Surgery is an eight week experience in familiarization with the care of patients suffering from conditions that are amenable to treatment by the use of the hand (surgery; fr. Greek: cheir [hand] and ergon [work], literally ‘handiwork’). Major emphasis in this rotation will be placed upon issues and problems in general surgery, but student familiarity with common textbook problems in the surgical subspecialties (thoracic and cardiovascular, orthopedics, urology, ENT, and neurosurgery) will be tested on the end-of-service NBME examination.

Students will be assigned to an individual clerkship faculty member who will shepherd the student experience in the operating room, out-patient clinics, and office based practice. In addition, students will take night call two times per week. For the final two weeks of the rotation, the student will undergo a concentrated subspecialty experience to be chosen by the student working with the Campus Dean, from among the surgical subspecialties of orthopedics, urology, or otolaryngology.

Reading

Required

Students will be responsible for the material in “Cope’s Early Diagnosis of the Acute Abdomen”, 21st Ed., edited by Silen, W., Oxford University Press, New York, 2005. This is one of the most highly regarded books in all of medicine, and mastery of the material contained herein will remove all mystery from the diagnosis of abdominal pain. It is available online from the COM library.

Suggested Texts

Listed in Appendix A are those Topics that are considered the Core Information for Surgery, and for which students will be held accountable. As medical students, you are responsible for choosing how, and from where, you will acquire this knowledge base. Although there are a number of excellent surgical texts available, “Current Surgical Diagnosis and Treatment”, 11th Ed., edited by Way, L., Mcgraw Hill, New York, 2006, is an authoritative, yet concise, text, and direct links to the Way chapters are provided in the Appendix. Many students seem to prefer Lawrence’s companion texts Essentials of General Surgery, and Essentials of Specialty Surgery. Blackbourne’s Surgical Recall is considered helpful by many. For review immediately prior to the NBME exam, I wholeheartedly recommend Doherty’s Current Essentials of Surgery, Lange, 2005. Individual topics are outlined and all pertinent information is provided on one page.

Regardless of which text(s) you choose, make certain that you have mastered those subtopics listed in the Appendix, as they are important and appear with great frequency on examinations. For those students wishing to pursue a surgical career, “Sabiston Textbook of Surgery”, 18th Ed, edited by Townsend, CM Jr., W. B. Saunders, Phila. 2008, is recommended as
encyclopedic. Choosing this option, however, will significantly increase your reading time, as topics are considered in great detail. “The Physiologic Basis of Surgery”, 4th Ed., edited by O’Leary, J.P., Lippincott Williams & Wilkens, Phila., 2008, is a requisite for anyone contemplating becoming a surgeon. Although primarily designed for surgical residents facing the American Board of Surgery In-Site Training Examination (ABSITE), it represents an outstanding review of physiology for non-surgeons as well.

If you wish to acquire a text that is not on our electronic list, or is not in our Regional Medical Center library, then you will need to purchase the book.

**End-Of-Service NBME Examination**

When first confronted by Surgery, many students see only the technical side; i.e., the procedures done in the operating room. While surgical technique is unquestionably important, of equal importance to the results from surgery are preoperative preparation (including diagnosis and workup), and postoperative care. NOTE WELL: THE NBME EXAM DOES NOT TEST YOUR KNOWLEDGE OF SURGICAL TECHNIQUE! Rather, this examination concentrates on establishing a diagnosis (45-50%), principles of management (25-30%), nutritional and digestive diseases (25-30%), and understanding mechanisms of disease (15-20%). Much of the exam is in clinical vignette form, in which you will be given data and expected to come to a diagnosis, order additional tests, or pick a therapy.

Many students have seen only the drama of the operating room, failing to see this “medical” side of Surgery, and have therefore felt that the Surgery NBME exam is “almost all medicine”. Don’t make that same mistake! The best surgeons are “Internists with Operating Privileges”!

This exam tests the application and integration of knowledge, rather than the recall of isolated facts. For these reasons, you cannot just study isolated facts, or cram at the last minute. You need to be on a schedule of programmed reading throughout the clerkship if you wish to be successful.

