 2480: Federal Income Taxes II (prerequisite: ACC 2460)

Economics: ECO 1001: Principles of Microeconomics

ECO 1002: Principles of Macroeconomics ECO 2101: Macro-Economic Theory ECO 2102: Micro-Economic Theory

Plus two (2) economics courses above 3000

Entrepreneurship: ENT 2020: Entrepreneurial Management

ENT 2021: Entrepreneurial Marketing ENT 2022: Entrepreneurial Finance ENG 2023: Entrepreneurial Practicum

Finance: FIN 1113: Principles of Finance

Plus any three (3) finance courses not including FIN

3350,FIN 3360, and FIN 3470.

International Business: MGT 2350: International Comparative Management

Two (2) elective courses (6 credits) choose from:

BL 2160: International Business Law

FIN 2335: International Financial Management MKT 2280: International Marketing and Trade MGT 2208 Special Topic in International Management

Other Approved IB Electives

Language:

If you have two years of a foreign language in high school, your language requirement is waived, otherwise, you are required to take two semesters of a foreign language (minimum 6 credits) at or above the intermediate level.

International experience is OPTIONAL.

Note: Finance, Marketing, and Management majors must select the international course offered by their major department. This course will also fulfill a major elective requirement.

Management Information Systems (MIS):

DIT 1006: Introduction to MIS

MIS 2020: Programming for Adaptive Problem

Solving

MIS 2030: Database Management

MIS 2040: Systems of Analysis & Design

Marketing: MKT 1137: Principles of Marketing

MKT Choice: MKT 2120: Buver Behavior

or MKT 2197:Marketing ResearchPlus two (2) other

marketing electives other than MKT 3450.

CO-MAJOR INTERNATIONAL BUSINESS

The IB Co-Major is restricted to College of Commerce and Finance (C&F) majors. The Co-Major must be taken in conjunction with a major in Accounting, Economics, Finance, Management Information Systems, Management, or Marketing.

	Τh	e Internation	al Bus	iness Co	-Major	course red	quirements	are as fo	llow	s:
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	MGT 2350:	International	Comparative	Management
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Three (3)) elec	tive	courses	(9	credits)	choose	from:	BL	2160:	Intern	ational
Business	Law;	FIN	2335:	Int	ernationa	l Finan	cial M	lanag	ement;	MKT	2280:

College of Commerce and Finance

International Marketing and Trade; or MGT 2208: Special Topic in International
Management or other approved IB Electives.
One (1) international-related History or international related Social Science
selected from Geography, History, Psychology, Political Science, or Sociology.
Language Requirement: two semesters of a foreign language (minimum 6 credits)
at or above intermediate level if French, German, Italian, or Spanish is chosen or
two semesters at the introduction level if Arabic, Chinese, Japanese, Russia is
chosen.
Required international experience.

Honors and Awards

Awards for distinguished scholarship in the College are made annually at the Beta Gamma Sigma dinner when the top 10% of the senior class and the top 7% of the junior class are honored. Beta Gamma Sigma is the national scholastic honor society in the field of business administration. Villanova's chapter is one of 157 from among 700 institutions offering undergraduate degrees in business.

The College's medallion winners for distinguished scholarship and service are awarded each year at the C&F Graduation Recognition Ceremony, held it on the Saturday of Commencement weekend.

Other awards by professional organizations and departments are distributed on a regular basis at appropriate times.

Honors Program

The Honors Program at Villanova brings together students with strong academic records and dedicated faculty members in challenging seminars that promote diversity and depth of learning. The seminars encourage innovation, development of communication skills, and independent research. Students in the College of Commerce and Finance who are interested in participating in the Honors Program should contact their academic advisors for eligibility criteria and registration procedures. General information about the Honors Program may be obtained from the Honors Program Office (SAC 103; telephone 610-519-4650).

International Study

The College of Commerce and Finance encourages all students to study abroad. Alliances have been developed between Villanova and numerous institutions abroad.

The Office of International Studies Office (Middleton Hall, 2nd floor, telephone 610-519- 6412) provides assistance to students desiring to study in a foreign country through a variety of one semester, full academic year, and summer programs. The courses must be approved in advance as to content and rigor by the chairperson of the student's major.

Internships

The College encourages all students to participate in an internship during their academic career. Internships, whether taken for academic credit or not for credit, provide valuable insight into career interests and objectives, provide concrete opportunities for students to make connections between classroom and theory, and often lead to permanent employment. Academic internships ("for credit" internships) are graded on a satisfactory/unsatisfactory basis and fulfill a free elective requirement (not a major elective requirement). Students should contact the Center for Student Advising and Professional Development, Bartley Hall 0023, 610-519-5532 for complete information and procedures.

Non-Business Minors for Business Majors

Students enrolled in the College of Commerce and Finance may pursue minors in programs offered by other colleges of the University, including the Honors Program. Detailed information on the process for approval may be obtained in the department of the discipline of the minor. Students pursuing minors may receive permission for overloads, if necessary.

Laptop Computers

Computing technology is integrated throughout the undergraduate curriculum of the College of Commerce and Finance. The College leases state-of-the-art laptop computers to assign to students. This computer is fully configured, and contains the hardware features and software necessary to support the College's academic programs and to access all of the University's information resources. The University operates a Computer Support Center (Vasey Hall, Room 1001, Phone: 610-519-7777) that offers hardware and software assistance, and also provides a loaner pool of laptops for business students whose machines require service. At the conclusion of the Sophomore year, students return the assigned computer in good working order to the University, and then receive a new laptop for use during junior and senior years. Students return this second computer in good working order to the University at the conclusion of their senior year. If a student leaves the College for any reason, the student must immediately return the computer to the College in good working order. Further information on the College's laptop computer program can be obtained by contacting the Computer Support Center at (610) 519-6646 or http://unit.villanova.edu/support/menu/csc.

Organizations

The objectives of collegiate education include proper social development and social leadership. Accordingly, Villanova University offers to the students a variety of extracurricular and co-curricular activities - religious, athletic, social, and cultural. Student activities are under the jurisdiction of the Dean of Students, the Dean's staff, and the Faculty Moderator of the individual organization. The College of Commerce and Finance sponsors the following organizations: Accounting Society, American Production and Inventory Control Society (APICS), Beta Gamma Sigma, Economics Society, Entrepreneurship Society, Financial Management Association, Gamma Phi Honor Society, International Business Society, Marketing Society, Omicron Delta Epsilon - Economics Honor Society, Pi Sigma Epsilon (Marketing Profession Fraternity), Small

Business Consultants, Association of Information Technology Professionals, and Society for the Advancement of Management.

Academic Policies and Information

Unless otherwise noted, the College of Commerce and Finance follows the general university academic policies and regulations listed in the University section of this Catalog. The specific policies for the College of Commerce and Finance are listed in the Commerce and Finance Undergraduate Handbook, which is available from the office of the Dean. It is the responsibility of the student to know and comply with all academic policies and regulations of the University and of the College of Commerce and Finance. Such policies are subject to change without prior notice.

Departments

Accountancy

Chair: Dr. Wayne G. Bremser

Professors: Bremser, Clay (Emeritus), Derstine, Monahan

Associate Professors: Barsky, Bierstaker, Borden. Catanach, Emig,

Hiltebeitel, Licata, O'Mara, Peters, Rhoades-

Catanach, Ward

Assistant Professors: Pelesh, Stiner, West

Business Fellow: McParland

Office: 3019 Bartley Hall, tel. 610/519-4340
Website: www.cf.villanova.edu/accountancy

Course Descriptions: www.cf.villanova.edu/accountancy/courses.html

The program is designed to provide academic preparation for those who seek employment in a wide-range of accounting, tax, and accounting-related areas. The program is also designed to provide a solid background for those individuals who intend to pursue graduate studies in business, law, or independent research. The program is separately accredited by the AACSB International – The Association to Advance Collegiate Schools of Business.

COURSE REQUIREMENTS FOR MAJOR:

ACC 1101 (Principles of Financial Accounting), ACC 1102 (Principles of Managerial Accounting), ACC 2310 (Intermediate Accounting I), ACC 2320 (Intermediate Accounting II), ACC 2430 (Auditing), ACC2460 (Federal Income Tax), ACC 2470 (Cost Accounting, Analysis and Control) plus one more ACC major elective except for: ACC 3430 (Accounting Internship), ACC 3470 (Accounting Co-Op), and ACC 3500 (independent study).

COURSE REQUIREMENTS FOR MINOR: ACC 1101, ACC 1102, plus 3 accounting courses from the following list:: ACC 2310, ACC 2320 (prerequisite: ACC 2310), ACC 2430 (prerequisite: ACC 2320), ACC 2450 (prerequisite: ACC 2320), ACC 2460, ACC 2470, and ACC 2480 (prerequisite: ACC 2460).

Business Law

Associate Professors: Kuhn, Rainone, Walsh

Assistant Professors: Cerino, DiLullo

Office: 3015 Bartley Hall, tel. 610-519-4350
Website: www.cf.villanova.edu/businesslaw
Course Descriptions: www.cf.villanova.edu/bl/blcourse.html

The Business Law program is administered by the chair of the Marketing Department. Business Law provides the student with an understanding of individual legal responsibilities arising from the interaction of persons, property and government, and creates an awareness of the legal environment of business.

Decision and Information Technol ogies

Chair: Dr. Robert L. Nydick

Professors: Andriole, S. Chaudhry, Liberatore, Najdawi, Wolek

(Emeritus)

Associate Professors: Chung, Luo, Nydick, Sipior, Varano, Wagner

Assistant Professors: Webster, Wright

Business Fellow: Powell **Instructor:** J. Hill

Office: 3080 Bartley Hall, tel. 610-519-4395

Website: www.cf.villanova.edu/dit

Course descriptions: www.cf.villanova.edu/dit/ditcourse.html

The MIS Major prepares students to better understand and utilize information technology in the management and operation of business organizations.

College of Commerce and Finance

COURSE REQUIREMENTS FOR MAJOR: MIS 2020: Programming for Adaptive Problem Solving, MIS 2030: Database Management, MIS 2040: Systems Analysis and Design

Plus any three (3) major courses from the following:

DIT 2160 Business Decision Making
MIS 3010 Business Data Communications
MIS 3020 Enterprise Systems and Applications
MIS 3030 Enabling Technologies in E-Business

MIS 3040 MIS Seminar

MIS 3090 Special Topics in MIS

COURSE REQUIREMENTS FOR MINOR: MIS 2020, MIS 2030, and MIS 2040

Economics

Chair: Dr. Peter A. Zaleski
Professors: Thanawala, Zech, Zaleski

Associate Professors: Clain, Donziger, Farrell, Giordano,, Wolnicki,

Assistant Professors: Asher, Barnett, Casario, Dressler, Kelly, Li, Mao,

Taylor

Office: 2015 Bartley Hall, tel. 610-519-4370 Website: www.cf.villanova.edu/economics

Course descriptions: www.cf.villanova.edu/economics/economicscourse.html

BACHELOR OF SCIENCE IN ECONOMICS: The Economics major offers a challenging intellectual experience designed for those who intend to enter business, government, legal, or teaching professions. It offers sound training in economic theory and institutions which foster the ability to analyze the problems of business and society through use of modern quantitative methods. The curriculum for the Economics major combines grounding in fundamentals with the opportunity to pursue individual interests in the selection of advanced courses. The required courses are: ECO 1001 (Principles of Microeconomics), ECO 1002 (Principles of Macroeconomics), ECO 2101 (Macro-Economic Theory), ECO 2102 (Micro-Economic Theory) and 4 additional Economic courses above ECO 3000.

BACHELOR OF ARTS IN ECONOMICS: Students in the College of Liberal Arts and Sciences who specialize in Economics earn the degree of Bachelor of Arts in Economics. Such students must take Calculus (MAT 1330 or equivalent) either to satisfy their math requirement or as a free elective. They should take ECO 1001 and ECO 1002 as two of the three social science courses in the Sophomore year. In addition, students must successfully complete: ECO 2101, 2102, 2137, 15 elective Economics credits, and ECO 4132. Students may receive a Concentration certificate by choosing to specialize in one of the following areas – (Business Economics, Global Economics, Human Resources, or

Pre-Law) by taking, as part of their 15 Economic credits, three courses within their specialty and focusing their seminar paper (ECO 4132) on that specialty area.

MINOR: MAT 1330 (Calculus or equivalent), ECO 1001, 1002, 2101, 2102, and 2 additional Economic courses above ECO 3000.

Finance

Chair: Dr. Andrea L. DeMaskey
Professors: McWilliams, Nawrocki, Olson

Associate Professors: Cochran, Dellva, DeMaskey, J. Heck, Shawn Howton,

Shelly Howton, LeClair,

Assistant Professors: Grover, Matthews, Pagano, Shaffer

Business Fellow: Jablonksi **Instructor:** N. Heck

Office: 2019 Bartley Hall, tel. 610-519-7395

Website: www.cf.villanova.edu/finance

Course descriptions: http://www.cf.villanova.edu/finance/financecourse.html

The Finance Major is designed for those students interested in domestic and international business finance, financial institutions, and investments. The curriculum also provides a solid foundation for individuals in pursuing postgraduate study in business and law. All finance majors are required to take designated courses in Advanced Financial Management, Financial Markets, and Investments. In addition, elective courses are selected from other offerings in the Finance Department with the exception of Finance Internship and Independent Study.

COURSE REQUIREMENTS FOR MAJOR: FIN 1113 (Principles of Finance), FIN 2114 (Advanced Financial Management), FIN 2227 (Financial Markets), FIN 2323 (Financial Institutions), and three (3) other Finance electives or two (2) other finance electives plus one of the following: ACC2310 (Intermediate Accounting I), ECO 2101 (Macro-Economic Theory), and ECO 2102 (Micro-Economic Theory). FIN 3350 (Finance Internship), FIN 3360 (Independent Study – Finance), and FIN 3470 (Finance Co-Op) can not satisfy finance major course requirements.

COURSE REQUIREMENTS FOR MINOR: FIN 1113 plus three (3) additional Finance electives except FIN 3350, 3360, and FIN 3470.

Management

Chair: Dr. Walter G. Tymon
Professors: Pearce, Stumpf
Associate Professors: Rongione, Tymon

Assistant Professors: Arvanites, P. Chaudhry, Clark, Doh, Fitzpatrick, Klingler,

McKendrick, Newbert, Quigley

Business Fellows: V. Hill, Katsioloudes

Instructor: Glasgow

Office: 2083 Bartley Hall, tel. 610-519-6924 Website: www.cf.villanova.edu/management

Course descriptions: www.cf.villanova.edu/management/managementcourse.html

The Management major prepares students for success after graduation in either the pursuit of further study in business or law, or their entry into the business world.

COURSE REQUIREMENTS FOR MAJOR: MGT 2155 (Organizational Behavior), MGT 2350 (International Comparative Management), DIT 2160 (Introduction to Decision Sciences) and three (3) elective courses from such fields as: Operations Research, Management Practice, Small Business Management and Human and Resource Management.

Marketing

Chair: Dr. P. Greg Bonner
Professors: Sanchez, Taylor
Associate Professors: Bang, Bonner

Assistant Professors: , Karson, Kozup, Landreth, O'Neill, Pirsch

Instructor: Mullen

Office: 3015 Bartley Hall, tel. 610-519-4350 www. cf.villanova.edu/marketing

Course descriptions: www.cf.villanova.edu/marketing/marketingcourse.html

The Marketing major focuses on a systematic and analytic study of the marketing process for goods and services in consumer, industrial, governmental, and international markets, with particular emphasis on the development and implementation of products, pricing, promotion, and physical distribution programs.

COURSE REQUIREMENTS FOR MAJOR: MKT 1137 (Principles of Marketing), MKT 2197 (Marketing Research) and MKT 2375 (Marketing Management), and four (4) additional Marketing electives choosing from MKT 2220 (Advertising Management), MKT 2120 (Buyer Behavior), MKT 2280 (International Marketing), MKT 2230

(Marketing of Services), MKT 2225 (Sales Management) and MKT 2349 (Contemporary Topics in Marketing.)

COURSE REQUIREMENTS FOR MINOR: MKT 1137 plus three (3) other MKT courses, one of which must be either MKT 2120 or 2197.

Villanova University

Barry Johnson, Ph.D., Dean
John Molyneux, Ph.D., P.E., Associate Dean, Academic Affairs
Lynda A. Capuzzi, BCE, P.E., Associate Dean, Student Affairs
Joan F. Chrestay, MSW, Associate Dean, External Affairs
H. Keith Moo-Young, Jr., Ph.D., P.E., Associate Dean, Research
Office: 310 CEER, tel. 610-519-4940
Website: www.engineering.villanova.edu

History

The second degree granting unit inaugurated at Villanova University was the College of Engineering, which began instruction in 1905 under the name of the School of Technology. It was the fourth engineering program to be established at a Catholic school of higher education in the United States (after The Catholic University of America, 1896, Manhattan College, 1896, and the University of Notre Dame, 1897). Dr. A.B. Carpenter, a graduate of Lehigh University, was hired in 1904 to organize and direct the School. He was ably assisted by Rev. James J. Dean, a young faculty member in the sciences. It was their responsibility to develop the curricula, hire faculty and plan the facilities needed. Programs in Civil and Electrical Engineering were the first to be initiated, with a total of twelve students enrolled. In 1908, an undergraduate program in Mechanical Engineering was established, and in 1909, the first engineering bachelor's degrees were awarded. An undergraduate program in Chemical Engineering was established in 1919. In the years following the Second World War, the College expanded its degree offerings to the masters level, establishing graduate programs in each of its four engineering departments. A fifth undergraduate degree program in Computer Engineering was added in 1993. A combined Bachelors/Masters Program is available in all programs. Interdisciplinary Doctoral Program was instituted. All of the College's undergraduate degree programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). There are three research units in the College: The Center for Advanced Communications (CAC), The Center for Nonlinear Dynamics and Control (CENDAC), and the Villanova Center for the Environment (VCE), a joint effort with the College of Liberal Arts and Sciences.

