

## Departments and Programs

---

---

### Aerospace Studies

---

---

**Faculty:** Hopkins, Alzate, Boyd, Sutton  
**Website:** [www.csc.vill.edu/~afrotc/index.htm](http://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 Program

---

---

**Director:** Dr. Maghan Keita  
**Office:** 448 St. Augustine Center, tel. 610/519-4661  
**Website:** [www.artsci.villanova.edu/africanastudies/](http://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 available in any given semester is available from the Africana Studies Office, St. Augustine 451.

**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

## College of Liberal Arts and Sciences

### Sample Electives:

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

---

---

<b>Director:</b>	TBA
<b>Office:</b>	104 St. Augustine Center, tel. 610/519-7325
<b>Website:</b>	<a href="http://www.artsci.villanova.edu/arabislamic/">www.artsci.villanova.edu/arabislamic/</a>

**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 104 St. Augustine Center (610/519-7712 or 7325).

---

---

## Army ROTC

---

---

**Faculty:** Lieutenant Colonel Latsha, Major Keim, Captain Karbel, Captain Limmer, Master Sergeant Pearson, Staff Sergeant Ortega

**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 this *Catalog*

---

---

## Art History

---

---

**Chair:** Dr. Adele Lindenmeyr  
**Office:** 403 St. Augustine Center, tel. 610/519-4660  
**Website:** [www.history.villanova.edu/arhistory/](http://www.history.villanova.edu/arhistory/)  
**Course descriptions:** [www.artsci.villanova.edu/courses/art\\_history.html](http://www.artsci.villanova.edu/courses/art_history.html)

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

**MAJOR:** Art History majors must complete AAH 1101 and AAH 1102 (History of Western Art, Ancient to Medieval and Renaissance to Contemporary World) plus one Studio Art Course and seven upper-level art history courses. These seven upper-level courses must include one course in each of the four general areas of art history (Ancient, Medieval, Renaissance, Modern); an art history elective; a Senior Seminar (4000-level course); and a Senior Thesis. 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

---

---

<b>Chair:</b>	Dr. George P. McCook
<b>Office:</b>	457 Mendel, tel. 610/519-4820
<b>Professors:</b>	Guinan, McCook, Sion
<b>Associate Professors:</b>	Maloney, Fitzpatrick
<b>Assistant Professor:</b>	Ambruster
<b>Instructor:</b>	DeWarf
<b>Website:</b>	<a href="http://www.astronomy.villanova.edu">www.astronomy.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/astronomy.html">www.artsci.villanova.edu/courses/astronomy.html</a>

**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, 4200, 4202, and 3 Physics courses (9-12 credits) numbered above 3000. Recommended are PHY 4000, 4002.

**MINOR:** 22 credits, including AST 2120, 2121, 2122, 2133, 2134, and three (3) of the following: AST 3141, 3142, 3152, 3162, 4121, 4122; MET 2001. *NOTE: prerequisites in Math and Physics must be met to gain admission to these courses.*

---

---

## Biology

---

---

<b>Chair:</b>	Dr. Russell M. Gardner
<b>Professors:</b>	Bauer, Desmond, Gardner, Maksymowych, Orkwiszewski, Stephens, Wieder
<b>Associate Professors:</b>	Baker, Curry, Dollahon, Olson, Knepper, Russell, Webb
<b>Assistant Professors:</b>	Balsamo, DiBenedetto, Friede, Russo, Shurer,
<b>Instructor:</b>	Chubb
<b>Office:</b>	152 Mendel, tel. 610/519-4830
<b>Website:</b>	<a href="http://www.bio.villanova.edu">www.bio.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/biology.html">www.artsci.villanova.edu/courses/biology.html</a>

**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.*

## Villanova University

**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.*

---

---

# Chemistry

---

---

<b>Chair:</b>	Dr. Barry S. Selinsky
<b>Professors:</b>	Birdsall, Doyne, Edwards, Giuliano, Wójcik
<b>Associate Professors:</b>	Bessel, Ludwig, Selinsky, Spritzer
<b>Assistant Professors:</b>	Ahmadi, Bausch, Casillas, Kassel, Rucker
<b>Office:</b>	215 Mendel Hall, tel. (610) 519-4840
<b>Website:</b>	<a href="http://www.chemistry.villanova.edu">www.chemistry.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/chemistry.html">www.artsci.villanova.edu/courses/chemistry.html</a>

**MAJOR:** CHM 1000; 1311/1301; 1512/1502; 3511/3501; 3211/3201; 3212/3202; 3311/3301; 3411/3401; 3412/3402; 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.

