

# SURGERY (SURG)

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## **SURG G700 - Surgery Clerkship (8 Credits)**

The Surgery Clerkship is a required rotation for third-year medical students consisting of primarily inpatient and also outpatient experiences. The overall goal of the clerkship is to provide relevant experiences for the student in the care of the patients with both acute and elective surgical problems. Under the supervision of attending staff physicians and residents, students spend variable amounts of time on general surgery and its subspecialties. Students continue to develop skills in medical history-taking, physical examination, and the use of laboratory data in an organized fashion to understand surgical diseases. During this clerkship, students should develop an understanding of the metabolic and physiologic effects of injury and trauma; correlate disordered physiology with the surgical pathologic process; recognize surgical illness and the place of operative intervention in treatment of diseases; understand the impact of surgery on the patient and family, including the psychological and socioeconomic changes that result from an operation; and acquire surgical techniques and skills basic to all physicians, including wound care, suture technique, and the ability to assist in the operating room. Primary methods of instruction include self-directed study, case-based discussion/presentation, conferences, small-group discussion, and teaching rounds. Student teaching on the wards is provided by direct interaction with all level of the staff, including faculty, senior and junior house staff. Students should expect to scrub on cases. They should meet patients they have operated on daily. They should strive to write orders with resident supervision. Students are also expected to attend the weekly surgery clinic, morbidity and mortality conference, and grand rounds, as appropriate. The conclusion of the clerkship includes the Surgery NBME subject examination and an Oral Board/OSAT.

## **SURG G701 - Clerkship Completion (0 Credits)**

This course allows completion of required M-III Clerkships where normal enrollment for those courses crosses academic years. It is valued at zero credits to reflect enrollment, but all graded material is taken into account in the G700 clerkship grade. Successful completion of required hours results in a passing grade.

## **SURG G710 - Multidisciplinary Oncology Elective (2 Credits)**

This elective is meant to introduce clinical surgical oncology, radiation oncology and medical oncology to medical students. This rotation is ideal for both students interested in pursuing a career in one of these fields and for those simply interested in learning about oncology. The majority of students' time will be spent on the surgical oncology team with appropriate outreach to radiation oncology and medical oncology. The main focus of the rotation will be to be understanding the multidisciplinary center concept of tumor management, including the demanding complexities of integrating multiple specialties in a timely and effective manner to maximize patient management based on nationally based cancer guidelines and clinical trial options. Students will have the opportunity to participate in surgery and medical therapies as well.

## **SURG G715 - Neurosurgery Elective (2 Credits)**

This elective introduces medical students to diseases of the nervous system amenable to surgical treatment. The students will participate in outpatient office evaluations, emergency room consultations, hospital-based patient care activities, didactic conferences, and operating room procedures to achieve the course objectives. Students will present new cases to Attending Neurosurgeons, prepare presentations for academic conferences, participate in clinical research activities, and scrub in the operating room, with assigned activities commensurate with the student's academic level. Evaluations are based on achievement of the six course objectives. Completion of core surgery and neurology clerkships are strongly encouraged.

## **SURG G720 - Ophthalmology Elective (2 Credits)**

This two week rotation is designed for medical students who wish to become familiar with ophthalmology as a medical and surgical specialty.

During the rotation, students are expected to learn the principles of the ophthalmic history and physical examination. Students will become familiar with the most common ophthalmic conditions including cataracts, glaucoma, diabetic retinopathy, and strabismus. They will also have the opportunity to work with subspecialists within the field of ophthalmology. Students will see a wide variety of ophthalmic pathology and become familiar with all that ophthalmology has to offer as a career.

The students will be given the opportunity to use specialized ophthalmic instruments including direct and indirect ophthalmoscopes, slit lamps, tonometers, and ultrasounds. They will be exposed to advanced testing performed in the office and observe surgery if interested. For students interested in an ophthalmology residency, this rotation will be a stepping stone on that path. For students not interested in an ophthalmology residency, the rotation will provide invaluable insight into ophthalmology as it relates to primary care as well as other specialties. The focus is integrative care of the patient.

## **SURG G730 - Otolaryngology Elective (2 Credits)**

This elective is appropriate for both students interested in head and neck aspects of primary care (pediatrics, family, internal medicine), as well as students interested in head and neck surgery as a career. Students will have exposure to the operating room, the inpatient service, and the outpatient clinic. Students will spend approximately 50% of their time in the operating room.

