

will be granted. In addition, lesser grades in any of these courses preclude taking subsequent courses for which the deficient courses are a prerequisite.

### **CIVIL ENGINEERING: ENVIRONMENTAL EMPHASIS**

GARY FISCHER, M.S.  
 MARY E. KEEFFE, PH.D.  
 TERENCE J. MULLEN, P.E.  
 JOHN L. SCHARF, PH.D.  
 ANTHONY M. SZPILKA, PH.D.  
 WILLIS WEIGHT, P.E.

#### **Department Mission and Goals**

Consonant with the mission of the College, this department is “dedicated to providing for its students the means for their full realization of a dual goal of vocation and enlightenment.” Society requires competent professionals who can solve contemporary problems by using connections among disciplines, especially the humanities, engineering and technology, and the sciences. The Programs within this Department are designed to blend the unique characteristics of Catholic liberal arts education with preparation for productive and rewarding professional careers. The four professional educational objectives of this department are to produce graduates who have:

- 1) The specialized knowledge and skills necessary for initiation into their chosen profession,
- 2) A broad range of skills necessary for effective communication,
- 3) An appreciation for the interrelationships among the branches of knowledge,
- 4) The ethical, social, and aesthetic perspectives necessary for values-based judgment and decision-making.

The Environmental Emphasis Option in Civil Engineering is designed to produce graduates who are prepared for professional, technical and scientific, engineering work in environmental clean-up, restoration, protection, and preservation. The environmental option in civil engineering is designed to meet accreditation criteria specified by the Accreditation Board for Engineering and Technology (ABET). As a result, Carroll graduates with a major in Civil Engineering – Environmental Emphasis will be eligible to take the two Professional Engineering licensure exams and thereby earn a Professional Engineer license. The civil engineering program is accredited by the Engineering Accreditation Commission of the Accreditation Board of Engineering & Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012. Telephone: 410-347-7700.

The Civil Engineering: Environmental Emphasis Program has adopted the philosophy and goals of the department. The four major areas of study with the Program are: structures, environmental, water resources, and transportation.

#### **I. Major Program Requirements**

- ENGR 105 & ENGR 106 GIS/Surveying/CAD I and II \*
- ENGR 205 Construction Materials & Testing
- ENGR 302 Engineering Mechanics I: Statics
- ENGR 303 Engineering Mechanics II: Solids
- ENGR 307 Fluid Mechanics
- ENGR 308 Thermodynamics
- ENGR 310 Structures I
- ENGR 313 Hydrology
- ENGR 323 Water Quality \*
- ENGR 324 Land Use & Restoration\*
- ENGR 325 Hydrogeology\*
- ENGR 326 Energy & Environment\*

- ENGR 327 Air Quality\*
- ENGR 401 Hydraulics
- ENGR 405 Water & Wastewater Treatment
- ENGR 407 Transportation Engineering
- ENGR 411-412 Senior Design Project
- ENGR 423 Public Health & Environment\*
- ENGR 423 Ground Water Modeling\*

#### **II. Other Program Requirements**

- EC 201 or 202 Principles of Economics (EC 202 preferred)
- EC 203 Project Management Economics
- CH 101-102 General Chemistry I and II
- ENWR 305 Technical Writing
- MA 131 Calculus of Single Variable Functions  
or MA 121-122 Differential and Integral Calculus
- MA 232 Differential Equations and Linear Algebra I
- MA 233 Multivariable Calculus
- MA 334 Differential Equations and Linear Algebra II
- MA 336 Probability and Statistics I
- PHIL 207 Business Ethics
- PHYS 205-206 Engineering Physics

Students must take the Fundamental of Engineering (FE) exam within nine months prior to receiving the degree.

To earn a Bachelor of Arts degree with a major in civil engineering: environmental emphasis, a student must earn a grade of “C” or better in all of the courses listed under “Major Program Requirements” and under “Other Program Requirements.” A lesser grade in any of these courses must be replaced before the Bachelor of Arts degree will be granted. In addition, lesser grades in any of these courses preclude taking subsequent courses for which the deficient courses are a prerequisite.

\*Pending Approval.

### **CLASSICAL STUDIES**

REV. DANIEL SHEA, PH.D.

#### **Mission and Goals**

The Classical Studies program operates under the aegis of the Department of Languages and Literature. With its particular focus upon the study of the Classical Greek and Latin languages, and ancillary courses offered through other departments, the program is designed to prepare students with a major/minor concentration for advanced study in the Classics and related fields. The program also serves the needs and interests of a range of students from other majors and from the community at large, for whom the study of Greek or Latin satisfies a personal interest or complements their academic pursuits. The knowledge, discipline, critical thinking and problem solving skills developed through the Classical Studies program are widely applicable and adaptable to the exigencies of an ever changing world; they engender habits of mind and heart well appreciated by a broad spectrum of graduate and professional programs and employers, and promote personal satisfaction, life-long learning, and intellectual and spiritual enlightenment.

