SURGICAL EDUCATION

A SURGERY CLERKSHIP
A required surgical rotation of 8 weeks is offered to students throughout the junior year. Emphasis is placed upon the principles of diagnosis and treatment of common surgical disorders. Half of the block, students rotate on general surgery services. The other half of the block, students are assigned to 3 weeks of a selected specialty and 1 week of required simulation. Each student will complete a Clerkship Lottery form. Student assignments may be made based on results of lottery, dependent on number of students on rotation and available specialties. Students will participate in the preoperative examination and evaluation, assist in surgical procedures, follow the postoperative management, and attend clinics. Student call is supervised by surgical residents. Faculty discussion sessions will be held Monday through Friday. The required textbooks are Essentials of General Surgery, 5th edition and Essentials of Surgical Specialties, 3rd edition, both by Lawrence, et al. An optional companion textbook is Surgery: A Competency-based Companion by Barry Mann.

B REQUIRED CLINICAL ELECTIVE/SELECTIVES
A selection of 4 week surgical electives/selectives are offered to students who have completed the 3rd year Surgery Clerkship. Most of these electives will meet the 4th year “surgical” and “other” selective requirements for graduation. In addition students who are in the Rural Track program and have completed a 3rd year Rural Track rotation are then eligible to take a 4th year rotation at the same rural track site for selective credit upon approval. These electives/selectives offer the students an in-depth experience with close supervision and provides graded responsibility to prepare them for residency.

C POSTGRADUATE INSTRUCTION
Formal training programs are established in the following divisions of surgery: General Surgery, 5 years; Urology, 5/6 years; Neurosurgery, 6 years; Plastic Surgery, 6 years; and Vascular Surgery, 7 years. In addition, the training programs for the Department of Orthopaedic Surgery is 5 years, the Department of Otolaryngology/Head and Neck is 5 years and the Department of Anesthesiology is 4 years.
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   CLERKSHIP OBJECTIVES
During completion of the third year surgery clerkship, the medical student will develop an understanding of the care of surgical patients. This understanding will include the following goals:

**Professionalism and Attitudes**
- Active participation as a member within a surgical team; participation will include maintaining professional relationships among team members, with patients, and among other health care providers while delivering patient centered care.

**Knowledge-Base**
- As a member of the surgical team, the student will perform a pre-operative assessment and preparation of the surgical patient in both elective and emergent circumstances.
- As a member of the surgical team, the student will describe the physiology of operative interventions, including anesthetic effects, post-operative recovery, influence of complications, and convalescence.
- The student will be exposed to multiple aspects of the profession of surgery, including the surgical specialties and anesthesiology.
- The student will demonstrate general medical knowledge necessary to understand the pathophysiology, presentation, and management of the common surgical diseases.

**Clinical Skills**
- The student will be instructed in the performance of basic surgical skills, including sterile technique, wound care, and resuscitation.

To meet these goals of the surgery clerkship, the following objectives will be assessed for each student:

**Professionalism and Attitudes**
- The participation of each student on a general surgery team for four weeks; assessment of performance will be based upon the student’s ability in data collection (history, examination, objective data), participation in daily work rounds, presentation of patient information and cases, professionalism, and collaborative efforts with team members.

**Health Maintenance and Preventive Care**
- The student will evaluate the patients (history and examination), participate in the operating room, engage in post-operative care of the patient, and provide discussion of the patient (to include history, physical examination, treatment options and rationales, and pathophysiology).
- Students will observe and potentially participate in the discussion of cancer screenings with patients.
CLERKSHIP OBJECTIVES (cont.)

Clinical Skills
- The student will demonstrate basic surgical skills and techniques, universal precautions, OR safety and sterile techniques via laboratories (suture lab, IV/intubation, and a urology lab).
- The student will demonstrate understanding of Laparoscopic procedures and principles.
- The student will participate in the accurate and complete documentation of patient care to include the preparation of operative notes, post-operative orders, and progress notes.

Knowledge-Base
- Students will be exposed to the breadth of the surgical specialties (including general surgery, minimally invasive surgery, surgical oncology, vascular and cardiothoracic surgery, otolaryngology, plastic surgery, orthopedic surgery, burn, acute care surgery, pediatric surgery, neurological surgery, SICU, anesthesia, and urologic surgery) through patient cases, clinic assignments, lectures, readings, case presentations and clinical rotations.
- The patient encounter experience will provide exposure to the common surgical pathologies, patients with acute abdominal pain of surgical etiology or treatment, surgical vascular diseases, and surgical trauma or critical care. Students will maintain a log of patient encounters.
- The student will evaluate patients (history and examination), participate in the operating room, engage in post-operative care of the patient, and provide discussion of the patient (to include history, physical examination, treatment options and rationales, and pathophysiology).
- Assimilation of the knowledge of the care of the surgical patient and the surgical diseases will be assessed by the NMBE Shelf examination at the end of the rotation.
Rural Track Surgical Experience:

• In addition to the onsite objectives, the medical student will develop an understanding of the care of surgical patients in a rural setting.

• Explore and discover issues relevant to practicing Surgery in a rural community.
  a. The student will evaluate the patients, participate in the operating room, and engage in post-operative care of patients.
  b. Provide students with core clinical experiences by working with a qualified surgical preceptor.
  c. Active participation as a member within the surgical team.
  d. The student will perform perioperative assessments and preparation of the surgical patient.
  e. The student will describe the pathophysiology of surgical problems, operative interventions including post-operative recovery, complications, and convalescence.
  f. The student will demonstrate general medical knowledge to understand presentation and management of common surgical diseases within specialty.