**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 8-10 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 and Modern Languages and Literature

---

---

<b>Interim Chair:</b>	Prof. Edward F. Jaworowski
<b>Professors:</b>	Helmetag, Hunt, Juliá, Ogden,
<b>Associate Professors:</b>	Omran, Pastore, Peraita, Poeta, Rigaud, Trujillo
<b>Assistant Professors:</b>	Chi, Hamada, Hart, Jaworowski, Nakagawa, Waggaman
<b>Office:</b>	303 St. Augustine Center, 610/519-4680
<b>Website:</b>	<a href="http://www.classicalmodernlanglit.villanova.edu/">www.classicalmodernlanglit.villanova.edu/</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/languages.html">www.artsci.villanova.edu/courses/languages.html</a>

**MAJORS:** Majors in French, German 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; Spanish 2211, 2212 and 3950 are required of all majors in Spanish. In addition, majors in French and German are required to take French 3950 or German 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 these 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 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.

---

---

## Cognitive Science Program

---

---

**Director:** Dr. Thomas C. Toppino  
**Office:** 331 Tolentine Hall, 610/519-5432  
**Website:** [www.artsci.villanova.edu/cogscience/](http://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 4605            Neurobiology  
BIO 6509            Directed Research (with Cognitive Science Program approval)  
CSC 4170            Theory of Computation  
CSC 4380            Information Visualization  
CSC 4730            Human-Computer Interaction  
CSC 5900 & CSC 5930            Special Topics (with Cognitive Science Program approval)  
CSC 5993            Independent Study (with Cognitive Science Program approval)  
ECE 3420            Expert Systems Programming  
ECE 5445            Introduction to Neural Networks  
PHI 2950            Topics in Philosophy (with Cognitive Science Program approval)  
PHI 3400            Theories of Knowledge

## College of Liberal Arts and Sciences

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

---

---

<b>Chair:</b>	Dr. Teresa A. Nance
<b>Professor:</b>	Lynch
<b>Associate Professors:</b>	Bowen, Mackey-Kallis, Michal-Johnson, Rose, Shyles
<b>Assistant Professors:</b>	Basso, Berens, Crable, Moore, O=Leary, Wilke, Woodard
<b>Instructors:</b>	D=Angelo, Linkins
<b>Website:</b>	<a href="http://www.communication.villanova.edu">www.communication.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/communication.html">www.artsci.villanova.edu/courses/communication.html</a>

**MAJOR:** Thirty (30) credit hours are required. COM 1000, Survey of Communication Studies, and COM 1100, Public Speaking, are prerequisites which must be taken in the sophomore year. A minimum G.P.A. of 2.5 is required. COM 5000, Communication Research, should be taken in the junior year or prior to taking COM 5050, Senior Project.

After completing COM 1000 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

Villanova University

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 courses from the major course offerings.

---

---

## Comprehensive Science

---

---

**Director:** Dr. Frederick Hartmann  
**Office:** 451 St. Augustine Center, 610/519-4661  
**Website:** [www.comprehensivesci.villanova.edu](http://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 1024	Computing for Scientists
BIO 2105, 2106	General Biology I and II
CHM 1151, 1152	General Chemistry I and II
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
<b>OR</b>	
PHY 2414/2415	University Physics: Thermodynamics and Lab

One Mathematics or Computing Sciences elective selected from the following:

CSC 1051	Algorithms and Data Structures I
MAT 2310	Statistics for Experimenters
MAT 2705	Differential Equations with Linear Algebra
MAT 4310	Statistical Methods

At least eight science electives and appropriate laboratories chosen in consultation with the student's advisor.