## **SURG G735 - Plastic Surgery Elective (2 Credits)**

What is Plastic Surgery? Plastic Surgery is a specialized branch of surgery that is defined by the treatment of deformities of the face and body. Plastic surgery is founded in restoring form and function to all areas of the body. Historically, plastic surgery has been predicated on the tradition of innovation in problem solving. Only plastic surgeons are trained to operate on the human body from head to toe. Plastic surgery, therefore, is equally vested in reconstructive and cosmetic procedures. Whether deformity is caused by trauma, cancer, congenital abnormality, previous surgery, or age, plastic surgeons are uniquely trained to restore the normal. GHS Plastic Surgery & Aesthetics is dedicated to these principles that founded the specialty of plastic surgery. The student should expect to learn the basic principles of Plastic Surgery. The student will participate in a vast range of procedures including facial reconstruction, craniofacial/pediatric plastic surgery, microsurgery, breast reconstruction, body contouring, cosmetic surgery, and oculoplastic surgery. The student will spend most of the time in the operating room with some time in clinic. There are no call responsibilities.

**SURG G740 - Urology Elective (2 Credits)**

Students will gain exposure to the broad, overall concepts of urologic disease and the practice of urology in the hospital and office setting. Students will focus on basic diagnostic procedures and treatment of male and female patients with diseases of the genitourinary system. Students are expected to actively participate in diagnostic and therapeutic endeavors under staff members' directions. Emphasis is placed on developing case presentation skills and organizing patient data in a concise, presentable fashion. Students will assist at surgery and attend related conferences.

**SURG G745 - Pediatric Surgery Elective (2 Credits)**

Students will achieve objectives by direct experience in care of pediatric surgical patients by participating as a member of the pediatric surgical team in daily patient care meeting, rounds, operations and clinic sessions.

**SURG G750 - Pediatric Urology Elective (2 Credits)**

This rotation emphasizes the diagnosis and management of pediatric urology patients. During this elective, students will be exposed to all aspects of pediatric urology. The experience includes outpatient clinical evaluations, in-office procedures, and operative cases. This rotation offers the opportunity for a supervised extensive hands-on experience as well as ability to work one-on-one with a physician and/or nurse practitioner.

**SURG G755 - Adult Cardiac Surgery (2 Credits)**

This elective introduces third year medical students to pre and post-operative patients with acute/chronic cardiac surgical problems. Students spend 2 weeks working during the day. Residents and faculty will supervise all student activities. The students' exposure will include patient encounters on the surgical floors, ICU, cath and electrophysiology lab, operating room and office. Students will also work with physician assistants during the rotation. Education material is presented through resident and attending rounds, didactic lectures, surgery conferences, morbidity/mortality conference and simulation training. Students are expected to give one presentation during the two week period.

**SURG G760 - General Thoracic (2 Credits)**

This third year 2 week rotation provides an in depth comprehensive experience in the diagnosis and surgical treatment of patients benign and malignant thoracic disease. The student will participate in inpatient and outpatient surgery, thoracic surgery office, and thoracic multidisciplinary clinic (MDC).

**SURG G765 - Colorectal Surgery (2 Credits)**

This rotation emphasizes the diagnosis and management of colorectal patients. During this elective, students will be exposed to all aspects of colorectal health. The experience includes outpatient clinical evaluations, in-office procedures, and operative cases. This rotation offers the opportunity for a supervised extensive hands-on experience as well as ability to work one-on-one with a physician.

**SURG G770 - Endocrine Surgery (2 Credits)**

This third-year, two-week rotation emphasizes the diagnosis and management of thyroid, parathyroid and adrenal diseases. The experience includes outpatient clinical evaluations, ultrasound-guided thyroid fine needle aspiration biopsy, and operative cases. This rotation offers the opportunity for a supervised extensive hands-on experience as well as ability to work one-on-one with a physician through all aspects of the care of the endocrine surgery patient.