• Afford students the unique opportunity to live and work in a rural community.
  a. The student will understand the steps taken to care for patients outside of the University setting.
  b. The student will describe the patient process in a private, rural setting.
  c. Students will understand the cultural and community relevance and service provided by a rural community surgeon.

• Provide opportunities for service learning through community integration activities.
Academic honesty is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person’s work is responsibly and honorably acquired, developed and presented. Any effort to gain an advantage not given to all students is dishonest, whether or not the effort is successful. The academic community regards academic dishonesty as an extremely serious matter, with serious consequences, ranging from probation to expulsion. If an end of course exam is given, the exam is a closed resource exam unless otherwise stated. When in doubt about dishonesty, plagiarism, paraphrasing, quoting, or collaboration, consult the instructor.

The Department of Surgery adheres to all policies found in the University of Missouri Health Care Medical Student handbook, http://som.missouri.edu/.

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please see me privately after class as soon as possible or at my office as soon as possible.

Office location: NW402 Office Hours: 8:00 – 5:00

If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning), please register with the Office of Disability Services (http://disabilitycenter.missouri.edu), S5 Memorial Union, 573-882-4696, and then notify me within the first week of the block of your eligibility for reasonable accommodations. For other MU resources for students with disabilities, click on "Disability Resources" on the MU homepage.

This sample statement is posted on the web at http://provost.missouri.edu/faculty/syllabus-information and at http://disabilitycenter.missouri.edu/faculty/syllabus.php.

The University community welcomes intellectual diversity and respects student rights. Students who have questions concerning quality of instruction in this class may address concerns to either the Departmental Chair or Divisional leader or Director of the Office of Student Rights and Responsibilities (http://osrr.missouri.edu/). All students will have the opportunity to submit an anonymous evaluation of the instructor(s) at the end of the course.

If you have any questions about academic integrity or intellectual pluralism, please feel free to contact Associate Vice Provost Michael Prewitt (882-1422) who oversees the Office of Student Rights and Responsibilities (http://osrr.missouri.edu/). For questions about ADA classroom accommodations, please contact the Office of Disability Services at 882-4696.

All students are expected to meet a high level of professional standards. The Department of Surgery expects students to be present and actively engaged in all activities of the clerkship. It is also anticipated that there may be times when there are specific reasons that an absence is necessary, such as illness, death in the family, religious holiday, and attendance to a professional meeting. All absences must be cleared with the Department first. A Request for Absence form must be completed and turned in to the Clerkship Coordinator, Jennifer Doty, R.N. for approval. Students on clerkship are allowed a maximum 5 days off over the course of the rotation. The expectation is that students will not have any absences, except in unusual and specific situations and may be required to make up some or all time missed. Refer to the OME Student Handbook for full policy, http://somis.umh.edu/src/absencepolicy.shtml.
Student Mistreatment

The School of Medicine believes that students are entitled to be treated by others (faculty, staff, patients and fellow students) in a professional manner. In order to address possible mistreatment issues that may arise, the School has developed a Student Mistreatment Policy.

Student Mistreatment Policy

This policy encourages medical students who believe they were mistreated by other students, faculty, residents, staff or patients to bring the conduct to the attention of appropriate individuals within the school and/or the university.

Concerning Mistreatment at the University of Missouri:

The University of Missouri System is an Equal Opportunity/Affirmative Action institution and is nondiscriminatory relative to race, religion, color, national origin, sex, sexual orientation, age, disability or status as a Vietnam-era veteran. The University is committed to providing a positive work and learning environment where all individuals are treated fairly and with respect, regardless of their status. The University does not tolerate mistreatment by or of its students, faculty, residents, staff or patients.

The University’s formal policy on maintaining a positive work and learning environment can be found at the following address:

http://www.umsystem.edu/ums/departments(gc/rules/personnel/330/080.shtml

Mistreatment comes in many forms, including but not limited to the following:

- physical abuse
- sexual abuse
- verbal abuse
- discrimination
- harassment (sexual or otherwise)
- public humiliation
- intentional neglect
- intentional lack of communication
- the assignment of tasks for punishment or in retaliation
- belittling of a student or their field of choice
- unreasonable or intentional exclusion of a student from an educational opportunity

In our investigations, educational efforts, policies and procedures, the School of Medicine recognizes that, in some instances, the perception of the individual who believes s/he were mistreated and the intent of the other person(s) involved are discrepant. Whatever the circumstance, students who believe they were mistreated are strongly encouraged to bring it to the attention of appropriate school or university officials (see page 14 for contact information).

It is the university's special responsibility to provide a positive climate in which students can learn. The University expects that the School of Medicine will provide educational programs and otherwise direct resources to creative and serious measures designed to improve interpersonal relationships, to help develop healthy attitudes toward different kinds of people, and to foster a climate in which students are treated as individuals rather than as members of a particular category of people. The university specifically prohibits consensual amorous relationships between individuals where one has direct supervisory or evaluative responsibility.
for the other (as between, for example, faculty member and student). The university’s policy in this regard can be found at the following address: http://www.umsystem.edu/ums/departments/hr/manual/519.shtml.

Concerning Mistreatment at the School of Medicine:
The University of Missouri School of Medicine’s commitment to the provision of a professional learning environment for our students is made explicit in our Vision Statement for Education in the following words: “Our educational processes promote intellectual curiosity, professionalism and the skills for lifelong learning.”

The School’s commitment is reiterated in the Foundation Values. The Foundation Values emphasize respect for one’s self, for others and for the truth commitment to act ethically, to welcome difference and to engage in an open exchange responsibility in our duty to our patients, colleagues and learners interactions that model the professionalism expected of physicians.