**Teaching and Learning Methods**

The majority of time that the student spends on the Junior Clerkship in Surgery will be spent as an apprentice to a surgeon from the clerkship faculty. This contact will provide the student with an appreciation of what a practicing community surgeon does, both in the operating room and in out-patient settings. Students will also have the opportunity of managing one case per week from the standpoint of Anesthesiology. In addition, each student will have weekly scheduled contact with the site-specific Clerkship Director, who will oversee CDCS entries, in order to provide breadth of patient experience, and to avoid duplication. Didactic sessions will be held weekly, as will site-specific conferences selected for student interest. Students will take in-house hospital night call twice weekly, and will be expected to be a part of any surgical admission or procedure occurring during their time on call. The work week will consist of Monday through Saturday (inclusive). Students will adhere to the ACGME rules regarding the workweek, which include working no more than 80 hours per week, no more than 24 hours continuously, except an additional 6 hours may be added to the 24 to perform wrap-up duties, and have at least one of every 7 days completely off from educational activities.

Each student will also be responsible for writing a 1000 word “Controversies in Surgery” paper (three pages double-spaced, not including references), consisting of the following:

a. Identify a controversial problem in Surgery that interests you.

b. Present the pro and con evidence-based arguments with full references

The evidence you present must be Level 3, or higher. If you are uncertain what this means, consult a summary of Evidence-Based Medicine, an FSU librarian, or your Clerkship Director.
c. Form your own conclusion and justify your position.

This paper is due prior to the NBME examination taken on the last day of the rotation, and should be sent to me by email (ed.bradley@med.fsu.edu) in Word Format. Failure to submit the paper on time may be considered a breach of professionalism. By submitting this paper you are certifying that it is entirely your work. All papers will be checked against a computerized registry (“Safe Assign”) for similarities in content and expression.

Clerkship Grading:

FSU COM has adopted the following Honors/Pass/Fail grading system and employs a uniform policy governing the assignment of grades to students completing required clerkships.

Student grades for required clerkships are calculated using information from all of the following sources:

- NBME subject examinations, or FSU COM internal clerkship-specific examinations, taken by students at the end of each clerkship,
- Standardized FSU COM student assessment forms completed by the clerkship faculty at the end of each clerkship,
- Standardized FSU COM forms completed by the clerkship director at the end of each clerkship,
- Compliance with CDCS data entry requirements (see individual clerkship syllabi)
- Required clerkship projects and activities, (see individual clerkship syllabi),
- Patient and staff evaluations.

Students must pass all of these components to pass the Surgery course.

As a performance based course, all students will be expected to achieve competency. Students who do not meet this standard will be required to remediate deficiencies before being advanced to the fourth year curriculum. Students will be provided frequent opportunities to assess their performance in non-graded exercises to identify areas of strength and weakness prior to the graded examination. Mid-clerkship formative feedback will be given to the students by their clerkship faculty.

It is the responsibility of the clerkship director and the education director to monitor and attest to the satisfactory completion of clerkship competencies/objectives.

- Third-year students who do not meet clerkship competencies/objectives must remediate identified deficiencies before advancing to the fourth year curriculum.

Clerkship Grade Considerations:

The NBME subject exam scores and percentiles used to calculate grades will be based upon the most recent NBME Academic Year Norms for Examinee Performance that are available at the beginning of an academic year.

In determining the percentile rank for each third year clerkship student’s NBME subject exam score, the Education Director will use the percentile ranks for the NBME Quarter that corresponds to the quarter in which 50% or more of the rotation was completed.
The Education Director is responsible for reviewing all student assessments and assigning the student’s grade for the clerkship. (In the absence of extenuating circumstances, the Education Director will assign the student’s grade according to the Grading Standards described below. If circumstances exist that are not adequately covered by these Grading Standards, the specific Education Director may request a deviation from established standards by presenting the reason for the proposed deviation to the assembled Education Directors. The decision of the combined Education Directors will be final.)

