

# SURGERY (S)

## **S 0111 - Outpatient Management of Peripheral Vascular Disease** **Credit(s): 3-6 Credits**

Learning to care for patients with vascular disease is a lengthy process based on didactic activities and direct patient care. Students will attend weekly vascular conference prior to the start of clinic (conference begins at 9 am). The clinic in the DOB in room 108 will begin after conference and end at approximately 12pm. Student expectations are listed based on the 6 core competencies below.

## **S 0112 - Outpatient Management of Complex Wounds** **Credit(s): 3-6 Credits**

Caring for patients with complex wounds is technically challenging and changes as technology evolves. Textbooks provide basic science information but cannot substitute for the experienced gained from seeing a large number of wounds and utilizing the newest strategies in wound care. The clinic in the DOB room 108 will begin at 9:30am and end approximately at 12:00(noon). Student expectations are listed based on the 6 core competencies below.

## **S 0115 - Ethics in Surgical Decision Making** **Credit(s): 3-6 Credits** (Repeatable for credit)

Why are outcomes from cancer operations so different between black and white patients, and how do surgeons understand this difference? A Guantanamo Bay prisoner refuses food and water; you, a military surgeon, are consulted to place a feeding tube against his will; do you do it for the love of country? What do we do with an exquisitely designed and useful anatomy atlas that was authored by a card-carrying member of the Third Reich? This course involves a reading at each class session with dynamic in-class discussion about the reading.

## **S 0119 - Humanism in the Care of Patients with Cancer** **Credit(s): 1-12 Credits** (Repeatable for credit)

The purpose of this elective is for medical students to understand the effects of cancer on patients and their families from the distinct perspective of the patient. In addition, students will have the opportunity to shadow the various physicians involved in the care of the patient to learn the medicine behind treating a patient with cancer. As cancer becomes more prevalent, it is imperative that medical students should learn not only how to treat patients with cancer, but also the impact it imparts on the patient physically, mentally, and emotionally. This elective was created to afford students the opportunity to learn about this chronic disease beyond the scope of modern medicine. This knowledge will ultimately equip medical students with the empathy and compassion to successfully treat an individual with cancer. It is our hope that cancer will serve as a model for all chronic diseases and lessons gained from this elective will influence the students' approach to any type of chronic care and management.

## **S 0120 - Introduction to Surgical Approaches** **Credit(s): 1-10 Credits** (Repeatable for credit)

Students will be exposed to various surgical approaches coordinated with faculty members from the department of surgery. Five of the six encounters for each session will be cadaver-based.

## **S 0301 - Surgery Clerkship** **Credit(s): 6-8 Credits** (Repeatable for credit)

## **S 0302 - Surgery Career Exploration** **Credit(s): 1-2 Credits** (Repeatable for credit)

This course may be used to register for Surgery career exploration. The location of the experience may be at a SLU SOM affiliate or at another health care institution.

## **S 0303 - Surgery self-designed Career Exploration** **Credit(s): 1-2 Credits** (Repeatable for credit)

## **S 0304 - Surgery - Urology @ Saint Louis University Hospital** **Credit(s): 1-4 Credits**

## **S 0305 - Advanced Plastic Surgery** **Credit(s): 1-4 Credits**

## **S 0306 - Facial Plastic and Cosmetic Surgery Center** **Credit(s): 1-4 Credits**

## **S 0307 - Mercy Clinic Surgical Specialists** **Credit(s): 1-4 Credits**

## **S 0308 - Mercy Clinic Vascular Specialists** **Credit(s): 1-4 Credits**

## **S 0309 - Pediatric General Surgery @ Cardinal Glennon Children's Hospital** **Credit(s): 1-4 Credits**

## **S 0310 - Pediatric Plastic Surgery @ Cardinal Glennon Children's Hospital** **Credit(s): 1-4 Credits**

## **S 0311 - St. Anthony's Surgical Specialists** **Credit(s): 1-4 Credits**

## **S 0312 - Colorectal Specialists, PC** **Credit(s): 1-4 Credits**

## **S 0401 - Transplantation Surgery** **Credit(s): 2-12 Credits**

Practical and theoretical experience in abdominal organ (kidney, pancreas and liver) transplantation and immunosuppression is offered through the Transplant Program at Saint Louis University Hospital, including active participation in daily rounds, transplant and transplant related operative procedures, clinics and patient care conferences. Practical and theoretical experience in transplantation research through participation in ongoing clinical activities is also available. Provides an extensive operative and perioperative management experience for students interested in a surgical career.