## College of Liberal Arts and Sciences

The degree program allows for students to design a concentration in a particular discipline or an interdisciplinary field.

### **Areas of Concentration:**

Biological-Chemistry

Chemistry

Environmental Studies

Mathematics

Pre-Medical

Physics

Biology

Cognitive Science

Geography

Meteorology

Pre-Optical

---

---

## Computing Sciences

---

---

**Chair:**

Dr. Robert E. Beck

**Professors:**

Beck, Cassel, Fleischman

**Associate Professors:**

Goelman, Hardt, Levitin, Lewis, Joyce, Soong

**Assistant Professors:**

Gormley, Japaridze, Klassner, Papalaskari,

**Office:**

161 Mendel Science Center, tel. 610/519-7307

**Website:**

[www.csc.villanova.edu](http://www.csc.villanova.edu)

**Course descriptions:**

[www.artsci.villanova.edu/courses/computing.html](http://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; MAT 1500, 1505, and 2310 plus four departmentally approved elective courses in computer science; 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 office. 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).

## Villanova University

**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.

**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 office.

**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.

---

---

## Core Humanities

---

---

**Director:** Dr. John A. Doody  
**Assistant Director:** Dr. Paul Wright  
**Office:** 104 St. Augustine Center, tel. 610/519-7325  
**Website:** [www.artsci.villanova.edu/corehumanities/](http://www.artsci.villanova.edu/corehumanities/)

The College of Liberal Arts and Sciences is committed to the view that the humanities play an essential role in university education by stimulating intellectual wonder, broadening cultural awareness, helping us examine moral values, and strengthening our search for a just and humane society. All Arts and Sciences students have an intensive exposure to the humanities in their Core Humanities Seminar in each semester of the first college year.

---

---

## Criminal Justice Program

---

---

**Director:** Dr. William Waegel  
**Office:** 204 St. Augustine Center, 610/519-4740  
**Website:** [www.artsci.villanova.edu/criminaljustice/](http://www.artsci.villanova.edu/criminaljustice/)

The Criminal Justice Concentration is an interdisciplinary program designed to provide students with an understanding of the causes of crime, societal reactions to crime and the nature and application of criminal law.

## College of Liberal Arts and Sciences

**CONCENTRATION:** Six courses, including Criminology (SOC 3000), Philosophy of Criminal Justice (PHI 2140), and a course focusing on due process issues from the list below. Students are *strongly encouraged* to take SOC 3000 as their first course.

SOC 3000

Criminology

PHI 2140

Philosophy of Criminal Justice

Due Process issues, at least one of the following two courses:

PSC 3500

The Supreme Court and Criminal Justice

SOC 4100

Criminal Procedure

At least three of the following:

SOC 2200

Sociology of Deviance

SOC 3020

Criminal Law and the Community

SOC 3100

Juvenile Delinquency

SOC 3200

Penology and Corrections

SOC 3300

Sociology of Law

PSC 3600

Criminal Justice System

CJ 3000

Introduction to Victimology

SOC 4100

Special Topics:Criminal Justice

---

---

## Economics

---

---

**Chair:**

Dr. Edward J. Mathis

**Professors:**

DeFina, Mathis, Thanawala, Zech

**Associate Professors:**

Donziger, Clain, Farrell, Giordano, Kroch, Wolnicki, Zaleski

**Assistant Professors:**

Alexandrin, C. Asher, Casario, Mao, Matthews, Taylor, Walsh, Webster

**Office:**

342 Bartley, tel. 610/519-4370

**Website:**

[www.cf.villanova.edu/economics/](http://www.cf.villanova.edu/economics/)

**Course descriptions:**

[www.artsci.villanova.edu/courses/economics.html](http://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 MAT 1330 (calculus) 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 the Sophomore or Junior year majors are required to take MGT 1006. In addition, students must successfully complete: ECO 2101, 2102; STA 2107, 2108; and 15 elective Economics credits.

**MINOR:** Students must take MAT 1330 (calculus), and complete a total of 18 credits consisting of ECO 1001, 1002, 2101, 2102, and 6 economics elective credits, excluding ECO 2110.

