

**990. Problems in Statistics and Probability**  
Fall, Winter, Spring, Summer. 1 to 4 credits. May re-enroll for a maximum of 10 credits. 873.  
Seminar or individual study on an advanced topic in statistics.

**995. Topics in Statistics and Probability**  
Fall, Winter, Spring. Variable credit.  
Nonparametric statistics, multivariate statistical analysis, statistical time series analysis, Bayesian statistics, reliability theory, stochastic approximation, design of experiments, sets of decision problems, stochastic processes, sequential analysis, other topics.

**999. Research**  
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 re-enroll 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 re-enroll 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 re-enroll for a maximum of 34 credits. H M 602.  
Principles of wound healing and tissue repair. Indications and applications of plastic procedures.

**611. Urology Clerkship**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll 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 performance of basic urologic skills.

**612. Rectal Surgery**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 34 credits. H M 602.  
Data collection, physical examination, and problem formulation relating to colon and rectal disease. Involvement in special techniques, examinations, and surgical procedures is an important aspect of the experience.

**613. Orthopedic Clerkship**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll 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 re-enroll for a maximum of 34 credits. H M 602.  
A hospital-based experience to provide the student with familiarity with the field and understanding of the contribution of neurosurgery in medicine generally.

**615. Ophthalmology Clerkship**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 34 credits. H M 602.  
Development of skills and knowledge in ophthalmoscopy, neuro-ophthalmology, visual function, and management of problems such as glaucoma, the red eye, and trauma.

**616. Thoracic Surgery Clerkship**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll 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.

**618. Anesthesiology Clerkship**  
Fall, Winter, Spring, Summer. 4 to 16 credits. May re-enroll for a maximum of 16 credits. H M 602.  
Introduces common anesthetic agents and provides opportunity for performing anesthetic procedures under faculty supervision.

**630. Emergency Medicine Clerkship**  
Fall, Winter, Spring, Summer. 4 to 8 credits. May re-enroll for a maximum of 8 credits. 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 treatment of emergencies seen in community emergency departments will be discussed.

## SYSTEMS SCIENCE

See Electrical Engineering and Systems Science.

## TELECOMMUNICATION\* TC

### College of Communication Arts and Sciences†

**120. Telecommunication in the United States**  
Fall, Winter, Spring. 3(3-0) Non-majors.  
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 telecommunication systems and services.

\*Name change effective July 1, 1975.  
Formerly Department of Television and Radio.  
†Name change effective July 1, 1975.  
Formerly College of Communication Arts.

**210. Telecommunication Processes**  
Fall. 3(3-0) Sophomores.  
Human communication processes and behavior as modified by telecommunication. Audiences of telecommunication. Functions and dysfunctions of telecommunication. Contemporary implications of telecommunication media on society.

**220. History and Economics of Telecommunication**  
Winter. 4(3-2) 210.  
Institutional and cultural development and underlying economic principles of the telecommunication field, including broadcast programs.

**230. Basic Telecommunication Technology**  
Spring. 4(3-2) 220.  
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.

**280. 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) 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) 301.  
Basic orientation to video and television studios, with lab experiences in production, writing and performance.

**310. Basic Telecommunication Policy**  
Fall, Winter. 4(4-0) Juniors, approval of department.  
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 interpretation of research results. Audience measurement services and feedback systems.

**350. Advanced Radio Production**  
Winter, Spring. 4(2-4) 301 and approval of department.  
Planning, coordinating and producing the radio program. Emphasis on documentary and studio productions utilizing original ideas and methods.

**351. Television Studio Production**  
Fall, Spring. 4(2-4) Junior majors, 302 and approval of department.  
Advanced television crew operations. Writing and production of programs directed by students in 451.

**361. Television Directing**  
(333.) Fall, Winter, Spring, Summer. 4(2-4) 302 and approval of department.  
Television producing and directing methods with assigned experiences in the television studios.