

# SURG - SURGERY

## SURG 800 Surgery Clerkship

**Credits 1.25 to 15. 1.25 to 15 Other Hours.** 25 to 15. Clinical surgery with workup of patients and participation with the clinical faculty in preoperative evaluation, operative procedure and postoperative care; participation in clinical rounds, conferences, emergency room and formal classroom activity. **Prerequisite:** Satisfactory completion of year two of the medical curriculum.

## SURG 801 Plastic Surgery

**Credits 1.25 to 6.3. 1.25 to 6.3 Other Hours.** Exposure to plastic surgery procedures and operating room experience; increase knowledge of wound care, surgical closures, and treatment of common plastic and reconstructive patients; participate in pre-op evaluations, decision-making, surgical operations, and postoperative care.

## SURG 802 Otolaryngology

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; familiarization with surgically general otolaryngology; increase familiarity and knowledge to promote the understanding and performance of a comprehensive otolaryngology examination in both adults and children; expansion of knowledge base to understand the diagnosis and treatment of common otolaryngologic problems and emergencies; exposure and basic knowledge in the use of common otolaryngologic practices such as fiber optic equipment, audiology, allergy, operating microscope and vestibular testing. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 803 General Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; familiarization with general surgical procedures; training in both pre and post-op care of general surgical patients and expansion of OR and procedural experience; experience in emergency surgical care; perform initial history and physical examination and plan initial workup of general surgical patients seen as an elective or emergency consultation; scrub in surgery, recognize anatomic structures, and know what procedure is indicated; familiarization with general surgical emergency situations, both inpatient and outpatient. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 804 Surgery of the Spine

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; familiarization with spine and musculoskeletal surgical procedures; increase familiarity and knowledge to perform a spine and musculoskeletal exam, identify various congenital and acquired pathologies of the spine and formulate treatment strategies, demonstrate an understanding of the different techniques and goals of various spinal surgeries. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 805 Neurosurgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; correlation of neuroanatomy and neurophysiology in the major areas of neurosurgical care (brain, spine, and peripheral nerves); correlation of imaging studies with surgical anatomy; broad exposure to neurological diseases requiring surgical intervention; opportunity to assist with pre-operative and post-operative evaluation as well as operative experience, including serving as a surgical assistant in selected cases. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 806 Orthopedic Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 4-week elective; familiarization with orthopedic surgery which will involve treatment of musculoskeletal disorders; increase familiarity and knowledge with both ambulatory and surgical treatment of common orthopedic problems; assist in surgery and management of fractures; recognize and describe common fracture patterns seen in a community setting; introduction to adult reconstructive orthopedic surgery, including joint replacement procedures and arthroscopic surgery; diagnosis of many common ambulatory orthopedic problems; diagnosis of inpatient orthopedic problems to facilitate communication with orthopedic specialists; read plain films and selected MRI scans; demonstrate an understanding of the impact of orthopedic problems in the general health and well-being of patients. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 807 Plastic Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; exposure to a broadly based plastic and reconstructive surgery practice including pediatric and adult craniofacial, hand, microsurgery, soft tissue tumor, trauma, aesthetic and burn surgery; one-on-one experience with senior staff in both the clinic and operating room; involvement with all aspects of the management of the plastic surgery patient including initial diagnosis, assisting with surgery, and post-operative care, fully integrating into the plastic surgery team. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 810 Oral and Maxillofacial Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- to 4-week elective; introduction to the spectrum of trauma and pathology seen in the practice of Oral and Maxillofacial Surgery; increase familiarity and knowledge of practical head and neck anatomy and its application to diagnostic and surgical procedures; instruction on common regional blocks of the head and neck for pain management; strengthening of knowledge of antibiotic therapy of maxillofacial infections; participation in diagnosing and management of maxillofacial trauma and infections. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 812 Bariatric Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Exposure to scope of bariatric surgery; expand knowledge of anatomy and pathophysiology related to bariatric patients; participation in pre-op evaluations, decision-making, surgical operations, and postoperative care.