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

---

---

## Education and Human Services

---

---

<b>Chair:</b>	Dr. Connie Titone
<b>Professors:</b>	Brooks, Heitzmann, Weinrach
<b>Associate Professor:</b>	Davis, Durnin, Jacobs, Titone
<b>Assistant Professors:</b>	Fierros, Hill, Kahn, Lafferty, Monnig, Murray, Nichols, Ramirez, Rosa, Schussler
<b>Office:</b>	302 St. Augustine Center, tel. 610/519-4620
<b>Website:</b>	<a href="http://www.education.villanova.edu">www.education.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/education.html">www.artsci.villanova.edu/courses/education.html</a>

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 \* 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, 3263, 4220, 4245, 4301.

### **HUMAN SERVICES PROGRAM**

The Human Services program 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 program will allow the student to concentrate on specific areas related to government and human service agencies.

## College of Liberal Arts and Sciences

**MAJOR:** The requirements for a major in Human Services include the courses listed below in addition to Psychology 1000, 2200, 2500, 2600, and elective; Sociology 1000, 2200, 3600, 2300, and an elective which lead to a minor in Psychology and Sociology, respectively.

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

---

---

# English

---

---

<b>Chair:</b>	Dr. Charles L. Cherry
<b>Professors:</b>	Cherry, Delano, McDiarmid, Nolan, Sherry, Thomas, Wilkinson
<b>Associate Professors:</b>	Berthold, Kirschke, Murphy, Ormsby-Lennon, Radcliffe, Schwarz
<b>Assistant Professors:</b>	Akoma, Bader, Black, Hicks, Hollis, Irwin, Lucky, Sewell, Shohet, Vilmure, Wood
<b>Instructors:</b>	Bonds, Forste-Grupp
<b>Office:</b>	402 St. Augustine Center, tel. 610/519-4630
<b>Website:</b>	<a href="http://www.english.villanova.edu">www.english.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/english.html">www.artsci.villanova.edu/courses/english.html</a>

**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 nineteenth-century British literature.
- ✂✂ One course in American literature 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 literature offerings (3000 level courses).
- ✂✂ At least one course from the American literature offerings (4000 level courses)

Villanova University

≪≪ 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.

---

---

## Ethics

---

---

**Director:** Dr. Sarah Vaughan Brakman (on leave 2001-2002)  
**Acting Director** Dr. Mark Doorley (2001-2002)  
**Office:** 485 St. Augustine Center, tel. 610/519-4780  
**Website:** [www.ethics.villanova.edu](http://www.ethics.villanova.edu)  
**Course descriptions:** [www.artsci.villanova.edu/courses/ethics.html](http://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 and takes ETH 2050, two required track courses, two additional electives from that track, and ETH 3000. 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.

**TRACKS:**

**A. ETHICS AND HEALTH CARE**

## College of Liberal Arts and Sciences

### Required track courses:

PHI 2115	Ethics for Health Care Professionals
THL 4200	Ethics of Life and Death or THL 5950 Death and Dying

### Track Electives:

BIO 3341	Genetics
BIO 3905	General Microbiology
NUR 4130	Issues in Health Care Delivery
NUR 4800	Women's Health Issues
NUR 4802	Issues and trends in Gerontology
PHI 2125	Death and Dying
PHI 3525	Philosophy of Human Sexuality
PHI 2950	Topic in Philosophy: Feminism, Ethics and Medicine
THL 4100	Christian Ethical Traditions and Contemporary Life

## **B. ETHICS, POLITICS, AND LAW**

### Required track courses:

PHI 3650	Philosophy of Law
PJ 5000	Meanings of Justice

### Track electives:

PHI 2140	Philosophy of Criminal Justice
PHI 2130	Business Ethics
PJ 5100	Discrimination, Justice and the Law
PSC 3500	Civil Rights and Civil Liberties
PSC 3800	Environmental Law
SOC 3000	Criminology
SOC 3010	Crime and Criminal Justice
THL 4300	Ethical Issues in Peace and Justice
THL 4600	North/South: Development Ethics

## **C. ETHICS, ECONOMICS, AND PUBLIC POLICY**

### Required Track Courses:

ECO 4207/PJ 5200	Poverty and the American Economy
THL 4320	The Social teachings of the Christian Churches