**Grading Standards for Required Clerkships:**

**Honors Criteria:**

A student *may* be assigned an “Honors” grade if the “Honors Criteria” listed below are met:

1. Receives a “yes” rating in all 6 subcategories of the clerkship assessment form pertaining to “Professionalism” and “Ethical Standards”; AND
2. Receives at least 10 “excellent” ratings in the remaining 17 subcategories on the clerkship faculty assessment form; AND
3. Has no more than 2 ratings of “satisfactory” and no ratings of either “marginal” or “poor”; AND
4. Receives a narrative summary by the clerkship director documenting excellent performance; AND
5. Scores at or above the 75th percentile for NBME shelf exam reference scores by students completing clerkships of comparable length at a similar time in the academic year (note: all NBME shelf exam scores taken by fourth year students shall be referenced to scores by students in the fourth quarter of third year); OR scores at a pre-determined honors-level score on the internal clerkship-specific exam; AND
6. Receives a satisfactory rating on all required clerkship projects and activities; AND
7. Satisfactorily complies with data entry requirements into the CDCS system; AND
8. Receives satisfactory patient and staff evaluations

Note: Education Directors may assign an “Honors” grade to high-performing clerkship students meeting either (but not both) of the following situations:

- Situation # 1: If the student satisfies all of the “Honors” criteria listed above, but receives only 9 “excellent” ratings in the remaining 17 subcategories on the clerkship faculty assessment form, OR
- Situation # 2: If the student satisfies all of the “Honors” criteria listed above, but receives an NBME shelf exam score at or above the 72nd percentile when referenced to students completing clerkships of comparable length at a similar time in the academic year.

**Pass Criteria:**

A student *may* receive a “Pass” grade if all of the “Pass Criteria” listed below are met:

1. Receives a “yes” rating in all 6 subcategories on the clerkship faculty assessment form pertaining to “Professionalism” and “Ethical Standards”; AND
2. Has no subcategories rated as “poor,” and no more than two subcategories rated as “marginal;” AND
3. Receives a clerkship director’s narrative summary denoting a satisfactory performance, AND
4. Scores at or above the 10th percentile for NBME shelf exam reference scores by students completing clerkships of comparable length at a similar time in the academic year (note: all NBME
shelf exam scores taken by fourth year students shall be referenced to scores by students in the fourth quarter of third year; OR scores at a pre-determined minimum passing score on the internal clerkship-specific exam; AND
5) Receives a satisfactory rating on all required clerkship projects and activities, where applicable, AND
6) Satisfactorily complies with data entry requirements into the CDCS system, AND
7) Receives satisfactory patient and staff evaluations

Fail Criteria:

A student is at risk for a grade of “Fail” if any of the Criteria” listed below are met:

1) Receives a “no” rating in any of the 6 subcategories of the clerkship faculty assessment form pertaining to “Professionalism” and “Ethical Standards”; OR
2) Receives three (3) or more of the remaining 17 subcategories rated as “marginal;” OR,
3) Receives a rating of “poor” in any remaining subcategory; OR
4) Receives a clerkship director’s summary denoting unsatisfactory performance; OR
5) Scores below the 10th percentile of students completing clerkship of comparable length at a similar time in the academic year on his/her NBME specialty subject exam; OR scores below the 10th percentile on the retake of the NBME clerkship-specific exam*; OR
6) Does not receive a satisfactory rating on all required clerkship projects and activities, where applicable; OR
7) Does not comply with data entry requirements into the CDCS system; OR
8) Does not receive satisfactory patient and staff evaluations

*Note: A student who fails the initial post-clerkship NBME subject exam, but performs at a satisfactory level in all other aspects of the clerkship, will receive an initial clerkship grade of “IR” and will be reported to the Student Evaluation & Promotion Committee (SEPC). The student will be given one opportunity to re-take the examination to achieve a passing score. This re-take must occur within 90 days from the day the student is notified that he/she has failed the initial subject examination, unless a different time-frame is approved by the SEPC. The student and regional campus dean will determine the date of the re-take examination, and provide at least four (4) weeks’ notice to the regional campus student support coordinator who will coordinate the ordering and re-take of the previously-failed examination.