Mission Statement

Villanova University is an independent coeducational institution of higher learning founded by the Augustinian Order of the Roman Catholic Church. The University is a

community of persons of diverse professional, academic, and personal interests who, in a spirit of collegiality, cooperate to achieve their common goals and objectives in the transmission, the pursuit, and the discovery of knowledge. The College of Engineering is a tangible expression of the University's mission, tradition, and commitment to society. As a major engineering college under Catholic auspices, it is committed to the education of engineers within the framework of the University's Judeo-Christian humanistic tradition and the heritage of the Order of St. Augustine.

The College of Engineering, consistent with the mission of Villanova University, is dedicated to the education of engineers who are technically competent, liberally educated, and ethically motivated. The College emphasizes undergraduate instruction and encourages research and scholarly activities in all of its departments. High quality research develops the faculty's intellectual skills and contributes to society's reservoir of knowledge. Graduate engineering programs within the College provide opportunities for advanced study, professional development, and participation in research.

The College mission is to provide an engineering education and to perform research in a manner that benefits society, yields an education based on established enduring values, and attracts quality students and faculty.

Objectives

The College of Engineering strives to prepare its graduates to understand their roles in a technological society, to make constructive contributions to it, and to provide ethical and moral leadership in their profession and communities. It accomplishes this by various methods, but primarily by integrating into the curriculum the values and morality of the University's Augustinian heritage. In addition to being professionally competent, graduates are expected to have an understanding of their professional and ethical responsibilities, the impact on engineering solutions in a global and societal context, and an appreciation of humanistic concepts in literature, the arts, and philosophy.

The College pursues these objectives by stressing:

- Excellence in teaching
 Faculty development through research and professional activities
 Emphasis on the design process so that the students are exposed to real-world situations
 Graduating students with the following attributes:
 - Ability to apply scientific and mathematical concepts and principles to solve problems in real-world context
 - Ability to plan and conduct experimental investigations, and to analyze and interpret their results
 - o Ability to be an effective member of a project team
 - o Ability to communicate ideas and information
 - Understanding of the role of the engineering profession and technology, including appreciation of concepts drawn from the humanities and social sciences
 - o Development of high professional and ethical standards
 - Motivation and capability to acquire, evaluate, and assimilate knowledge and continue the learning experience

Degrees Offered

The College of Engineering offers full-time (day) academic programs leading to the following degrees: Bachelor of Science in Chemical Engineering, Bachelor of Science in Civil Engineering, Bachelor of Science in Computer Engineering, Bachelor of Science in Electrical Engineering, and Bachelor of Science in Mechanical Engineering.

The undergraduate engineering programs offered by Villanova University are fully accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Degree Requirements

The undergraduate engineering curriculum provides the foundation for careers in engineering as well as the basis for further study in engineering and other professions such as law, medicine, and management. Studies concentrate on mathematics, physics, chemistry, engineering science, and engineering analysis and design within a particular engineering discipline.

The curriculum places special emphasis upon developing oral and written communication skills, and it offers opportunities to develop an appreciation of the social sciences and humanities, and the flexibility to pursue minors. Courses in the humanities are included in each curriculum to make the student engineer more fully aware of social responsibilities and better able to consider non-technical factors in the engineering decision making process. Extensive hands-on laboratory experience leads to required projects for all seniors to ensure professional preparation in the fundamentals of the design process within the real constraints of problem solving. In order to qualify for a bachelor's degree in the College of Engineering, undergraduate engineering students must successfully complete all of the first year core curriculum courses, those major courses required for the particular engineering degree sought, and a series of electives, as indicated in the following sections. They must also achieve cumulative overall and technical grade point averages of at least 2.00 in their course work.

At least half of all the engineering courses and, normally, the final 30 credits of an engineering bachelor's degree program, must be taken at Villanova University. All undergraduate degree requirements should normally be completed within a six-year period. NOTE: It is the responsibility of each student to know and to fulfill all degree requirements. In order to keep the curriculum abreast of the latest engineering developments, Villanova University reserves the right to change the program requirements without prior notice.

Core Curriculum for Students entering in Fall 2004 or later

Freshman Year								
First Semester		Credits		Second Semester		Credits		
CHM	General	4		Elective	Science Elective ²	3/4		
1151	Chemistry							
CHM	General	1		CHS	Modern Thought:	3		
1103	Chemistry			1001 ¹	Enlightenment to			
	Laboratory I				Present			

CHS	Ancient	3	EGR	Engineering	3
1000^{1}	Medieval and		1705	Computations	
	Renaissance				
	Thought				
EGR	Introduction	3	MAT	Calculus II	4
1700	to		1505		
	Engineering				
MAT	Calculus I	4	PHY	Physics I,	3
1500			2400	Mechanics	
THL	Christian	3			
1050	Theology, an				
	Introduction				
or	or				
THL	Christianity				
1051	in History				

NOTE¹: This course may be taken in either semester.

NOTE ²: Science elective depends upon proposed major. ECE students should take ECE 1620 Engineering Programming and Applications.

Engineering Curricul um El ective Requirements in Humanities and Social Science

In addition to required Freshman Year courses and specified courses for each degree program, candidates for degrees in engineering must successfully complete 12 credits from the following:

- ☐ THL 1050 Christian Theology: an Introduction or THL 1051 Christianity in History
- ☐ One 3-credit Theology course at the 2000 level or above.
- ☐ Two additional 3-credit courses chosen from among the following:
 - o Theology courses at the 2000 level or above
 - o Any Philosophy course
 - o Any Peace and Justice course
 - o ETH 2050 Ethical Traditions and Contemporary Life
 - o EGR 2001 Engineering: The Humanistic Context. (This course is required by some programs. See adviser.)

Electives

All students select their remaining humanities and social science electives from among the courses listed in this catalog and offered by the following departments.

Humanities	Social Sciences
Arab & Islamic Studies	Economics
Art History (except skills courses)	Geography
Classical Studies	Peace and Justice
Communication (except skills courses)	Political Science
English (Literature)	Psychology
History	Sociology
Honors Program (for eligible students	Women's Studies
only)	
Modern Languages (except speaking	
courses in native language)	
Philosophy	
Theatre (except skills courses)	
Theology (2000 and above)	

Courses primarily emphasizing skills (such as acting, painting, sculpting, public speaking, etc.) are not acceptable in all programs. Consult your department chairman.

Declaration of Major

All engineering students are enrolled in a common freshman year curriculum with the exception of a science elective taken in the second semester. Prior to the end of their freshman year all engineering students are required to declare their major field of study, i.e., Chemical, Civil, Computer, Electrical, or Mechanical Engineering.

Engineering students who wish to change their major within the College of Engineering must make this request in writing to the Dean of Engineering. Engineering students who wish to change their major to an area outside of engineering must apply for admission to the Dean of the college offering that program.

Degree Programs

Bachelor of Science in Chemical Engineering

The chemical engineer typically uses the principles of mathematics, chemistry, physics and engineering sciences to creatively solve technical and commercial problems arising in industries which manufacture products by chemical reactions. These solutions must respond to economic constraints as well as social, ethical and safety implications. The chemical engineer may also apply these principles in related fields where the management of chemical transformations is important, such as preservation of the environment, pharmaceutical manufacturing, bio-engineering or the creation of new medical technology. Finally, the chemical engineer can apply understanding of fundamental principles to fields that interact indirectly with chemical technology, such as industrial management and patent law.

Program Educational Objectives - The overall educational objectives of the Bachelor of Science in Chemical Engineering Program are:

To prepare our graduates to enter the chemical engineering profession
immediately after receiving the bachelor's degree, as well as to develop the
personal capabilities that allow them to enter a variety of other professions should
they choose to do so.
To develop an understanding of the scientific principles underlying technology,
upon which the practice of the profession of chemical engineering is based.
To develop the technical skills needed to practice the chemical engineering profession, at an entry level immediately upon graduation, and to pursue an
advanced degree in chemical engineering at some time after graduation if qualified.
To develop those personal and interpersonal skills that facilitate effective practice of the chemical engineering profession and lead to the opportunity for career success.
To develop broadly educated, well-rounded graduates, as is consistent with the
Augustinian tradition.
To prepare graduates whose capabilities will enable them to continue to learn and grow professionally, and who are able to take advantage of professional
opportunities as they arise, to enhance their career.
The department has formulated specific educational outcomes that will achieve

The department has formulated specific educational outcomes that will achieve these overall educational objectives. For a detailed listing of these outcomes, please refer to the department website at www.engineering.villanova.edu/che.

Curricular Philosophy. The early years of the chemical engineering curriculum emphasize the basic principles of natural and engineering sciences. Later courses use these principles to develop skill in chemical engineering design - the solving of nonroutine, open-ended problems requiring the exercise of judgment, and constrained by economic, safety, reliability or other requirements. Courses gradually develop the students' abilities, with the complexity of design experiences systematically increasing throughout the required courses in chemical engineering science, and culminating in the senior process design course.

Technical electives in the junior and senior years allow the student to tailor the program toward career goals. In the senior year, the student develops the ability to work independently by carrying out a chemical engineering project. All stages of the curriculum apply computers in various modes, ranging from programming personal computers for the solution of simple problems, through the use of computers for process monitoring and control, to the use of sophisticated software packages for process design.

The curriculum includes several technical electives, to be chosen from a list of approved courses under the guidance of a faculty member designated as the student's academic adviser. The student may elect one such technical elective outside the Chemical Engineering Department, as described in the guidance manual. (A copy of the guidance manual which lists acceptable elective courses and describes the advising process is available from the ChE academic advisers or from the department, as well as on the ChE website: www.engineering.villanova.edu/che).

Program of Studies for students matriculating before Fall 2003

Sophomore Year							
First Semester		Credits		Second Se	Credits		
CHE	Chemical	4		CHE	Chemical	3	
2041	Process			2032	Engineering		

	Calculations			Thermodynamics I	
CHM 3415	Physical Chemistry for Engineers I	3	CHE 2232	Fluid Flow Operations	3
CHM 3401	Physical Chemistry Lab I	1	CHE 2811		
MAT 2705	Differential Equations with Linear Algebra	4	CHE 2432	Modeling and Numerical Methods I	3
PHY 2402	Physics II: Electricity and Magnetism	3	CHM 3416	Physical Chemistry for Engineers II	3
Elective	Humanities THL>2000	3	CHM 3402	Physical Chemistry Lab II	1
			PHY 2403	Physics Lab for Engineering	1
			Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3

Junior Ye	ear					
First Sem	ester	Credits	dits Second Sen		nester	Credits
CHE 3031	Heat Transfer Operations	3		CHE 3032	Principles of Mass Transfer	3
CHE 3131	Chemical Engineering Thermodynamics II	3		CHE 3232	Dynamic Simulation and Control Applications	3
CHE 3132	Chemical Engineering Economics	3		CHE 3231	Modeling and Numerical Methods II	3
CHE 3911	Chemical Engineering Lab I	1		CHE 3922	Chemical Engineering Lab II	2
CHE 3821	Professional Development II	2		CHE 3822	Professional Development III	2
CHM 2211	Organic Chemistry I	3		CHM 2212	Organic Chemistry II	3
CHM 2201	Organic Chemistry Lab I	1		CHM 2202	Organic Chemistry Lab II	1
Elective	Humanities from THL, PHI, PJ,	3				

ETH 2050, EGR		
2001		

Senior Year								
First Seme	ester	Credits		Second Ser	mester	Credits		
CHE 4131	Process Design	3		Electives	Technical	9		
CHE 4031	Chemical Reaction Engineering	3		Elective	Humanities/ Social Science	3		
CHE 4921	Chemical Engineering Lab III	2		Elective	Free	3		
CHE 4831	Chemical Engineering Project	3						
CHE 4821	Professional Development IV	2						
Electives	Technical	6						

Program of Studies for students matriculating Fall 2003 or later

Sophomoi	re Year				
First Seme	First Semester		Second S	emester	Credits
CHE 2041	Chemical Process Calculations	4	CHE 2032	Chemical Engineering Thermodynamics I	3
CHM 2211	Organic Chemistry I	3	CHE 2232	Fluid Flow Operations	3
CHM 2201	Organic Chemistry Lab I	1	CHM 2212	Organic Chemistry II	3
MAT 2705	Differential Equations with Linear Algebra	4	CHM 2202	Organic Chemistry Lab II	1
PHY 2402	Physics II: Electricity and Magnetism	3	PHY 2403	Physics Lab for Engineering	1
Elective	Humanities THL>2000	3	Elective	Humanities/ Social Science	3
			Elective	Ethics from any department	3

Junior Ye	ear					
First Sem	First Semester		Second	Second Semester		
CHE 3031	Heat Transfer Operations	3	CHE 3032	Principles of Mass Transfer	3	
CHE 3131	Chemical Engineering Thermodynamics II	3	CHE 3232	Simulation and Control	3	
CHE 2432	Modeling and Numerical Methods I	3	CHE 3842	Safety Analysis	2	
CHE 3841	Applied Statistics	2	CHE 3922	Chemical Engineering Lab II	2	
CHE 3911	Chemical Engineering Lab I	1	CHM 3416	Physical Chemistry for Chemical Engineers	3	
	Technical Elective	3	CHM 3402	Physical Chemistry Lab for Chemical Engineers	1	
Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3		Technical Elective	3	

Senior Ye	ear				
First Sem	ester	Credits	Second Se	mester	Credits
CHE 4131	Process Design I	3	CHE 4832	Chemical Engineering Research II	3
CHE 4031	Chemical Reaction Engineering I	3		Technical Electives	9
CHE 4831	Chemical Engineering Research I	3	Elective	Humanities/ Social Science	3
CHE 4821	Tech. Literature Investigations	1			
CHE 4921	Chemical Engineering Laboratory III	2			
	Technical Elective	3			

Bachel or of Science in Civil Engineering

Civil engineers are involved in the planning, design, construction, and operation of facilities essential to modern life such as dams, bridges, highways, buildings, airports, harbors, river and shore protection, drinking water supplies, wastewater treatment, solid and hazardous waste management and disposal, offshore structures, and space platforms. Because these projects are often of a magnitude that affects large segments of the population, the responsibility of the civil engineer extends beyond mere physical facilities into the social, political, and economic welfare of those they serve.

Mission Statement: Our mission is to provide our students with a high quality, contemporary, broad-based civil engineering education within a Judaeo-Christian, humanistic context preparing our students for professional practice, graduate study, and life-long learning.

Program Educational Objectives - Graduates of our Department will be prepared to:

- Use their broad based civil engineering backgrounds to perform as entry-level engineers in general civil engineering or in environmental, geotechnical, structural, transportation, or water resources engineering.
- ☐ Enter graduate school in the disciplines listed above or closely related disciplines, as well as other areas such as business and law.
- ☐ Continue the process of life-long learning as required for long-term personal and professional growth.
- Recognize their professional and ethical responsibilities to society as members of the engineering professional community.
- ☐ Use communication, computer, and teamwork skills to help themselves and their employers succeed.
- ☐ Relate their personal and professional lives to the Judaeo-Christian, humanistic tradition.

The broad-based curriculum provides flexibility and meets student needs through a selection of electives. More information on the Civil Engineering program can be found at the Department website www.engineering.villanova.edu/ce.

Program of Studies

Sophon	Sophomore Year								
First Se	emester	Credits	Second S	emester	Credits				
CEE 2104	Mechanics: Statics & Dynamics	4	CEE 2103	Mechanics of Solids	3				
CEE 2602	Civil Egr. Measurements	3	CEE 2311	Environmental Egr. Science	3				
MAT 2500	Calculus III	4	MAT 2705	Differential Equations with Linear Algebra	4				
PHY 2402	Physics II: Electricity and Magnetism	3	Elective	Humanities THL>2000	3				
GLY	Geology for	3	Elective	Free	3				

2805	Engineers			

Junior	Year				
First S	Semester	Credits	Second Sem	nester	Credits
CEE 3321	Water & Wastewater Treatment	3	CEE 3211	Transportation Engineering	3
CEE 3401	Structural Analysis	3	CEE 3412	Structural Design	3
CEE 3500	Fluid Mechanics	3	CEE 3511	Hydraulic Egr. & Hydrology	3
CEE 3704	CE Numerical & Statistical Analysis	3	CEE 3801	Soil Mechanics	3
CEE 3902	CE Materials	2	CEE 3901	Soil Mechanics Laboratory	1
CEE 3921	Environmental Egr. Laboratory	1	CEE 3911	Fluid Mechanics Laboratory	1
			CEE 3912	Structural Egr. Laboratory	1
			Elective	Humanities from THL, PHI, PJ, ETH 2050	3

Senior Yo	Senior Year							
First Sem	nester	Credits	Second Sen	nester	Credits			
CEE 4601	CEE Professional Practice	3	CEE 4606	CEE Capstone Design Project	3			
CEE 4701	Economy and Risk	3	EGR 2001	Engineering: Humanistic Context	3			
Elective	CEE Senior Elective ¹	3	Elective	Social Science from ECO, GEO, PJ, PSC, PSY, SOC, WS	3			
Elective	CEE Senior Elective ¹	3	Elective	Humanities Elective	3			

Elective	CEE Senior Elective ¹	3	Elective	Free	3
Elective	Technical Elective ²	3	Elective	Technical Elective ²	3

¹CEE Senior Electives include:

CEE 4224 Transportation Facilities Design

CEE 4331 Solid & Hazardous Waste

CEE 4412 Advanced Structural Engineering

CEE 4521 Water Resources Engineering Design

CEE 4801 Foundation Design

CEE 4235 Advanced Transportation Engineering

CEE 4612 CEE Undergraduate Research,

and other courses defined as Technical Electives by the College of Engineering

Bachel or of Science in Computer Engineering

The objectives of the computer engineering program are to prepare graduates for successful professional careers in computer engineering and to nurture in them the skills required for career-long learning whether through informal self-study, continuing education, or formal advanced study in computer engineering or a related discipline.

Program Educational Objectives - The educational objectives for the computer engineering program are listed below.

- ☐ Graduates will master, to the satisfaction of the faculty, the fundamentals of the discipline.
- Graduates will have substantial experience in engineering design.
- ☐ Graduates will develop and nurture skills for life-long learning and continuing professional development.
- ☐ Graduates will be able to communicate effectively.
- Graduates will have opportunities to explore the technological and social implications of their professional activities.