**SURG G775 - Vascular Medicine (2 Credits)**

The vascular medicine clinical rotation will provide the medical students with an introduction to the diagnostic, therapeutic, and preventative approaches to all peripheral vascular diseases. The field of vascular medicine routinely uses non-invasive vascular testing to quantify disease and then determines if medical management is appropriate; and if not, assists in the application of more invasive therapies. The medical student will be introduced to the clinical characteristics of many vascular diseases, including arterial, venous and lymphatic, as they occur at peripheral, aortic, renal, mesenteric, coronary, cerebral, pulmonary, and other sites. Students will get a glimpse into the extensive knowledge base that is essential in understanding the pathogenesis of vascular diseases including PAD, aneurysms, vasculitis, arteriovenous fistulas, lipid disorders, essential hypertension, renovascular hypertension, arterial and venous thrombosis, pulmonary embolism, varicose veins, venous insufficiency (CVI), lymphedema and vasospastic disorders.

**SURG G800 - Acute Care Surgery Acting Internship (4 Credits)**

Students on the ACS/Trauma rotation serve as junior surgical house officers to patients with acute surgical problems and trauma. Students spend two weeks working during the day and two weeks at night. Residents and faculty will supervise all student activities. The students' exposure will include patient encounters on the surgical floors, emergency room, trauma bay, and clinic. M4 students will also be expected to teach M3 medical students rotating through their surgical clerkships. Education material is presented through resident and attending rounds, didactic lectures, surgery conferences, morbidity/mortality conference and simulation training. M4 students are expected to give one presentation during the four week period and take the NBME Advanced Clinical Exam in Surgery.

**SURG G801 - Trauma Acting Internship (4 Credits)**

Students on the Trauma rotation serve as junior surgical house officers to patients with acute trauma. Students spend two weeks working during the day and two weeks at night. Students will work the Saturday and Sunday in between the day weeks. This means rounding on Saturday and Sunday with the Interns. Residents and faculty will supervise all student activities. The students' exposure will include patient encounters in the emergency room, trauma bay, and clinic. M4 students will also be expected to teach M3 medical students rotating through their surgical clerkships. Education material is presented through resident and attending rounds, didactic lectures, surgery conferences, morbidity/mortality conference and simulation training. M4 students are expected to give one presentation during the four week period.

**SURG G802 - Neurosurgery Acting Internship (4 Credits)**

This intensive rotation is intended for qualified students applying for neurosurgical residency training. This 4-week experience provides advanced exposure to transition students toward intern level responsibilities for patient care. The students will participate in outpatient office evaluations, emergency room consultations, hospital-based patient care activities, didactic conferences, and operating room procedures to achieve the course objectives. Students will present new cases to Attending Neurosurgeons, prepare oral presentations for academic conferences, participate in clinical research activities, and scrub in the operating room. Students will participate in overnight neurosurgical call in accordance with ACGME Duty Hours standards. Evaluations are based on achievement of the six course objectives.

**SURG G810 - Pediatric Surgery (4 Credits)**

This rotation offers the student an opportunity to work closely with pediatric surgeons in the office and hospital practice using the preceptor method to provide an exemplary approach to the management of problems in surgical pediatrics. The main emphasis of the course is to provide a basis for the comprehensive care of children requiring surgical intervention. The student will be exposed to the basic surgical techniques and be given the opportunity to participate during certain procedures. Patients presenting with complaints ranging from management of para-surgical congenital anomalies will be seen in this setting. The student will work as part of a team of the pediatric surgery service, participating in preoperative, intraoperative, and postoperative care. The patient population will consist of age groups from the premature newborn to the young adolescent. Exposure to a broad spectrum of cases needing surgical intervention, and/or management, will be provided. Hospital rounds, lectures, and conferences will be scheduled for the student to parallel the surgeon. Students will spend two weeks working during the day and two weeks working at night.

**SURG G811 - Vascular Surgery (2-4 Credits)**

This 4th year clerkship will provide students a comprehensive experience in the diagnosis and management of patients with vascular disease, including arterial, venous, and lymphatic disorders. They will participate in all aspects of patient care including the inpatient and outpatient setting. Students will be treated as an intern and participate in both open surgical and endovascular treatment of patients on the vascular service. Under supervision of the attending surgeon and/or vascular surgical resident, the student will also be involved in performing a history and physical, writing notes, instituting care, evaluating problems, planning therapy and seeing consultations. A daily vascular conference takes place after morning report starting at 7 AM.

