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.
25 to 6.25.

SURG 802 Otolaryngology
Credits 1.25 to 10. 1.25 to 10 Other Hours.
25 to 10. This 2- or 4-week elective will familiarize the student with surgically general otolaryngology. Increase the student's familiarity and knowledge to promote the understanding and performance of a comprehensive otolaryngology examination in both adults and children; expand the knowledge base to understand the diagnosis and treatment of common otolaryngologic problems and emergencies; provide the 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.
25 to 10. This 2- or 4-week elective will familiarize the student with general surgical procedures. Increase the student’s training in both pre and post-op care of general surgical patients and to expand on their OR and procedural experience; provide experience in emergency surgical care; perform an 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 804 Surgery of the Spine
Credits 1.25 to 10. 1.25 to 10 Other Hours.
25 to 10. This 2- or 4-week elective will familiarize the student with spine and musculoskeletal surgical procedures. Increase the student’s 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.
25 to 10. This 2- or 4-week elective will allow the student to correlate neuroanatomy and neurophysiology in the major areas of neurosurgical care: brain, spine, and peripheral nerves. Additionally, the student will correlate imaging studies with surgical anatomy. The student will be provided with a broad exposure to neurological diseases requiring surgical intervention. The student will be provided with the 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.
25 to 10. This 4-week elective will familiarize the student with orthopedic surgery which will involve treatment of musculoskeletal disorders. This elective will increase the student's familiarity with both ambulatory and surgical treatment of common orthopedic problems; allow students to assist in surgery and management of fractures; help students be able to recognize and describe common fracture patterns seen in a community setting; introduce students to adult reconstructive orthopedic surgery, including joint replacement procedures and arthroscopic surgery. Students can also diagnose many common ambulatory orthopedic problems; diagnose inpatient orthopedic problems to facilitate communication with orthopedic specialists; read plain films and selected MRI scans; and demonstrate an understanding 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.
25 to 10. This 2- or 4-week elective will provide an 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. The student will be provided a one-on-one experience with senior staff in both the clinic and operating room. The student will be involved with all aspects of the management of the Plastic Surgery patient: initial diagnosis, assisting with surgery, and post-operative care, fully integrating the student 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.
25 to 10. This 2- to 4-week elective is an introduction to the spectrum of trauma and pathology seen in the practice of Oral and Maxillofacial Surgery. Increase the student’s 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 student’s knowledge of antibiotic therapy of maxillofacial infections. Students will participate 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.
25 to 10.
SURG 815 Urology  
Credits 1.25 to 10. 1.25 to 10 Other Hours.  
25 to 10. This 2- or 4-week elective is designed to give the student experience in the evaluation and management of common clinical problems seen in a Urology practice. The elective will familiarize the student 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.  
25 to 10. 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.  
25 to 10. This 2- or 4-week elective will further the educational experience in the clinical care of patients with vascular surgical disorders and improve the clinical acumen of students in recognizing the problems of these patients as individuals. The student will broaden his/her educational base and enable him/her to make decisions about the care of patients with vascular surgical problems. The elective will provide students with an experience which will enable those considering vascular surgery as a career choice to further evaluate this decision as to its appropriateness. Additionally, the course will provide students with 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.  
25 to 10. This 2- or 4-week SICU rotation will provide the student with additional experience in the management of critically ill trauma and general surgical patients, as well as exposure to the multi-disciplinary management of those patients. This will include 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.  
25 to 10. This 4-week elective will be exposed to all realms of transplantation surgery, including the procurement procedure (“donor”) and transplants (liver, kidney and pancreas). Also, an essential part of our field is the postoperative care of the recipient, including ICU management. Finally, the student will attend our pre and posttransplant clinics to gain a full understanding of transplantation medicine. Multiple didactic sessions are offered.  
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.  
25 to 10. This 2- or 4-week elective will familiarize the student with general surgical procedures. Increase the student’s training in both pre and post-op care of general surgical patients and to expand on their OR and procedural experience; provide experience in emergency surgical care; perform an 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.  
25 to 10. This elective will provide a broad exposure to the evaluation and management of patients with urgent/emergent surgical problems. Provide a broad exposure to operative techniques and an opportunity to develop technical skills. Provide 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.  
25 to 10. This elective will strive to: Provide an exposure to a broadly based plastic and reconstructive surgery practice including adult craniofacial, hand, microsurgery, soft tissue tumor, trauma, aesthetic and burn surgery; Involve the student in the management of the plastic surgery patient: initial diagnosis, assisting with surgery, and post-operative care; Integrate the student into the Plastic Surgery team.

