# Civil Engineering-CE

### Simulation Models for Transportation 847 Applications Fall of even years. 3(3-0)

Simulation models for analysis and optimization of transportation systems. Experimentation with planning and traffic simulation models for signal timing and capacity analysis.

# **Transportation Research Methods**

Spring. 3(3-0)

Application and interpretation of quantitative met hods and design of experiments for transportation research; ANOVA, non-parametric, discriminant analysis, factor analysis, multivariate regression,

# Intelligent Transportation Systems (ITS) Fall of odd years. 3(3-0) RB: Traffic and 850

Transportation engineering

Technical and policy aspects emerging from the application of advanced technologies to transportation problems. Intelligent Transportation Systems (ITS) user services requirements, available and emerging technologies, case studies of ongoing operational tests, legal institutional and planning issues related to ITS development and deployment.

#### 851 Transportation and the Environment

Spring of even years. 3(3-0) RB: B.S. in Civil Engineering with emphasis on transportation or environmental engineering R: Open only to graduate students in the College of Engineering.

The impact of transportation systems on the environment. Elements of Environmental Impact Statements. Policy options and their consequences. Alternatives for reducing environmental impact.

### Independent Study in Civil Engineering 890

Fall, Spring, Summer, 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course, R: Open only to Civil Engineering master's students. Approval of department.

Research problems of limited scope not pertaining to thesis accomplished under CE 899 or CE 999.

#### Selected Topics in Civil Engineering 891

Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course.

Selected topics in new or developing areas of civil engineering.

#### 892 Master's Research Project

Fall, Spring, Summer. 3 to 5 credits. R: Open only to master's students in the Civil Engineering major. Approval of department. Master's degree Plan B individual student research project. Original research, research replication, or survey and reporting on a research topic.

#### 893 Master's Design Project

Fall, Spring, Summer. 1 to 3 credits. R: Open only to master's students in the Civil Engineering major. Approval of department.

Master's degree Plan B individual student civil engineering design project.

## Master's Thesis Research

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 24 credits in all enrollments for this course.

Master's thesis research.

### Independent Study in Civil Engineering 990

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to Civil Engineering doctoral students

Research problems of limited scope not pertaining to thesis accomplished under CE 999.

### **Doctoral Dissertation Research**

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 72 credits in all enrollments for this course.

Doctoral dissertation research.

# 491

**Topics in Classical Studies** Spring of even years. 3(3-0) P:NM: (CLA 210) R: Open only to juniors or seniors.

Special topics supplement regular course offerings.

Senior Thesis Fall, Spring. 3(3-0) P:NM: (LTN 402) R: Approval of department.

Scholarly research and writing with a focus on specific problems, under faculty supervision.

# CLASSICAL **STUDIES**

# **CLA**

# **Department of Romance** and Classical Languages College of Arts and Letters

### Latin and Greek Roots of English Words Spring of even years. 3(3-0)

Prefixes, suffixes, and roots of English vocabulary from Greek and Latin word elements.

# **Greek and Roman Mythology**

Fall. 3(3-0)

Introduction to Greek and Roman myths, with emphasis on myth as social discourse and as an influence on ancient poets and thinkers.

#### 210 **Greek Civilization**

Fall. 3(3-0)
General survey of salient aspects of ancient Greek civilization and modern approaches to its study.

# Roman Civilization

Spring. 3(3-0) SA: CLA 310

Ancient Roman civilizations and modern approaches to their study.

# Introduction to Ancient Studies

Fall. 2(1-2) Interdepartmental with Arts and Letters; History of Art; History. Administered by Arts and Letters.

Methods and current trends in the study of the Greek and Roman world. Visits to library and museum collections

### Greek and Roman Literature in English Translation

Fall of even years. 3(3-0) R: Not open to freshmen.

Representative works of major Greek and Roman authors.

### 360 **Ancient Novel in English Translation** Spring of odd years. 3(3-0) R: Not open to

freshmen Translation of the ancient Greek and Roman novel. Interpretation of assigned novels. The role of popular literature in Greco-Roman society.

# Women in Classical Greek Society

Spring of odd years. 3(3-0) Interdepartmental with Women's Studies. R: Not open to freshmen or sophomores.

Image, role, and status of women in Greek society as seen through literary sources.

### COMMUNICATION COM

# **Department of Communication College of Communication** Arts and Sciences

### **Human Communication** 100

Fall, Spring, Summer. 3(3-0)

Process and functions of communication. Principles underlying communication behavior. Practice in analyzing communication situations and in speaking and writing.

### 200

**Methods of Communication Inquiry** Fall, Spring, Summer. 4(3-2) P:NM: Completion of University mathematics requirement.

Nature and conduct of communication inquiry. Significant questions about communication and finding systematic answers.

### 225 An Introduction to Interpersonal Communication

Fall, Spring, Summer. 3(3-0)

Principles and practices of interpersonal communication. Emphasis on effective and responsible interpersonal communication.

## Introduction to Organizational Communication

Fall, Spring, Summer. 4(4-0)

Theories, systems, structures and processes of organizational communication. Organizational cultures. Communication in multinational organizations and in individual, leadership, supervisor-subordinate and small group situations.

#### **Effects of Mass Communication** 275

Fall, Spring, Summer. 3(3-0) Interdepartmental with Telecommunication. Administered by Department of Telecommunication. RB: (TC 100) R: Not open to freshmen.

Major social effects of mass media on audience behavior. Political communication. Media effects on children. Message strategies producing attitude change. Interrelationships between mass media and interpersonal communication.

### 315 Information Gathering and Interviewing **Theories**

Fall of odd years. 3(3-0) R: Open only to juniors or seniors.

Information gathering as a relational process. Interaction through the asking and answering of ques-