

949. Advanced Applied Stochastic Processes

Winter. 4(4-0) MGT 836, 937. Interdepartmental with and administered by the Management Department.

Selected topics from the following areas: Semi-Markov, Markov-renewal and regenerative process models; Markov and semi-Markov decision processes; decision theory, applications from production, inventory, reliability, queuing, and gaming theory.

971. Advanced Theory of Statistics I

Fall. 3(3-0) 873, MTH 927, 981 or concurrently.

General decision theory. Concepts of loss, risk, admissibility, completeness, minimax and Bayes solutions. Sufficiency, equivariance and their associated reductions. Monotone likelihood ratio and exponential families. Optimality properties of tests.

972. Advanced Theory of Statistics II

Winter. 3(3-0) 971; 982 or concurrently.

Statistical convergence theorems. Variables and distributions in n -space. Asymptotic and exact sampling distributions. Tests of significance.

973. Advanced Theory of Statistics III

Spring. 3(3-0) 972.
Continuation of 972.

981. Advanced Theory of Probability I

Fall. 3(3-0) 863; MTH 927 or approval of department.

Measures on infinite product spaces and Kolmogorov's consistency theorem. Distributions and characteristic functions. Independence. Series of independent random variables.

982. Advanced Theory of Probability II

Winter. 3(3-0) 981 or approval of department.

Central limit problem: the classical limit problem, the bounded variances case, and limit laws for infinitely divisible random variables. Conditional probabilities and expectations. Martingales with discrete time.

983. Advanced Theory of Probability III

Spring. 3(3-0) 982 or approval of department.

Ergodic theory; individual and L_p ergodic theorems. Second order processes, weakly and strongly stationary processes. Foundations; separability and measurability of processes; properties of sample functions. Continuous time martingales. Processes with independent increments.

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*

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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.

*Established February, 1971.

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.

617. Emergency Medicine Clerkship

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

Exposure to acute problems of wide variety is provided by this experience. Evaluation, management and disposition of patients is seen in the framework of the continuing patient care system.

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.

150. Introduction to Telecommunication

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

Nature, development, economics, social control and influence of the telecommunication media in modern society.

201. Fundamentals of Radio Broadcasting

Fall, Winter, Spring, Summer. 4(2-4) 150.

Basic orientation to the radio studio, with laboratory experiences in production, writing, and performance.

202. Fundamentals of Television Broadcasting

Fall, Winter, Spring. 4(2-4) 201.

Basic orientation to the television studio, with laboratory experiences in production, writing, and performance.

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.

*Name change effective July 1, 1975.

Formerly Department of Television and Radio.

†Name change effective July 1, 1975.

Formerly College of Communication Arts.