Students who have an initial third-year clerkship grade of “IR”, and re-take the shelf exam, must achieve a score at or above the 10th percentile for the NBME shelf exam reference scores by students taking the exam at a similar time in the academic year. The date of the re-take exam---and not the dates of the clerkship--will establish which set of NBME norms are used to determine whether a passing grade has been achieved. Students, who complete the re-take exam during or following the fourth quarter of their third year curriculum, will have their scores referenced to those fourth quarter scores.

If a passing score is achieved on the re-take examination, the initial “IR” grade will be changed to a grade of “Pass.” A student who fails the initial exam cannot achieve an “honors” grade regardless of the score on the re-take exam.

If a student does not pass the re-take examination or fails to re-take the examination within the 90 day window, the original “IR” grade will be changed to a grade of “Fail.”
Students who receive a failing clinical evaluation from the Clerkship Faculty will receive a grade of “Fail” for the clerkship (regardless of the subject exam score or the score on the internal clerkship-specific exam) and will be referred to the Student Evaluation and Promotion Committee (SEPC).

Students who fail to meet CDCS requirements for required clerkships:

Data from the CDCS system is used to assess and direct individual educational objectives for each student as well as meet accreditation standards for the COM. This makes accurate and timely data entry into the CDCS system imperative for clerkship students. Identification by the clerkship director of failure to comply with clerkship-specific CDCS data-entry standards may result in a lowering of the student’s clerkship grade by the Education Director, and in cases of blatant noncompliance, may result in a student’s failing the clerkship due to concerns of professionalism.

Students who receive poor evaluations by patients or staff:

Patient and staff evaluations provide important information about student performance, and are required to be collected during all third-year required clerkships. Consistently low evaluations by either patients or staff may result in a lowering of the student’s clerkship grade by the Education Director, and in extreme cases, may result in a student’s failing the clerkship due to concerns about professionalism.

Students who receive a grade of “Fail” for any reason not covered above (i.e., concerns re: student professionalism, for example) will be referred to the SEPC for disciplinary action.

A student must receive a “Pass” or “Honors” grade for all required third-year clerkships in order to be eligible for promotion to the fourth year of the curriculum.

Course Evaluation

Each student will be given the opportunity to provide constructive feedback regarding the clerkship faculty and directors using the on-line CDCS evaluation system. Course evaluation forms will be available on-line 72 hours before the last day of the rotation. Note that you must complete the on-line course evaluation in order to be permitted to sit for the NBME Surgery examination. Students will also be given the opportunity to critically evaluate the curriculum using a standard instrument supplied by the Education Director in Surgery. Be assured that your evaluation of the course and the faculty will not be released to anyone until after your grade has been assigned. Thoughtful student feedback is critical for improving the quality of the clerkship learning experience.

Course Objectives

By the completion of the Clerkship, the student will be expected to be able to:

(1) Demonstrate the ability to conduct a focused medical history and targeted physical examination pertinent to a surgical condition.
(2) Create a meaningful differential diagnosis following initial work-up
(3) Demonstrate familiarity with core surgical knowledge
(4) Develop the capability to provide a concise and logical patient presentation
(5) Appreciate ethical, cultural, and public health issues in Surgery, including local, state, and federal oversight
(6) Demonstrate facility in applying informatics to critical appraisal of the surgical literature, and to making surgical diagnostic and therapeutic management decisions.
(7) Demonstrate proficiency in: scrubbing and maintaining sterile technique, dressing clean and contaminated wounds, wound closure with sutures/staples, drain management, wound debridement, and operative assistance.
(8) Be familiar with the choice of anesthetic agents, their administration, and recovery from their usage.
(9) Recognize and treat commonly encountered problems in Orthopedics, Urology, Otolaryngology, Thoracic and Cardiovascular, and Neurosurgery.
(10) Recognize an acute surgical abdomen, and assign its probable cause
(11) Effectively and respectfully communicate with colleagues, staff, patients and families
(12) Recognize the importance of specific geriatric conditions, such as dementia, delirium, and the propensity to fall in older age populations
(13) Develop familiarity with suturing wounds, bladder catheterization, and endotracheal intubation