## **S 0406 - Clinical Surgery** **Credit(s): 2-12 Credits**

Clerkship provides broad exposure to pre-operative, operative, and postoperative care of adult cardiothoracic surgery patients. Students assume patient care responsibility under direction of attending surgeon and resident staff. Students take call every fourth night.

## **S 0408 - Renal Interstitial Fibrosis Role of Extracellular Matrix** **Credit(s): 4 Credits**

Students may use microscopic or biochemical techniques to participate in ongoing studies investigating signal transduction in cell isolates from the urinary tract in a novel model.

## **S 0409 - Surgery Reading Elective** **Credit(s): 2-4 Credits**

Student and Elective Director will identify a surgical problem of mutual interest and the student will conduct a Medline search to find recent articles on it. The student will read the papers and write a 3-5 page mini-review to be graded by the elective director.

## **S 0410 - Surgical Critical Care** **Credit(s): 2-12 Credits**

One-month rotation in Surgical ICU. Students will have patient responsibilities including evaluation, treatment, and management of critically ill patients. Students will learn procedures under direct supervision of residents, fellow and/or attendings. Students will present one teaching session on pertinent topic(s) at end of rotation.

**S 0411 - Women in Surgery****Credit(s): 2-12 Credits**

This course is designed to answer many of your questions during an opportunity to work individually with women in various surgical specialties. This course is offered during all phases of the medical school curriculum. A non-graded questionnaire will be given at the beginning and end of the course to evaluate the student's response to the course as part of the overall evaluation. This elective involves a comprehensive surgical rotation from pre-operative evaluation, inter-operative and post-operative management and follow-up clinical visits. Student's will choose a different female surgeon to spend one week each on the four-week rotation. Two full history and physical examinations will be submitted and evaluated as part of the evaluation. The students may choose a supervising faculty member. Required reading for this course is *The Pocket Mentor* published by the Association of Women Surgeons. Additional readings may be chosen for discussion from the course bibliography.

**S 0412 - Surgical Oncology Research****Credit(s): 2-12 Credits**

The student will be responsible for a complete written evaluation, which includes the history, physical examination, and medical decision-making. They will accompany the patients to the operating room and be involved in the postoperative care. They will act under the direct supervision and/or observation of the attending physician for all patient encounters.

**S 0413 - Organ and Tissue Donation in Medicine****Credit(s): 4 Credits****S 0414 - Outpatient Evaluation of Peripheral Arterial Disease****Credit(s): 2 or 4 Credits****S 0416 - Advanced Suturing Techniques****Credit(s): 1-12 Credits**

Students will begin with basic suturing techniques on day 1 using synthetic skin and 4-0 to 5-0 suture. Simple interrupted and running stitches will be completed (horizontal and vertical mattress, subcuticular, etc.). On day 2 the students will begin practicing vascular anastomoses on Dacron grafts, using smaller 7-0 sutures. Interrupted and running stitches will be applied in these sessions. On days 3-5, students will spend time demonstrating proficiency in using interrupted and running stitches on small sheets of latex under the operating microscope, while using 8-0 materials. Following documented proficiency with this section, they will then move to dissecting turkey wing arteries and veins under an operating microscope. After severing these vessels, the students anastomose them (end to end or end to side) with 8-0 stitches. Both interrupted and running stitches will once again be used. Once the anastomosis is completed, patency will be checked by infusing the vessels with water through a 3-cc syringe with a 27-gauge needle. Proficiency will have to be demonstrated in each activity by the student before they progress to the next sequential step in the tutorial. Streaming videos of some of these techniques are currently available and students can watch these before beginning the elective. A written tutorial guide is also included.