**SURG G812 - Oconee Surgical Elective (2-4 Credits)**

Apprenticeship style rotation where medical student will have the opportunity to work directly with a practicing general surgeon in rural practice. This will include shadowing the physician in the office, seeing consult patients in the emergency department, and operating with the surgeon on elective and emergent cases. Oconee does not have residents, which gives M4 medical students the unique opportunity to work directly with an attending physician.

**SURG G813 - Colorectal Surgery (2-4 Credits)**

This rotation emphasizes the diagnosis and management of colorectal patients. During this elective, students will be exposed to all aspects of colorectal health. The experience includes outpatient clinical evaluations, in-office procedures, and operative cases. This rotation offers the opportunity for a supervised extensive hands-on experience as well as ability to work one-on-one with a physician.

**SURG G814 - Multidisciplinary Surgical Oncology (2 Credits)**

This elective will introduce medical students to clinical surgical oncology, radiation oncology, and medical oncology. This rotation is ideal for students interested in pursuing a career in one of these fields or for those simply interested in learning about oncology. The majority of the students' time will be spent on the surgical oncology team with appropriate outreach to radiation and medical oncology. The main focus of the rotation will be to understand the multidisciplinary center concept of tumor management, including the demanding complexities of integrating multiple specialties in a timely and effective manner to maximize patient management based on national cancer guidelines and clinical trial options. Students will have the opportunity to participate in surgery and medical therapies as well. There will be no night or weekend duties.

**SURG G815 - Surgical Intensive Care Unit (4 Credits)**

The surgical critical care rotation will provide M4 students with experience in the clinical concepts and procedures used in surgical critical care. Under the supervision of faculty and residents students provide comprehensive ICU care for complex trauma, vascular, neurosurgical and general surgery patients. Students will also participate in trauma resuscitations in the trauma bay. Students are expected to be an integral part of the ICU team and assist in daily rounds, evaluating new consults, coordinating care with the pulmonary team and performing procedures. Students are expected to present two brief oral reports on assigned topics for critical care teaching rounds. Students will spend two weeks working during the day and two weeks working at night.

**SURG G820 - Urology (2 Credits)**

Students will gain exposure to the broad, overall concepts of urologic disease and the practice of urology in the hospital and office setting. Students will focus on basic diagnostic procedures and treatment of male and female patients with diseases of the genitourinary system. Students are expected to actively participate in diagnostic and therapeutic endeavors under staff members' directions. Emphasis is placed on developing case presentation skills and organizing patient data in a concise, presentable fashion. Students will assist at surgery and attend related conferences.

**SURG G825 - Neurosurgery (2 Credits)**

This elective introduces medical students to diseases of the nervous system amenable to surgical treatment. The students will participate in outpatient office evaluations, emergency room consultations, hospital-based patient care activities, didactic conferences, and operating room procedures to achieve the course objectives. Students will present new cases to Attending Neurosurgeons, prepare presentations for academic conferences, participate in clinical research activities, and scrub in the operating room, with assigned activities commensurate with the student's academic level. Evaluations are based on achievement of the six course objectives. Completion of core surgery and neurology clerkships are strongly encouraged.

**SURG G830 - Ophthalmology (4 Credits)**

This four week rotation is designed for medical students who wish to become familiar with ophthalmology as a medical and surgical specialty and may be leaning towards this field for residency. During the rotation, students are expected to learn the principles of the ophthalmic history and physical examination. Students will become familiar with the most common ophthalmic conditions including cataracts, glaucoma, diabetic retinopathy, and strabismus. They will also have the opportunity to work with subspecialists within the field of ophthalmology. Students will see a wide variety of ophthalmic pathology and become familiar with all that ophthalmology has to offer as a career. The students will be given the opportunity to use specialized ophthalmic instruments including direct and indirect ophthalmoscopes, slit lamps, tonometers, and ultrasounds. They will be exposed to advanced testing performed in the office and observe surgery if interested. For students interested in an ophthalmology residency, this rotation will be a stepping stone on that path. The students will also be exposed to interesting inpatient consults and emergency room patients. They will also have the option to come in with the ophthalmologist on call on certain nights. For students not interested in an ophthalmology residency, the rotation will provide invaluable insight into ophthalmology as it relates to primary care as well as other specialties. The goal is to have the students become proficient with the direct ophthalmoscope, the slit lamp and comfortable working up ophthalmology patients. The focus is integrative care of the patient. Students will be expected to work up and present patients to the attending physicians by the end of the rotation.