A more detailed description of these objectives is available.

The curriculum is structured to provide a thorough foundation in the fundamentals of computer engineering, electrical engineering and computer science. Design, as well as analysis, is emphasized throughout the curriculum, using a project-based structure to teach students how to learn on their own, work in teams, and synthesize new engineering solutions by using their knowledge and analytical skills. Great importance is placed on developing oral and written communication skills. The curriculum also provides opportunities for an increased awareness of the broader implications of technology and of the social responsibilities of the profession.

The design process is emphasized throughout all four years, and design projects are included in the laboratory courses. The sophomore and junior years include core courses in computer algorithms, digital system design, computer architectures, microprocessor systems, computer interfacing, and the C programming language. This provides a foundation for the senior year which includes electives and an in-depth design project. Students can tailor their senior year towards a variety of objectives by carefully choosing electives in computer engineering, the humanities, and other subjects. The Electrical and Computer Engineering Department provides these specialized areas: computer

²Technical Electives include

communications security, multimedia, fuzzy logic, neural networks, microcontrollers, software engineering, computer networks, and real-time digital signal processing.

Senior electives can also be used to complement the computer engineering requirements with studies in fields outside of the department. Possibilities include a computer science minor, a mathematics minor, a business minor, and a minor or concentration in cognitive science. Selection of specializations and study options require each student to assume an active and responsible role in the planning and decision making as the program unfolds. To aid in this, detailed information is available from the departmental office and can be discussed with the chairperson or the Computer Engineering program adviser.

Dual Degree Program Leading to a Bachelor of Science in Computer Engineering and a Bachelor of Science in Electrical Engineering

Superior students may earn both the Bachelor of Science in Computer Engineering and the Bachelor of Science in Electrical Engineering degrees. The two degrees are awarded simultaneously upon completion of all requirements for both degrees. Because of the significant overlap between the two programs, it is possible to earn both degrees in four and a half years. Interested students should consult the ECE special programs adviser as early in their undergraduate studies as possible to obtain additional information.

Program of Studies – Class of 2005

	nore Year emester	Credits	Second Se	Credits	
CSC 1051	Algorithms and Data Structures I	4	CSC 1052	Algorithms and Data Structures II	4
ECE 2040	Fundamentals of Computer Engineering I	4	ECE 2041	Fundamentals of Computer Engineering II	4
ECE 2050	Fundamentals of Electrical Engineering I	4	ECE 2051	Fundamentals of Electrical Engineering II	4
ECE 2409	Fundamentals of MATLAB	2	PHY 2402	Physics II: Electricity and Magnetism	3
MAT 2705	Differential Equations with Linear Algebra	4	Elective	Humanities THL>2000	3

Junior Yo	Junior Year								
First Semester		Credits		Second Semester		Credits			
CSC	Discrete	3		CSC	Software	3			
1300	Structures			4700	Engineering				

CSC 1600	Operating Systems	3	ECE 3240	Discrete-Time Signals and Systems	4
ECE 3420	Expert Systems Programming	3	ECE 3450	Digital Electronics	3
ECE 3445	Computer Architecture	4	ECE 3720	Engineering Probability and Statistics	3
Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3	ECE 3971	Design Seminar - CPE	3

Senior Ye	ar				
First Semester		Credits	Second Ser	mester	Credits
ECE 4470	Computer Networks	4	ECE 4973	Design Project Report - CPE	1
ECE 4971	Design Project – CPE	3	Elective	Technical Elective ¹	3
Electives	Technical Electives ¹	6	Elective	Restricted Elective ²	3
Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3	Electives	Free	6
			Elective	Humanities ³	3

¹Technical electives must be chosen from the approved list of computer engineering or computer science courses. At least 2 must be taken from the computer engineering list of approved electives.

Program of Studies – Class of 2006 & 2007

Sophon	Sophomore Year							
First Semester		Credits		Second Se	mester	Credits		
CSC 1051	Algorithms and Data Structures I	4		CSC 1052	Algorithms and Data Structures II	4		
ECE 2042	Fundamentals of Computer Engineering I	3		ECE 2044	Fundamentals of Computer Engineering II	3		
ECE 2043	Fundamentals of Computer	1		ECE 2045	Fundamentals of Computer	1		

²Restricted elective must be an approved technical elective or have the approval of the ECE Department Chair.

³Choose from EGR 2001, ETH 2050, PHI 1600, PHI 2130, PHI 2150, PHI 2180, PHI 3820, PHI 3825.

	Engineering I Lab I			Engineering II Lab II	
ECE 2052	Fundamentals of Electrical Engineering I	3	ECE 2054	Fundamentals of Electrical Engineering II	3
ECE 2053	Fundamentals of Electrical Engineering I Lab I	1	ECE 2055	Fundamentals of Electrical Engineering II Lab II	1
ECE 2409	Fundamentals of MATLAB	2	PHY 2402	Physics II: Electricity and Magnetism	3
MAT 2705	Differential Equations with Linear Algebra	4	Elective	Humanities ³	3

Junior	Junior Year							
First Se	First Semester			Second S	emester	Credits		
CSC 1300	Discrete Structures	3		CSC 4700	Software Engineering	3		
CSC 1600	Operating Systems	3		ECE 3240	Discrete-Time Signals and Systems	4		
ECE 3424	Expert Systems Programming	3		ECE 3450	Digital Electronics	3		
ECE 3445	Computer Architecture	4		ECE 3720	Engineering Probability and Statistics	3		
ECE 3900	Professional Development Seminar	2		ECE 3971	Design Seminar - CPE	3		

Senior Yea	ar				T
First Seme	ester	Credits	Second Se	mester	Credits
ECE 4470	Computer Networks	4	ECE 4973	Design Project Report - CPE	1
ECE 4971	Design Project – CPE	3	Elective	Technical Elective ¹	3
Electives	Technical Electives ¹	6	Elective	Restricted Elective ²	3
Elective	Humanities THL ≥2000	3	Elective	Free	3

		Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3
		Elective	Humanities	3

Technical electives must be chosen from the approved list of computer engineering or computer science courses. At least 2 must be taken from the computer engineering list of approved electives.

Bachelor of Science in Electrical Engineering

The objectives of the electrical engineering program are to prepare graduates for successful professional careers in electrical engineering and to nurture in them the skills required for career-long learning, whether through informal self-study, continuing education, or formal advanced study in electrical engineering or a related discipline.

Program Educational Objectives - The educational objectives for the computer engineering program are listed below.

- ☐ Graduates will master, to the satisfaction of the faculty, the fundamentals of the discipline.
- ☐ Graduates will have substantial experience in engineering design.
- ☐ Graduates will develop and nurture skills for life-long learning and continuing professional development.
- ☐ Graduates will be able to communicate effectively.
- ☐ Graduates will have opportunities to explore the technological and social implications of their professional activities.

A more detailed description of these objectives is available.

The curriculum is structured to provide a thorough foundation in the fundamentals of electrical and computer engineering. Design, as well as analysis, is emphasized throughout the curriculum, using a project-based structure to teach students how to work on their own, work in teams, and synthesize new engineering solutions by using their knowledge and analytical skills. Great importance is placed on developing oral and written communication skills. The curriculum also provides opportunities for an increased awareness of the broader implications of technology and of the social responsibilities of the profession.

The design process is emphasized throughout all four years, and design projects are included in the laboratory courses. The sophomore and junior years include core courses that provide a foundation for the senior year which includes electives and an in-depth design project. Students can tailor their senior year towards a variety of objectives by carefully choosing electives in electrical engineering, the humanities, and other subjects. The Electrical and Computer Engineering Department provides these specialized areas: control systems, digital signal processing, microwave networks, communication electronics, optoelectronics, analog and digital integrated electronics, microcontrollers, and power systems.

²Restricted elective must be an approved technical elective or have the approval of the ECE Department Chair.

³Choose from EGR 2001, ETH 2050, PHI 1600, PHI 2130, PHI 2150, PHI 2180, PHI 3820, PHI 3825.

Senior electives can also be used to complement the electrical engineering requirements with studies in fields outside of the department. Possibilities include minors in business, cognitive science, computer engineering, computer science, mathematics, and physics and concentrations in cognitive science and mechatronics.

Students in the electrical engineering program acquire a working knowledge of computers and their applications by studying algorithms, programming, and the design and interfacing of computers. The year-long, sophomore-level Fundamentals of Computer Engineering sequence and junior-level courses on Digital Electronics and Analog Electronics provide hands-on-experiences with software and hardware interfacing techniques. Senior electives provide applications of computer-aided analysis and design, simulation, and real-time laboratory processing in areas such as control, communication electronics, signal processing, integrated electronics, optoelectronics, microcontrollers, and microwave networks. Selection of specializations and electives require each student to assume an active and responsible role in the planning and decision making as the program unfolds. To aid in this, detailed information is available from the departmental office and can be discussed with the chairperson and the Electrical Engineering program adviser.

Dual Degree Program Leading to a Bachelor of Science in Computer Engineering and a Bachelor of Science in Electrical Engineering

Superior students may earn both the Bachelor of Science in Computer Engineering and the Bachelor of Science in Electrical Engineering degrees. The two degrees are awarded simultaneously upon completion of all requirements for both degrees. Because of the significant overlap between the two programs, it is possible to earn both degrees in four and a half years. Interested students should consult the ECE special programs adviser as early in their undergraduate studies as possible to obtain additional information.

Program of Studies – Class of 2005

Sophor	nore Year				
First Se	emester	Credits	Second	Semester	Credits
ECE 2040	Fundamentals of Computer Engineering I	4	ECE 2041	Fundamentals of Computer Engineering II	4
ECE 2050	Fundamentals of Electrical Engineering I	4	ECE 2051	Fundamentals of Electrical Engineering II	4
ECE 2420	Engineering Programming and Applications	3	ECE 2409	Fundamentals of MATLAB	2
MAT 2705	Differential Equations with Linear Algebra	4	MAT 2500	Calculus III	4
PHY 2402	Physics II: Electricity and Magnetism	3	PHY 2403	Physics Lab for Engineering	1

Junior Ye	ear				
First Sem	ester	Credits	Second Se	emester	Credits
ECE 3220	Signal Processing	4	ECE 3550	Analog Electronics	4
ECE 3450	Digital Electronics	3	ECE 3690	Engineering Electromagnetics	4
ECE 3500	Electronic Materials and Devices	4	ECE 3770	Electrical Communications	4
ECE 3720	Engineering Probability and Statistics	3	ECE 3970	Design Seminar - EE	3
Elective	Humanities THL>2000	3	Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3

Senior Ye	ar				
First Seme	ester	Credits	Second Ser	mester	Credits
ECE 4290	Engineering System Models and Control	4	ECE 4972	Design Project Report - EE	1
ECE 4970	Design Project – EE	3	Elective	Technical Electives ¹	3
Electives	Technical Electives ¹	6	Elective	Restricted Elective ²	3
Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3	Electives	Free	6
			Elective	Humanities ³	3

¹Technical electives must be chosen from the approved list of electrical engineering courses.

Program of Studies – Class of 2006 & 2007

Sophor	nore Year				
First Se	emester	Credits	Second	Semester	Credits
ECE 2042	Fundamentals of Computer Engineering I	3	ECE 2044	Fundamentals of Computer Engineering II	3

²Restricted elective must be an approved technical elective or have the approval of the ECE Department Chair.

³Choose from EGR 2001, ETH 2050, PHI 1600, PHI 2130, PHI 2150, PHI 2180, PHI 3820, PHI 3825.

ECE 2043	Fundamentals of Computer Engineering I Lab I	1	ECE 2045	Fundamentals of Computer Engineering II Lab II	1
ECE 2052	Fundamentals of Electrical Engineering I	3	ECE 2054	Fundamentals of Electrical Engineering II	3
ECE 2053	Fundamentals of Electrical Engineering I Lab I	1	ECE 2055	Fundamentals of Electrical Engineering II Lab II	1
ECE 2420	Engineering Programming and Applications	3	ECE 2409	Fundamentals of MATLAB	2
MAT 2705	Differential Equations with Linear Algebra	4	MAT 2500	Calculus III	4
PHY 2402	Physics II: Electricity and Magnetism	3	PHY 2403	Physics Lab for Engineering	1

Junior Y	'ear				
First Sei	nester	Credits	Second S	emester	Credits
ECE 3220	Signal Processing	4	ECE 3550	Analog Electronics	4
ECE 3450	Digital Electronics	3	ECE 3690	Engineering Electromagnetics	4
ECE 3500	Electronic Materials and Devices	4	ECE 3770	Electrical Communications	4
ECE 3720	Engineering Probability and Statistics	3	ECE 3970	Design Seminar - EE	3
ECE 3900	Professional Development Seminar	3	Elective	Humanities THL ≥2000	3

Senior Ye	ear				
First Sem	ester	Credits	Second Se	emester	Credits
ECE 4290	Engineering System Models and Control	4	ECE 4972	Design Project Report – EE	1
ECE 4970	Design Project - EE	3	Elective	Technical Elective ¹	3

Elective	Technical Elective ¹	6	Elective	Restricted Elective ²	3
Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3	Elective	Free	3
			Elective	Humanities from THL, PHI, PJ, ETH 2050, EGR 2001	3
			Elective	Humanities ³	3

¹Technical electives must be chosen from the approved list of electrical engineering courses.

Bachelor of Science in Mechanical Engineering

Mechanical Engineering is concerned with applying the principles of solid mechanics, fluid mechanics, thermodynamics, heat transfer, material science, dynamics and control to the analysis and design of machines and systems of all types. In applying this technical knowledge, the mechanical engineer must consider economic constraints and the social and ecological implications of solutions imposed. The mechanical engineering curriculum offers the student an opportunity to pursue educational objectives within the framework of this broad theme.

Mission Statement The mission of the Department of Mechanical Engineering is to provide a sound, broad-based educational experience that prepares students for the societal and professional aspects of their lives. Students will be educated, competent, and socially responsible mechanical engineers who clearly possess the following characteristics:

Proficiency in the design of mechanical components and systems.

Proficiency in analyzing and solving fundamental engineering problems,
Proficiency in written, oral, and graphical communications,
Preparedness for employment, graduate studies, and continuing education,
A broad education that includes an understanding of professional and ethical
responsibilities.

This mission statement is consistent with the goals in the strategic plan and the university mission statement.

Program Educational Objectives

Have the skills and abilities needed for successful employment in the mechanica
engineering and related professions.

Understand the fundamental scientific principles that underpin the mechanical engineering profession,

²A Restricted elective must be an approved technical elective or have the approval of ECE Department Chair.

³Choose from EGR 2001, ETH 2050, PHI 1600, PHI 2130, PHI 2150, PHI 2180, PHI 3820, PHI 3825.

- Possess the necessary communication and interpersonal skills to enable them to be successful in mechanical engineering and other professions.
- ☐ Know the importance of life-long learning for enhancing their personal and professional growth, and their careers.
- ☐ Be broadly educated, consistent with the tradition of St. Augustine.

The first two years of the mechanical engineering program are devoted to laying a foundation of mathematics, physical science, and the general engineering sciences. The junior and senior years are devoted primarily to mechanical engineering topics. The required courses span the field of mechanical engineering, and career/ME electives provide the opportunity to pursue specific areas of the discipline in greater depth. The student chooses three courses (9 credit hours) of technical electives plus an additional three credits of a career/free elective. The design process is emphasized throughout the program and culminates with a senior year project that requires a synthesis of basic principles learned in previous courses.

All mechanical engineering students are required to take at least one of the elective courses offered by the department, designated as the ME elective in the program of studies. Ordinarily students will take two or more such courses, designated career/ME electives and one other course, designated the career/free elective, which can be any three credit course. However, the career/ME and the career/free elective slots may be applied to a minor or concentration in Liberal Arts & Sciences or to a minor in Business. The specific courses must be selected in conjunction with the appropriate departmental office and the student's academic adviser. Requirements for a minor are set by the appropriate department. All concentrations and minors must be approved by the Chair of Mechanical Engineering. Any course which meets a mechanical engineering curriculum requirement and also a requirement for a concentration or minor may be counted for both.

Throughout the curriculum the technical courses are balanced by a careful selection of humanities courses to ensure that the effects of technology on society are given due consideration in design.

A faculty adviser is assigned to each student at the beginning of his/her sophomore year to provide academic and career guidance for the remainder of the student's years in the program until graduation. The adviser should be consulted regarding such topics as career electives, minors or concentrations, and completion of degree requirements for graduation.

Program of Studies - For students entering program in Fall 2002 or later

Sophomore Year							
First Semester		Credits		Second S	Second Semester		
MAT 2500	Calculus III	4		CEE 2103	Mechanics of Solids	3	
ME 2100	Statics	3		COM 1101	Business and Professional Communication	3	
ME 2502	Professional Development Seminar	1		MAT 2705	Differential Equations with Linear Algebra	4	

ME 2505	Mechanical Engineering Analysis & Design	4	ME 2113	Manufacturing Engineering	3
PHY 2402	Physics II: Electricity and Magnetism	3	ME 2900	Mechanical Engineering Laboratory I	1
PHY 2403	Physics Lab for Engineering	1	ME 3100	Thermodynamics I	3

Junior Ye	ar				
First Sem	First Semester		Second Semester		Credits
ME 3150	Introduction to Dynamics	3	ECE 6020	Introduction to Electrical Systems	3
ME 3300	Materials Science I	3	ME 3403	Solid Mechanics & Design II	3
ME 3402	Solid Mechanics and Design I	3	ME 3950	Heat Transfer	3
ME 3600	Fluids and Fluid Systems	3	ME 3802	Vibrations	3
ME 3900	Mechanical Engineering Laboratory II	1	ME 4800	Design Seminar in ME I	1
Elective	Humanities THL>2000	3		Humanities from THL, PHI, PJ, ETH 2050	3

Senior Ye	ear				
First Sem	First Semester		Second Semester		Credits
ME 4902	Mechanical Engineering Laboratory III	1	ME 4802	Design Seminar in Mechanical Engineering III	1
ME 4102	System Dynamics	3	Electives	Career/ME Electives	6
ME 4801	Design Seminar in Mechanical Engineering II	2	Elective	Career/Free ¹	3
ME 4850	Thermal-Fluid System Design	1	Elective	Professional Development from ME 6621, PHI 1600, PHI 2150, PHI 3820, PHI 3825	3
Elective	Social Science	3	EGR	Engineering: The	3

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	from ECO, GEO, PJ, PSC, PSY		2001	Humanistic Context	
Elective	ME Elective	3			

This is a career elective for those students pursuing a concentration as described above; for all other students it serves as a free elective.