**S 0417 - Surgical Oncology at Saint Louis University Hospital****Credit(s): 2-12 Credits**

Surgical elective focusing on the evaluation and management of surgical oncology patients in both the preoperative, perioperative, and postoperative periods.

**S 0418 - Pediatric Urology****Credit(s): 2-12 Credits (Repeatable for credit)**

A clinical elective in pediatric urology for fourth year medical students.

**S 0420 - Vascular Surgery****Credit(s): 2-12 Credits**

The goal of this course is to give the student further exposure to peripheral vascular disease, its signs, symptoms, evaluation, and medical, interventional, and surgical treatment.

**S 0421 - Urology****Credit(s): 2-12 Credits**

To provide inpatient and outpatient experience in treating urologic problems.

**S 0422 - Plastic Surgery****Credit(s): 2-12 Credits**

The plastic surgery course is a clinical clerkship with responsibility for patient work up, operating room assistance and emergency room work. Students follow hospitalized patients and see patients in the outpatient setting as well. They participate in twice weekly conferences and are involved in suturing whenever possible. They are instructed in basic principles of wound and burn management, suturing techniques, skin grafts and skin/muscle flaps, hand surgery, craniofacial surgery and cosmetic surgery. They are encouraged to take call once a week.

**S 0423 - Pediatric Cardiac Surgery****Credit(s): 2-12 Credits**

The pediatric cardiac course is a clinical clerkship with responsibility for patient work up, operating room assistance and emergency room work. Students follow hospitalized patients and see patients in the outpatient setting as well. They participate in twice weekly conferences and are involved in suturing whenever possible. They are encouraged to take call once a week.

**S 0424 - Clinical Surgery****Credit(s): 2-12 Credits**

Clerkship provides broad exposure to pre-operative, operative, and postoperative care of adult cardiothoracic surgery patients. Students assume patient care responsibility under direction of attending surgeon and resident staff.

**S 0426 - Women in Surgery****Credit(s): 2-12 Credits**

Know a female surgeon? Considering becoming one? Do you have a significant other thinking about a career in surgery? Surgical specialties do not exclude women in this rotation and this rotation does not exclude men. This course is designed to answer many of your questions during an opportunity to work individually with women in various surgical specialties. This course is offered during all phases of the medical school curriculum. This elective involves a comprehensive surgical rotation from pre-operative evaluation, inter-operative and post-operative management and follow-up clinical visits. Student's will choose a different female surgeon to spend one week each on the three-week rotation. Two full history and physical examinations will be submitted and evaluated as part of the evaluation. The student may choose a supervising faculty member. Required reading for this course is *The Pocket Mentor* published by the Association of Women Surgeons.

**S 0427 - Outpatient Evaluation of Peripheral Arterial Disease****Credit(s): 2-12 Credits**

This Year 4 elective is designed for students NOT pursuing careers in surgery or vascular surgery. The course is designed to emphasize recognition of vascular emergencies, timeliness of evaluation for urgent conditions and operative risk assessment for cardiovascular morbidity and mortality. In addition, opportunities will be provided to discuss management options of different types of wounds and observe the postoperative course of patients from a variety of open and endovascular procedures. Recognition of postoperative complications will also be emphasized. Patient care responsibilities will be entirely in the outpatient setting at the Doctor's Office Building, John Cochran Veterans Administration Hospital and Forest Park Hospital.

**S 0428 - Transplantation Surgery****Credit(s): 2-12 Credits**

Practical and theoretical experience in abdominal organ (kidney, pancreas and liver) transplantation and immunosuppression is offered through the Transplant Program at Saint Louis University Hospital, including active participation in daily rounds, transplant and transplant related operative procedures, clinics and patient care conferences. Practical and theoretical experience in transplantation research through participation in ongoing clinical activities is also available. Provides an extensive operative and perioperative management experience for students interested in a surgical career.