### Track Electives:

PHI 1600	Business and Society
PHI 2130	Business Ethics
PHI 2400	Social and Political Philosophy
PHI 3820	Environmental Ethics
PHI 2410	Ethics of War
PHI 2170	Ethical and Social Issues in Mass Media
PHI 2150	Engineering Ethics

## Villanova University

PJ 2500	Education and Social Justice
PJ 2400/THL 4350	Service and Education for Justice
PJ 3400/THL 4310	War and Morality
PJ 5400/THL 4340	Ethics, Justice and the Family
PJ 5000	The Meaning of Justice
PJ 2600	Catholic Social Thought and Analysis
PSC 2600	Public Policy
PSC 3800	Environmental Law and Regulation
PSC 3500	Civil Rights and Civil Liberties
THL 4600	North/South: Development Ethics
THL 4300	Ethical Issues in Peace and Justice

### **D. ETHICS, SCIENCE, TECHNOLOGY, AND ENVIRONMENT**

#### Required Track Courses:

PJ 2200	Caring for the Earth
PHI 3820	Environmental Ethics

#### Track Electives:

BIO 3255	Introductory Ecology
BIO 3351	Genetics
ECO 1104	The Environment and the Economy
HIS 3321	Science and Technology in Modern History
PHI 2180	Ethical Issues in Computer Science
PHI 3825	Technology and Society
PHI 4050	Philosophy of Natural Science
PHI 2430	Eco-Feminism
PHI 2150	Engineering Ethics
PHI 295	(Topics in Philosophy) Philosophy of Biology
PSC 3800	Environmental Law and Regulation
THL 4600	North/South: Development Ethics
THL 5400	Science and Religion

---

---

## Geography

---

---

<b>Program Director:</b>	Dr. J. Harold Leaman
<b>Associate Professor:</b>	Leaman
<b>Assistant Professor:</b>	Hu
<b>Office:</b>	202 St. Augustine Center, tel. 610/519-4710
<b>Website:</b>	<a href="http://www.geography.villanova.edu/">www.geography.villanova.edu/</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/geography.html">www.artsci.villanova.edu/courses/geography.html</a>

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.

---

---

## History

---

---

<b>Chair:</b>	Dr. Adele Lindenmeyr
<b>Professors:</b>	Bergquist, Lindenmeyr, Gallicchio
<b>Associate Professors:</b>	Haas, Johnson, Keita, Kiley, Koven, Little, McLaughlin
<b>Assistant Professors:</b>	Ener, Kerrison, Mires, O'Toole, Ryan, Steege, Sullivan, Winer
<b>Office:</b>	403 St. Augustine Center, tel. 610/519-4660
<b>Website:</b>	<a href="http://www.history.villanova.edu">www.history.villanova.edu</a>
<b>Course Descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/history.html">www.artsci.villanova.edu/courses/history.html</a>

**MAJOR:** HIS 1050 plus 27 additional credits in history including: HIS 5501 (Historical Methods) or HIS 5515 (Independent Research); 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 1050.

---

---

## Honors Program

---

---

<b>Director:</b>	Dr. Edwin L. Goff
<b>Assistant Director:</b>	Ms. Christine Muller
<b>Office:</b>	103 St. Augustine Center, tel. 610/519-4650
<b>Website:</b>	<a href="http://www.honorsprogram.villanova.edu">www.honorsprogram.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/honors.html">www.artsci.villanova.edu/courses/honors.html</a>

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.

## College of Liberal Arts and Sciences

**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 liberal arts 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.

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.

---

---

## Irish Studies

---

---

**Director:** Dr. James J. Murphy  
**Office:** 467 St. Augustine Center, tel. 610/519-4676  
**Website:** [www.artsci.villanova.edu/irishstudies/](http://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 A broad 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.

---

---

## Latin American Studies

---

---

**Director:** Dr. Satya Pattnayak  
**Office:** 273 St. Augustine Center, tel. 610/519-4773  
**Website:** [www.latinamericanstudies.villanova.edu](http://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 and five additional courses (15 credits) as follows: HIS 4410, 4415, 4420, 4425, or 4495; PSC 4750 or ECO 4200; LAS. 1100 and two electives which can be taken either from the program core or from the list of electives.