Program of Studies - For students entering program before Fall 2002

-	Sophomore Year First Semester Credits Second Semester Credits								
First Se	First Semester			Second	Semester	Credits			
CEE 2101	Engineering Mechanics I - Statics	3		CEE 2102	Engineering Mechanics II- Dynamics	3			
MAT 2500	Calculus III	4		CEE 2103	Mechanics of Solids	3			
ME 2500	Mechanical Engineering Analysis & Design I	3		MAT 2705	Differential Equations with Linear Algebra	4			
PHY 2402	Physics II: Electricity and Magnetism	3		ME 2900	Mechanical Engineering Laboratory I	1			
PHY 2403	Physics Lab for Engineering	1		ME 2501	Mechanical Engineering Analysis & Design II	3			
ME 2502	Professional Development Seminar	1		ME 2113	Manufacturing Engineering	3			
COM 1100	Public Speaking	3							

Junior Ye	ear				
First Sem	First Semester		Second	Semester	Credits
ME	Materials Science I	3	CEE	Fluid Mechanics	3
3300			3111		
ME	Mechanical	3	ECE	Introduction to	3
3500	Engineering & Design III		6020	Electrical Systems	
ME 3900	Mechanical Engineering Laboratory II	1	ME 3200	Machine Design	4

ME 3401	Stress Analysis I	3	ME 5202	Vibrations	3
ME 3100	Thermodynamics I	3	ME 3101	Thermodynamics II	3
Elective	Humanities THL>2000	3	ME 3901	Mechanical Engineering Laboratory III	1

First Semester		Credits	Second Se	Second Semester	
ME 4800	Design Seminar in Mechanical Engineering I	1	ME 4801	Design Seminar in Mechanical Engineering II	3
ME 4101	Heat Transfer I	3	Elective	Humanities from THL, PHI, PJ, ETH 2050	3
ME 4102	System Dynamics	3	Elective	Professional Development from ME 6621, PHI 1600, PHI 2150, PHI 3820, PHI 3825	3
EGR 2001	Humanities: Engineering: The Humanistic Context	3	Electives	Career/ME Electives	6
Elective	Social Science from ECO, GEO, PJ, PSC, PSY, SOC,WS	3	Elective	Career/ME or Free ¹	3
Elective	ME Elective	3			

¹This is a career elective for those students pursuing a concentration as described above; for all other students it serves as a free elective.

Special Programs

Dual Degree Programs, Minors and Options

The College of Engineering provides the flexibility for its students to pursue various program additions and options. These include a dual degree program leading to a Bachelor of Arts degree, or a Bachelor's degree through the College of Commerce and Finance; a dual degree program leading to a Bachelor of Science in Computer Engineering and a Bachelor of Science in Electrical Engineering; academic minors in Business, Chemistry, Computer Engineering, Computer Science, Mathematics,

Mechatronics, and Physics; the Honors Program; and the ROTC Programs. Also the College of Engineering offers a Five-Year Combined Bachelors/Masters Program in all departments.

Bachelor of Arts - Dual Degree Program

Engineering students wishing to enter a Dual Degree Program must write a letter to the Dean of Engineering requesting admission into the program.

Business Minors outside the College of Engineering

Students should contact the Dean's Office in the respective college regarding the specific program.

Computer Engineering Minor

The department offers a minor in computer engineering to students outside the department. The requirements include five required courses and two electives. The required courses are:

ECE 1620: Engineering Programming and Applications

ECE 2042 & 2043: Fundamentals of Computer Engineering I & Lab

ECE 2044 & 2045: Fundamentals of Computer Engineering II & Lab

ECE 2052 & 2053: Fundamentals of Electrical Engineering I & Lab

ECE 3445: Computer Architecture (prerequisite ECE 2041)

The two electives must be selected from the following list.

ECE 5240: Multimedia

ECE 5430: Microcomputer System Design (prerequisite ECE 2041)

ECE 5444: Introduction to Fuzzy Logic (prerequisite ECE 2409)

ECE 5445: Introduction to Neutral Networks (prerequisite ECE 2409)

ECE 5450: Microcontrollers and Applications (prerequisite ECE 2041)

ECE 5470: Topics in Computer Networks

ECE 5477: Computer Communications Security

ECE 5484: Advanced Digital System Design (prerequisite ECE 3450)

ECE 5540: Digital Integrated Electronics (prerequisite ECE 3450)

ECE 5790: Digital Signal Processing (prerequisite ECE 3220 or ECE 3240)

ECE 5792: Real-Time Digital Signal Processing (prerequisite ECE 5790

Prerequisite courses must be satisfied.

Mechatronics Minor

The purpose of the mechatronics minor is to provide interested undergraduate Mechanical Engineering and Electrical and Computer Engineering students an opportunity to undertake interdisciplinary courses of relevance to state-or-art electromechanical system applications. The requirements of the minor according to major are the following. Contact your academic adviser if you wish to pursue this minor.

Mechanical Engineering Majors (One course is taken in place of ECE 6020)

Required ME Courses:

ME 2100: Statics

ME 3150: Introduction to Dynamics

ME 4102: System Dynamics

Required ECE Courses:

ECE 2052 and ECE 2053 (lab): Fundamentals of Electrical Engineering I ECE 2054 and ECE 2055 (lab): Fundamentals of Electrical Engineering II ECE 2042 and ECE 2043 (lab): Fundamentals of Computer Engineering I

One of the remaining courses must be chosen from the following ECE electives:

ECE 3550: Analog Electronics

ECE 4290: Engineering System Models and Controls

ECE 5450: Microcontrollers ECE 5800: Electric Machines

One of the remaining courses must be chosen from the following ME electives:

ME 5411: Mechatronics ME 5421: Robotics

Electrical and Computer Engineering Majors

Required ME Courses:

ME 2100: Statics

ME 3150: Introduction to Dynamics

ME 4102: System Dynamics

Required ECE Courses:

ECE 2052 and ECE 2053 (lab): Fundamentals of Electrical Engineering I ECE 2054 and ECE 2055 (lab): Fundamentals of Electrical Engineering II ECE 2042 and ECE 2043 (lab): Fundamentals of Computer Engineering I

One of the following courses must be chosen from the following ME electives:

ME 5411: Mechatronics ME 5421: Robotics

ME 5203: Introduction to Automatic Control

One of the remaining courses must be chosen from the following ECE electives:

ECE 5390: Control System Design ECE 5450: Microcontrollers

ECE 5800: Electric Machines

Five-Year Combined Bachelors/Masters Programs

In many fields, the Master's degree is rapidly becoming the entry level requirement for engineering graduates seeking employment. The College of Engineering offers the opportunity to those students who wish to obtain a Bachelor's and Master's degree in five years. This program is academically demanding and requires a recommendation from the student's undergraduate program adviser.

The Combined Bachelors/Masters program may permit students, who enter the program in their senior year, to take a maximum of nine graduate credits which could be counted toward both the baccalaureate and masters degrees. The baccalaureate is awarded upon completion of the undergraduate requirements. Students apply to the Combined Bachelors/Masters program early in the second semester of their junior year. Recommendation from the appropriate undergraduate program adviser is required, and the standard department graduate admission process is used. The Combined Bachelors/Masters program requirements will vary; interested students should contact the department in which they would like to pursue graduate study. All departments in the College of Engineering offer the Combined Bachelors/Masters program.

Academic Policies & General Information

Unless otherwise noted, the College of Engineering follows the general university academic policies and regulations listed in the University section of this Catalog. It is the responsibility of the student to know and comply with all academic policies and regulations of the University and of the College of Engineering. Such policies may change without prior notice. Policies specific to the College of Engineering follow:

Academic Standing

In order to remain in good academic standing, undergraduate engineering students must maintain a cumulative Grade Point Average (GPA) of at least 2.00 and a cumulative Technical Grade Point Average (TGPA) of at least 2.00. Technical courses are defined as all engineering, science, and mathematics courses.

Advanced Placement Credit

Information on advanced placement credit is found at www.engineering.villanova.edu/prospective/apcreditpolicyrevisions.pdf

Advising

During the freshman year a student is encouraged to learn more about the engineering profession in order to make a more informed choice of a major field of study. Assistance necessary to arrive at this decision (which is made at the end of the freshman year) is provided by the College of Engineering in the following ways:

As a freshman, a student is assigned to a faculty adviser, who provides career planning advisement and when appropriate, referrals. In addition, the College of Engineering sponsors programs which inform freshman students about career opportunities available in each major field of engineering.

Academic advisement for freshmen, i.e. class scheduling and course adjustments, is provided by the Associate Dean, Student Affairs.

Academic advisement for upper class engineering students is provided by the student's faculty adviser.

Audit

A student may elect to audit a course to reinforce and strengthen his/her current knowledge or to explore new areas without the pressure of tests and grades. No academic credit is earned for auditing a course. However, the audited course is noted on the student's official record. Permission to audit a course must be obtained from the student's adviser.

Awards and Honors

Full-time engineering students who achieve a semester Grade Point Average of 3.25 or higher qualify for the Dean's List in the College of Engineering.

The Dean's Award for Academic Achievement is presented to engineering seniors in recognition of outstanding academic performance in their undergraduate studies in the College of Engineering. Seniors with a cumulative Grade Point Average of 3.50 or more, after seven semesters are eligible for this award.

The Dean's Award for Meritorious Service is presented to engineering seniors in recognition of exceptional dedication and service unselfishly given to the College of Engineering over an extended period of time. The quality and consistency of the service to the College are recognized by means of this award.

In order to recognize and encourage excellence in scholarship, chapters of the following national honorary engineering societies are maintained by the college: Tau Beta Pi, for all engineers; Chi Epsilon, for Civil Engineers; Eta Kappa Nu, for Electrical Engineers and Computer Engineers; and Pi Tau Sigma, for Mechanical Engineers.

Bankruptcy Policy

A freshman engineering student may request to declare academic bankruptcy in any required course in the freshman engineering curriculum, and repeat the course with a new start on the grade earned for that course. The grade earned in the first attempt for any such "bankrupted" course will remain on the transcript, but only the grade from the second attempt at that course will be used in computing the future cumulative and technical grade point average.

The following restrictions apply to this policy:

- This option applies only to freshman engineering students, defined as those students who have earned fewer than 36 credits toward an engineering degree at Villanova.
- 2. This option applies only to those courses designated in the University Catalog as requirements for the freshman year of studies in engineering.
- 3. This option may be exercised only one time per course, but there is no limit on the number of different courses in the freshman curriculum for which this option may be employed.
- 4. Once this option is exercised and the grade previously earned for any specified course is declared "bankrupt," this decision may not be revoked and therefore the original grade may not be reinstated.
- 5. The student must agree that the course for which the policy is exercised must be retaken at Villanova, and must be completed by the end of the next semester of the normal academic year (i.e., a fall course must be completed in the following spring semester, and a spring course must be completed in either the following summer or the following fall semester).

Computing

College and University Computing. The entire campus is linked via a high-speed network and is connected to the internet. The College has multiple computer labs reserved for use exclusively by engineering students. Access to the workstations in these labs is provided 24 hours a day, 7 days a week, with proper authorization of the student's Wildcard. The College also provides several remote access solutions, such as Terminal Services for remote application execution, and Virtual Private Networks, for campus equivalent network connectivity. Beginning with the freshman class of 2003-04, students are issued wireless laptop computers as part of their curriculum. New computers are issued every two years. Support of the program is provided by UNIT, the University's IT group, with a wall-in, on-line, and telephone help desk system.

Departmental Computing. There are more than 100 microcomputer workstations located in engineering classrooms, laboratories, and the four engineering departments.

The Chemical Engineering Department makes available a number of personal computers for student use in carrying out classroom assignments. It has also dedicated several personal computers to data acquisition and control in laboratory experiments. Chemical Engineering students utilize a dedicated departmental intranet of personal computers to run packaged software for simulation of process systems, including Aspentech's ASPEN-PLUS. The departmental computer laboratory also provides a wide range of special-purpose software prepared by the department faculty in the sciences of material and energy balances, thermodynamics, process control, fluid flow and heat/mass transfer.

The Civil and Environmental Engineering Department's computer facilities include personal computers and associated printers and plotters. A variety of software packages including MATLAB, ANSYS, STAAD-III, HEC-RAS, HEC-HMS, HCS, KERN, and AUTOCAD are used in the curriculum. Student exposure to computer-based applications includes spreadsheet and economic analysis, structural design and analysis of buildings and bridges, slope stability, stream water quality modeling and waste load allocations, sensitivity and matrix analysis of civil engineering systems, generation of hydrographs, culvert hydraulics, modeling of river systems, and transportation system planning and simulation of traffic operations.

The Electrical and Computer Engineering Department utilizes Sun file servers with Sun workstations, which are available in the Advanced Computer Systems Laboratory. In addition the department has PC's, CAE workstations and Microcontroller Development Systems. The department software includes UNIX, SMP, ILS, HP ECE Design Center software, VHDL CAD Tools, MATLAB, SIMULINK, Electronics Workbench, and PSpice. This software is used for digital signal processing, real-time control and robotics, microwave measurement, and the design of analog and digital circuits and systems.

The Mechanical Engineering Department has personal computers that are equipped with data acquisition systems and software for graphing, designing, and calculating. Software includes MATLAB, FLUENT, Mathcad, ANSYS, AUTOCAD, PCDEFORMTM, DADS, Working Model 3DTM and other applications programs used for finite element analysis, heat transfer and fluid flow, and multi-body dynamic analysis.

International Studies

The College of Engineering, recognizing the continued changes globally in both the learning and practicing of the skills of engineering, encourages all majors to consider studying in an overseas university some time during their four years at Villanova. By enhancing language and communication skills, in addition to taking courses in engineering where appropriate, Villanova Engineers will strengthen their own liberal arts program so integral to a Villanova Engineering degree.

For more information contact your department chairperson or the International Studies Office, Middleton Hall, 2nd floor (phone 610-519-6412).

Laboratory Facilities

Dedication of the Center for Engineering Education and Research (CEER) took place in June 1998. The multi-million dollar facility provides leading edge technological support for teaching and research in the College of Engineering.

The 88,400-square-foot structure houses 30 instructional and research laboratories, a computer-aided engineering center, an interdisciplinary student projects laboratory, student group study rooms, a multi-media lecture hall seating 140, and conference rooms.

The Chemical Engineering Department maintains modern laboratory facilities to support the Bachelor of Science in Chemical Engineering curriculum. Experiments in the three Chemical Engineering Laboratory courses range from the demonstration of fundamental principles in bench-scale or pilot plant equipment, to hands-on experience with fully integrated, industrial scale process equipment. In addition, the department maintains extensive general-purpose laboratory capabilities for those students who carry out an experimental investigation as part of their senior Independent Study project.

The Civil and Environmental Engineering Department is committed to "hands-on" education in its experimental, computational, and design laboratories. Facilities are currently dedicated to instruction and research capabilities in materials (soils, concrete, and steel), the environment, geology, structures, measurements, fluid mechanics and hydraulics.

The Electrical and Computer Engineering Department laboratory facilities are available to serve as important components of study in specialized areas as well as for core studies. Laboratories are currently in place for instruction and research in Control Systems, Digital Systems and Microprocessors, Electronics, Signal Processing, Intelligent Systems, Solid State Devices, Microwaves, Microcontrollers, Advanced Electronics, Advanced Computer Systems, Antenna Anechoic Chamber, Antenna Research, Communications, and Student Projects.

The Mechanical Engineering Department laboratories provide an environment for students to reinforce their understanding of the fundamental principles of mechanical engineering and apply that knowledge in experimental analysis and problem-solving. Laboratories currently available include Manufacturing Processes, Thermodynamics, Engine Testing, Materials Testing and Material Science, Vibration, Stress, Heat Transfer, Fluid Mechanics, and Wind Tunnel.

Registration Options

Qualified undergraduate engineering students are permitted and encouraged to enroll in more challenging courses than those specified in their standard curriculum,

provided that they obtain approval from their department chairperson and other appropriate individuals where necessary, as indicated below.

Required and elective courses in the humanities and social sciences may be taken through the Honors Program for those students who qualify. Application should be made directly to the Director of the Honors Program.

Undergraduate students wishing to enroll in an engineering graduate course must have written approval from their department chairperson and the chairperson of the department offering the course. Permission will normally be granted only to seniors who have a cumulative Grade Point Average of 3.0 or higher. Permission to enroll in graduate courses offered by other Colleges within the University must be obtained from the Dean of that College as well as the chairperson of the department offering the course and the student's department chairperson.

Satisfactory/Unsatisfactory Grade Policy

Upperclass engineering students may elect to take, on a Satisfactory/Unsatisfactory basis, one course per semester which meets all of the following criteria: 1) it is not specifically designated by course number in the curriculum of the student's major; 2) it is not being given by the department in which the student is majoring; 3) it is not designated as a Technical Elective in the curriculum of the student's major; and 4) permission to take the course has been specifically granted by the chairperson of the department in which the student is majoring.

To take a course on a Satisfactory/Unsatisfactory basis, the student must first register for the course by the normal procedure. After registration has been completed, the student must complete a Satisfactory/Unsatisfactory form (supplied by the Registrar's Office); this form must be signed by the student's department chairperson.

Other pertinent information can be found under the "Grading System" policies in the University section of this Catalog.

Schol astic Loads and Overloads

The individual engineering majors are comprised of appropriately sequenced course groupings referred to as "regular semester course loads." Students enrolled in the College of Engineering may take up to four credits, or one course overload, in any given semester provided that (1) a freshman has permission from the Associate Dean for Student Affairs. Normally, only second semester freshmen with a GPA of at least 3.5 are permitted to overload, or (2) an upperclassman has approval from his adviser and chairman. Normally a GPA of at least 3.0 is required in this case.