**S 0429 - Pediatric Urology****Credit(s): 2-12 Credits****S 0430 - Colorectal Surgery****Credit(s): 2-12 Credits**

Both inpatient and outpatient colorectal surgery. Time in the operating room. Variety of pathology, i.e., colon cancer, Crohn's disease, diverticulitis.

**S 0433 - Surgical Educator and Researcher****Credit(s): 2-12 Credits (Repeatable for credit)**

This elective is designed for 4th year students interested in the field of surgery, education of students and research who think they may ultimately want to practice in an academic environment. This elective will allow students to engage in brief, meaningful research which may be cited on their applications to residency programs. Students will select one topic/week to research. An annotated list of current literature reviewed will be submitted to the course director or co-director. Options including integrating operative approaches with cadaver dissection to be performed to demonstrate key anatomical features of the topic being researched may be considered with advanced notice. A 45-50-minute power point presentation geared toward the educational needs of a 3rd year medical student will be completed and presented at the end of the elective. Particular emphasis should be placed on learning objectives, relevance to standardized testing questions and application to clinical rotations and experience. This presentation will be recorded and made available for review by students on the general surgery service.

**S 0434 - General/Vascular Surgery at St. Mary's****Credit(s): 1-12 Credits**

This elective is designed to offer fourth year students' exposure to common General and Vascular Surgery cases at SSM Health St. Mary's Hospital. Students will have the opportunity to work with SLU School of Medicine faculty Dr. Jason Keune, Dr. Scott Wong, Dr. Adam Ring, Dr. Theresa Schwartz and others pending availability. Objectives include: To gain experience with common surgical procedures in a community hospital setting. To reinforce proper surgical operating room procedures in terms of scrubbing, sterile technique, knot tying, handling of surgical instruments, and suturing. To refine history and physical skills involving surgical cases. To learn basic pre and post-operative management of common surgical procedures. To learn the evaluation and long-term management of common surgical issues in the outpatient setting.

**S 0435 - Pediatric General Surgery****Credit(s): 1-12 Credits**

This is a 4-week rotation providing an in-depth student exposure to General and Thoracic Pediatric Surgery. Students will be exposed to all aspects of surgical care for patients ranging from preterm infants to adolescents. Learning Objectives include: 1. To gain additional experience in the surgical care of infants and children. 2. To obtain an age appropriate history and physical examination and to develop a basic differential diagnosis. 3. To develop the skills to make appropriate case presentations to fellows and faculty. 4. To learn basic operative skills such as suturing, knot tying, and principles of laparoscopy. 5. To develop an appreciation for multi-disciplinary patient care as well as an appreciation for members of the care team at all levels. 6. To develop an evidenced-based approach to medical care and ongoing education.

**S 0499 - Surgery Student Chief****Credit(s): 1-12 Credits**

Students selected to take this elective will serve as "Student Chiefs" at the beginning of the required clerkships. Week 1: The first week of the elective overlaps with the required, one-week orientation for students beginning their clerkships. During this week you would receive instruction in how to teach and provide feedback in the clinical setting. You will also be expected to help with general third year orientation week. Weeks 2-3: The following two weeks, you will help the new third-year students make the transition from classroom to clinic. The clerkship director and the education coordinator for the clerkship will provide you with guidance in this area. For example, you may be asked to observe and provide feedback when students perform histories and physical exams, to provide guidance on written and oral case presentations, and other clerkship tasks. In general, your job is to help facilitate each student's successful entry into the clerkship.

**S 0501 - Subinternship: Trauma-Surgical Critical Care at Saint Louis University Hospital****Credit(s): 1-4 Credits** (Repeatable for credit)

Students will be assigned to the trauma and surgical critical care service at Saint Louis University Medical Center where they will participate in the care of patients admitted to the trauma service. They will follow patient in the intensive care unit and on the ward. In addition, they will see patients two days per week in an outpatient setting. They will attend a weekly critical care conference, a weekly trauma conference, and a monthly trauma/emergency medicine conference. They will function at the PGY1 level, admitting and following patients assigned to them by the senior resident on the service. They will see a minimum of 3 new inpatients per week and may follow 6 or more established patients per week. They may perform or assist with, under direct and proper supervision, technical procedures that a PGY1 would ordinarily perform. They may assist in the operating room with all surgical procedures performed on their patients. Students will organize a schedule to include night float shifts.