**Concentration:** Two courses in Spanish language training beyond the intermediate level and six additional courses (18 credits) as follows: HIS. 4410, HIS. 4415, HIS. 4420, HIS. 4425 or HIS. 4495; PSC. 4750 or ECO. 4200; LAS. 1100; one course in Latin American literature and two electives, which can be taken either from the program core or from the list of electives.

**Program Core:**

ECO 4200 Special Topics: The Economics of Latin American and the Caribbean  
HIS 4410 Colonial Latin America

College of Liberal Arts and Sciences

HIS 4415	Latin America since Independence
HIS 4420	Latin American Revolutions
HIS 4425	Mexico
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: Third World 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

Elective courses:

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/ HIS 4490*	Modern Political History of the Southern Cone*
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

---

---

<b>Director:</b>	Dr. John Schrems
<b>Office:</b>	451 St. Augustine Center, tel. 610/519-4661
<b>Website:</b>	<a href="http://www.liberalarts.villanova.edu">www.liberalarts.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/liberal.html">www.artsci.villanova.edu/courses/liberal.html</a>

The Liberal Arts major is an interdisciplinary major within the College of Liberal Arts and Sciences. Students in the program select a Liberal Arts concentration in one of the following areas: (1) Humanities, (2) Social Sciences, or (3) Independent Studies. Within the selected concentration the student plans a course of study which cuts across normal academic lines.

**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).
- ≪≪ The Social Sciences Concentration: (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.

*NOTE:* (Elementary Education, in cooperation with Rosemont College, is coordinated through the Liberal Arts major. Incorporated into the Liberal Arts Major may be such specialized College concentrations as Africana Studies, Arab and Islamic Studies, Criminal Justice, Irish Studies, Latin American Studies, Peace and Justice, and Women's Studies. Many other concentrations of the student's own making are possible, and are commonly pursued, within the major.)

---

---

## Mathematical Sciences

---

---

<b>Chair:</b>	Dr. Robert A. Styer
<b>Professors:</b>	DeVos, Feeman, Fleischman, Hartmann, Jantzen, Marrero, Pigeon, Sprows, Woldar
<b>Associate Professors:</b>	Gluchoff, Kleiber, Levitan, Longman, Lynn, Norton, Pollack-Johnson, Rhodes, Short, Styer, Volpert
<b>Assistant Professors:</b>	Ashley, Bartlow, Belkin, Borchardt, Buckley, Deanin, Lupinacci, Pasles, Seliktar
<b>Instructor:</b>	Lukens, Santomas
<b>Director of Mathematics Learning and Resource Center:</b>	Chiacchiere
<b>Office:</b>	305 St. Augustine Center, tel. 610/519-4850
<b>Website:</b>	<a href="http://www.math.villanova.edu">www.math.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/math.html">www.artsci.villanova.edu/courses/math.html</a>

**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) and CSC 1024.

**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.

---

---

## Naval Science

---

---

<b>Chair:</b>	Col. J. Bruce Hulick, USMC
<b>Professor:</b>	Hulick
<b>Instructors:</b>	Andersen, Blanchard, Durden, McKenzie, Reller,
<b>Office:</b>	103 John Barry, tel. 610/519-7380
<b>Website:</b>	<a href="http://www.nrotc.villanova.edu">www.nrotc.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/naval.html">www.artsci.villanova.edu/courses/naval.html</a>

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

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

---

---

<b>Director:</b>	Dr. William Werpehowski
<b>Office:</b>	Ground Floor, Sullivan, tel. 610/519-4499
<b>Website:</b>	<a href="http://www.peaceandjustice.villanova.edu/">www.peaceandjustice.villanova.edu/</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/pj.html">www.artsci.villanova.edu/courses/pj.html</a>

