965. Stationary and Second Order Processes
Winter of odd-numbered years. 3(3-0)
STT 883.
Stationary, second order, and Gaussian processes. Sample path properties. Linear and nonlinear prediction and estimation. Applications.

966. Markov Processes
Spring of odd-numbered years. 3(3-0)
STT 884.

990. Problems in Statistics and Probability
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 10 credits. STT 673 or STT 683.
Seminar or individual study on an advanced topic in statistics.

995. Topics in Statistics and Probability
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 36 credits.
Nonparametric statistics, multivariate statistical analysis, statistical time series analysis, Bayesian statistics, reliability theory, stochastic approximation, design of experiments, tests of decision problems, stochastic processes, sequential analysis, other topics.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of the department.

STUDIO ART
See Art.

SURGERY SUR
College of Human Medicine

608. Basic Surgery Clerkship
Fall, Winter, Spring, Summer. 6 to 15 credits. May reenroll for a maximum of 30 credits. FMF 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. SUR 608.
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. SUR 608.
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 reenroll for a maximum of 34 credits. SUR 608.
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.

613. Orthopedic Clerkship
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 34 credits. SUR 608.
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. SUR 608.
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 reenroll for a maximum of 34 credits. SUR 608.
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 reenroll for a maximum of 34 credits. SUR 608.
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 reenroll for a maximum of 16 credits. SUR 608.
Introduces common anesthetic agents and provides opportunities for performing anesthetic procedures under faculty supervision.

619. General Surgery Elective Clerkship
Fall, Winter, Spring, Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. SUR 608.
Experiences in clinical general surgery.

620. Advanced Surgery Clerkship
Fall, Winter, Spring, Summer. 6 to 8 credits. May reenroll for a maximum of 16 credits. SUR 608, MED 608.
Focus on advanced clinical and surgical skills. Students have more responsibility for patient care and direct learning to specific topics in general or subspecialty surgery. Clerkship options vary by community.

621. Nutritional Care of Surgical Patients
Fall, Winter, Spring, Summer. 4 to 12 credits. SUR 808, MED 608, approval of instructor.
Clinical experience on the Nutrition Team in dealing with surgical and medical patients requiring therapeutic nutrition as a result of metabolic derangement and nutritional deficiencies. Major emphasis on nutritional assessment and formulation of plans of management through intravenous support.

501. Shock and Metabolism
Fall, Winter, Spring, Summer. 3(3-0) Master's student in surgery or approval of department.
Results of prolonged reduction in tissue perfusion on tissue metabolism, structure and function at the systemic, cellular and subcellular levels and pharmacologic interventions useful in volume resuscitation.

502. Clinical Surgical Anatomy
Spring. 6(4-4) Master's student in surgery or approval of department. Interdepartmental with the Department of Anatomy.
Review of surgical anatomy; the opportunity to obtain detailed anatomical information through lecture and dissection sessions; and the Clinical interpretation of anatomy and surgical approaches.

503. Enteral and Parenteral Nutrition
Winter. 4(2-4) Master's student in surgery, approval of department.
The identification of individuals requiring nutritional support, nutritional requirements in diseases, delivery of total parenteral and enteral nutrition and special problems in nutrition (i.e., anorexia nervosa and obesity).

500. Seminars in Research
Fall, Winter, Spring, Summer. 1 credit. May reenroll for a maximum of 3 credits.
Master's student in surgery, approval of department.
Preparation and presentation of research data, philosophy and methods of research, thesis and other research reports, literature review, illustration of research data, practical assignments.

507. Master's Thesis Research
Fall, Winter, Spring, Summer. 1 to 15 credits. May reenroll for a maximum of 15 credits. SUR 601, SUR 602, SUR 603, approval of department.

SYSTEMS SCIENCE
See Electrical Engineering.

TEACHER EDUCATION TE
College of Education

101. Exploring Teaching
Fall, Winter, Spring. 3(2-3)
Examination of the manifest and hidden curriculum in classrooms; the multiple purposes of schooling; individual reasons for choosing teaching; participant/observation in a local classroom required.

200. Individual and the School
Fall, Winter, Spring, Summer. 5(3-0)
Not open to students with credit in TE 200A, T E 200B, T E 200C or T E 200D.
Major psychological factors in the school learning-teaching situation; concepts in human development related to problems in the school situation; teacher's role in motivation, conceptual learning, problem solving, and the development of emotional behavior, attitudes and values, learning of skills, retention and transfer, and measurement of student abilities and achievement.