**SURG G835 - Otolaryngology Head and Neck Surgery (2 Credits)**

This elective is appropriate for both students interested in head and neck aspects of primary care (pediatrics, family, internal medicine), as well as students interested in head and neck surgery as a career. Students will have exposure to the operating room, the inpatient service, and the outpatient clinic. Students will spend approximately 50% of their time in the operating room.

**SURG G840 - Pediatric Neurosurgery (2 Credits)**

This 2 week rotation will provide an introduction to the preoperative, operative and post-operative care of infants and children. The student will have the opportunity to round with the attending pediatric neurosurgeon, evaluate and present consults, perform history and physicals and scrub in on cases in the operating room. The student will also see patients in the outpatient setting.

**SURG G845 - Plastic Surgery (2 Credits)**

What is Plastic Surgery? Plastic Surgery is a specialized branch of surgery that is defined by the treatment of deformities of the face and body. Plastic surgery is founded in restoring form and function to all areas of the body. Historically, plastic surgery has been predicated on the tradition of innovation in problem solving. Only plastic surgeons are trained to operate on the human body from head to toe. Plastic surgery, therefore, is equally vested in reconstructive and cosmetic procedures. Whether deformity is caused by trauma, cancer, congenital abnormality, previous surgery, or age, plastic surgeons are uniquely trained to restore the normal. GHS Plastic Surgery & Aesthetics is dedicated to these principles that founded the specialty of plastic surgery. The student should expect to learn the basic principles of Plastic Surgery. The student will participate in a vast range of procedures including facial reconstruction, craniofacial/pediatric plastic surgery, microsurgery, breast reconstruction, body contouring, cosmetic surgery, and oculoplastic surgery. The student will spend most of the time in the operating room with some time in clinic. There are no call responsibilities.

**SURG G850 - Pediatric Urology (2 Credits)**

This rotation emphasizes the diagnosis and management of pediatric urology patients. During this elective, students will be exposed to all aspects of pediatric urology. The experience includes outpatient clinical evaluations, in-office procedures, and operative cases. This rotation offers the opportunity for a supervised extensive hands-on experience as well as ability to work one-on-one with a physician and/or nurse practitioner.

**SURG G855 - Vascular Medicine (2-4 Credits)**

The vascular medicine clinical rotation will provide the medical students with an introduction to the diagnostic, therapeutic, and preventative approaches to all peripheral vascular diseases. The field of vascular medicine routinely uses non-invasive vascular testing to quantify disease and then determines if medical management is appropriate; and if not, assists in the application of more invasive therapies. The medical student will be introduced to the clinical characteristics of many vascular diseases, including arterial, venous and lymphatic, as they occur at peripheral, aortic, renal, mesenteric, coronary, cerebral, pulmonary, and other sites. Students will get a glimpse into the extensive knowledge base that is essential in understanding the pathogenesis of vascular diseases including PAD, aneurysms, vasculitis, arteriovenous fistulas, lipid disorders, essential hypertension, renovascular hypertension, arterial and venous thrombosis, pulmonary embolism, varicose veins, venous insufficiency (CVI), lymphedema and vasospastic disorders.

**SURG G860 - Wound Care (2 Credits)**

This 2 week rotation is designed to expose medical students to the assessment and management of various chronic wounds in a multidisciplinary setting. Students will spend the majority of their time at the Wound Healing Center of GHS at the Patewood Campus where they will round with the attending physician. Experience evaluating venous ulcerations, diabetic foot wounds, as well as unusual wounds such as vasculitic wounds will be provided. Hands on experience will include basic wound debridement, basic wound dressing, multilayer compression wraps and off-loading techniques. In addition, there will be opportunity to rotate at Greenville Memorial Hospital with the wound care team. The schedule will typically be 8 am to 5pm Monday through Thursday with no call or weekend duties.

**SURG G865 - Adult Cardiac Surgery (2-4 Credits)**

This elective introduces fourth year medical students to pre and post-operative patients with acute/chronic cardiac surgical problems. Students spend 2-4 weeks working during the day. Residents and faculty will supervise all student activities. The students' exposure will include patient encounters on the surgical floors, ICU, cath and electrophysiology lab, operating room and office. Students will also work with physician assistants during the rotation. Education material is presented through resident and attending rounds, didactic lectures, surgery conferences, morbidity/mortality conference and simulation training. Students are expected to give one presentation during the four week period.