The Foundation Values reiterate that prejudice or bias directed against others is not permissible. Prejudice or bias directed toward others, whether based upon race, religion, ethnicity, gender, age or sexual preference, is prohibited by University regulation.

Whom Should You Ask?
Medical students are sometimes reluctant to discuss mistreatment for fear of being identified or even receiving reprisals; yet they often want alleged mistreatment incidents to be investigated. The School does not tolerate retaliation or reprisals against students who bring incidents of possible mistreatment to the attention of faculty and/or school officials.

The mistreatment of students by patients may be particularly painful. Students are strongly encouraged to discuss such incidents with a trusted supervisor, mentor or colleague. A range of school and university resources are available to students who may wish to discuss issues informally and confidentially. Those resources include individual medical school faculty, deans and department chairs, advisors, clerkship directors, preceptors and others. Concerns, problems, questions and complaints may be discussed anonymously and confidentially with the Associate Dean for Student Programs, whose role specifically includes student advocacy and who is available to all enrolled MU medical students.

The Associate Dean for Student Programs is Rachel Brown MD Office of Medical Education (MA215) Telephone: 573-882-2923 Email: brownrac@health.missouri.edu

The same definitions, policies and procedures apply in all sites where University of Missouri School of Medicine students receive education and clinical training under the supervision of university faculty.
Non-Involvement of Providers of Student Health Services in Student Assessment

Our accreditation standards require that any health professional who provides health services of any kind to a University of Missouri School of Medicine medical student must have NO involvement in the current or subsequent academic assessment or promotion of the medical student who received or is receiving those services. When a student is assigned to a facilitator, preceptor or service or appears before a committee where such a conflict exists, it is the responsibility of all concerned to bring the conflict to the attention of the course or clerkship director and the Office of Medical Education, in order that an alternative assignment may be made, or action taken that ensures the health care provider concerned is not involved in the assessment or promotion of a particular student. Faculty, residents, students, or other health professionals who have questions about this policy are requested to contact Rachel Brown MD, Associate Dean for Student Programs (brownrac@health.missouri.edu; MA215, (573) 882-2923). Dr. Brown is also available to answer questions and clarify situations that may appear ambiguous.

ORIENTATION

The Department of Surgery welcomes you to this portion of your educational experience. The block is structured to give you as broad an exposure to surgery as possible in the time allowed and to provide a balanced view of the surgical lifestyle. You should gain appreciation for the pathophysiologic processes involved in surgical disease and master the basic surgical skills needed to progress to the senior year.

This handbook describes activities, resources and goals for the course. Textbook knowledge should be supplemented with information in current journals, which can be accessed via a Medline search.

A professional approach is expected of all members of the surgical team. Attire and conduct should conform to departmental standards and lend dignity to the health care process. A shirt and tie for gentlemen and appropriate dress for ladies is worn with a white coat. A University name tag is worn at all times. Operative scrub clothes are worn only when required. Professional attire is mandatory in Teaching Rounds, Grand Rounds, and clinic. Interactions with nursing and ancillary staff should reflect an attitude of mutual respect in the cooperative effort of providing optimum patient care. **No cell phones are allowed in the clinical arena.**

Attending and resident surgeons are committed to teaching. Medical student initiative is a major determinate of what is ultimately gained from the rotation. We anticipate that students will be compulsive in their desire to seek additional information about their patients.

The Clinical Course Director is Stephen Colbert, M.D., Division of Plastic Surgery, Department of Surgery. The Clinical Coordinator, Jennifer Doty, R.N., beeper # 499-7686, phone 2-8081, and the Student Support Specialist I, Megan Crane, phone 2-9811, are in room NW402. Please address any questions to them. **Any schedule changes or absences must be cleared in advance with the Program Assistant or Clinical Coordinator.** The surgery student bulletin board is located in the Surgery Classroom, MC203 in McHaney Hall. Schedule reminders are e-mailed weekly to each student. In addition, a text message will be sent to each student with any last minute changes to the lecture schedule as they occur.
PATIENT INTERACTIONS

Each student will rotate with a General Surgery team for a 4-week experience. Each student will complete a Clerkship Lottery form. Student assignments may be made based on results of lottery, dependent on number of students on rotation. General Surgery teams are University, Acute Care Service, Surgical Oncology and VA. As student numbers increase, the adult general surgery service at Women and Children's Hospital may be utilized. The student will round with the team, write progress notes, scrub on OR cases, and attend clinics. Ward performance will be evaluated by the surgical attendings and residents.

STUDENT CALL

Call will be covered each night/weekend by the night float student or assigned student. Each student reports to the resident on call at 5 pm, and works with the resident until 7 am the next day. Weekend call begins at 7 am and lasts for 24 hours. Call is the student's primary exposure to the Emergency Center and to trauma patients.

Call Rooms:

“Shared call rooms will be available for medical students in Suite M108A thru S (M108F – Call Room 4 – Students – Open Access, 2 beds; M108B – Call Room 6 – Students – Females, 4 beds; M108A – Call Room 7 – Students – Males, 4 beds). Access to the outer door as well as individual call rooms is by badge swipe. Badges have been cleared thru security for access. If you are unable to access the rooms with your badge, please contact hospital Security (882-7147). If no bed is available, please contact the house manager through the hospital operator. If there is still a problem you can page Deborah Pasch, Executive Director, University Hospital (397-0051 ).”

OPERATING ROOM

The operating room is a unique learning situation. Appreciation of multiple anesthetic techniques can be acquired by accompanying each of your patients in the holding area and during induction. During the procedure, observation and palpation of the gross pathology can be related to the patient's history and physical findings. Understanding of regional anatomy, indications for surgery and operative techniques is expected. Attending and resident surgeons will be present and interested in teaching. Take advantage of this opportunity through appropriate questions and observations. Introduce yourself to the attending or chief resident at the beginning of the case.