COM Competencies and Course Objectives

Professional Attitudes, Values, and Behavior – Objectives # 5, 11
Moral Reasoning and Ethical Judgment – Objective # 5, 11
Communicating with Patients, Families, and Colleagues – Objective # 11
Application of Basic Sciences to Patient Care – Objectives # 2, 6, 8, 9, 10
Essential Clinical Skills – Objectives # 1, 2, 6, 7, 8, 11, 12
Problem Solving and Critical Thinking – Objectives # 1, 2, 4, 7, 11
Life Long Learning and Information Management – Objective # 6
Social, Cultural, and Community Context of Health, Illness, and Care – Objectives # 5, 11, 12, 13
Personal Awareness – Objectives # 5, 11
Organizations, Systems, and Quality Improvement – Objectives # 5, 13

Compliance with these competencies and course objectives is continuously monitored by the on-site Clerkship Faculty, and the Clerkship Director, and teaching faculty must confirm compliance on the student evaluation form. Educational objectives and competencies are also evaluated by the NBME end of service examination, patients, colleagues, and staff.

CDCS Data Entry Policies For Surgery

Categorization of extent of patient contact may be somewhat different on Surgery compared to other rotations. In general, the three categories of contact are:

**Full:** focused H & P, AND participate in plans for workup/therapy (i.e., scrub on patient, discuss diagnosis and treatment with attending, etc.), AND follow.

**Minimal:** brief contact, usually less than 10 minutes (look at x-rays, or
lesion, etc.

**Moderate:** everything else

All surgical procedures done under general anesthesia are to be assigned to the “major” category

Please note that the same patient should not be entered more than twice (including post-operative visits) unless a new problem has developed. The rationale is that while I am interested in your workload, I am even more interested in your breadth of experience.

**Patient Encounters Required to Meet Course Objectives**

The following guidelines are offered to suggest the types and *minimal numbers* of patients to be encountered by students on the Surgery rotation in order to meet the objectives stated above:

- **a)** total number of patients encountered – 110, including 30 major operations
- **b)** gastrointestinal disease – 40
- **c)** general surgical patients exclusive of GI disease – 20
- **d)** oncology – 20
- **e)** trauma – 5
- **f)** urology – 3*
- **g)** otolaryngology – 3*
- **h)** orthopedics – 3*
- **i)** cardiovascular – 2
- **j)** procedures – 15 (including wound suturing, foley and nasogastric tube placement, abscess drainage, venipuncture, intravenous lines, and endotracheal intubation)

*Patient numbers will be higher or lower depending upon the specific two week selective experience. Although the LCME no longer requires specific numbers of patients to be encountered for certification, we have found that collection of these data helps us in judging student initiative, and assists in determining the mix and breadth of student contact with patients.

**Students With Disabilities**

The Florida State University adheres to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA) in prohibiting discrimination against any qualified person with a disability. Students with specific questions regarding the FSU policies governing students with disabilities may contact the Student Disability Resource Center.

Students with disabilities who wish accommodations based on a disability must notify the College of Medicine Office of Student Affairs and register with the FSU Student Disability Resource Center (SDRC). In order to register with the SDRC the student must provide the Center with the required documentation. A definitive diagnosis of disability must be stated in the documentation. Details regarding the required documentation for each disability can be found at the SDRC website [www.fsu.edu/~staffair/dean/StudentDisability](http://www.fsu.edu/~staffair/dean/StudentDisability).

Exam Protocol for Students with Disabilities at Florida State University College of Medicine
The Florida State University adheres to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA) in prohibiting discrimination against any qualified person with a disability. Students with specified questions regarding the FSU policies governing students with disabilities may contact the Student Disability Resource Center (SDRC).