Technical Electives

Students who are required to select technical electives as part of their departmental program are required to select these electives from among the courses listed in this Catalog and offered by the following departments: Astronomy, Biology, Chemistry, Chemical Engineering, Civil and Environmental Engineering, Computing Sciences, Electrical and Computer Engineering, Mathematical Sciences, Mechanical Engineering, and Physics. The selection must be done with the advice and approval of the student's adviser and chairperson.

Transfer of Credit

With recommendation of their department chairperson, and approval of the Dean, engineering students are permitted to earn course credit at other schools. In order to initiate a request to do this, the student must obtain and complete a Course Elsewhere Form, available in the Office of the Dean of Engineering. A complete description of the substitute course content in the form of a copy of the other institution's official course catalog or a copy of the other institution's web description must be attached to this form. The student should allow 7-10 days for final action to be taken on the request. After that time, the student making the request should contact the Dean's Office to determine the outcome.

Students who have completed approved courses elsewhere must request that institution to forward a transcript to the Office of the Dean of Engineering. NOTE: only courses in which a grade of "C" (or the equivalent) or better is eceived will be transferred for credit. Grades of courses taken elsewhere are not included in the calculation of the Grade Point Average (GPA) or Technical Grade Point Average (TGPA) at Villanova University.

College-level work done prior to high school graduation may be awarded transfer credits upon receipt of evidence that the course was/is taken beyond the minimum requirements for high school graduation, according to the curriculum requirements of the school. In addition, all other University requirements must be fulfilled.

Withdrawal from Courses

Engineering student requests for authorized withdrawal from a course without penalty (WX) will be granted automatically until approximately three and a half weeks after mid-term break (see academic calendar @ www3.villanova.edu/calendar/index.html for exact date). After that date the student must present a valid reason for the request, such as insufficient information to determine standing in the course, (i.e., grades on tests and assignments), or serious personal or medical problems. The Associate Dean of Academic Affairs will decide whether or not to grant these requests based on the information supplied by the student and recommendations from the faculty member teaching the course and, in the case of upperclass students, the chairperson of the department in which the student is majoring.

Student Organizations

In order to encourage close contact between our engineering students and practicing professional engineers, and to assist students in establishing their engineering identity, the College of Engineering maintains student chapters of many engineering professional societies. These groups, with the cooperation and support of the faculty and practicing professional engineers, organize and sponsor meetings, guest speakers, and field trips of interest to engineering students.

Refer to the website: www.engineering.villanova.edu/students for information on student organizations.

The broader professional and social interests of all engineering students are served by the Villanova University Engineering Student Council. Membership in this organization is open to all undergraduate engineering students.

Departments

Chemical Engineering

Chair: Dr. C. Michael Kelly
Professors: Joye, C.M. Kelly, Punzi
Associate Professors: Ritter, Muske, Skaf, Weinstein

Assistant Professors: W. Kelly

Office: 217 White Hall, tel. 610-519-4950
Website: www.engineering.villanova.edu/che
Courses: catalog.villanova.edu/courses/che.html

Civil and Environmental Engineering

Chair: Dr. Ronald A. Chadderton

Professors: Chadderton

Associate Professors: Dinehart, Traver, Suri, Yost

Assistant Professors: Duran, Glynn, Gross, Liu, Parkany, Welker Office: 139 Tolentine Hall, tel. 610-519-4960 www.engineering.villanova.edu/ce Courses: catalog.villanova.edu/courses/cee.html

Electrical and Computer Engineering

Chair: Dr. Edward V. McAssey, Jr., Interim Chair

Professors: Amin, Buckley, Hoorfar, Zygmont

Associate Professors: Bukowski, Caverly, DiMeo, Dwyer, Kresch, Mobasseri,

Perry, Peyton-Jones, Singh

Assistant Professors: Jupina, Konyk, Kulkarni, McKeough, Mercede

Instructor: Char

Office:411 Tolentine Hall, tel. 610-519-4970Website:www.engineering.villanova.edu/eceCourses:catalog.villanova.edu/courses/ece.html

Mechanical Engineering

Chair: Dr. Gerard Jones

Professors: Ashrafiuon, Jones, Nataraj, Whitman

Associate Professors: Chun, Jen, Kroos, Radhakrishnan, Santhanam Fleischer, Hoffman, Koffke, O'Brien, Raulli

Instructor: Fulmer **Industrial Professor:** Casey

Office: 131 Tolentine Hall, tel. 610-519-4980
Website: www.engineering.villanova.edu/me
Courses: catalog.villanova.edu/courses/me.html

College of Nursing

M. Louise Fitzpatrick, Ed.D., Dean

Rose M. O'Driscoll, M.S.N., Assistant Dean for Administration M. Frances Keen, DNSc, Assistant Dean and Director of Undergraduate Program Office: St. Mary's Hall, first floor, tel. 610/519-4900

Website: www.nursing.villanova.edu

Course descriptions: www.catalog.villanova.edu/courses/nur.html

Faculty

Professors: Fitzpatrick, Sharts-Hopko
Associate Professors: Beletz, Brown, Cantrell, Copel,
Haynor, Keen, Ott, Pickett, Smeltzer, Weingarten, Zamerowski,
Assistant Professors: Bradley, Costello, Crumlish, DeSilets, Dowdell,
Erickson, Fetter, Frain, Hinkle, Keech, McGinn, McGovern,
O'Driscoll, Pizzi, Schiller, Smith,
Sullivan, Todd, Willens, Zawacki
Clinical Associate Professor: Capriotti

Clinical Assistant Professors: Bruderle, McKenna, Wimmer Adjunct Professor: Wildgust

The health care of a complex and technologically advanced society requires professional nurses who are liberally educated, clinically competent, compassionate and ethically motivated. In responding to these objectives, the College of Nursing is a tangible expression of Villanova's mission, values and commitment to human service.

History

Villanova University first responded to society's need for baccalaureate-prepared nurses in 1932 when it offered a program of study leading to a Bachelor of Science in Nursing Education. This commitment was expanded in 1953 to create a College of Nursing that now offers a generic BSN program, a BSN completion program for registered nurses, an accelerated BSN program for second degree students, an MSN program, a PhD program and a Continuing Education Program.

Baccalaureate nursing education prepares individuals for professional nursing practice in a variety of health-care settings and for continuous personal and educational growth, including entrance into graduate education in nursing. A liberal education is integrated with the ideals, knowledge, and skills of professional nursing practice under the direction of well-qualified faculty.

The College of Nursing is approved by the State Board of Nursing of the Commonwealth of Pennsylvania. Upon completion of the undergraduate program, graduates are eligible to take the licensing examination (NCLEX) for professional registered nurses. This license is transferable within the United States nationally by state. The undergraduate and graduate programs are both fully accredited by the National League for Nursing Accreditation Commission and the Commission on Collegiate Nursing Education. The Nurse Anesthesia concentration in the graduate program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs. The Continuing Education Program is accredited as a provider of Continuing Education in Nursing by the American Nurses Credentialing Center, Commission on Accreditation.

Contact Information:

American Nurses Credentialing Center 600 Maryland Avenue, SW Suite 100 West Washington, DC 20024-2571 202/651-7000 1-800-284-CERT (2378) www.nursingworld.org/ancc/.

Commonwealth of Pennsylvania Department of State Bureau of Professional and Occupational Affairs State Board of Nursing P.O. Box 2649 Harrisburg, PA 17105-2649 Phone:(717) 783-7142 Fax: (717) 783-0822

http://www.dos.state.pa.us/bpoa/ nursing@pados.dos.state.pa.us Commission on Collegiate Nursing Education One Dupont Circle, NW, Suite 530 Washington, DC 20036

Phone: (202) 463-6930 Fax: (202) 785-8320 www.aacn.nche.edu/ Accreditation/index.htm

Council on Accreditation of Nurse Anesthesia Educational Programs 222 South Prospect Avenue Park Ridge, Illinois 60068-4001 Phone: (847) 692-7050 Fax: (847) 692-6968 www.aana.com/

National League for Nursing Accreditation Commission 61 Broadway New York, NY 10006 Phone: (212) 363-5555 x153 Fax:(212) 812-0390

www.nlnac.org/index.html

Mission

The College of Nursing is a tangible expression of Villanova University's mission, tradition, and commitment to human service. As a major school of nursing under Catholic auspices, it carries responsibility for the education of nurses within the framework of Christian beliefs and values and the heritage of the Order of St. Augustine. The academic programs in the College of Nursing are directed to interpretation of nursing as a healing ministry emanated by love and demonstrated through service and the care of others. As a healing art as well as an applied science and practice discipline, nursing as taught at Villanova University, emphasizes the concern for spiritual health as well as that of mind and body. Curricula reflect the integration of these elements and their application in clinical practice and concern for others regardless of race, ethnicity or religion. The College of Nursing educates individuals for service to a diverse society which includes all sectors and strata of the population; as such, graduates are prepared to assume roles in all settings where health care is delivered.

Within this context, nursing draws its worth and spirit from motives based on love of one's fellow men and women who are made in the image and likeness of God. As a social service to the community, nursing responds to the needs of the sick, poor and disabled, and promotes wellness as the pre-eminent goal of nursing care. The practice of nursing within a Christian environment requires that those who nurse recognize and respect the needs of each person and that they teach while they nurse in order to assist their patients and the community to achieve the highest possible level of wellness of body, mind, and spirit.

The College of Nursing, consistent with the mission of Villanova University, assumes responsibility for the education of individuals who will be prepared to provide a vital service to society and who are liberally educated, clinically competent, compassionate and ethically motivated. The college is committed to providing high quality education in the liberal arts and sciences and expert preparation in the knowledge and clinical skills of professional nursing to qualified individuals who must be prepared and empowered to confront the health care demands of a complex and technologically advanced society.

The College views itself as an important locus of education, research and organizational leadership within nursing's professional and educational communities. It views with great seriousness its prominent role with the constellation of collegiate nursing programs under Catholic auspices.

The College awards the baccalaureate degree in nursing (BSN) and provides basic preparation in nursing to those who are studying for the first professional degree in the field. Such students include high school graduates with no prior college experience, registered nurses who were prepared in hospital or junior college programs and who have not yet attained the baccalaureate, college graduates with degrees in other disciplines who have made a later decision to study nursing, and mature adults who are studying for their first college degree.

The Graduate Program awards the master's degree in nursing (MSN) and provides preparation and leadership development in selected areas of advanced nursing practice, development of research skills and knowledge of health policy. In addition, course options prepare individuals for positions as administrators of nursing and health services, case managers, clinical teachers, faculty, nurse practitioners, and nurse anesthetists. The Graduate Program also awards the Doctor of Philosophy degree in nursing (PhD) to

individuals who are prepared as teacher-scholars for academic careers in higher education.

The Program in Continuing Education is committed to providing short courses, conferences, workshops and symposia for nurses, other health professionals and the public-at-large on topics related to health care. Some of these programs are developed to update the knowledge of practicing nurses while others provide an academic arena for the sharing and critique of papers and ideas relevant to current issues or trends in health care.

The College of Nursing's emphasis on education in values and ethical principles is a pervasive and central theme and emanates from the Catholic and Augustinian tradition of the University. The faculty are expected to serve as role models and mentors for the professional development of students in the exercise of their academic responsibilities.

Degrees and Programs

The College awards the baccalaureate degree in nursing (BSN) and provides basic preparation in nursing to those who are studying for the first professional degree in the field. Such students include high school graduates with no prior college experience, registered nurses who were prepared in hospital or junior college programs and who have not yet attained the baccalaureate, college graduates with degrees in other disciplines who have made a later decision to study nursing, and mature adults who are studying for their first college degree.

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Degree Requirements

Bachelor of Science in Nursing Curriculum (136 credits)

FRESHMAN

Fall Semester	credits	Spring Semester	credits
CHM 1131	3	CHM 1134	3
CHM 1103	1	CHM 1108	1
CHS 1000	3	CHS 1001	3
NUR 1101	2	NUR 1103	2

PSY 1000 or SOC 1000	3	SOC 1000 or PSY 1000	3
THL 1050 or PHI 1050	3	PHI 1050 or THL 1050	3
		ENG 1050	3
SOPHOMORE			
BIO 1205	4	BIO 1206	4
BIO 1181	3	NTR 2120	3
NUR 2104	2	NUR 2106	2
NUR 2105	1	NUR 2107	2
PSY 2200	3	MAT 1250	3
Elective	3	Soc. Studies Elective*	3
*Must be selected from the areas of History, Political Science, or			
Economics in consultation with the	e student'	s major adviser.	
JUNIOR			
NUR 3112	6	NUR 3116	6
NUR 3113	6	NUR 3117	6
NUR 3108	3	NUR 3110	3
NUR 3030	3	PHI 2115	3
SENIOR			
NUR 4101	6	NUR 4102	6
NUR 4103	6	NUR 4107	6
NUR 4130	2	NUR 4110	5
THL Elective**	3		

^{**2000} level or above is recommended

Program Requirements

Entrance physical examination, selected diagnostic tests, as well as designated immunizations, are required of all nursing students. Additional health screening tests may be required by the various agencies utilized for clinical experience in nursing courses.

Students are required to be certified in Basic Cardio-pulmonary Resuscitation prior to enrolling in NUR 2106 and 2107. Continuing re-certification is the responsibility of the student throughout the remainder of the program.

All materials concerning health examinations, diagnostic tests, immunizations, health screening and cardio-pulmonary resuscitation are course requirements for the following courses: 2107, 3113 (Spring Semester Offering) and 4103. They must be on file in the College of Nursing by the end of the Spring final examination period or prior to the first day of class in the *first semester* of enrollment.

All junior and senior students are required to participate in a battery of standardized tests to assess nursing knowledge prior to graduation. The cost is assumed by the students. Permission to take the NCLEX Licensure exam may be delayed based upon a student's academic record and performance on the standardized tests.

Registered nurse students must furnish evidence of malpractice liability insurance.

Academic Policies and Information

Unless otherwise noted, the College of Nursing follows the general university academic policies and regulations listed in the University section of this Catalog. It is the responsibility of the student to know and comply with all academic policies and regulations of the University and of the College of Nursing and to abide by the professional standards established by the College. Such policies may change without prior notice. Note: if a student withdraws from the College of Nursing and is readmitted at a later date, the requirements in effect at time of readmission will be applied. Policies and regulations specific to Nursing students include the following:

Academic Advising

Every student entering the College of Nursing is assigned a faculty adviser. It is the responsibility of the student to contact his/her adviser prior to each registration period and if he/she is experiencing any academic difficulty. Each student must take responsibility to meet with his/her adviser on an ongoing basis. Advisers are available during posted office hours or by appointment.

Academic Grievance Procedure

If a student has a grievance within a nursing course, he/she is advised to speak with the individual teaching the course. If the problem is not resolved at this level, it may be taken to the Course Leader, Program Director, and Dean in that order.

Academic Policies

Students are expected to abide by the policies and professional standards established by the College of Nursing. The College of Nursing reserves the right to change program requirements without prior notice to reflect advances in the professional field. If a student withdraws from the College of Nursing and is readmitted at a later date, the requirements in effect at the time of readmission will be applied.

nursing major.
Only one nursing course may be repeated in the curriculum prior to dismissal
from the program.
A required course may be repeated once prior to dismissal from the program.
Students must complete, in sequence, the required lower division courses, with a
Q.P.A. of 2.5 in order to advance to junior level courses.
Students must successfully complete, in sequence, courses in the nursing major as
indicated in the curriculum plan.

☐ A grade of "C" or better must be attained in all nursing courses for progress in the

☐ The College of Nursing reserves the right to place on probation or withdraw any student whose performance is deemed unsatisfactory.

College of Nursing

Students whose primary language is not English will be encouraged to bring
translation dictionaries to their examinations and be given untimed tests.
International students, who are in the generic and BSN program or RN completion
program but who are not ex-patriates residing permanently or working in the
United States and will not sit for NCLEX but return to their countries, may have
the progression policies suspended, on a case by case basis, by action of the Dean
of the College of Nursing and upon formal recommendation of the Program
Director.
Preparation for Registered Licensing Examination:
a. For the purpose of continuously preparing nursing students in the baccalaureate

program leading to initial licensure as registered nurses for the comprehensive licensing examination (NCLEX-RN), standardized tests developed for this purpose will be administered and evaluated as part of the final course grades beginning in the junior year (or its equivalent) at the student's expense.

b. All senior nursing students (or the equivalent) are required to demonstrate successful achievement on a designated predictive NCLEX-RN readiness assessment examination prior to graduation. This examination, in combination with any required remediation, must be successfully completed as a prerequisite to certification by the College as part of the application process for the NCLEX-RN examination.

Academic Probation and Dismissal

Probation. A student is placed on academic probation in the College of Nursing when:

☐ A required course is failed.

- ☐ A grade less than C is earned in science or nursing courses.
- ☐ The QPA is below 2.0 in any given semester.

Dismissal. Students are usually permitted two semesters of probationary status prior to dismissal from the program. A dismissal from the College may be appealed in writing. Detailed instructions for appeal are outlined in the dismissal letter.

In circumstances involving those students who have entered Villanova University through the Academic Advancement Program, satisfactory progress of the student will be determined by the Academic Standing Committee and/or Dean of the College in which the student is matriculated. In the event that, due to poor high school preparation, additional time is necessary for the student to complete the requirements towards graduation, the student will be viewed as being in a five-year program. Satisfactory progress will be viewed accordingly.

Admission

Regular Students. All applicants for full-time or part-time study must meet the entrance requirements for admission to the University as listed in this Catalog.

Transfer Students. Transfer students with a 2.5 Q.P.A. are considered for admission to the College of Nursing on a limited basis. Please see the section on Transfer Students in the general University section of this Catalog. Further inquiries should be directed to the College of Nursing.

Adult Students/Second Career Applicants. The College of Nursing welcomes applications from adults who wish to begin preparing for a career in nursing. These include individuals who possess undergraduate and/or graduate degrees in other fields as well as those adults entering college for the first time. Part-time study is possible during the introductory level of the program. Full-time study is required during the clinical portion of the program. All applicants must meet the entrance requirements for admission to the University. In addition, the College offers an accelerated curriculum for individuals with a bachelor's degree in another discipline. Applicants must demonstrate superior academic achievement in prior course work to be eligible for this program. Further inquiries should be directed to the College of Nursing.