Operations are performed at University Hospital, Veterans Administration Hospital, Womens and Children Hospital, MOI (Missouri Orthopaedic Institute), and MCOS (Missouri Center for Outpatient Surgery). Sterile technique and operating room procedures are presented during orientation. Breaks in sterile technique can result in increased patient mortality and morbidity and must be avoided. Scrub suits are not to be worn outside of the operating room suites without a covering lab coat; they should never be removed from the hospital.
VA OPERATING ROOM ORIENTATION

1. Scrub suits worn out of OR Suite must be changed before re-entering the OR Suite. Civilian attire may not be worn into the right corridor off the main hall - only to the left, which leads to the locker area.

2. Cap, mask and shoe covers must be worn in the OR Suite at all times. Beards must be covered by hoods. Caps, masks and shoe covers are not to be worn out of the OR Suite.

3. Surgery day begins at 0700. First cases are scheduled at 0730.

4. Phone system at the VA
   a. VA extensions (from MU): Dial 814-6000 and enter number or wait for operator
   b. outside line: Dial 9 (to call any outside number including MU numbers)
   c. OR Clerk: dial 814-6000 and enter 5-3878
   d. Recovery Room: dial 814-6000 and enter 5-3875

5. VA Paging system: 814-6696 and enter VA pager #.

6. OR hours are 6:45 - 3:30. All patients, except locals, will go to Recovery Room unless special arrangements have been made to return to a unit. Late or emergency surgery patients will be recovered in the ICU or with special arrangements on a ward.

7. No eating or drinking is allowed in the Operating Rooms or Recovery Room.

8. If assistance is needed in scrubbing, please ask.

9. M3 students assigned to the VA will need to send their name and scrub size to Stephen King, Stephen.Keene@va.gov, or Asa Bradford-Sturguess, Asa.Bradford-Sturguess@va.gov. They will build you an account to receive a card for the scrub machine. If you will just be spending a few days at the VA please stop by the O.R control center (administrative office), sign the log, and take a card for the day and return when you leave.
VA MEDICAL STUDENT RESPONSIBILITIES

Medical Student Responsibilities at the VA
For morning rounds, open the list and please obtain the vitals for the patients on your service; see below for further details.

THE LIST

Where to find it:
- “Start” → “CMO-WS153588” → “data” under Network Location → “PUBLIC” folder → “General Surgery List” folder → “General Surgery List” or “Current Vascular Surgery List Current” word document (whichever one you’re on)

What to do:
- Every morning please update...
  - Room Number! This doesn’t change as often as on services at the University, but in the middle of the night sometimes patients get moved around.
  - Vitals in CPRS, I’s & O’s on the floor (patient’s room or nurses’ station).
  - Sometime in the afternoon...
    - Before/After surgeries, please add any new patients to the list. Include their past medical & surgical histories and feel free to abbreviate and be selective (by and large, we don’t care if they have a hx of glaucoma or “lumbago”, but I DO care if they have a history of CAD s/p CABG, COPD, prior CVA or DVT). This is very helpful when thinking about what a patient’s increased risks are in the perioperative period.
    - Update Medications.
    - Update Procedures/diagnoses and their dates.
  - End of the week...
    - Add next week’s surgery schedule to the bottom of the list.
    - “Start” → “CMO-WS153588” → “data” under Network Location → “PUBLIC” folder → “PUBLIC” folder → “General Surgery List” → “Surg Calendar” folder → click on the excel file for whatever service & month.

VITALS

<table>
<thead>
<tr>
<th>Rm</th>
<th>Pt</th>
<th>Vitals</th>
<th>Dx/Procedure/Course</th>
<th>Allergy</th>
<th>Diet</th>
<th>Meds</th>
<th>Consults</th>
</tr>
</thead>
<tbody>
<tr>
<td>O=</td>
<td></td>
<td>PMH: TAA, AAA, HTN, DM, CKD, Diverticulosis</td>
<td>BP</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>UOP=</td>
<td></td>
<td>PSH: TURP, sigmoid colectomy, cerebral aneurysm repair</td>
<td>RR SpO2</td>
<td></td>
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</tr>
</tbody>
</table>

- For Ins/Outs:
  - List the volume (in or out) for the PREVIOUS 24hours- from 00:00-24:00 and then in parentheses, list the volume since midnight on the morning of your vitals collection
    - Ex: I = 2450 (200), O= 3000 (500), UOP= 2000 (400), Stool = 1000 (100)
  - If there is ostomy output recorded, please list the output under stool.
  - If there is any DRAIN output (JP, TrueClose, WoundVAC), please list this anywhere.

- For Vitals:
  - Tmax is more important than Tcurrent. Please look at the patient’s temperatures ranging from the time of vitals collection until 00:00 of the DAY PRIOR to obtain your Tmax.
  - If a patient has an episode of severe HTN (SBP >180) or is intermittently tachycardic, take a mental note (in addition to writing it down) and discuss it with your residents- (these are the steps that make you a part of the team and we will LOVE you for it.)
• For Labs:
  o You see three sets of parentheses along with the skeleton for CBC and BMP (above). Within these parentheses,
    please include the value from the DAY PRIOR (or last available lab): WBC (top left set of parentheses above CBC skeleton), HGB (top right set of parenthesis above CBC skeleton), and Cr (bottom right set of parentheses below BMP skeleton).
  o Please include any other pertinent labs (a patient on the ventilator usually has an ABG, patients on Coumadin have an INR, etc and please remember to check culture results daily if they’ve been taken)

**THE PRINTER**

• You’ll need to set up the printer for your personal VA account the first time you log on.
• To add the printer...
  o “Start” → “Settings” → “Printers & Faxes” → “Add Printer” → Follow the instructions on the screen, click “Next” when the Printer Wizard page first pops up → “A network printer or printer attached to another computer” → “Under “Find a printer in the directory” → Under name enter “MSURG1” and under location, “6” and then click “Find now” → When it finds the printer, highlight it where it shows up below and click “ok”.