**S 0502 - Subinternship: Burn Surgery at Mercy Medical Center****Credit(s): 1-4 Credits** (Repeatable for credit)

Students will be assigned to the Burn Unit at St. John's Mercy Medical Center where they will follow patients admitted to the burn unit and less severe burns that may be admitted to or later transferred to the floor. In addition, students will have the opportunity several days per week to evaluate patients in the outpatient setting. A student's goal will be to function at the PGY1 level, admitting and following patients assigned to them by the senior resident on the service and communicating directly with attending physician staff daily. They will perform, with proper supervision, any technical procedures that a PGY1 would ordinarily perform and they will assist in the operating room with all surgical procedures performed on their patients.

**S 0503 - Subinternship: Surgical ICU at John Cochran VA Medical Center****Credit(s): 2-12 Credits** (Repeatable for credit)

Subinternship at the John Cochran VA Medical Center Surgical ICU. This rotation is staffed currently by one anesthesia critical care attending, one surgical critical care attending (general surgery), and 1 surgical critical care attending (thoracic), one surgical critical care attending (trauma/ Washington University). All are full time VA employees.

**S 0504 - Subinternship: Acute Care Surgery****Credit(s): 2-12 Credits** (Repeatable for credit)

Subinternship focusing on the evaluation and management of patient's acute general surgery problems.

**S 0505 - Subinternship: Surgical Critical Care at Saint Louis University Hospital****Credit(s): 2-12 Credits** (Repeatable for credit)

A rotation in Surgical ICU department. Students will have patient responsibilities including evaluation, treatment, and management of critically ill patients. Students will learn procedures under direct supervision of residents, fellow and/or attendings.

**S 0506 - Subinternship: Urology****Credit(s): 2-12 Credits** (Repeatable for credit)

Students on the urology rotation as a sub-intern will participate in the care of patients admitted to the urology service. The urology service is primarily a consult service so students on this rotation will see anywhere from 6-10 new consults per week in the hospital setting, in addition they will see patients two days per week in the outpatient urology clinics. There are weekly conferences that students are required attend. On alternating weeks there is the GU multidisciplinary conference and the weekly GU education series. All students on this rotation will be required to give a PowerPoint presentation during either the 2nd or 3rd week of their rotation at the weekly GU education conference. Students will function at the level of a PGY-1 following patients assigned to them by the senior resident on the service. They will see 1 new inpatient per day and will follow 2 established patients per day, not including new consults. They will perform and/or assist with, under direct supervision of an attending physician, technical procedures that a URO-1 would normally perform. They may also assist in the OR with all surgical procedures performed on new admissions or outpatients. Students will take call every Tuesday while on the rotation and 1 weekend call with the clerkship director.

**S 0901 - Surgery Direct Patient Care****Credit(s): 1-12 Credits** (Repeatable for credit)

This course may be used to register for a Surgery elective. The elective experience must fulfill the requirements for a direct-patient care elective. The location of the experience may be at a SLUSOM affiliate or at another health care institution.

**S 0902 - Surgery Non-Direct Patient Care****Credit(s): 1-12 Credits** (Repeatable for credit)**S 0903 - Surgery Research****Credit(s): 1-12 Credits** (Repeatable for credit)

This course may be used to register for a Surgery elective. The elective experience must fulfill the requirements for a research elective. The location of the experience may be at a SLUSOM affiliate or at another health care institution.

**S 0904 - Surgery Senior Inquiry****Credit(s): 1-12 Credits** (Repeatable for credit)**S 0905 - Surgery Teaching****Credit(s): 1-12 Credits** (Repeatable for credit)