

Descriptions—Surgery of Courses

620. Advanced Surgery Clerkship
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: (SUR 608 And MED 608) R: Open only to graduate-professional students in the College of Human Medicine.
Advanced experience in critical care, trauma, and nutrition. Students must successfully complete several technical bedside procedures with more responsibility for patient care than in SUR 608.

621. Surgical Nutritional Care Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course. P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine.
Clinical experience with nutrition team dealing with surgical and medical patients requiring therapeutic nutrition as a result of metabolic derangement and nutritional deficiencies.

633. Extended Clinical Experience
Fall, Spring, Summer. 6(6-0) P: (SUR 608)
Based in community hospitals and ambulatory sites, this is a 4 week clinical experience emphasizing interviewing skills, history, physical exam, problem solving and therapy.

637. Core Competencies III
Spring, Summer. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Human Medicine; Family Practice; Medicine; Obstetrics, Gynecology and Reproductive Biology; and Pediatrics and Human Development. Administered by Human Medicine. P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.
A weekly seminar addressing core knowledge and skills from an interdisciplinary perspective.

801. Shock and Metabolism
Fall. 4(4-0) R: Open only to M.S. students in Surgery.
Results of prolonged reduction in tissue perfusion on tissue metabolism, structure, and function at the systemic, cellular and subcellular levels. Pharmacologic interventions useful in volume resuscitation.

802. Clinical Surgical Anatomy
Spring. 4(2-4) Interdepartmental with Anatomy. R: Open only to Master's students in Surgery.
Review of surgical anatomy. Detailed anatomical information through lecture and dissection sessions. Clinical interpretation of anatomy and surgical approaches.

803. Enteral and Parenteral Nutrition
Fall, Summer. 3(3-0) R: Open only to M.S. students in Surgery.
Identification of individuals requiring nutritional support. Nutritional requirements in diseases. Delivery of total parenteral and enteral nutrition. Special problems.

804. Research Design and Quantitative Techniques for Surgical Residents
Spring. 3(3-0) R: Open only to students in master's degree program in Surgery.
Recognition and differentiation between experimental designs. Identification of strengths and weaknesses of a manuscript. Recognition and definition of statistical terms and common inferential techniques used in surgical research. Use of computer software in research.

890. Seminars in Research
Fall, Spring, Summer. 1 credit. A student may earn a maximum of 5 credits in all enrollments for this course. R: Open only to M.S. students in Surgery.
Philosophy and methods of research. Preparation and presentation of research data in research reports. Practical applications.

899. Master's Thesis Research
Fall, Spring, Summer. 3 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course. P: SUR 801, SUR 802, SUR 803, SUR 804. R: Open only to M.S. students in Surgery. Approval of department.

SYSTEMS SCIENCE SYS

Department of Electrical and Computer Engineering College of Engineering

410. Systems Methodology
Spring. 2(1-3) P: Completion of Tier I writing requirement. R: Open only to seniors in the Engineering Arts major.
Systems analysis and design. Needs analysis, system identification, graphical models. Team project required.

TEACHER EDUCATION TE

Department of Teacher Education College of Education

150. Reflections on Learning
Fall, Spring, Summer. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education.
Students' experiences as learners in comparison to psychological, sociological, and anthropological theories and assumptions about learning and teaching in and out of school.

240. Diverse Learners in Multicultural Perspective
Fall, Spring, Summer. 3(2-2) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Counseling, Educational Psychology and Special Education. Not open to students with credit in TE 250.
Communicative, linguistic, physical, sensory, behavioral, affective, and cognitive differences in learning in multicultural classrooms. Factors that mediate access to knowledge.

250. Human Diversity, Power, and Opportunity in Social Institutions
Fall, Spring, Summer. 3(3-0)
Comparative study of schools and other social institutions. Social construction and maintenance of diversity and inequality. Political, social and economic consequences for individuals and groups.

301. Learners and Learning in Context (W)
Spring. 4(3-4) P: Completion of Tier I writing requirement. (TE 150) And (TE 250 Or CEP 240) R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program.
Role of social context and sociocultural background in learning. Natural and socially constructed differences among learners. Relationship among subject-specific knowledge, teaching and learning that subject, and the institutional and communal context. Multiple literacies.

401. Teaching of Subject Matter to Diverse Learners (W)
Fall. 5(3-8) P: Completion of Tier I writing requirement. TE 301. R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program.
Examining teaching as enabling diverse learners to inquire into and construct subject-specific meanings. Adapting subject matter to learner diversity. Exploring multiple ways diverse learners make sense of the curriculum.

402. Crafting Teaching Practice (W)
Spring. 6(4-8) P: Completion of Tier I writing requirement. (TE 401) R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program.
Gathering data on learners to inform content and instructional decisions. Deciding what should be taught for specific disciplines. Teachers' multiple roles and their professional, intellectual, socio-political, and communal responsibilities.

405. Feminist Analyses of Education in the United States
Fall of odd years. 3(3-0) Interdepartmental with Women's Studies. Administered by Women's Studies. P: (WS 201 Or WS 202 Or WS 203) R: Not open to freshmen or sophomores.
Feminist perspectives on the role of gender in structuring educational experiences in elementary and secondary school.

490. Independent Study in Teacher Education
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program. Approval of department.
Supervised individual or small group study of the practice of teaching.

494. Field Experience in Teacher Education
Fall, Spring. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Approval of department.
Supervised practice and/or observations in educational settings.