The Classical Studies program will produce graduates who:

- I. Read, understand, and interpret a classical language
- II. Demonstrate knowledge and understanding of Greco-Roman culture
- III. Connect with other disciplines and expand knowledge
- IV. Develop insight into their own language and culture
- V. Participate in wider communities of language and culture

## Major in Classical Studies

### I. Major Program Requirements

Forty-eight semester credits including:  
LA 101-102 Introductory Latin  
LA 203-204 Intermediate Latin  
GK 201-202 Introductory Greek  
GK 301-302 Intermediate Greek  
CLST 491 Senior Research Seminar  
CLST 492 Senior Writing Seminar

### II. Other Program Requirements

Eighteen semester credits from the following:  
AT 210 Art Appreciation  
ENLT 215 Survey of Classical Literature  
HI 201 Greek History  
HI 202 Roman History  
HI 203-204 Medieval History  
HI 301 History of the Catholic Church  
LL 220 Introduction to Linguistics  
PHIL 151 Ancient Philosophy  
PHIL 202 Medieval Philosophy  
TH 207 Introduction to the Old Testament  
TH 208 Introduction to the New Testament  
TH 303 History of Christian Thought

All candidates for the Bachelor of Arts degree in Classical Studies are required to write a comprehensive paper. By April 1 of the junior year, students must submit a proposal stating the topic of the comprehensive paper and signed by the faculty member who has agreed to direct the paper.

## Minor in Classical Studies

### Program Requirements

Twenty-six semester credits including:  
LA 101 and 102 Introductory Latin  
LA 203 and 204 Intermediate Latin  
or  
GK 201 and 202 Introductory Greek  
GK 301 and 302 Intermediate Greek

The introductory course (two semesters) in one other language

12 credits from the courses listed under "Other Program Requirements" for the Classical Studies major.

## COMMUNICATION STUDIES

ALAN HANSEN, PH.D.  
CHARLOTTE M. JONES, PH.D.  
DOREEN KUTUFAM, PH.D.  
BRENT NORTHUP, M.A.

### Mission and Goals

The mission of the Communication Department mirrors the mission of the college: by seeking the "full realization of the dual goals of vocation and enlightenment."

The communication department has developed both educational/vocational goals and holistic goals for the enlightenment of our students.

The educational/vocational goals of the Communication Department:

- 1) to teach students to communicate effectively
- 2) to prepare students for a career in a business or another communication-related field

- 3) to prepare students for possible graduate study in communication or a related field
- 4) to prepare students for a possible career in public relations
- 5) to prepare students for a possible career in print or broadcast journalism
- 6) to prepare students for a possible career as a secondary education teacher of communication, speech or forensics
- 7) to train students to succeed in intercollegiate forensics competition

The holistic goals of the Communication Department:

- 1) to advise students comprehensively, including the development of a four-year plan leading to a major or minor and the development of a general career lifeplan
- 2) to illuminate students on the need to use communication constructively and unselfishly, to serve others and to promote peace on all levels - interpersonal, societal and global
- 3) to illuminate students on the moral foundations of communication, which include the need to treat every person with reverence
- 4) to illuminate students on the need for intercultural understanding in order to treat people of all backgrounds with tolerance and respect and
- 5) to teach practical communication skills - such as conflict management skills and relationship-building skills - which can enhance the personal life of students for a lifetime

## Major in Communication Studies

### I. Major Program Requirements

Thirty-six semester credits of communication courses, including:

CO 101 Basic Communication  
CO 108 Desktop Publishing  
CO 206 Small Group Communication  
CO 225 Professional Communication  
CO 280 Gender Communication  
CO/ENWR 306 Writing for the Print Media  
CO 308 Communication Ethics  
CO 320 Organizational Communication  
CO 340 Interpersonal Communication Theory  
CO 395 Research Methods  
CO 414 Human Communication Theory  
CO 495 Senior Practicum: The Graceful Exit

Notes:

1. A maximum of 6 credit hours in forensics at the 200-level or above may apply toward the communication studies major.
2. Forensics at 200-level or above may be substituted for CO 225.
3. All degree students should review requirements for graduation as described in this catalog.

Note: The Department of Communication Studies will administer a two-part comprehensive exam at the end of each student's senior year. The first part, an oral presentation by the student, is required of all students. The second part, the comprehensive on all communication coursework, is not required of students who complete CO 499, Honors Thesis.

## Minor in Communication Studies

### Minor Program Requirements

Twenty-one semester credits in communication, including:

CO 101 Basic Communication  
CO 206 Small Group Communication  
CO 225 Professional Communication