## SURG 815 Urology

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4- week elective; experience in the evaluation and management of common clinical problems seen in a urology practice; familiarization with the techniques utilized in urologic historical and physical examination; the basic urologic evaluation and indications for specialized urologic examination; urologic diagnostic and therapeutic events to enable understanding of the indications and contraindications for diagnostic testing and surgical therapy. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 816 Surgery Acting Internship

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Advanced level of surgical training by approaching the functioning responsibility of an intern while building on the clinical skills obtained in third year Surgery Clerkship; training in pre and post-op care of general surgical patients to expand OR and procedural experiences; experience in emergency surgical care by taking in house surgical call with the junior general surgical resident; more in depth involvement for senior medical students in the care of critically ill patients within the intensive care unit setting.

## SURG 817 Vascular Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; further educational experience in the clinical care of patients with vascular surgical disorders; improvement of clinical acumen in recognizing the problems of these patients as individuals; broaden educational base and enable decision making about the care of patients with vascular surgical problems; provides experience which enables those considering vascular surgery as a career choice to further evaluate decision as to its appropriateness; broad exposure to the various surgery educational activities. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 818 Surgical Intensive Care Unit

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week SICU rotation; additional experience in the management of critically ill trauma and general surgical patients, as well as exposure to the multidisciplinary management of those patients; includes education directed towards ventilatory management, hemodynamic monitoring and management, as well as nutritional, pharmacologic, and rehabilitative efforts. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 819 Abdominal Transplant Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 4-week elective; exposure to all realms of transplantation surgery, including the procurement procedure (donor) and transplants (liver, kidney and pancreas); postoperative care of the recipient, including ICU management; attend our pre and posttransplant clinics to gain a full understanding of transplantation medicine; multiple didactic sessions. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 820 ENT Surgery Elective

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; familiarization with general surgical procedures; increase training in both pre and post-op care of general surgical patients and expansion of OR and procedural experience; experience in emergency surgical care; perform initial history and physical examination and plan initial workup of general surgical patients seen as an elective or emergency consultation; scrub in surgery, recognize anatomic structures, and know what procedure is indicated; become familiar with general surgical emergency situations, both inpatient and outpatient. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 821 Acute Care Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Broad exposure to the evaluation and management of patients with urgent/emergent surgical problems; broad exposure to operative techniques and an opportunity to develop technical skills; practical clinical experience in preparation for a surgical internship.

## SURG 822 General Surgery – GI II

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Exposure to a broadly based plastic and reconstructive surgery practice including adult cranio-facial, hand, microsurgery, soft tissue tumor, trauma, aesthetic and burn surgery; involves management of the plastic surgery patient: initial diagnosis, assisting with surgery, and post-operative care; integration into the plastic surgery team.

## SURG 823 Liver/Kidney Transplantation

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** Broad exposure to fundamental concepts of perioperative care, and specific exposure to the comprehensive management of transplant patients and the process of transplantation; various aspects of transplantation to include organ preservation, procurement, immunosuppressive medications and surgical complications; opportunity to take on increasing responsibilities while building on the clinical skills obtained in third year surgery clerkship.

## SURG 832 Cardiovascular and Thoracic Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; becoming part of the surgical team caring for patients undergoing cardiac procedures; participation with cardiologists, attending surgeons and a house staff in the evaluation and follow-up of cardiac surgical patients; experience emphasizes applied cardiopulmonary physiology and diagnostic studies in patient management. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 836 Orthopedic Surgery/Sports Medicine

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; designed to provide an experience for those considering orthopedic surgery; introduction to care and treatment of common orthopedic problems; experience to perform initial orthopedic evaluations associated with sports injuries as well as routine orthopedic physical exams. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 838 Surgical Oncology