**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

---

---

<b>Chair:</b>	Dr. Helen Lang
<b>Professors:</b>	Betz, Brogan, Busch, Caputo, Doody, Fielder, Immerwahr, Schmidt,
<b>Associate Professors:</b>	Carvalho, Goff, Losoncy, McCartney, Scholz, Wall
<b>Assistant Professors:</b>	Brakman, Klein, Mensch, Miles, Regan,
<b>Office:</b>	108 St. Augustine Hall, tel. 610/519-4690
<b>Website:</b>	<a href="http://www.philosophy.villanova.edu">www.philosophy.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/philosophy.html">www.artsci.villanova.edu/courses/philosophy.html</a>

**MAJOR:** In order to graduate in the major, students must take Philosophy 1050 and 10 additional courses in the major. Of these 10 courses, 3 are the history sequence (2500 or 3000; 2150, 3100, 3120, 3130, 3160, 4600; 2520). Student make take one of two paths within the major to complete the seven other classes: In the Track Path students will select a track and take 3 courses as part of that track. The track will serve as a focus within the major. Students will be required to take at least 2 advanced seminars (5000) or a seminar and a thesis. The Five Tracks are Cultural Studies, Pre-law, Social and Political Philosophy and Ethics, History of Philosophy, Continental Philosophy. In the Thesis Path students will treat 6 of the 7 courses as free electives, one of which must be an advanced seminar. The seventh 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.

**MINOR:** In order to graduate as a Philosophy minor, the student must take fifteen credit hours in Philosophy, this number to include credits taken to satisfy the collegiate core requirements. At least nine credits must be taken from courses other than 1050, 2015, 2115, 2130 and 2150.

---

---

## Physics

---

---

<b>Chair:</b>	Dr. Philip Maurone
<b>Professors:</b>	Hones, Maurone, Phares
<b>Associate Professors:</b>	Shaw, Vassiliou, Wunderlich, Zamani
<b>Assistant Professors:</b>	Arrison, Besson, Papaefthymiou-Davis, Schick, Siah, Strieb,
<b>Office:</b>	352A Mendel, tel. 610/519-4860
<b>Website:</b>	<a href="http://www.phy.villanova.edu">www.phy.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/physics.html">www.artsci.villanova.edu/courses/physics.html</a>

**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.

---

---

## Political Science

---

---

<b>Chair:</b>	Dr. Craig Wheeland
<b>Professors:</b>	Hahn, Johannes, Kerbel, Langran, Lesch, Malik, Schrems, Thompson
<b>Associate Professors:</b>	Barrett, Ellis, Gustafson, Sheehan, Strack, Wheeland
<b>Assistant Professors:</b>	Kreuzer, Maranto, Smith
<b>Office:</b>	202 St. Augustine Center, tel. 610/519-4710
<b>Website:</b>	<a href="http://www.psc.villanova.edu">www.psc.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/psc.html">www.artsci.villanova.edu/courses/psc.html</a>

**MAJOR:** Thirty credit hours in political science courses are required for a major including the two introductory courses 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:** Nine additional credits beyond the 30 credits for a major may earn a student a certificate in a concentration area. Concentrations may be earned in: International Relations, Pre-Law, Public Administration, Pre-Graduate School, and Employment Oriented. A list of courses which satisfy each concentration is available in the departmental office.

**MINOR:** Fifteen credits consisting of the two introductory courses plus any three advanced courses 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

---

---

<b>Chair:</b>	Dr. Douglas Klieger
<b>Professors:</b>	Blewitt, Brown, Bush, Folk, Klieger, Long, Toppino, B. Ziegler
<b>Associate Professors:</b>	Kendzierski, Kurtz, Tuck
<b>Assistant Professors:</b>	Brand, Krauss, Kurtz, Sheldon
<b>Office:</b>	334 Tolentine, tel. 610/519-4720
<b>Website:</b>	<a href="http://www.psychology.villanova.edu/">www.psychology.villanova.edu/</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/psychology.html">www.artsci.villanova.edu/courses/psychology.html</a>

**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

---

---

<b>Director:</b>	Dr. Jeffrey Hahn
<b>Office:</b>	264 St. Augustine Center, tel. 610/519-4640
<b>Website:</b>	<a href="http://www.artsci.villanova.edu/Russian/">www.artsci.villanova.edu/Russian/</a>