**ATTIRE**

• Every day, please feel free to wear scrubs except on Wednesdays and Fridays- wear or bring dress clothes on these days as you will go to clinic (if your service has clinic that day) or may be expected to go to clinic later (if you finish with the OR and are helping the other service in clinic).
• If you are on vascular surgery, you do not need to dress up for the 7am Mon/Thurs conferences.

**SCHEDULE**

• General weekly schedule...
  o **Monday:** General Surgery OR & Vascular Surgery OR. Vascular surgery has 7am conference.
  o **Tuesday:** Vascular Surgery OR all day; Gen surg has Colonoscopy Clinic in the morning and afternoon clinic at the BRONZE clinic starting at 12:30pm
  o **Wednesday:** These days are painfully early due to resident conferences starting at 6am. General Surgery clinic at SPECIALTY clinic starting at 8:00/8:15. **WEAR OR BRING DRESS CLOTHES FOR CLINIC AND CONFERENCE TODAY REGARDLESS OF WHICH SERVICE YOU ARE ON.** Vascular surgery has cath lab procedures often all day.
  o **Thursday:** General Surgery has Colonoscopy Clinic in the morning and OR in the afternoon. Vascular surgery has 7am conference and OR cases sometimes in the afternoon.
  o **Friday:** Vascular Surgery clinic at SPECIALTY clinic starting at 8:00/8:15. **WEAR OR BRING DRESS CLOTHES FOR CLINIC TODAY REGARDLESS OF WHICH SERVICE YOU ARE ON.**
  o **Weekends:** 1 student needs to be present to pre-round and help write notes. You are usually done by 9:30, rarely later than 11am.

  o A medical student needs to be in every Gen Surg or Vascular OR case.

**WRITING NOTES**

• Use your CPRS account and then change the author of the note to one of the interns and when you have completely finished the note to the best of your ability, click ‘save without signature.’ This will put the note in the residents inbox to update/sign.
• Find the patient → Click on the “Notes” tab → Click on “New Note” →
  o **For rounds,** you’ll use the “Co-Gen Surg Inpatient Note” or “Co-Vascular Surgery Inpatient Note” as your template. This note template is used for ALL patients (on primary service and with consults).
For clinic, you’ll use the template “Co-Gen (Vascular) Surg Clinic F/U Note” if the patient is returning for post-op or follow-up. You will use the “Co-Gen (Vascular) Surg H&P/PreOp Note” as your template if the patient is being scheduled for surgery- in this case a resident needs to be notified to help obtain consent, place pre-op orders and complete other forms for scheduling.

For clinic, please DOCUMENT appropriately. This sounds self-explanatory but we all forget to do it. Also, if you write a note (which is so greatly appreciated), place the INTERN who is with you as the author of your note (do NOT write a note under your chief’s name unless told specifically to do so). Since you cannot place orders, please be thorough with your plan so that the intern who reads your note (possibly 8 hours later) knows EXACTLY what the attending wanted.

- VASCULAR clinic - Common problems you will see
  a. Peripheral vascular disease: Check peripheral pulses. If a patient does not have pedal pulses, please check for femoral pulses.
  b. Carotid stenosis: ask about TIA/Stroke-like symptoms & any hx of prior stroke- weakness, numbness, tingling, facial droop, changes in speech or vision- specifically ameurosis fugax (“Have you ever had vision loss like there is a curtain coming down over your eye?”). AND DO A BASIC NEURO EXAM- cranial nerves- pupils & any baseline facial droop should be recorded. Some of these patients have had a stroke in the past and it is important to establish their baseline strength in their arms and legs.
  c. Please ask all patients if they are on ASA, Plavix, and a statin (check their med list and confirm that they are on one or more). Ask all patients if they are smokers now or in the past.

- GENERAL SURGERY clinic - Common problems you will see
  a. Hernias- know as many of the different types of hernias that you can because if you are in the OR there is a good chance someone is gonna ask you about ALL of them.
  b. Colon polyps/cancer- When was last colonoscopy? What was found (pathology reports can be found under Tools > Radiology/Imaging > VistA imaging display)? Any symptoms- blood in stool (bright red vs black), hx of constipation, family history?
  c. Gallbladders- the anatomy is key here.
  d. Hemorrhoids- these exams should be deferred for when you are with an attending. Remember to ask about specific symptoms: bleeding, itching, etc.

Above all else, please try to “own” your patients and be a member of the team. If you know that we have a patient who needs a dressing changed in the morning (which, if they have a dressing, that’s usually when we change it), then you will be a life-saver and deemed “proactive” and “amazing” if you have gauze, kerlix, tape and scissors with you. Or on vascular surgery, a doppler is used often daily on rounds. Always have lube in your pocket. I do.

If you have any questions or concerns at any moment about what you are to be doing or where you are to be, PLEASE ASK (pages & calls are welcome or physically prod if you dare). When in doubt, listen to that wholesome little voice in your head, “I should probably just go down to Same Day Surgery since I can’t find my chief or the intern and I think we have a case today...” instead of listening to that louder, sleepy, and over-riding voice that says, “Just stay put and later when asked say, ‘I didn’t know what to do’.” You become a part of the team when you decide that’s what you want to be.
PATIENT CARE SKILLS

Each student is required to observe and gain competence in the following patient care skills: sterile technique, intravenous cannulation, arterial blood gas interpretation, nasogastric insertion, urethral catheterization, wound dressing changes, suture and staple removal. The following Skills Labs will be required during the first week of the Clerkship.