Students who warrant accommodations based upon the functional effects of a physical or learning disability should adhere to the following procedure:

1. Student meets with a representative of the Student Disability Resource Center (SDRC), provides documentation of a disability and requests accommodations. (A definitive diagnosis of a disability must be identified in the documentation. Details regarding the required documentation for each disability can be found at the SDRC website: www.fsu.edu/~staffair/dean/StudentDisability.)

2. For entering students, this is best accomplished prior to the beginning of classes (e.g., Orientation Week). For all other students, it must be completed at least one month prior to the examination date when accommodations would be instituted.

3. SDRC staff will review the documentation to determine sufficiency and eligibility for accommodations. If additional documentation is needed, this may be obtained through the Office of Student Counseling Services (OSCS) at the COM or elsewhere in the community. If additional testing is required, temporary accommodations may be granted while documentation is completed.

4. Student and SDRC staff identifies the type of accommodations that are appropriate based upon the student’s disability.

5. SDRC staff completes and signs a Faculty Letter addressed to the COM’s Associate Dean for Student Affairs indicating that documentation supports specific accommodations.

6. Student signs Faculty Letter indicating agreement with suggested accommodations and understanding of his or her responsibility to present the letter to the Associate Dean for Student Affairs at the College of Medicine.

7. SDRC prints two copies of the Faculty Letter and retains a copy as a record of the initial meeting, eligibility and accommodation request.

8. Student will schedule an appointment to meet with the Associate Dean for Student Affairs within one week’s time to present the second original Faculty Letter. The student is also encouraged to keep a copy of this document.

9. The Associate Dean for Student Affairs will review the letter, determine appropriateness of all requests based on the requirements for the college, and discuss concerns with student and/or call SDRC when appropriate.

10. The letter will be kept in a confidential place in the Office of Student Affairs and not made part of the academic record of the student.
11. Once accommodation have been confirmed, the student is to schedule an appointment with the OSCS.

12. The OSCE’s at the COM will be the representative responsible for facilitating accommodations for medical school students who have been determined eligible for services. The OSCS will explain to the student how the accommodations will be facilitated.

13. The student will then be responsible for completing the SDRC Exam Sign-Up Sheet and ensuring that his/her Year 1/Year 2 Year and Course Directors overseeing the examination have signed it. Exam Sign-Up Sheets may be obtained from year 1/Year 2 Coordinators or the OSCS.

14. The student will return the completed SDRC Exam Sign-up Sheet to the SDRC at least 5 WORKING DAYS prior to the scheduled date/time of the exam in order to facilitate testing/exam accommodations. Failure to meet this requirement will release the COM and SDRC from the responsibility of providing accommodations for that particular examination.

15. A special situation arises with the NBME examinations. Since these examinations need to be ordered well in advance of the test date, students who are requesting to take an NBME under special accommodations should complete the Exam Sign-Up sheet at least 4 weeks prior to the date the exam is to be administered.

16. Students who qualify for exam accommodations will follow SDRC’s Testing Center policies. If the examination is not taken at the SDRC, the COM (in collaboration with SDRC) will coordinate the provision of other accommodations. This might occur for quizzes or shorter, in-class exams. The student is responsible for notifying the instructor at least five working days prior to the quiz/exam if on-site accommodations are desired. Except for extenuating circumstances, all Year1/Year2 integrated and Year1/Year2 NBME exams requiring accommodation will be administered at the SDRC.

17. For those students attending the regional campuses, Steps 1-11 should be followed in order to be approved for accommodations. However, the Regional Campus Dean will be responsible for overseeing the implementation of the accommodations in collaboration with the Associate Dean for Student Affairs.

18. Provision of exam proctors and appropriate distribution of exams for students receiving accommodation will be administered by the Office of Medical Education (for Year 1/2 and the Regional Campus Deans (Year 3/4).

COM Philosophy

Professionalism is a major component of our medical curriculum. We believe students should conduct themselves appropriately in the various educational activities of the curriculum. This conduct includes coming to educational activities on-time, using the laptop computers only for course work during the educational activity, and not disrupting the class if late. The faculty should also demonstrate professionalism, by starting and ending all scheduled educational activities on time and providing a course schedule with clearly explained course policies in the course syllabus. Any changes in the schedule should be given to the students in a timely manner.
Students will be accountable and personally responsible for attending all educational activities (small groups, labs, clinical experiences, examinations, lectures, computer sessions, etc.).