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; in-depth experience in the field of surgical oncology, especially upper gastrointestinal malignancies; involvement in the preoperative, intra-operative, and post-operative care of the patient; better understanding of the significance of multimodality treatment regimens in the therapy of cancer. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 840 Plastic Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; exposure to a broadly based plastic and reconstructive surgery practice including pediatric and adult craniofacial, hand, microsurgery, soft tissue tumor, trauma, aesthetic and burn surgery; one-on-one experience with senior staff in both the clinic and operating room; involved with all aspects of the management of the plastic surgery patient including initial diagnosis, assisting with surgery, and post-operative care, fully integrating into the plastic surgery team. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 841 Surgical Oncology

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; in-depth experience in the field of surgical oncology, especially upper gastrointestinal malignancies; involvement in the preoperative, intra-operative, and post-operative care of the patient; better understanding of the significance of multimodality treatment regimens in the therapy of cancer. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 842 Adult and Pediatric Urology

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; hands-on experience in a busy urology practice; time in the clinic and in the operating room; includes participation in the diagnosis, evaluation, and treatment of a wide spectrum of urologic disease; experience in performing urologic history and physical exam; development of a treatment plan for patients with common urologic problems; interpretation of urologic imaging studies including CT scan, ultrasound, and intra-operative fluoroscopy. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 843 Genitourinary

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 4-week elective; facilitate educational process and stimulate further interest in urology; increase familiarity and knowledge of basic urological evaluation, and indications for specialized urologic examination of radiographic, ultrasonographic, endoscopic, and urodynamic studies; exposure to urologic instrumentation in both the inpatient and outpatient setting in an attempt to give insight into the indications and contraindications for instrumentation, and to initiate understanding of the normal versus the pathologic states identified at instrumentation of the genitourinary tract. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 845 Transplant Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; process of transplantation from the preoperative evaluation to the postoperative care; introduction to various aspects of transplantation to include organ preservation, procurement, immunology, immunosuppressive medications and technical complications; increase familiarity and knowledge of surgical complications of the transplant recipient and their treatment and surgical alternatives for dialysis access in the renal failure patients. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 848 Ophthalmology

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; increase familiarity and knowledge of ocular history taking; general ocular examination; concepts of medical ophthalmology and systemic disease relationships; basic elements of neuro-ophthalmology and understanding the fundamentals of strabismus and its diagnosis. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 849 Pediatric Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- or 4-week elective; increase familiarity and knowledge of children/neonates as surgical patients; increase familiarity and knowledge to recognize entities peculiar to pediatric surgery; management and treatment of common pediatric surgical problems. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 853 Podiatry

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2-week elective; medical problems of the foot; increase familiarity and knowledge to evaluate weight bearing foot x-rays; perform a thorough examination, diagnose and provide differentiate foot problems; properly render, prescribe, or evaluate diabetic foot care; understand how to perform a digital block; and perform a basic biomechanical exam. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 854 Orthopedic Surgery

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- to 4-week elective; experience in orthopedic surgery and the treatment of musculoskeletal disorders; participation in the ambulatory and surgical treatment of common orthopedic problems; assist in surgery and the management of closed fractures and recognize and describe common fracture patterns seen in the community setting; surgeries include but are not limited to joint replacement, arthroscopy, fractures, foot and hand reconstruction, sports medicine and spine; familiarization with the techniques of orthopedic history taking and musculoskeletal examination; participation in orthopedic trauma call at a level dependent upon individual interest. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 857 Ophthalmology - Retina

**Credits 1.25 to 10. 1.25 to 10 Other Hours.** 2- to 4-week elective; work along faculty in the diagnosis, testing and treatment of corneal, external, and vitreoretinal diseases; increase familiarity and knowledge on how to use a direct-ophthalmoscope, slit lamp and other specialized instruments as well as how to perform ophthalmology examinations; observation of surgical procedures performed both in office and in the operating room. **Prerequisite:** Satisfactory completion of year three of the medical school curriculum.

## SURG 858 General Surgery

**Credits 1 to 15. 1 to 15 Other Hours.** Integration into the service as a member of the surgical team; participation in all aspects of patient management as both inpatient and outpatient; completion of at least 40 hours per week on the service; participation in night call required; housing not provided. **Prerequisite:** Admission to medical school.