**SURG G870 - Breast Surgery (2 Credits)**

This fourth year 2 week rotation provides an in-depth comprehensive experience in the diagnosis and surgical treatment of patients with both benign and malignant breast disease. The student will participate in inpatient and outpatient surgery, breast health center office, and breast multidisciplinary center (MDC). At the MDC, the student will participate in the evaluation of breast cancer patients as part of the team including surgeon, radiation oncologist, medical oncologist, radiologist, pathologist, nurse navigator, lymphedema specialist, and research nurse. Breast tumor board meets on the first Thursday of the month at 7 am in CC2. The student should plan to attend this if the rotation falls during this time.

**SURG G875 - Minimally Invasive Surgery (4 Credits)**

This rotation will allow students to experience the breadth of surgical practice in three very common conditions: Hernia, reflux and obesity. The rotation will be divided into two blocks. The first two weeks will be spent with the GHS Hernia Center under the guidance of Drs. Cobb, Carbonell and Warren. The following two weeks will be spent with the GHS Bariatric service, under the guidance of Drs. Scott, Eichorn, Rapp and Bour. The course will include experience in the operating room, outpatient setting, and inpatient care.

**SURG G880 - Endovascular Neurosurgery/Neurology (2 Credits)**

Two week elective for motivated 4th year medical students in Endovascular Neurosurgery/Neurology. Targeted students would include those interested in pursuing Radiology, Neurology, or Neurosurgery as residents seeking additional exposure to particular disease states such as cerebral AVM/AV fistula, cerebral aneurysm, ischemic stroke, subarachnoid hemorrhage, and cerebral angioma. Students will receive exposure to minimally invasive procedures using image guidance and catheter based approaches such as cerebral angiograms, mechanical thrombectomies, cerebral coilings, and/or embolizations to treat vascular neurological diseases. Students will be participating primarily on inpatient wards with one of our two endovascular specialists and his/her nurse practitioner, and will also have some experience with outpatient clinic. Opportunities such as placing central venous catheters and arterial lines may be available during inpatient portions of the rotation. It is strongly recommended that students participate in one night of call per week to see additional cases that may not be available during regular hours, most notably mechanical thrombectomies for acute ischemic stroke and coiling/clipping of aneurysms. Students will be expected to attend any conference that faculty regularly attend, such as monthly M&M. Evaluation will be determined by performance during daily rounds with faculty and each student will be required to give a presentation at the end of the 2 week rotation based on a topic given by the faculty member.

**SURG G885 - Bariatric Surgery (2 Credits)**

This fourth year 2 week rotation provides an in-depth comprehensive experience in the diagnosis and surgical treatment of patients who suffer from the disease of obesity. The student will participate in inpatient and outpatient surgery, observe patients in the bariatric clinic, and work with the dietitians at the bariatric office. In the clinic, the student will participate in the evaluation of the patient with obesity, observe the preoperative discussion that lead to interventions, and prepare patients for surgery. In the operating room, the students will observe cutting edge laparoscopic techniques and become familiar with techniques that keep obese patients safe in the OR. In addition, students will become familiar with the epidemiology of obesity, proper nutrition in post bariatric patients, and preferred surgical methods for treating the disease process.

**SURG G890 - Endocrine Surgery (2-4 Credits)**

This fourth year rotation emphasizes the diagnosis and management of thyroid, parathyroid and adrenal diseases. The experience includes outpatient clinical evaluations, ultrasound-guided thyroid fine needle aspiration biopsy, and operative cases. This rotation offers the opportunity for a supervised extensive hands-on experience as well as ability to work one-on-one with a physician through all aspects of the care of the endocrine surgery patient.

**SURG G895 - General Thoracic Surgery (2-4 Credits)**

This fourth year 2 or 4 week rotation provides an in depth comprehensive experience in the diagnosis and surgical treatment of patients benign and malignant thoracic disease. The student will participate in inpatient and outpatient surgery, thoracic surgery office, and thoracic multidisciplinary clinic (MDC).

**SURG G899 - Surgery Away Rotation (2-4 Credits)**

The student will complete an intensive study of Surgery at another hospital or practice. This course must be approved through the VSAS application service or office of the M3/M4 Director.