- **Skills Lab will review IV lines, intubation and suturing.** The skills are performed in holding areas, operating rooms, patient wards, intensive care units and emergency center, with supervision.

- **A Laparoscopic Lab that reviews laparoscopic procedures.**

- **Foley Catheter Lab.**

INTEGRATED LEARNING ACTIVITIES THROUGH SIMULATION

- The student will participate in required simulation events

- Mock Trauma and hand-off exercises are supported by the staff of the Shelden Clinical Simulation Center.

PLOG (PATIENT LOG)  
*access through Student Portfolio*

In addition, PLOG is an on-line system to be utilized by the student to keep track of patient encounters during the Surgery Clerkship. PLOG is a required activity. Failure to complete the PLOG will result in a failing grade for the clerkship. Entries should be made upon seeing the patient or soon thereafter. This is confidential information. Any written notes or reminders made with the intention to enter at a later date must be shredded once entered. All patients you see for whom you could write a SOAP note must be entered. Patient encounters include patients seen on the wards, in the clinics and in the OR. Once you enter an encounter, it cannot be edited. A patient can only be entered once, unless the patient is seen in a different setting. It is the **student's responsibility** to assure they are meeting the minimum course requirements throughout the block. Please keep track of your progress by using the “My Progress” tab inside PLOG. All requirements must be met by the end of the clerkship. The Nurse Coordinator and the Course Director will closely follow each student’s progress and will help assess progress each week and at mid-block. Random audits of entries will be performed. Falsification of entries will be considered an Honor Code violation and may result in course failure and/or other consequences.

WISE-MD CASES

All students are required to complete 4 cases through Wise-MD prior to the completion of the Clerkship. The web address is: [http://www.med-u.org/](http://www.med-u.org/).
PATIENT CENTERED CARE

Our graduates are able to deliver care that improves the health of individuals and communities. Patient-centered care reflects a respect for individual patient values, preferences, and expressed needs. This care is grounded in the best available evidence and conserves limited resources. It depends on shared decision-making and active patient participation. Our graduates' care will be marked by compassion, empathy and patient advocacy.

A short reflection exercise demonstrating patient centered care will be expected of each student on the Surgery Clerkship.

FACULTY/RESIDENT/CLERKSHIP EVALUATION
(access through Student Portfolio)

Each student will be required to complete on-line evaluations of the faculty (GS, subspecialty and lectures) and residents (call and service) that they work with during the 8-week rotation, as well as an overall evaluation of the 8 weeks of the clerkship.

In addition, Dr. W. Kirt Nichols, Interim Chairman and Dr. Stephen Colbert, Clerkship Director for the Department of Surgery will meet with students at the end of the block to provide a forum for student feedback.

Required Mid-Rotation Feedback

Each third year clerkship requires you to obtain "mid-rotation" formative feedback, to indicate when this is done in PLOG, and to submit your completed mid-rotation feedback form to the course office or Clerkship Coordinator. For your Surgery Clerkship, you should ensure feedback from a preceptor (a faculty member or resident) at the end of week 2 on the general surgery portion of your rotation. The purpose is to allow you to act on that feedback before your formal evaluation is completed at the end of week 4 of your general surgery service. You do not need to do a self-assessment of every descriptor on the form, but you should complete the form as it will best benefit you and use it when you have your mid-rotation feedback session. A copy of the form will be given to you at the clerkship orientation. You should turn in your form once completed to the Surgery education office. We encourage you to get feedback mid-week during your specialty week rotations as well, but you do not need to use the feedback form at that time.

CONFERENCES

During the academic year, Surgical Grand Rounds are held the 3rd Wednesday of each month at 7:00 am in Acuff Auditorium (MA217). Topics and speakers will be posted. Attendance is mandatory and professional attire is required. The Department of Surgery offers many other conferences. Student participation is encouraged, but is not mandatory.
Faculty didactic sessions are held daily in MC203 or MC401 (see topics listed below). The actual schedule will be handed out the first day of the block. Your active participation is expected. If you are scrubbed, ask the operating surgeon if you should leave. Follow his or her guidance regarding the benefit of staying with the case or attending lecture.