Registered Nurse Applicants. Graduates from diploma and associate degree nursing programs are eligible for admission. Requirements for admission include: transcripts from all academic institutions and proof of registered professional nurse licensure. Applicants should apply for admission through the Office of Admissions of the University.

Through a series of nursing examinations and clinical validation, a registered nurse student may demonstrate current nursing knowledge earning 45 credits in nursing. Specific policies and procedures may be obtained through the College of Nursing. Credit by examination is available through the College of Arts and Sciences for non-nursing courses. See the section on Registered Nurses, below.

Admission to Closed Sections of Courses

Students will not be permitted to enroll in closed sections. Exceptions to this rule will be made only by the Assistant Dean and Program Director of the Undergraduate Program or Assistant Dean for Administration and only when a student must enroll in the specific section in order to complete requirements which are necessary for progression in the program.

Graduate Course Registration for Undergraduate Students

A junior or senior with a 3.00 cumulative quality point average wishing to enroll in a graduate course must have the written approval of the Dean of the College of Nursing.

International Studies

The College of Nursing, in conjunction with the Office of International Studies, is pleased to offer a variety of opportunities for a Nursing major to study in an overseas university during her/his course of studies.

The College of Nursing has established a year-long study abroad program with the University of Manchester, Manchester, England. Students in this program spend their entire sophomore year in England. The courses transfer to Villanova as the sophomore year of the nursing curriculum and students graduate on time with their classmates.

The program requires some changes in the freshman course of study; any freshman who is interested should contact the Director of the Undergraduate Nursing Program or

College of Nursing

his/her academic adviser as early as possible. A nursing major may also participate in any of the summer or semester study abroad programs approved by the University and administered by the Office of International Studies. However, since these are not nursing programs, students who participate need to change their course of study and may graduate later than their graduation class. Interested students should see the detailed discussion International Studies in the Villanova University section of this *Catalog* or contact the Office of International Studies, St. Augustine Center, Room 415, (phone 610-519-6412).

Withdrawal from a Course (WX)

Until the final day for authorized withdrawal from courses, approximately three and a half weeks following mid-term break (for exact date, see the academic calendar @ http://www3.villanova.edu/calendar/), students may withdraw from a course without penalty and will receive the grade of "WX". After that date, students seeking withdrawals from courses without penalty ("WX") must present to the Dean a written request with valid reasons for the request, such as serious personal or medical problems, and recommendations from the instructor of the course. The Dean of the College is the final authority for granting or refusing the exception on the basis of the documentation and recommendations submitted. Students who do not have a justifiable cause to withdraw from a course without academic penalty may still withdraw from the course and receive a grade of "W." Withdraw from a course may alter a student's degree completion date.

BSN Program for Registered Nurse Students

Registered nurse students achieve advanced standing in the undergraduate program through transfer of applicable college credits and through successful completion of required validation exams in nursing and optional challenge exams in selected liberal education courses. Each of these mechanisms is described below.

Requirements

All registered nurse students are expected to have the following on file prior to enrollment in Nursing 3000 and 3005:

Entrance Health Examination and Laboratory Studies.
Current CPR Certification including resuscitation and choking measures for
infant, child, and adult with one person and two-person rescue procedures, and
review of an Automated External Defibrillator.
Current Pennsylvania R.N. License.
Current Malpractice Insurance Certificate.

Transfer of Liberal Education Course Credit

Up to 64 credits in applicable liberal education courses may be transferred from accredited colleges or universities. A grade of 'C' or better must have been earned, and courses must be evaluated as equivalent to appropriate Villanova courses.

Credit by Examination (Liberal Education Courses)

Selected liberal education courses may be challenged through the University's Credit by Examination Program. RN students may challenge up to 12 credits in liberal education in accord with the policies and procedures of that program. Information is available from faculty advisers.

Advisement

RN students are assigned a faculty adviser when admitted to the College and are expected to consult with the adviser on a regular basis.

Excel sior Validation Exams in Nursing

Four of the five tests are owned and administered by Excelsior College. Within the immediate area, these tests are offered at 6 different colleges. There are six test sessions each year, scheduled between October and August. Registration materials and study guides are available from Excelsior College (Tel. 518/464-8631; Address: 7 Columbia Circle, Albany, NY 12203-5159, www.excelsior.edu).

The four required Excelsior exams are:

□ Professional Strategies in Nursing (#426)
□ Maternal-Child Nursing, Baccalaureate (#457)

☐ Adult Nursing (#554)

☐ Health Restoration, Area II (#477)

The passing score for each of these exams is a standard score of 45. Each exam may be repeated once, if necessary. All four Excelsior exams must be passed to earn 27 credits in nursing at Villanova. The exams are NOT required for admission to the College, however. Scores are valid for 5 years.

The fifth exam is incorporated within the first required nursing course at Villanova (NUR 3000) and is entitled Clinical Validation Exam. It assesses foundational clinical nursing skills and is designed and implemented by Villanova Nursing faculty. It may be repeated once if necessary, and must be passed to earn 20 additional credits in nursing and to progress in the program.

COURSE/CREDIT REQUIREMENTS (136 credits)

Physical Sciences/Math	(25 crs)	Nursing	(71 crs)
Anatomy & Physiology	(6-8 crs)	Excelsior Exams and/or	
Organic/Biochemistry	(3-4 crs)	AAS Nursing Credit	(27 crs)
		Transfer	
Microbiology	(3-4 crs)	NUR 3110*	(3 crs)
Nutrition	(3 crs)	NUR 3000/3005	(4 crs)
Statistics	(3 crs)	Clinical Validation Exam	(20 crs)

College of Nursing

Electives	(3 crs)	NUR 4102	(6 crs)
NUR 4107	(5 crs)		
NUR 4110	(6 crs)		
Humanities	(21 crs)	Social/Behavioral Sciences	(12 crs)
English/Literature	(3 crs)	General Psychology	(3 crs)
Philosophy-Health		Developmental Psychology	(3 crs)
Care Ethics	(3 crs)	Introductory Sociology	(3 crs)
Religious Studies	(6 crs)	Elective	(3 crs)
Humanities Elective	(9 crs)		
Free Electives	(6 crs)		

NOTE: BSN candidates take NUR 3110; MSN candidates may take NUR 8904 after completing a course in statistics.

Facilities for Instruction and Practice

The University assumes full responsibility for providing the instruction throughout the entire program. (Students are responsible for their own transportation to and from the various facilities utilized for the practice of nursing.) Community based practice of nursing will most likely require individual means of transportation for agency and home visiting. During the professional portion of the curriculum, theory and laboratory are directed by faculty members. Among the agencies used for student experience are the following:

Albert Einstein Medical Center, Philadelphia, PA

Alfred I. DuPont for Children, Wilmington, DE

Belmont Center for Comprehensive Treatment, Philadelphia, PA

Broomall Presbyterian Village, Broomall, PA

The Bryn Mawr Hospital, Bryn Mawr, PA

Children's Hospital of Philadelphia, Philadelphia, PA

Crozer-Chester Medical Center, Chester, PA

Delaware County Memorial Hospital, Drexel Hill, PA

Fox Chase Cancer Center, Philadelphia, PA

Graduate Hospital, Philadelphia, PA

Holy Redeemer Nazareth Visiting Nurse Agency, Philadelphia, PA

Hospital of the University of Pennsylvania, Philadelphia, PA

Jefferson Home Health, Bryn Mawr, Pa

Lankenau Hospital, Philadelphia, PA

Learning Resource Center, College of Nursing

Little Flower Manor, Darby, PA

Main Line Rehabilitation and Nursing Center, Paoli, PA

Medical College of Pennsylvania, Philadelphia, PA

Mercy Fitzgerald Hospital, Darby, PA

Mercy Hospital of Philadelphia, PA

Montgomery Hospital, Norristown, PA

Pennsylvania Hospital, Philadelphia, PA

Presbyterian Hospital Home Health, Philadelphia, PA

St. Christopher's Hospital for Children, Philadelphia, PA

St. Ignatius Nursing Home, Philadelphia, PA St. Joseph's Villa, Flourtown, PA Saunder's House, Wynnewood, PA Thomas Jefferson University Hospital, Philadelphia, PA Veterans Administration Medical Center, Philadelphia, PA Visiting Nurse Association, Philadelphia, PA

Selected school systems, day-care centers, community health centers, senior citizen centers, and industries are also used.

Heal th and Wellness Concentration

The Health and Wellness Concentration encompasses an understanding of the concepts of healthy living and nutrition and the knowledge of the changing health care system. The knowledge obtained in this concentration can be applied to studies in the areas of social sciences, business and psychology. Requirements for the minor include NUR 2200, NTR 2120 and NUR 7080. Students then choose one of the following courses to complete the requirement: NUR 4800, NUR 4802, NUR 7040, NUR 7081, NUR 7082, NTR 7120. The concentration requirement is 12 credits and is open to all non-nursing majors. Students must have junior status to take the 7000 level courses.

Part-Time Studies

James R. Johnson, M.S., Director Suzanne F. Allen, M.Ed., Assistant Director

History and Objectives

For more than 85 years, the Division of Part-Time Studies has fulfilled the educational needs of thousands of men and women who were unable to or did not wish to pursue a regular full-time day program. Among those it serves are: high school graduates who are unable to undertake a regular full-time day program but wish to undertake or complete an unfinished baccalaureate degree program; professionals who seek to update and expand their knowledge and skills; college graduates who lack undergraduate requirements for admission to graduate or professional school or who are seeking initial secondary school certification or additional endorsements for secondary school certification; high school graduates who do not qualify for acceptance as degree candidates but who seek the opportunity to prove themselves as non-matriculated students with the chance to matriculate upon the successful completion of a stipulated number of courses; and men and women of all ages who are simply interested in taking courses to enrich their personal lives. Senior citizens (age 65 and over) are eligible to enroll in undergraduate courses for personal enrichment only, but they are not charged for tuition. They may register AFTER the drop/add period, which is the first week of the semester, in courses in which the enrollment limit has not been reached.

Part-Time Studies provides comprehensive advising services at registration time and throughout the year to assist students in planning their educational careers and academic schedules. To acquaint new students with the general regulations of and services provided by the Part-Time Studies division and the University, a variety of web-based resources, including an on line orientation and a virtual campus tour are available via the Part-Time Studies web site at www.parttime.villanova.edu. The University Counseling Center and the Career Services Office provide additional services to the Part-Time Studies student.

Although Part-Time Studies mainly serves the part-time student, it is possible, with permission, for a student to take a full-time course load. Even on a part-time basis, however, a Part-Time Studies student can complete a baccalaureate program in five to six years. With

permission of the Director or academic advisor, Part-Time Studies students may enroll in day classes.

Requirements for admission, advancement, and graduation are the same as those prevailing in the full-time undergraduate colleges. As a result, matriculated students may transfer from Part-Time Studies to one of the full-time colleges without loss of credit. Indeed, many high school graduates begin their degree programs in Part-Time Studies and subsequently transfer to the appropriate day college. Conversely, students who, usually for financial reasons, are obliged to discontinue as full-time students, are able to continue their studies as part-time students in Part-Time Studies.

The degrees pursued in Part-Time Studies are Villanova University degrees, in every respect commensurate with those offered by the full-time colleges of the University. The business programs are accredited by the American Assembly of Collegiate Schools of Business. The Computer Science program is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

Admission

Application forms for admission to part-time undergraduate study are available on line at www.parttime.edu and may also be obtained from the Director, Part-Time Studies, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085.

Students seeking admission into degree programs (matriculated status) must submit complete records from all secondary schools and institutions of higher learning previously attended. Students seeking postgraduate status must submit transcripts showing degree and graduation date or a copy of the diploma from their baccalaureate degree institution. Students applying for non-matriculated (non-degree program) status must submit secondary school records indicating graduation or proof of receipt of a state equivalency diploma. *To avoid delay, address all material to Part-Time Studies*. Applicants for matriculated status are requested to have a set of complete records on file at least four weeks prior to registration in order to be evaluated in advance of enrollment. Registration as a non-matriculated student is suggested in those cases where transcripts are delayed.

Secondary school requirements for entrance to a specific curriculum are outlined in the University section of this *Catalog*. The requirement for non-matriculated status is proof of graduation from an accredited secondary school or proof of receipt of a General Educational Development Diploma.

Applicants for matriculation in a degree program will be evaluated on their previous academic records in high school and college, if applicable. Those who are not initially accepted as matriculated students (candidates in a degree program) may be accepted as

Part-time Studies

non-matriculated students. Students will retain non-matriculated status until completion of at least 18 credit hours at Villanova at which time they will be re-evaluated for matriculation.

Students attending other institutions who are in good standing and have permission to take undergraduate courses at Villanova may do so as may high school seniors with strong academic backgrounds who have permission from their guidance counselor or principal. Senior citizens, those age 65 or older, may enroll in undergraduate courses for personal enrichment only without the payment of tuition. Information on the application procedures for these particular categories may be obtained from the Part-Time Studies office.

Readmission

A student who has not attended classes in Part-Time Studies for two years or longer is considered an inactive student. To be readmitted, a PTS application form, from the PTS office in 107 Vasey Hall, must be completed. When the form is received, the record will be reviewed, and a letter sent to the applicant indicating readmission status.

Degrees Offered

Villanova University offers the following programs of study for the Bachelor's Degree which may be completed through Part-Time Studies: Accountancy, Business Administration, Communication, Computer Science, Information Science, Education (Secondary Education, Teacher Certification), English, General Arts, History, and Human Services.

In October 2002, a new degree, the Bachelor of Interdisciplinary Studies was approved by the Villanova Board of Trustees. This degree will be offered in the evening for Villanova adult students. As part of this degree, students will choose one of the following majors: General Studies, Information Systems and Leadership Studies (available in Fall 2005).

In addition to the Bachelor's degree, the following programs are available: Associate of Arts, Accountancy Certificate, Business Administration Certificate, and Secondary Teacher Certification.

Degree Requirements

To qualify for the Bachelor's degree, a student must complete successfully the requirements for the degree as described in this *Catalog*. Villanova University reserves the right to change program requirements without prior notice.

The Baccalaureate degree is awarded and a student is graduated when the curriculum prescribed by the University for one or more of the various degree programs has been satisfied. In addition to the curricular requirements, candidates for graduation must meet the following requirements:

- ☐ A minimum final cumulative quality point average of 2.0.
- A minimum of half of all courses required for the degree earned at Villanova.
- ☐ A minimum of half of the requirements for the major degree program earned at Villanova.
- ☐ The final 30 credits (senior year) must be earned at Villanova.

Detailed information on all the following degree programs may be found in the specific College and Department sections of this *Catalog*; additional specific information may be obtained from the Part-Time Studies office.

Bachelor of Arts/Bachelor of Science

Students in the Bachelor of Arts program in Part-Time Studies may major in Communication, Education, English, History, Human Services, or General Arts. The degree requirements may be found under the departmental listings contained in this *Catalog*. Within the Bachelor of Arts degrees, minors are available in Business, Communication, Computer Science, Education, English, History, Human Services, Philosophy, Political Science and Sociology.

The Core Curriculum of the College of Liberal Arts and Sciences is applicable to these majors offered in Part-Time Studies: Bachelor of Arts in General Arts, Communication, English, History, and Human Services; and Bachelor of Science in Computer Science, Education, and Information Science. A description of the Core Curriculum may be found in the College of Liberal Arts and Sciences section of this *Catalog*.

For the Bachelor of Arts Degree in General Arts, General Arts with a Business Minor, Communication, English, History, and Human Services, 40 courses and a minimum of 122 credits are required.

For the Bachelor of Science in Computer Science, 41 courses and a minimum of 129 credits are required. For the Bachelor of Science in Information Sciences, 40 courses and a minimum of 124 credits are required.

For the Bachelor of Science in Education, course and credit requirements vary according to the subject area of certification. The twelve subject areas available for certification are: Biology, Chemistry, Communication, English, French, General Science, German, Latin, Mathematics, Physics, Social Studies, and Spanish. Required courses in some subject areas, including student teaching, are available during day times only. *Day classes are billed at the day tuition rates*.

BACHELOR OF INTERDISCIPLINARY STUDIES

The Bachelor of Interdisciplinary Studies offers majors in General Studies, Information Systems and Leadership Studies. This degree was developed in conjunction with the College of Liberal Arts and Sciences and has the support of the Dean and faculty of that college. It is

Part-time Studies

a Villanova degree in every respect and is grounded in the humanities as are all Villanova degree programs.

The Bachelor of Interdisciplinary Studies degree requires a total of 120 credits, with a core curriculum of 45 credits. This core curriculum provides more flexibility and choices so that adult students may select classes in line with their personal interests and experiences as well as their professional goals. The specified core curriculum will apply *only* to the BIS degree program. Each concentration area consists of 33 credits and the degree includes 42 credits of free electives.

BACHELOR OF INTERDISCIPLINARY STUDIES CORE CURRICULUM (45 credits)

Humanities in Augustinian Tradition (3 courses; 9 credits)

CHS 1000	Ancient, Medieval and Renaissance Thought	3
PHI 1050	Introduction to Philosophy	3
THL 1050	Christianity: Traditions and Transitions	3

Civic and Ethical Leadership (3 courses; 9 credits)

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ETH 2050	Ethical Tradition	3
American Perspectives:		3
PSC, ECO, SOC, HIS		
Global Perspectives:		3
PSC, ECO, SOC, HIS		

Communication and Writing Skills (2 courses; 6 credits)

COM 1100	Public Speaking	3
ENG 1050	The Literary Experience	3

Cultural Appreciation (2 courses; 6 credits)

Fine Arts	3
Modern	3
Language/Culture,	
Theatre, Film, Literature	

Quantitative and Scientific Literacy (2 courses: 6 credits)

Natural Science	3
MAT 1260	3

Core Electives (3 courses; 9 credits)

Advanced Courses:	Advanced courses in these subjects must be numbered 2000 and above.	
History, Philosophy,		3
Theology, English,		3
Communication, Fine Arts,		3
Social Science		

Major (33 credits) 1, 2 The numbers 1 and 2 are footnotes

¹ Students with a major in "General Studies" must take advanced courses in one of the following areas: Humanities, Social Sciences, or Independent General Studies (self-defined academic program). *Humanities Area*: Art History, Classical Studies, Communication, Education, English, French, German,

Free Electives (42 credits)

2 Major courses for Information Systems and Leadership Studies will be added as the curriculum becomes effective.

Associate of Arts

The Associate of Arts Degree program is designed for students who are not seeking a baccalaureate degree but still wish to follow a specific curriculum. The Associate of Arts Degree program may be completed in half the time it normally takes to complete the baccalaureate program. The program requires 20 courses and a minimum of 60 credits. At least half of the credits (30) must be taken at Villanova. A 2.0 cumulative QPA is required to attain the A.A. Students completing the program with a 2.0 average may continue toward the Bachelor of Arts without loss of credit.