Unexcused absences reflect negatively on the goals and objectives of the medical curriculum and demonstrate unprofessional behavior by the respective student.

We owe it to our state legislature and the citizens of the State of Florida to provide a quality educational program that meets the needs of our students in preparing them for the M.D. degree.

**Attendance Policy**

Students are expected to attend all scheduled activities. Students are expected to be on time. Being on time is defined as being ready to start at the assigned time. If a student has an emergency that prevents her/him from attending a scheduled activity, s/he is to call and notify the Office of Student Affairs (Year 1/2) or the Regional Campus Dean / Student Support Coordinator (Year 3/4) and request that they inform the supervisors/professors/clerkship faculty/education director for that activity. If at all possible, the student should also call and at a minimum, leave a message with one of the course/clerkship directors. It is important that students realize that their absence or tardiness negatively impacts a number of other people. Attendance, including tardiness, is part of the student’s evaluation for professionalism. Negative evaluations may result in decreased grades and in severe cases, referral to the Student Evaluation and Promotion Committee.

**Procedure for Notification of Absence**

**Year 3/4 Required Clerkships**

If the student requests an absence in advance, the “Advance Request for Absence from Educational Activity(ies)” form should be completed, signed by the student and given to the Regional Campus Dean. Requests for excused absences from a required clerkship should be rare and made only in situations that cannot be rescheduled to occur during a scheduled time off or during an elective. An excused absence from a required clerkship may be allowed when it is determined by the Regional Campus Dean that the student has no alternative (see Fourth Year Scheduling Policies).

The Regional Campus Dean, after consultation with the Education Director and the Clerkship Director, will make the final decision regarding the student’s request and give the student the implications for the absence (e.g., remediation, course grade adjustment, make-up exam, etc.). Final decisions regarding implications for the student’s grade shall rest with the Education Director. The Clerkship Director will notify the clerkship faculty member of the decision. The form will be filed in the Office of Student Affairs at the regional campus.

If the absence occurs due to an unforeseen emergency, the student should contact the Clerkship Director and the Regional Campus Dean immediately to report the absence including the reason for the absence. The Regional Campus Dean, after consultation with the Education Director and the Clerkship Director will make the final decision regarding implications of the student’s absence. The implications for the absence (e.g., remediation, course grade adjustment, make-up exam, etc.) will be given to the student by the Regional Campus Dean. Final decisions regarding implications for the student’s grade shall rest with the Education Director. The Clerkship Director
will notify the clerkship faculty member of the decision. The form will be filed in the Office of Student Affairs at the regional campus.

**Un-excused Absences**

Any unexcused absence will, at the very least, negatively impact the final grade in this course. Students achieving borderline grades may be assigned the lower grade when unexcused absences are present.

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**Surgical Selectives in ENT, Urology, and Orthopedics**

Immediately upon the completion of the six week experience in General Surgery, the student will begin a two week concentrated exposure to common problems frequently encountered by primary care physicians in either ENT, Urology, or Orthopedics, the specific subspecialty to be chosen by the student, working with the Campus Dean. This experience is designed to give a flavor of the subspecialty, rather than to be a comprehensive coverage of the material. During this subspecialty exposure, the student will be assigned to a specific surgeon, who will guide the student through office based problems, hospital rounds, and operative experiences. More specific information regarding the specific goals and objectives of the Selectives is listed immediately below.

**Selective Clerkship In ENT-Head and Neck Surgery**

**Course Description**

The 2-week ENT- Head and Neck Surgery Clerkship will cover major pathologic conditions in the head and neck regularly encountered by primary care physicians. The student will be assigned to a preceptor who will work with the student on the diagnosis and treatment of these common lesions, in clinics, on hospital rounds, and in the operating room.

**Required reading**

The chapter on Otorhinolaryngology in your chosen text.