SURG 823 Liver/Kidney Transplantation  
Credits 1.25 to 10. 1.25 to 10 Other Hours.  
25 to 10. The faculty will strive to: provide a broad exposure to fundamental concepts of perioperative care, and specific exposure to the comprehensive management of transplant patients and the process of transplantation; educate the student on various aspects of transplantation to include organ preservation, procurement, immunosuppressive medications and surgical complications; provide the medical student with the opportunity to take on increasing responsibilities while building on the clinical skills obtained by the student in his third year Surgery Clerkship.

SURG 832 Cardiovascular and Thoracic Surgery  
Credits 1.25 to 10. 1.25 to 10 Other Hours.  
25 to 10. This 2- or 4-week elective will allow students to become a part of the surgical team caring for patients undergoing cardiac procedures. Students participate with cardiologists, attending surgeons and a house staff in the evaluation and follow-up of cardiac surgical patients. The experience emphasizes applied cardiopulmonary physiology and diagnostic studies in patient management.

SURG 836 Orthopedic Surgery/Sports Medicine  
Credits 1.25 to 10. 1.25 to 10 Other Hours.  
25 to 10. This 2- or 4-week elective is designed to provide an experience for those considering Orthopedic Surgery and introduce the students to care and treatment of common orthopedic problems. The elective will provide students with the 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.  
25 to 10. This 2- or 4-week elective will provide an in-depth experience in the field of surgical oncology, especially upper gastrointestinal malignancies. The student will be involved in the preoperative, intraoperative, and post-operative care of the patient. The elective will provide a 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.  
25 to 10. This 2- or 4-week elective will provide an 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. The student will be provided a one-on-one experience with senior staff in both the clinic and operating room. The student will be involved with all aspects of the management of the Plastic Surgery patient: initial diagnosis, assisting with surgery, and post-operative care, fully integrating the student 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.  
25 to 10. This 2- or 4-week elective will provide an in-depth experience in the field of surgical oncology, especially upper gastrointestinal malignancies. The student will be involved in the preoperative, intraoperative, and post-operative care of the patient. The elective will provide a 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.  
25 to 10. This 2- or 4-week elective is designed to give the student a hands-on experience in a busy urology practice. Time will be spent in the clinic and in the operating room. It will include participation in the diagnosis, evaluation, and treatment of a wide spectrum of urologic disease. The elective will provide students the experience of performing urologic history and physical exam; developing a treatment plan for patients with common urologic problems; interpreting 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.  
25 to 10. This 4-week elective is designed to facilitate their educational process and to stimulate further interest in urology. This elective will increase the student’s familiarity and knowledge of basic urological evaluation, and indications for specialized urologic examination of radiographic, ultrasonographic, endoscopic, and urodynamic studies. This elective will also expose students 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.  
25 to 10. This 2- or 4-week elective is designed to educate the student on the process of transplantation from the preoperative evaluation to the postoperative care; introduce the student to various aspects of transplantation to include organ preservation, procurement, immunology, immunosuppressive medications and technical complications. This elective will increase the student’s 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.  
25 to 10. This 2- or 4-week elective will increase the student’s familiarity and knowledge of ocular history taking; general ocular examination; concepts of medical ophthalmology and systemic disease relationships; basic elements of neuro-opthalmology and understand 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.  
25 to 10. This 2- or 4-week elective will increase the student’s familiarity and knowledge of children/neonates as surgical patients. This elective will increase the student’s familiarity and knowledge to recognize entities peculiar to pediatric surgery; manage and treat 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.  
25 to 10. This 2-week elective is designed to educate the student on the medical problems of the foot. This elective will increase the student’s familiarity and knowledge of weight bearing foot x-rays; perform a thorough examination, diagnose and provide differentiate foot problems. Students will 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.  
25 to 10. This 2- to 4-week elective provides an experience for medical students in orthopedic surgery and the treatment of musculoskeletal disorders. Students will participate in the ambulatory and surgical treatment of common orthopedic problems. Students will 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. Students will become familiar with the techniques of orthopedic history taking and musculoskeletal examination. Students will participate in orthopedic trauma call at a level dependent upon their 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.
This 2- to 4-week elective is designed for students to work along faculty in the diagnosis, testing and treatment of corneal, external, and vitreoretinal diseases. This elective will increase the student’s familiarity and knowledge as they learn how to use a direct-ophthalmoscope, slit lamp and other specialized instruments as well as how to perform ophthalmology examinations. They are allowed to observe 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.
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 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 999 On Campus Student Initiated Elective
Credits 1.25 to 12. 1.25 to 12 Other Hours.
25 to 12. This is an on-campus opportunity in the department of Surgery in the College 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. Students interested in developing an elective of this type should contact the head of the appropriate department for additional details.