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: AAH 2009; HIS 3241, 3242; PSC 4401, 5351, 5950; RUS 1131, 1132, 3412, 3717, 3718, 3810, 3818, 3819; THL 5510; and appropriate special topics courses in Economics and approved by the

## College of Liberal Arts and Sciences

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

---

---

<b>Chair:</b>	Dr. Thomas Arvanites
<b>Professors:</b>	Gallagher, Jones, Juliani, Knapp, McFalls
<b>Associate Professors:</b>	Arvanites, Eckstein, McGarry, Malik, Pattnayak, Shai, Waegel
<b>Assistant Professor:</b>	Hannon, McKenzie
<b>Office:</b>	204 St. Augustine Center, tel. 610/519-4740
<b>Website:</b>	<a href="http://www.sociology.villanova.edu">www.sociology.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/sociology.html">www.artsci.villanova.edu/courses/sociology.html</a>

**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 are required to take 2 courses from one group and 1 course from the other group.

Majors who wish to structure their Program toward a specific career objective can choose courses from one of the following areas, each of which provides training for a different occupational career.

**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 concentration in Criminal Justice is available for interested students.

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.

---

---

## Studio Art and Music

---

---

**Office:** 205 St. Augustine Center, tel. 610/519-4760  
**Course descriptions:** [www.artsci.villanova.edu/courses/sar.html](http://www.artsci.villanova.edu/courses/sar.html)

Courses in Studio Art and Music are administered by the chair of the Theatre Department.

---

---

## Theatre

---

---

**Chair:** Rev. Peter M. Donohue, O.S.A.  
**Professor:** Christy  
**Associate Professors:** Cannuli, Power, Rotte,  
**Assistant Professors:** Donohue, Lloyd, Stagliano,  
**Office:** 205 St. Augustine Center, tel. 610/519-4760  
**Website:** [www.theatre.villanova.edu/](http://www.theatre.villanova.edu/)  
**Course descriptions:** [www.artsci.villanova.edu/courses/theatre.html](http://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

---

---

<b>Chair:</b>	Rev. Arthur Chappell, O.S.A.
<b>Professors:</b>	Binns, Conn, Dobbin, Prusak, Scanlon, Van Allen, Werpehowski
<b>Associate Professors:</b>	Benavides, Danove, Eigo, Hadley, Godzieba, Inati, Lazor, Loya, Martin, Toton,
<b>Assistant Professors:</b>	Chappell, Doyle, Enright, Hughes, Graham, Laird, Pohlhaus, Veverka, Weaver
<b>Office:</b>	107 St. Augustine Center, tel. 610/519-4730
<b>Website:</b>	<a href="http://www.theology.villanova.edu">www.theology.villanova.edu</a>
<b>Course descriptions:</b>	<a href="http://www.artsci.villanova.edu/courses/theology.html">www.artsci.villanova.edu/courses/theology.html</a>

**MAJOR:** Thirty credit hours exclusive of the required introductory course, THL 1050, which students in the College of Liberal Arts and Sciences and the College of Commerce and Finance normally take in the sophomore year. Twenty-four credit hours are to be taken from among the following: THL 2725, 2726 and 2590 (to be taken as soon as possible after the major is declared); one course in Biblical Studies; THL 3100 or 3500; THL 3200; a choice of one among THL 3300, 3325, 3400, 3600; a choice of one among THL 5100 through 5300 plus 5500 and 5510. A student may choose the remaining three credit hours from any of the other Theology and Religious Studies courses. THL 3500 is especially recommended.

**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

---

---

**Director:** Dr. Gaile Pohlhaus  
**Office:** 478 St. Augustine Center, tel. 610/519-4798, or 130 St. Augustine Center, 610/519-7422  
**Website:** [www.artsci.villanova.edu/womenstudies/](http://www.artsci.villanova.edu/womenstudies/)  
**Course descriptions:** [www.artsci.villanova.edu/courses/ws.html](http://www.artsci.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 5000	Integrating Seminar
WS 3000	Independent Study
TOPICS	Courses in several departments are offered each semester. (Please see Master Schedule)