Subject	Credits
ENG 1050, Advanced Literature ¹	6
Foreign Language 1121, 1122	6
HIS 1050, Advanced History1	6
MAT 1210, 1220, 1230, 1235; or	
CSC 1010, 1020, 1030, 1040 (one course must be MAT)	6
PHI 1050, Advanced Philosophy ¹	6
THL 1050, Advanced Theology ¹	6
ETH 2050	3
Humanities Elective ²	3
Social Science Electives ³	6
Free Electives	12

¹Advanced courses in these subjects must be numbered 2000 and above.

Bachel or of Science in Accountancy

The B.S. in Accountancy requires a minimum of 41 courses and 123 credits. Details are to be found in the College of Commerce and Finance Section of this *Catalog*.

History, Peace and Justice, Philosophy, Spanish, Theology, Theatre. *Social Sciences Area*: Economics, Geography, Political Science, Psychology, Sociology.

²Humanities Electives: Art History, Classical Studies, Communication, English, History, Modern Languages, Philosophy, Theology and Religious Studies, Theatre.

³Social Science Electives: Economics, Geography, Political Science, Psychology, Sociology.

Bachelor of Science in Business Administration

The B.S. in Business Administration requires a minimum of 41 courses and 123 credits. The following courses are required.

FRESHMAN YEAR

Courses	credits	Courses	Credits
DIT 1006	3	ENG 1010	3
ECO 1001, 1002	6	MAT 1330, 1335	6
PHI 1050	3	CHS 1000, 1001	6
BL 1090	3		
SOPHOMORE YEAR			
ACC 1101, 1102	6	DIT 2010	3
Social Science ¹	3	HISTORY ²	3
COM 1101	3	THL 1050	3
ENG 1050	3	Free Elective	6
ETH 2050	3		

¹Social Science: choose from Geography, Sociology, Political Science, Psychology.

JUNIOR YEAR

FIN 1113	3	Major Courses	6
MGT 1102	3	Natural Science ³	3
DIT 1141	3	Non-business Electives ⁴	6
MKT 1137	3		
ECO 3109	3		

³Natural Science: choose from AST, BIO, CHM or PHY with corresponding lab.

SENIOR YEAR

Humanities ⁵	3	THL Elective	3
Major courses ⁶	12	Social/Natural	3
		Science ⁷ /History	
		Elective	
MGT 3301	3	Free Electives	6

²History: choose from any course in the department.

⁴Accounting majors take a third required accounting course during the junior year in place of a non-business elective course.

Part-time Studies

Certificate Programs

Several certificate programs are available through Part-Time Studies. Certificate programs are designed for individuals who already have bachelor's degrees but wish to develop expertise in a particular area. The following programs are available:

Accountancy Certificate. The Accountancy Certificate is designed to allow individuals who possess bachelor's degrees in liberal arts or other non-business majors to acquire expertise in accounting. Besides providing an educational opportunity for persons interested in securing careers in accounting in a diversity of environments in industry, business and government, the program also meets the needs of individuals who work in smaller businesses or who are self-employed and need knowledge of accounting practices to make critical business decisions. The certificate requires 24 accounting credits which the state of Pennsylvania currently mandates as the minimum requirement to sit for the CPA examination.

To be eligible for this certificate, a student must possess a bachelor's degree from an institution accredited by the appropriate regional accrediting association. Eight courses must be completed: ACC 1101, 1102, 2310, 2320, 2430, 2450, 2460, and 2470. Students are required to have any prerequisite courses necessary (indicated in the course description) for any particular course in the certificate program. A maximum of 2 courses, specifically Principles of Financial Accounting and Principles of Managerial Accounting, will be allowed in transfer. No other course substitutions will be allowed. All remaining upper-level courses in the certificate program must be completed at Villanova.

Business Administration Certificate. The Business Administration Certificate provides business-related knowledge and skills and is especially useful to individuals with bachelor's degrees in liberal arts or other non-business majors who wish to acquire expertise in business areas. The program also meets the needs of individuals who work in smaller businesses or who are self-employed. To be eligible for this certificate, a student must possess a bachelor's degree from an institution accredited by the appropriate regional accrediting association.

Eight courses must be completed: four specifically required and four electives from the approved list of electives, which represent more advanced treatments of the required courses. Students are required to have any prerequisite courses necessary (indicated under the course description) for any particular course in the certificate program. A maximum of 2 courses (6 credits) will be allowed in transfer. No other course substitutions will be allowed.

The required courses are: ACC 1101, 1102; ECO 1001 or 1002; MGT 1102;

The *elective courses* must be chosen from the following:

ACC 2310, 2320, 2340, 2430, 2450, 2460, 2470,

BL 1090, 2135. 2150, 2170, 2185

⁵Humanities: choose from Art History, Classical Studies, English, Modern Languages, Philosophy or Theatre.

⁶Accounting majors: it is recommended that BL 2185 be substituted for one free elective.

⁷Choose from Geography, Political Science, Psychology, Sociology, the Natural Sciences, or History.

DIT 1141, 2006, 2010, ECO 1001 or 1002 (the one not taken for the required course) 2110, 3106, FIN 1113, 2323 MGT 2153, 2155 MKT 2220, 2225, 2277, 2280

Secondary Teacher Certification

Students who possess a Bachelor's degree and want to pursue Teacher Certification on a part-time or full-time basis should apply through the Office of Part-Time Studies. The twelve subject areas which can be pursued at Villanova are: Biology, Chemistry, Communication, English, French, General Science, German, Latin, Mathematics, Physics, Social Studies, and Spanish. Details on Secondary Teacher Certification can be found in the College of Liberal Arts and Sciences section of this catalog.

Continuing Studies

The Office of Continuing Studies offers a great variety of non-credit educational opportunities. These offerings range from one day seminars to eight, twelve, and twenty-five week programs. Many are offered on Villanova's campus; others are delivered off-campus, at convenient Delaware Valley corporate training sites. Some of the programs offered include: Alcohol and Drug Counseling; Paralegal Education; Marketing Communications; Management Courses; Human Resource Management; Fund Raising; Payroll Administration; Commercial Real Estate; American Society of Training and Development Seminars; Project Management Training; and Microsoft Certified Systems Engineer Training.

Many of these programs lead to or prepare one for professional certification. For information on any of these programs or for a complete listing of all offerings, contact the Office of Continuing Studies (610/519-4310), 102 Vasey Hall.

Non-Matricul ated and Postgraduate Students

A student may enroll in Part-Time Studies without seeking a degree. Such students are classified as *non-matriculated students or postgraduate students*.

Postgraduate students are students who have already earned a bachelor's degree and are not seeking a second degree but merely taking undergraduate courses. These students are free to enroll in day or evening classes at Villanova through Part-Time Studies. Available space in day classes, however, may restrict their curricular options.

Non-matriculated students have not yet earned a bachelor's degree but seek to take college courses for a variety of reasons. Such students include those who:

□ Want to take college courses to develop a particular expertise or for purposes of personal enrichment.

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- ☐ Have applied for degree status but with current academic records have not been accepted. Such students may need to remedy deficiencies or establish their academic qualifications before applying or reapplying for degree programs. The conditions to be met before their records will be reevaluated are specified in the letter from the PTS Admissions Office.
- ☐ Have applied for degree status, but the credentials presented have been inadequate to enable the Admissions Committee to render a positive decision. These students are generally advised to pursue, as non-matriculated students, the program for which they requested admission, and to compile at least 18 credits, thus demonstrating their ability to complete the program requirements. After the students complete the 18 credits, they may request reevaluation.

Non-matriculated students or postgraduate students who wish to change to matriculated status must apply and complete the appropriate request form in the Part-Time Studies office. Students will be responsible to see that the PTS Admissions Committee has all necessary credentials for consideration of their requests (See the section on Admission, above).

Generally, non-matriculated students are urged to request degree status if possible rather than accumulate a large number of credits without any specific goals. Thirty credits should be taken as a guide in this regard.

Non-matriculated and postgraduate students must maintain good academic standing by carrying at least a 2.00 cumulative quality point average.

Flexible Enrollment Options

Fastforward at Villanova

Villanova's FastForward courses are designed to help adult students move forward quickly toward graduation. These courses are scheduled on seven Saturdays, either in the morning or afternoon, for a class period of 3 1/2 hours, and will be supplemented with on-line instruction. FastForward 1 is held from late August till the middle of October, FastForward 2 from mid-October to mid-December, FastForward 3 from mid-January through late February, and FastForward 4 from March to late April. FastForward courses may also be available on weekday evenings.

Each course can be completed in only half a semester but is a complete three-credit class with fewer on campus class hours.

Variable Course Load

Students can vary the number of courses taken each semester, depending on their professional and personal demands. An average course load for many part-time students is two per semester. By utilizing our FastForward courses, students may take a total of four courses in a semester: two during the regular semester, and one in each of the FastForward sessions. Students who take four courses in fall, four in spring, and two in the summer, will complete ten courses per year (the same amount as a full-time day student).

Evenings/Weekends

Students can choose classes that meet one night a week for 14 weeks, on Saturdays for seven weeks with additional online instruction (FastForward), or on Friday nights and Saturdays (one credit psychology seminars).

Summer Session

Students who wish to quicken the pace of their degree program can continue studies year-round by attending summer classes. Villanova offers an eight-week summer evening session that runs from the end of May through the end of July.

Distance Education

Because technology is an integral part of the modern college classroom, Villanova University also offers classes via Internet and video during Summer Session as well as during the academic year.

Academic and Student Policies and Information

With the exceptions and specifications listed below, students in Part-Time Studies are governed by the same regulations and policies that apply to students in the four undergraduate Villanova Colleges. See the general University section and the individual college sections of this Catalog for further information on all the following. NOTE: it is the responsibility of the student to know and observe all academic policies and regulations. Such policies may change without prior notice.

Academic Standing

To qualify for a bachelor's degree, a candidate must earn a cumulative quality point average of at least 2.00. Part-Time Studies students who wish to take courses in the day sessions must also maintain a 2.00 cumulative quality point average. A student's record will be submitted to the Academic Standing Committee for appropriate action (ranging from probation to dismissal) if the average has fallen below 2.0. If a student is placed on probation their course load may be restricted, and they must achieve a specified grade point average in that semester in order to continue to be eligible for enrollment.

Address Changes

Important mailings are sent to students throughout the academic year. It is essential that all students keep the PTS office informed of any change in their permanent home address and/or mailing address. Otherwise, we cannot be responsible for students not receiving material through the mail. Change of Address forms are available in the PTS office, 107 Vasey Hall. Students must also check their Villanova e-mail and Novasis accounts for information from the Registrar and other offices.

Advanced Academic Credit

In addition to the provisions for advanced academic credit listed in each College's section of this *Catalog*, Part-Time Studies students may gain credit by examination by means of the College Level Examination Program (CLEP) administered through the College Entrance Examination Board. Credit is awarded for the CLEP Subject Examinations and NOT for the General Examinations. The credit must be applicable to the student's program.

CLEP credits are considered transfer credits. A maximum of 60 transfer credits, which could include CLEP credits and credits from other colleges or universities, may be accepted toward a degree program.

A score of 60 or higher on an approved Subject Examination will be considered for credit. For further information, students should contact the Part-Time Studies office.

Advising

The Director and Assistant Director of Part-Time Studies are responsible for academic advising. They are available during evening or daytime hours. Appointments in the office or via telephone may be arranged through the Part-Time Studies office (610/519-4300).

Accountancy	Mr. James Johnson/Ms. Suzanne Allen
Accountancy Certificate	Ms. Suzanne Allen
Business Administration	Mr. James Johnson/Ms. Suzanne Allen
Business Administration	Ms. Suzanne Allen
Certificate	
Communication	Dr. B. Crable
Computer Science	Dr. John Matulis/Dr. Georgi Japaridze
Education, Teacher Certification	Dr. Connie Titone
English, Liberal Arts, History	Mr. James Johnson/Ms. Suzanne Allen
Human Services	Dr. Beverly Kahn
Non-Matriculated and Assoc. of	Mr. James Johnson/Ms. Suzanne Allen
Arts	
Postgraduates	Mr. James Johnson/Ms. Suzanne Allen

Each student is assigned an academic advisor who may be contacted for assistance in making those decisions that affect academic goals. The student should consult with an advisor at least once a semester to insure proper course selection and advancement in his program. Note: Although advisors will do all they can to assist students, the students themselves are responsible for securing accurate and timely information about policies and procedures affecting their academic programs, for understanding the requirements of degree programs they choose, for planning for the orderly fulfillment of those requirements, and for keeping accurate records of their academic progress and transactions. Additional

Part-time Studies

information and policies may be found in the University section and in the individual college sections of this *Catalog*.

Auditing

Students who are not working for college credits may enroll for audit status with the consent of the Director of Part-Time Studies and the student's academic advisor. Additional information may be found in other sections of this catalog.

Change of Degree Program

A student who wishes to change degree programs must request the change on a form available in the Part-Time Studies office.

Class Status

Matriculated students (those who have been accepted into a bachelor's degree program) with under 30 credits *completed* are considered Freshmen; with 30-59 credits, Sophomores; with 60-89 credits, Juniors; and with 90 credits or more, Seniors.

Dean's List

To be included on the Dean's List, a student must be matriculated in a degree program, must achieve a 3.5 GPA, and must carry at least 6 credits per semester, none of which can be a satisfactory/unsatisfactory course. Letters of congratulations are mailed to each student who achieves this high honor. If a student so desires a letter can also be sent to his or her employer. The Dean's List pertains to the fall and spring semesters.

Drop and Add

Students may make changes in their schedules during the Drop and Add period -- the first five class days of each semester. To eliminate a course, add a course, or both, a student must obtain a drop/add form in the PTS office, complete the information, and secure the academic adviser's signature. To change only evening courses, the student may leave the form in the PTS office. To change day courses, students must take the completed and signed form to the Registrar's Office or on-line, via Novasis. The Registrar's Office then will send a revised copy of the schedule. If the information is not accurate, the student should contact the PTS office for assistance. *NOTE:* In order not to be charged for a class, it must be

dropped officially from the schedule *before* the start date of classes listed in the Academic Calendar.

Financial Planning

Villanova offers several easy-payment options to our students as well as payment by Discover, Visa or MasterCard. Students may also elect to use an alternate payment plan, for a small fee, whereby they pay their tuition in scheduled increments over the course of the semester.

Another valuable resource for students can be their employers, many of whom will pay tuition for their employees who attend Villanova. Students who are employed either full or part-time should check their company's policy and take advantage of that benefit if it is available to them.

The Villanova Tuition Employer Billing Plan is an agreement between the employer of a Villanova student and Villanova University. With this agreement, the employer guarantees that Villanova will receive tuition re-imbursement payments for the employee and in turn, Villanova will bill the employer, not the individual student. Villanova has a variety of employers who take advantage of this plan for their employees.

A list of scholarships, local and national, for adult part-time students is available in the PTS office or on line at www.parttime.villanova.edu..

Graduation Application

A student who expects to receive a degree is required to make official application for the degree no later than November 1 for May completion, April 1 for September completion, and August 1 for December completion. A prospective graduate card can be obtained from the Part-Time Studies Office or on line at www.parttime.villanova.edu. *This is an extremely important procedure*. The student's advisor will review his or her record and verify the completion of all graduation requirements.

Parking

Parking permits may be purchased at walk-in registration or at the Department of Public Safety (Farrell Hall, 824 Lancaster Avenue). Instructions for web based parking registration may be found at publicsafety.villanova.edu/parking.html. Further information is available from the University Parking Office (610/519-6990). All students who utilize Villanova parking lots must have a current parking permit.

Personal Safety

Students are requested to report all *Crimes* and *Emergencies* immediately to the Department of Public Safety (610/519-4444). Individuals who desire an escort or other assistance should call 610/519-6979.

Registration

All new students who have been accepted by Part-Time Studies and currently enrolled students in good standing are eligible for registration. It is the student's responsibility to see that they select courses in accordance with the requirements of their program and in consultation with their academic advisor.

Students are encouraged to register early, whether in person, via Novasis, by mail, or by *Fax*. Further information may be obtained from the fall or spring brochures, summer catalog, the Part-Time Studies web site at www.parttime.villanova.edu, or by contacting the Part-Time Studies office.

Student Programs

Part-Time Studies offers assistance to help students become acquainted with the resources on campus and to aid in the transition to academic life. In the past the following programs have been scheduled: Orientation, Campus Tour, College Survival Skills (study skills workshop), Library Tour, and Career Services workshops. All of these resources are now available to part-time students via the PTS web site at www.parttime.villanova.edu. New programs can be added as the need arises. Suggestions are always welcome. Information on various programs is available from the PTS office.

Student Activities

Villanova offers approximately 150 different student organizations which fall under the jurisdiction of the Office of Student Development, located in 214 Dougherty Hall, 610/519-4210. For information on the various groups, visit or contact that office. PTS students are allowed to participate in any activity on campus except a varsity level sport.

The *NiteLine*, the newspaper published for PTS students, serves as a vehicle for disseminating news of interest to the Part-Time Studies student body.

Transfer of Credits

Transfer provisions are described under "Admissions" in the University section of this *Catalog*. Applications for transfer into Part-Time Studies should be made in the Part-Time Studies Office.

PTS students who wish to take courses at other institutions should seek the approval of the Director or Assistant Director of PTS as to the particular institution they wish to attend and as to the particular course(s) they wish to take.