*Essentials of General Surgery, current edition, Lawrence, et al*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>Burn Trauma</td>
<td>Acute Care Surg</td>
</tr>
<tr>
<td>Fluid &amp; Electrolyte Balance</td>
<td>Acute Care Surg</td>
</tr>
<tr>
<td>Shock</td>
<td>Acute Care Surg</td>
</tr>
<tr>
<td>Surgical Critical Care or Vents</td>
<td>Acute Care Surg</td>
</tr>
<tr>
<td>Traumatic Abdomen</td>
<td>Acute Care Surg</td>
</tr>
<tr>
<td>Appendicitis</td>
<td>Gen Surg</td>
</tr>
<tr>
<td>Pediatric Surgery</td>
<td>Gen Surg</td>
</tr>
<tr>
<td>Pancreas</td>
<td>Gen Surg</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>Neurosurgery</td>
</tr>
<tr>
<td>Children’s Orthopaedics</td>
<td>Orthopaedic Surgery</td>
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<tr>
<td>Common Problems in Children’s Orthopaedics</td>
<td>Orthopaedic Surgery</td>
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<tr>
<td>Airway Management</td>
<td>Otolaryngology</td>
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<tr>
<td>Facial Plastic &amp; Reconstructive Surgery</td>
<td>Otolaryngology</td>
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<tr>
<td>Otology</td>
<td>Otolaryngology</td>
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<tr>
<td>Otolaryngology</td>
<td>Otolaryngology</td>
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<tr>
<td>Pediatric Airway Management</td>
<td>Otolaryngology</td>
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<tr>
<td>Plastic Surgery</td>
<td>Plastic Surgery</td>
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<tr>
<td>Cleft and Craniofacial Surgery</td>
<td>Plastic Surgery</td>
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<tr>
<td>Reconstructive Surgery</td>
<td>Plastic Surgery</td>
</tr>
<tr>
<td>Breast</td>
<td>Surgical Oncology</td>
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<tr>
<td>Endocrine Surgery</td>
<td>Surgical Oncology</td>
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<tr>
<td>Colon-Rectal Cancer</td>
<td>Surgical Oncology</td>
</tr>
<tr>
<td>Chest Tube, Pneumothorax, and Tamponade</td>
<td>Thoracic Surgery</td>
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<tr>
<td>Mitral Valve</td>
<td>Thoracic Surgery</td>
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<tr>
<td>Solitary Pulmonary Nodule</td>
<td>Thoracic Surgery</td>
</tr>
<tr>
<td>Transplantation</td>
<td>Urology</td>
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<tr>
<td>Urology</td>
<td>Urology</td>
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<tr>
<td>Vascular Anatomy</td>
<td>Vascular Surgery</td>
</tr>
<tr>
<td>Vascular Disease</td>
<td>Vascular Surgery</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>Vascular Surgery</td>
</tr>
<tr>
<td>Aneurysms</td>
<td>Vascular Surgery</td>
</tr>
<tr>
<td>Peripheral Artery Disease</td>
<td>Vascular Surgery</td>
</tr>
</tbody>
</table>
| **REFERENCE TEXTS** | **Anesthesiology** | (1) Clinical Anesthesia, 7th ed | Barash  
Lippincott  
(2) Basics of Anesthesia, 6th ed.  
Stoelting & Miller  
Churchill Livingstone  
Elsevier  
Cardiothoracic Surgery | (1) Cardiac Surgery in the Adult | Cohn, Edmunds,  
(Available on-line free)  
(2) General Thoracic Surgery  
(3) Comprehensive Surgical Management of Congenital Heart Disease | Shields  
Hodder Arnold  
General Surgery | (1) Textbook of Surgery, current ed  
(2) Principles of Surgery, current ed | Sabiston  
Schwartz  
Neurological Surgery | (1) Handbook of Neurosurgery  
(2) Youman's Neurological Surgery | Greenberg  
Saunders  
Orthopaedic Surgery | (1) Physical Exam of Spine & Extremities  
(2) Surgical Exposures in Orthopaedic Surgery: The Anatomic Approach | Hoppenfeld  
Hoppenfeld, deBoer, Buckley  
Otolaryngology | Primary Care Otolaryngology, 2nd ed  
Operative Otolaryngology Head and Neck Surgery, current ed | American Academy of Otolaryngology Head & Neck Foundation  
Mark K. Wax, M.D.  
Eugene N. Myers  
Ophthalmology | (1) Basic Ophthalmology, 9th ed | Harper  
Pediatric Surgery | (1) Pediatric Surgery  
(2) Pediatric Surgery Handbook | Holcomb  
Humberto L. Lugo-Vicente  
(electronic resource)  
Plastic Surgery | (1) Plastic Surgery Indications, Operations and Outcomes | Achauer, Eriksson, Guyuron, Coleman, Russell, VanderKolk  
Surgical Oncology | (1) Cancer  
(2) Cancer Medicine | DeVita  
Lea  
Trauma | (1) Trauma. 5th ed. | Moore, Mattox, Feliciano Appleton & Lange  
Urology | (1) Campbell's Urology  
(2) Smith's General Urology | Walsh, et. Al. Saunders  
Lange, McGraw/Hill  
Vascular Surgery | Vascular Surgery | Rutherford  
Saunders |
STUDENT EVALUATION

Each student's performance is continuously evaluated during the block. The final grade is determined by Faculty/Resident Evaluation of Student (FES), the NBME Surgery shelf exam, and Professionalism as outlined below. Grades are Honors, Letter of Commendation, Satisfactory, and Unsatisfactory and will be based on specific criteria.

Mid-block evaluations (by faculty or a resident) must be completed and PLOGGED by each student during the General Surgery rotation. Students will also complete a self-evaluation/reflection, identifying areas of strengths and weaknesses.

Grading Criteria

FES

The evaluations based on the four weeks of General Surgery ward performance will account for 57.25% of the total FES grade. The evaluations based on each of the three weeks of Specialty Week performance will count for 14.25%. Thus, the three specialty weeks combined will account for 42.75% of the total FES grade. Eligible final course grades will be based on the final FES grade as follows:

<table>
<thead>
<tr>
<th></th>
<th>Needs Improvement</th>
<th>Meets Expectations</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors Eligible</td>
<td>0</td>
<td>&lt;50%</td>
<td>50% or more</td>
</tr>
<tr>
<td>Letter Eligible</td>
<td>0</td>
<td>&lt;75%</td>
<td>25% or more</td>
</tr>
<tr>
<td>Satisfactory Eligible</td>
<td>&lt;15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>15% or more</td>
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<td></td>
</tr>
</tbody>
</table>

KNOWLEDGE

The NBME Surgery Shelf Exam score will be graded as follows:

<table>
<thead>
<tr>
<th>NBME Percentile Rank</th>
<th>Eligible Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%+</td>
<td>Honors</td>
</tr>
<tr>
<td>75-89%</td>
<td>Letter</td>
</tr>
<tr>
<td>5-74%</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>4% or less</td>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>

