618. Anesthesia 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.
Problem solving in anesthetic medicine and surgery. Pulmonary physiology. Diagnostic tools and tests, and indications for surgical procedures.

619. Sub-specialty Surgery 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.
Surgical domains are covered otherwise in which students desire further exposure.

620. Advanced Surgery Clerkship
Fall, Spring, Summer. 6 credits.
P: SUR 608, MED 608. R: Open only to graduate-professional students in College of Human Medicine.
Advanced experience in critical care, trauma, and pulmonary physiology.

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.

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, Medicine, Pediatrics and Human Development, Family Practice, and Obstetrics, Gynecology and Reproductive Biology. Administered by Human Medicine.
P: MIP 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.

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

894. Research Design and Quantitative Techniques for Surgical Residents
Spring, 3(0-3)
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.

986. 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.

SYSTEMS SCIENCE

TEACHER EDUCATION

Department of Teaching Education
College of Education

150. Reflections on Learning
Fall, Spring, Summer. 3(0-3) 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.
R: Not open to students with credit in TE 250.
Communicative, linguistic, physical, sensory, behavioral, cognitive, and affective 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: TE 150; TR 250 or CSP 240. R: Not open to freshmen and sophomores. Open only to Education majors and to students in Education specialization. Completion of Tier I writing requirement. Role of social context and sociocultural background in learning. Natural and socially constructed differences among learners. Developing the 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: TE 301. R: Not open to freshmen and sophomores. Open only to Education majors and to students in Education specialization. Completion of Tier I writing requirement. 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: TE 401. R: Not open to freshmen and sophomores. Open only to Education majors and to students in Education specialization. Completion of Tier I writing requirement. 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, sociopolitical, and communal responsibilities.

405. Feminist Analyses of Education in the United States
Fall. 3(3-0) Interdepartmental with Women's Studies. Administered by Women's Studies.
P: WRS 201; WRS 202 or WRS 203. R: Open only to freshmen and sophomores. Feminist perspectives on the role of gender in structuring educational experiences in elementary and secondary school.

470. Student Teaching
Fall, Spring. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course.
R: Not open to freshmen and sophomores. Open only to teacher certification candidates. Extended supervised experience in K-12 classrooms to develop proficiency in teaching. Learning to teach and learn in the classroom. Temporary approval effective from Summer Semester 1994 through Spring Semester 1996.

473. Elementary Student Teaching: Special Education
Fall, Spring. 10(2-24)
P: Open only to freshmen and sophomores. Open only to elementary special education teaching certification candidates. Supervised special education student teaching in elementary schools. Participation in planning, implementing, and evaluating instruction. Individualized Educational Planning (IEP) Committee and interdisciplinary exercises. Temporary approval effective from Summer Semester 1994 through Spring Semester 1996.