University Senate

The University Senate, an advisory group to the University President and the Board of Trustees, includes representation from Part-Time Studies. Junior class standing is a requirement for eligibility to serve as the Part-Time Studies representative. Students who may be interested in serving in the Senate should contact the Director, Part-Time Studies.

Withdrawal from a Course

After the drop/add period, which is the first week of classes, any student who is unable to complete a course and wishes to terminate attendance in that course must do so through the official withdrawal procedure. Discontinuance of attendance or notice to the instructor does not constitute official withdrawal.

Students are required to notify the Part-Time Studies office promptly, either in writing or by completing the appropriate form in the Part-Time Studies office. A phone call to the PTS office is not acceptable. If the student withdraws in person, the date on the form will be considered the official withdrawal date. If the student withdraws via letter, the postmark date on the letter will be considered the official withdrawal date.

After the last date for Authorized Withdrawal (the Friday after mid-term break), a student may petition for withdrawal without penalty only for valid reasons. To do so, a student must submit a signed Request for Authorized Withdrawal, signed by the professor and/or laboratory instructor, along with the standard form for the Dean's review.

If a student is granted the Authorized Withdrawal, the course remains on his transcript but the designation WX will appear in the grade column. WX signifies that the withdrawal was approved, and there is no grade given or calculated for that course. A student who leaves class without officially withdrawing will continue to incur absences and will receive the final grade of Y (unauthorized withdrawal) which is calculated as an F in the grade point average.

Directory

Full-time Faculty

- EDMUND J. DOBBIN, O.S.A., 1987; A.B., 1958, Villanova University; M.A., 1962, Augustinian College; M.S., 1964; S.T.L., 1968, The Catholic University of America; S.T.D., 1971, University of Louvain (Belgium). *President; Professor, Theology and Religious Studies*
- TEMERSHAH AHMADI, 2001; B.S.,1988, California State University, Hayward; M.S., 1993, Ph.D., 1996, University of California, Los Angeles. *Assistant Professor, Chemistry*
- CHIJI AKOMA, 2001; B.A., 1988, University of Calabar, Nigeria; M.A., 1991, University of Ibadan, Nigeria; Ph.D., 1998, Binghamton University. Assistant Professor, English
- CAROL AMBRUSTER, 1987; B.S., 1971, Northeastern University; Ph.D., 1984, University of Pennsylvania. Assistant Professor, Astronomy and Astrophysics
- SEEMEE ALI, 2001, B.A., 1989, Austin; M.A., 1998, Ph.D., 2000, University of Dallas. *Post Doctoral Fellow, Core Humanities*
- MOENESS G. AMIN, 1984; B.S.E.E., 1976, Cairo University, Egypt; M.S.E.E., 1980, University of Petroleum and Minerals, Saudi Arabia; Ph.D., 1984, University of Colorado. *Professor, Electrical and Computer Engineering*
- JAMES W. ARRISON, 1992; B.S., 1983, Villanova University; Ph.D., 1990, University of Pennsylvania. Assistant Professor, Physics
- DEBRA A. ARVANITES, 1983; B.S., State University of New York, 1977; M.B.A., 1979; Ph.D., 1982, Rensselaer Polytechnic Institute. *Assistant Professor, Management*
- THOMAS ARVANITES, 1989; B.A., 1977, M.A., 1979, Ph.D., 1986, State University of New York at Albany. Associate Professor, Sociology
- CHERYL C. ASHER, 1984; B.A., 1977, Boston College; Ph.D., 1981, University of Pennsylvania. Assistant Professor, Economics
- CHARLES E. ASHLEY, 1988; B.S., 1981, University of Toledo; M.S., 1983, Rensselaer Polytechnic Institute; Ph.D., 1986, Rensselaer Polytechnic Institute. Assistant Professor, Mathematical Sciences
- HASHEM ASHRAFIUON, 1988; B.S., 1982, M.S., 1984, Ph.D., 1988, State University of New York at Buffalo. *Associate Professor, Mechanical Engineering*
- EARL D. BADER, 1968; B.A., 1963, Ohio State University; M.A., 1965, Ph.D., 1969, Indiana University. Assistant Professor, English
- WILBER W. BAKER, 1968; A.B., 1956, Grinnell College; M.S., 1959, Iowa State University; Ph.D., 1964, Oregon State University. *Associate Professor, Biology*
- RONALD A. BALSAMO, 1998; B.S., 1984, Delaware Valley College; M.S., 1986, Washington State University; Ph.D., 1994, University of California, (Riverside). *Assistant Professor, Biology*
- ANIL K. BAMEZAI, 2002; B.S., 1979, M.S., 1982, Jammu University; Ph.D., 1987, All India Institute of Medical Sciences. *Assistant Professor, Biology*
- HAE-KYONG BANG, 1997; B.A., 1983, Ewha Women's University; M.A., 1986, University of Texas at Austin; Ph.D., 1993, Michigan State University. *Assistant Professor, Marketing*

- DAVID M. BARRETT, 1990; B.A., 1973, University of Notre Dame; M.A., 1985, University of Essex (England); Ph.D., 1990, University of Notre Dame. *Associate Professor, Political Science*
- NOAH P. BARSKY, 1998; B.S./M.S., 1992, Pennsylvania State University; Ph.D., 1998, University of Connecticut. Assistant Professor, Accountancy
- THOMAS L. BARTLOW, 1968; B.S., 1963, State University of New York at Albany; M.S., 1966, Ph.D., 1969, State University of New York at Buffalo. Assistant Professor, Mathematical Sciences
- JOSEPH BASSO, 1999; B.A., 1984, M.A. 1988, Rowan University; Ph.D., 1992, Texas A&M University; Assistant Professor, Communication.
- AARON M. BAUER, 1988; B.S., 1982, Michigan State University; Ph.D., 1986, University of California, Berkeley. *Professor*, *Biology*
- JOSEPH W. BAUSCH, 1993; B.S., 1985, University of Evansville; Ph.D., 1990, University of Southern California. *Assistant Professor, Chemistry*
- ROBERT E. BECK, 1966; B.S., 1963, Harvey Mudd College; M.A., 1965, Ph.D., 1969, University of Pennsylvania. *Professor, Computing Sciences*
- ELAINE E. BELETZ, 1983; B.S.N., Fairleigh Dickinson University, 1970; M.A., New York University, 1974, M.Ed., 1978; Ed.D., 1979, Columbia University. *Associate Professor, Nursing*
- MARILYN R. BELKIN, 1992; B.A., 1970, M.S., 1974, Carnegie-.Mellon University. Assistant Professor; Mathematical Sciences
- GUSTAVO BENAVIDES, 1989; B.A., 1971, Universidad de San Marcos (Lima); M.A., 1977, Ph.D., 1982, Temple University. Associate Professor, Theology and Religious Studies
- EILEEN BERENS, 1990; B.A., 1957; Immaculata College; M.A, 1968, Ph.D., 2000, Temple University, Assistant Professor, Communication
- JAMES M. BERGQUIST, 1963; B.A., 1955, University of Notre Dame; M.A., 1956, Ph.D., 1966, Northwestern University. Professor Emeritus, History
- CAROL A. BESSEL, 1995; B.S., 1988; Ph.D., 1993, State University of New York at Buffalo. *Associate Professor, Chemistry*
- MICHAEL BERTHOLD, 1987; B.A., 1977, Cornell University; M.A., 1979, Ph.D., 1987, Harvard University. Associate Professor, English
- MORGAN BESSON, 1984; B.S., 1975, Villanova University; M.A., 1979, Boston University; Ph.D., 1986, Lehigh University. *Assistant Professor, Physics*
- JOSEPH BETZ, 1966; B.S., 1961, St. Joseph's University; M.A., 1964, University of Chicago; M.A., 1966, Villanova University; Ph.D., 1973, University of Chicago. *Professor, Philosophy*
- EMILY M. BINNS, 1977; A.B., 1963, College of Chestnut Hill; M.A., 1966, Ph.D., 1969, The Catholic University of America. *Professor Emeritus, Theology and Religious Studies*
- SCOTT BLACK,1999; B.A., 1988, McGill University; M.A., 1995, Ph.D., 1999 The Johns Hopkins University. Assistant Professor, English
- PAMELA BLEWITT, 1976; B.A., 1967, University of Rochester; M.A., 1969, Teachers College, Columbia University; Ph.D., 1977, University of Rochester. *Professor, Psychology*
- ELLEN BONDS, 1997; B.A., 1974, University of Louisville; M.A., 1983, West Chester University; Ph.D., 1996, Lehigh University. *Instructor, English*
- P. GREG BONNER, 1985; A.B., 1968, Boston College; M.A., 1974, Ph.D., 1984, Temple University.

 Associate Professor, Marketing

- VALERIE BOOTH, 2002; B.A., 1985, McGill University; M.A., 1990, George Washington University; Ph.D., 1996 Emory University. Visiting Assistant Professor, Core Humanities
- JAMES P. BORDEN, 1986; B.A., 1979, East Stroudsburg University; M.B.A., 1981, Carnegie-Mellon University; Ph.D., 1986, Drexel University. Associate Professor, Accountancy
- SHERYL PERLMUTTER BOWEN, 1987; B.A., 1978, Pennsylvania State University; M.A., 1982, University of North Carolina; Ph.D., 1986, University of Massachusetts. *Associate Professor, Communication*
- PATRICIA K. BRADLEY, 1997; B.S.N., 1977, Temple University; M.S.N., 1986, Ph.D., 1998, University of Pennsylvania. *Assistant Professor, Nursing*
- SARAH VAUGHAN BRAKMAN, 1993; B.A., 1986, Mount Holyoke College; M.A., 1990, Ph.D., 1994, Rice University. *Assistant Professor, Philosophy*
- REBECCA J. BRAND, 2002; B.A., 1996, Vassar College; M.S., 1998, University of Oregon; Ph.D., 2002, University of Oregon. *Assistant Professor, Psychology*
- WAYNE G. BREMSER, 1974; B.S., 1965, M.B.A., 1966, Drexel University; Ph.D., 1974, University of Pennsylvania. *Professor, Accountancy*
- WALTER BROGAN, 1986; B.A., 1968, Catholic University; M.A., 1973, Northern Illinois University; Ph.D., 1981, Duquesne University. *Professor, Philosophy*
- VICTOR D. BROOKS, JR., 1974; B.A., 1968, La Salle College; M.S., 1969, Ed.D., 1974, University of Pennsylvania. *Professor, Education and Human Services*
- JANIE BROWN, 1980; B.S., 1966, Plattsburgh State University College; Ed.M., 1973, Ed.D., 1979, Teachers College, Columbia University. Associate Professor, Nursing
- MICHAEL BROWN, 1985; B.A., 1980, University of Michigan; Ph.D., 1985, University of California, Berkeley. *Professor, Psychology*
- ELIZABETH BRUDERLE, 1990; B.S.N., 1988, Neumann College; M.S.N., 1990, Villanova University, 2002, D.N.Sc., Widener University. *Clinical Assistant Professor, Nursing*
- KEVIN BUCKLEY, 1997; B.E.E., 1976, M.S.E.E., 1980, Villanova University; Ph.D., 1986, University of Southern California. *Professor, Electrical and Computer Engineering*
- JULIA BUKOWSKI, 1985; B.S., 1974, University of Pennsylvania; D.I.C., 1976, Imperial College, University of London; Ph.D., 1979, University of Pennsylvania. Associate Professor, Electrical and Computer Engineering
- MICHAEL E. BURKE, 1967; A.B., 1964, Holy Cross College; M.A., 1967, Ph.D., 1971, Duke University. Associate Professor Emeritus, History
- DONALD X. BURT, O.S.A., 1967-72, 1982; A.B., 1952, Villanova University; M.A., 1955, Ph.D., 1960, The Catholic University of America. *Professor Emeritus, Philosophy*
- PETER BUSCH, 2002; B.S., 1991, Michigan State University, Ph.D., 1999, University of Toronto. Visiting Assistant Professor, Core Humanities
- THOMAS W. BUSCH, 1964; B.A., 1960, St. Joseph's College (Indiana); M.A., 1962, Ph.D., 1966, Marquette University. *Professor, Philosophy*
- DAVID F. BUSH, 1972; B.A., 1965, University of South Florida; M.A., 1968, University of Wyoming; Ph.D., 1972, Purdue University. *Professor, Psychology*
- RICHARD G. CANNULI, O.S.A., 1979; B.F.A., 1973, Villanova University; M.F.A., 1979, Pratt Institute. *Professor, Theatre*
- MARY ANN CANTRELL, 1993; B.S.N., 1983, Duquesne University; M.S.N., 1989, Villanova University, Ph.D., 1997 University of Maryland. Assistant Professor, Nursing

- THERESA CAPRIOTTI, 1995; B.S.N., 1978, State University of New York; D.O., 1983, New York College of Osteopathic Medicine; M.S.N., 1995, N.P., 1999, Villanova University. *Clinical Assistant Professor, Nursing*
- JOHN D. CAPUTO, 1968; B.A., 1962, La Salle College; M.A., 1964, Villanova University; Ph.D., 1968, Bryn Mawr College. David R. Cook Endowed Chair, Professor, Philosophy
- FRED J. CARRIER, 1966; B.A., 1952, Coe College; M.A., 1958, Northwestern University; Ph.D., 1968, University of Wisconsin. *Associate Professor Emeritus, History*
- JOHN M. CARVALHO, 1986; B.A., 1976, University of California; M.A., 1979, Ph.D., 1987, Duquesne University. Associate Professor, Philosophy
- MICHELLE CASARIO, 1991; B.A., 1984, Elizabethtown College; M.A., 1987, Ph.D., 1991, Northeastern University. Assistant Professor, Economics
- ROBERT J. CASEY, 1985; B.M.E., 1944, Villanova University; M.S.M.E., 1951 University of Pennsylvania. *Industrial Professor, Mechanical Engineering*
- LILLIAN N. CASSEL, 1987; B.A., 1968, M.S., 1973, Ph.D., 1987, University of Delaware. *Professor, Computing Sciences*
- EDUARD G. CASILLAS, 1999; B.A., 1982, Bradley University, Ph.D., 1996, The Johns Hopkins University, Assistant Professor, Chemistry
- ANTHONY H. CATANACH, JR., 1998; B.B.A., 1975, M.A. 1991, University of New Mexico; Ph.D., 1994, Arizona State University. Associate Professor, Accountancy
- ROBERT H. CAVERLY, 1997; B.S.E.E., 1976, M.S.E.E., 1976, North Carolina State University; Ph.D., 1983, The Johns Hopkins University. *Associate Professor, Electrical and Computer Engineering*
- ANGELA M. CERINO, 1980; B.A., 1972, J.D., 1976, Temple University. Assistant Professor, Business Law
- RONALD A. CHADDERTON, 1981; B.S.C.E., 1968, M.S.C.E., 1974, Bucknell University; Ph.D., 1976, Carnegie-Mellon University; P.E. (PA). Edward A. Daylor Endowed Chair, Professor and Chair, Civil and Environmental Engineering.
- ARTHUR B. CHAPPELL, O.S.A., 1988; B.S., 1964, Villanova University; M.A., 1970, Augustinian College; M.A., 1972, Catholic University of America; S.T.L., 1986, S.T.D., 1987, Pontificia Universitas a S. Thoma Aq. in Urbe (Rome, Italy). Assistant Professor, Theology and Religious Studies
- EDWARD S. CHAR, 1998; B.E.E., 1996, M.S.E.E., 1998, Villanova University; *Instructor, Electrical and Computer Engineering*.
- PEGGY E. CHAUDHRY, 1991; B.S., 1980; University of Wisconsin-Stout; M.B.A., 1985, University of Wisconsin-LaCrosse; Ph.D., 1992, University of Wisconsin-Madison. Assistant Professor, Management
- SOHAIL S. CHAUDHRY, 1991; B.Sc.M.E., 1974, Mosul University; M.S., 1977, M. Phil., 1979, Ph.D., 1985, Columbia University. *Professor, Decision and Information Technologies*
- CHARLES L. CHERRY, 1968; A.B., 1964, Loyola College; M.A., 1966, Ph.D., 1968, The University of North Carolina. *Professor*, *English*
- YINLIANG CHI, 1986; B.A., 1957, Shanghai College of Finance and Economics; M.A., 1961, East China University. Assistant Professor, Classical and Modern Languages and Literatures
- STEVEN CHIACCHIERE, 1988; 1983, B.S., Pennsylvania State University; 1987, M.A., Villanova University. *Instructor, Mathematical Sciences*

- G. LEE CHRISTENSEN, 1976; B.C.E., 1960, Villanova University; M.S., 1968, Ph.D., 1973, The Johns Hopkins University; P.E. (MN). Professor Emeritus, Civil and Environmental Engineering.
- THERESA CHRISTIAN; Diploma 1938, Freidman Hospital, B.S., 1941, Loyola University; B.S.N., 1943, University of Toronto; M.S.N., 1947, University of Chicago. *Associate Professor-Emeritus, Nursing*
- JAMES J. CHRISTY, 1967; B.A., 1963, The Catholic University of America; M.A., 1965, Villanova University; Ph.D., 1973, Stanford University. Professor, Theatre
- THOMAS F. CHUBB, 1993; B.A., 1985, LaSalle University; M.A., 1993, Villanova University. Instructor, Biology
- YOUNG W. CHUN, 1979; B.S., 1972, Seoul National University; M.S., 1976, Ph.D., 1978, University of Iowa. Associate Professor, Mechanical Engineering
- Q.B. CHUNG, 1998; B. S. 1982, Seoul National University; M.B.A., 1987, State University of New York at Albany; Ph.D., 1992, Rensselaer Polytechnic Institute. Associate Professor, Decision and Information Technologies
- SUZANNE H. CLAIN, 1987; B.A., 1976, Wesleyan University; M.A., 1979, Ph.D., 1984, Princeton University. Associate Professor, Economics
- KEVIN D. CLARK, 2001; B.S., 1989, University of Baltimore; M.B.A., 1991, Ph.D., 2001, University of Maryland. Assistant Professor, Management
- ALVIN A. CLAY, 1955; B.S., 1951, Villanova University; M.B.A., 1957, Drexel University.

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