PROFESSIONALISM

Demonstrations of professionalism include, but are not limited to the following:
- Timely completion of PLOG requirements
- Timely completion of SEC Evaluations of faculty, residents, and rotation
- Completion of all required activities, including simulations (Lap, IV/ET, foley, TEAM), PCC exercises, WiseMd cases, inter-professional activity, and call duties
- NO unexcused absences
- Request/Approval of excused absences at least 2 weeks before event (preferably at the beginning of the block)
- Appropriate attendance and preparation for all clinical assignments

Student professionalism performance will be graded as 'Unsatisfactory', 'Marginal', or 'Meets expectations'. Eligible final grades are determined as follows:

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Marginal</th>
<th>Meets Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors Eligible</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Letter Eligible</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Satisfactory Eligible</td>
<td>0</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>X</td>
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</tbody>
</table>

**Final Grade**

The final grade determination is made by consensus of the faculty. A grade of **Unsatisfactory** in any one of the three component areas (FES, Knowledge, and Professionalism) results in **failure of the clerkship**. Final remediation is determined by the Committee on Student Promotions (CSP). Department of Surgery suggestions for remediation of each area may include the following:

**FES**
Complete 3 weeks of Interblock on a General Surgery service obtaining a passing FES grade.

**KNOWLEDGE**
Retake the NBME and pass with 5% or greater percentile rank. The date to retake the exam will be based on recommendations by the Office of Medical Education (OME).

**PROFESSIONALISM**
Complete 3 weeks of Interblock on a General Surgery service obtaining a passing Professionalism grade. Write a Professionalism paper and present/discuss with the education committee and OME/Surgery faculty/residents.

**IF REMEDIATION OF ANY AREA IS FAILED, STUDENT MUST REPEAT THE THIRD YEAR CLERKSHIP WITH A PASSING GRADE.**
REQUESTS FOR RECONSIDERATION FOR CLINICAL GRADES

Students may question any component of the grade in a clinical curriculum course. A re-consideration shall not be used to question a rule, procedure, or policy established by an authorized faculty or administrative body. Rather, it shall be used as due process by a student who believes that a rule, procedure, or policy has not been followed or has been applied in an inequitable manner. Requests to re-consider the grade are considered part of the student assessment process and therefore subject to the Honor Code. Students will not contact faculty or residents to request a change in clinical evaluations. Any requests made in this manner will be considered unprofessional and will void the student's opportunity to appeal that component of the grade. When a review of a grade occurs, the student's entire performance on the component in question will be reassessed. This reconsideration process is intended to supplement the processes defined by the University of Missouri and the School of Medicine. The University of Missouri Registrar's guidelines for changes in grades states that no grade shall be otherwise changed unless there is clear, convincing, and unequivocal evidence that it was a direct result of arbitrary and capricious conduct by the instructor or faculty evaluator. This Department of Surgery process will not supersede the policies of the University of Missouri or the School of Medicine.

Reconsideration Process
A student who wishes to have any component or overall grade reconsidered must submit a request for reconsideration to the Clerkship Director in writing no later than two (2) weeks after the final clerkship grade has been released to the students by the Offices of Medical Education. The request must include the following:

1. A request for grade reconsideration
2. The course in which the grade was received
3. The block in which the grade was received
4. A clear statement of the perceived grade discrepancy
5. The relief sought
6. Address and phone number of the student
7. Signature of the student

The Clerkship Director will acknowledge receipt of the request to the student within ten (10) calendar days of its receipt. The Clerkship Director and Department Chair have the discretion to discuss the request with the student and other involved parties in an effort to resolve the discrepancy within the course department. A determination will be made within thirty (30) calendar days of receipt of the request, and the student will be notified of the determination in writing. If a discrepancy is determined to exist and is resolved in this manner, the terms of the resolution will be put in writing, signed by the Clerkship Director, and reported to the Offices of Medical Education. If it is determined that a discrepancy does not exist, the Clerkship Director shall respond to the student in writing within thirty (30) calendar days of receipt of the written request for re-consideration of the grade.

If a student is uncomfortable approaching the Clerkship Director, then he/she shall submit the request for re-consideration to the clerkship Department Chair. If a student is uncomfortable approaching the department Clerkship Director and Department Chair, then he/she is encouraged to discuss the issue with the Associate Dean for Student Programs and Professional Development who will advocate for him/her.

Appeal to the Dean
Should the student be dissatisfied with the response of the Clerkship Director and/or Department Chair he/she may, within ten (10) calendar days of receipt of such response, submit a written appeal to the Dean of the School of Medicine, through the Associate Dean for Curricular Improvement. Upon receipt of the written appeal, a panel will be formed by the Dean's Office. The panel will consist of one clinical course director, one other faculty member, and one student member (student member currently serving on the Curriculum Board) drawn at random from the pool of participants in each group. The pool of participants in each group will be solicited annually from each group. The list of volunteers will be
maintained by the Offices of Medical Education. Names will be drawn randomly by the Associate Dean for Curricular Improvement. No member of the panel may be from the department of any of the involved parties. If a person whose name is drawn is not able to participate because of prior commitments, another name will be drawn. The panel may gather evidence, interview individuals, and request further information from the involved parties. Within **thirty (30) calendar days** of the receipt of the appeal, the panel will give a written copy of their recommendation to the Dean. If the decision of the panel is not unanimous, the dissenting party may submit a written dissenting opinion at the same time. The Dean will respond in writing within **five (5) working days** of receipt of the panel's recommendation. The Dean may accept the recommendation, amend it, reverse it, or refer it back to the panel for reconsideration. The decision of the Dean is final.

(Also see the University of Missouri Employee Grievance Policy: 380.010)