### 990. Problems in Statistics and Probablility

Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 10 credits. STT 873

Seminar or individual study on an advanced topic in statistics.

## Topics in Statistics and 995.Probability

Fall, Winter, Spring. Variable credit.

Nonparametric statistics, multivariate statistical analysis, statistical time series analysis, Bavesian statistics, reliability theory, stochastic approximation, design of experiments, sets of decision problems, stochastic processes, sequential analysis, other topics.

#### Doctoral Dissertation Research 999.

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

# STUDIO ART

See Art.

# SURGERY

SUR

# College of Human Medicine

### 608. Surgery Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 43 credits. H M 602.

An introduction to the surgical patient, stressing surgical diagnosis, pre-operative evaluation and post-operative care. Objectives are designed to help the student attain acceptable levels of surgical competence for physicians.

### 609. Otolaryngology Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

Common otolaryngologic disorders, emergencies, including diagnosis and treatment, and judgments concerning proper management by primary physicians.

#### 610. Plastic Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

Principles of wound healing and tissue repair. Indications and applications of plastic procedures.

# Urology Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

Demonstration of clinical manifestations of genito-urinary disease, investigative methods and techniques of diagnosis and management, familiarity with urologic emergencies and per-formance of basic urologic skills.

### 613. Orthopedic Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

Diagnostic and management information and skills, including emergencies, in common orthopedic problems.

#### 614. Neurosurgery Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

A hospital-based experience to provide the stu-dent with familiarity with the field and under-standing of the contribution of neurosurgery in medicine generally.

# Ophthalmology Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

Development of skills and knowledge in ophthalmoscopy, neuro-opthalmology, visual function, and management of problems such as glaucoma, the red eye, and trauma.

# Thoracic Surgery Clerkship

Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. H M 602.

Problem-solving in thoracic medicine and surgery, also stressing pulmonary physiology, use of diagnostic tools and tests, and indications for surgical procedures.

# Anesthesiology Clerkship

Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. H M 602.

Introduces common anesthetic agents and provides opportunity for performing anesthetic procedures under faculty supervision.

### Emergency Medicine Clerkship 630.

Fall, Winter, Spring, Summer. 4 to 8 credits. May reenroll for a maximum of 8 credits. SUR 608, H D 608 or MED 608; H M 602. Interdepartmental with and administered by the Department of Medicine.

Pathophysiology and other basic concepts will be used to explain the development of emergent conditions. Clinical diagnosis and treatement of emergencies seen in community emergency departments will be discussed.

# SYSTEMS SCIENCE

See Electrical Engineering and Systems Sci-

## TELECOMMUNICATION TC College of Communication Arts and Sciences

### 120. Telecommunication in the United States

Fall, Winter, Spring. 3(3-0) Nonmajors.

tion systems and services.

History, economics, public control, programming, social effects and future of telecommunication; primarily radio and television broadcasting and cable communication. Citizen responsibilities in the development of telecommunica-

## 210. Telecommunication Processes Fall. 3(3-0) Sophomores, Telecom-

munication majors.

Human communication processes and behavior as modified by telecommunication. Audiences of telecommunication. Functions and dysfunctions of telecommunication. Contemporary implications of telecommunication media on sociēty.

## 220. History and Economics of Telecommunication

Winter. 4(3-2) Sophomore TC majors,

EC 201. Institutional and cultural development and underlying economic principles of the telecommunication field, including broadcast programs.

# Basic Telecommunication Technology

Spring. 4(3-2) Sophomore TC majors.

An analysis of technical factors involved in electronic communication: transmission, sound physics and aural technology, light physics, visual behavior and image technology, computer and automation controls, technical telecommunication policy formulation.

# History of the Motion Picture Fall, Winter. 4(2-4) Sophomores.

Development of the motion picture from its beginning to the present, emphasizing social background and cultural values. Screening of significant films from various periods and countries.

#### 301. Basic Audio Production

(201.) Fall, Winter, Spring, Summer. 4(2-4) TC 210, TC 220, TC 230.

Basic orientation to audio and radio studios, with laboratory experiences in production, writing and performance.

#### 302.Basic Video Production

(202.) Fall, Winter, Spring. 4(2-4) TC 301.

Basic orientation to video and television studios, with lab experiences in production, writing and performance.

# Basic Telecommunication Policy Fall, Winter. 4(4-0) TC 210, TC 220, TC 230.

Essential U.S. public communication policy is treated through rigorous methodological analysis of case and statutory law, public documents and related primary materials.

## 335. Audience Survey and Analysis Winter, Summer. 4(4-0) Juniors.

Designing research for the study of telecommunication audiences. Survey research, sampling, questionnaire construction, research administration. Analyses and interretation of re-search results. Audience measurement services and feedback systems.

#### 350. Advanced Radio Production

Fall, Spring. 4(2-4) TC 301 and approval of department.

Planning, coordinating and producing the radio program. Emphasis on documentary and studio productions utilizing original ideas and methods.

#### Television Studio Production 351.

Fall, Spring. 4(2-4) TC 302, approval of department.

Advanced television crew operations. Writing and production of programs directed by students in TC 451.

### 361.Television Directing

(333.) Fall, Winter, Spring, Summer. 4(2-4) TC 302 and approval of department.

Television producing and directing methods with assigned experiences in the television studios.