Highway and Traffic Safety 844

Fall of odd years. 3(3-0)

Analysis of highway geometric design alternatives and operational-control strategies with respect to accident probabilities. Statistical methods of pattern Countermeasure selection identification. evaluation methodology. Risk management.

846 Statewide Transportation Network Evaluation

Spring of odd years. 3(3-0)

Transportation system measures, needs studies, sufficiency ratings. Cost allocation programming and budget constraints. models. Corridor transportation economics, analysis. demand elasticity.

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 methods and design of experiments for transportation research; ANOVA, non-parametric, discriminant analysis, factor analysis, multivariate regression, SPSS.

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

Technical and policy aspects emerging from the application οf advanced technologies 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.

Finite Element Method

Fall, Spring. 3(3-0) Interdepartmental with Mechanical Engineering. Administered by Department of Mechanical Engineering. SA: AE 809, MSM 809

Theory and application of the finite element method to the solution of continuum type problems in heat transfer, fluid mechanics, and stress analysis.

890 Independent Study in Civil Engineering

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

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. 1 to 5 credits. student may earn a maximum of 5 credits in all enrollments for this course. 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.

Master's Design Project

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. 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

Fall, Spring, Summer. 1 to 4 credits. 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 999

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.

CLASSICAL STUDIES

CLA

Department of Romance and Classical Languages College of Arts and Letters

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.

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.

292 **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

350 Greek and Roman Literature in English **Translation**

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

Representative works of major Greek and Roman

Ancient Novel in English Translation 360

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 400

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

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

Topics in Classical Studies

Spring of even years. 3(3-0) RB: (CLA 210) R: Open only to juniors or seniors.

Special topics supplement regular course offerings.

Senior Thesis

Fall, Spring. 3(3-0) RB: (LTN 402) R: Approval of department.

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

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, Completion of Summer. 4(3-2) RB: University mathematics requirement.

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

An Introduction to Interpersonal 225 Communication

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

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

240 Introduction to Organizational Communication

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

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

275 **Effects of Mass Communication**

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