## SURG 864 Minimally Invasive Surgical Research

**Credits 1 to 15. 1 to 15 Other Hours.** Participation in research project; fundamentals to begin, carry out and organize research projects in the future; how to think critically, answer new questions in a scientific way and the process of presenting and publishing at the national level; preparation to practice and contribute to evidence based medicine. **Prerequisites:** 3rd year classification in good standing.

## SURG 865 Oculoplastic Surgery

**Credits 1 to 15. 1 to 15 Other Hours.** Exposure to a broadly based oculoplastic and reconstructive surgery practice including adult craniofacial, soft tissue tumor and aesthetic surgery; one-on-one experience with senior staff in the clinic and operating room; management of the oculoplastic surgery patient including initial evaluation, assisting with surgery and post-operative care. **Prerequisites:** SURG 800 and MPED 800.

## **SURG 872 Surgical Innovation & Transformative Rapidly Engineered Prototyping**

**Credits 1 to 15. 1 to 15 Other Hours.** Surgical Innovation & Transformative Rapidly Engineered Prototyping. Identification of clinical unmet needs in the operating theater; introduction to proven strategies and tactics employed by major medical device companies to evaluate surgical procedures for innovation potential; development of a sophisticated level of understanding on how to become an effective clinician inventor in a hospital setting. **Prerequisites:** SURG 800.

## **SURG 875 Trauma Surgery**

**Credits 0 to 10. 0 Lecture Hours. 0 to 10 Other Hours.** Development of knowledge and skill in the evaluation, surgical intervention, ward care, and follow-up of trauma patients. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctor of Medicine classification.

## **SURG 876 Oculoplastics Surgery**

**Credits 0 to 10. 0 Lecture Hours. 0 to 10 Other Hours.** Introduction to oculoplastics; outpatient experience involving clinic, in office surgeries, operating room cases and some inpatient consults; perspective of orbital and oculoplastic diseases including diagnosis and treatment plans. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctor of Medicine classification.

## **SURG 877 Orthopedic Spine Surgery**

**Credits 0 to 10. 0 Lecture Hours. 0 to 10 Other Hours.** Exposure to orthopedic spine surgery and the care of patients with spinal injuries and diseases; development of knowledge and skills to formulate principles for assessing, planning and initiating treatment of adult patients with surgical and non-operative problems. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisite:** Doctor of Medicine classification.

## **SURG 878 Colon and Rectal Surgery**

**Credits 0 to 10. 0 to 10 Other Hours.** Aspects of colon and rectal surgery including robotic surgery, in-office procedures, and colonoscopy. **Prerequisite:** Doctor of Medicine classification.

## **SURG 886 Otolaryngology Acting Internship**

**Credits 0 to 10. 0 to 10 Other Hours.** Exposure to all the different subspecialties within otolaryngology at an intern level. **Prerequisite:** Doctor of Medicine classification.

## **SURG 888 Neurosurgery and Clinical Neurosciences Blended**

**Credits 0 to 10. 0 to 10 Other Hours.** Exposure to the principles and skills underlying the recognition and management of neurosurgical and neurological diseases in the inpatient and outpatient clinical setting. **Prerequisite:** Doctor of Medicine classification.

## **SURG 985 Off Campus Student Initiated Elective**

**Credits 1.25 to 15. 1.25 to 15 Other Hours.** Formally described elective courses at another medical school or off-campus opportunities that are not formally approved electives; School of Medicine requires that each of these electives be approved prior to the rotation.

## **SURG 999 On Campus Student Initiated Elective**

**Credits 1.25 to 12. 1.25 to 12 Other Hours.** On-campus opportunity in the department of Surgery in the School of Medicine that is not defined herein; experiences may include clinical research, basic science research, library research, other basic science activities, and other clinical activities; interest in developing an elective of this type should contact the head of the appropriate department for additional details.