**Teaching Methods**

The student will have ample exposure to common ENT problems, with an emphasis on correct diagnosis as opposed to treatment. Teaching will consist of oral discussion of common ENT problems while in surgery, in the clinics, and on rounds with their preceptor. Approximately 50 patients with ENT conditions will be seen.

**Grading**

Will follow the FSU College of Medicine Guidelines as outlined in the syllabus for surgery. A formative oral examination in the form of a case presentation will be given to the Clerkship Director at the end of the two week session.

**Course Evaluation**

The student must provide feedback to the clerkship director and preceptor following the 2-week clerkship. This will assist in evaluating the effectiveness of the clerkship for future years.

**Course Objectives**

The student will demonstrate an ability to conduct a focused medical history and perform a good physical exam, in this case a comprehensive head and neck exam. In the head and neck area most problems are visible or palpable, so the student should move forward quickly.
Students will learn to work up common ENT and Head and Neck Surgical problems, including the use of laboratory studies and imaging modalities, such as CTs, and will be able to describe the medical and surgical options for the most commonly encountered ENT problems.

Ear:
- Acute Otitis Media
- Chronic Otitis Media
- Perforation of the eardrum
- Students should be able to discuss deafness and its possible causes
- Students should have a basic understanding of vertigo

Nose:
- Allergic versus Non Allergic rhinitis
- Mechanical obstruction from deviated septum
- Nasal polyps
- Nasal Fractures
- Epistaxis

Throat and Pharynx:
- Acute pharyngitis
- Peritonsillar abscess
- Evaluation sleep apnea
- Obstructive breathing in adults and adolescent
- Airway problems in Adults and Children

Evaluation of a neck mass:
- Lymph node vs.
- Salivary tumors vs.
- Head and neck tumors

Attendance Policy
Standard COM Attendance Policy

Selective Clerkship in Orthopedics

Course Description
This two week clerkship will introduce students to those orthopedic conditions commonly seen in primary care practices, and will focus on the diagnosis and treatment of these conditions. The student will be assigned a preceptor who will work directly with the student in the clinic, in the operating room, in the emergency room, and on hospital rounds.

Required Reading
The chapter on Orthopedics in your chosen text, as well as Hoppenfield’s Physical Examination of the Spine and Extremities which may serve as a reference during the clinical clerkship.

Teaching Methods
On the two-week clerkship, the student will be exposed to approximately 50 orthopedic patients in the clinic, and between 10 and 20 surgical procedures.

Grading
Grading will follow the FSU College of Medicine Guidelines as outlined in the syllabus for surgery.

Course Evaluation
The student must provide feedback to the clerkship director and preceptor following the two-week clerkship. This will assist both the preceptor and clerkship director in evaluating the effectiveness of the clerkship so that improvements can continually be made to meet the needs of the students.

**Course Objectives**

The student will learn to take an accurate and directed history as well as perform appropriate physical examination. By the second week of the clerkship, students will be expected to evaluate orthopedic patients prior to their being seen by the preceptor, thereby receiving immediate feedback and instruction on the development of an appropriate physician/patient interpersonal and professional relationship, history taking and appropriate physical exam as well as interpretation of appropriate radiographic studies.

Ample opportunity will be afforded each student to learn the basics of both plain radiographic and MRI/CT radiographic interpretation of orthopedic conditions.

The student will be exposed to appropriate use and application techniques of splints for the upper and lower extremities.

The student will learn appropriate nonoperative measures for common orthopedic problems. The student will also be able to differentiate between what can be treated conservatively by a primary care physician and what should be referred to an orthopedic surgeon.

The students will be taught safe methods of injecting the knee and shoulder where appropriate. The student will also be taught the appropriate use of rehabilitation/physical therapy for various orthopedic diagnoses.

The student will gain a comfort level with commonly prescribed “orthopedic medications” such as nonsteroidal agents, antibiotics and narcotic pain medications when necessary.

During the two-week clerkship the student will encounter the following orthopedic problems:

- **Knee:** Meniscal tears, osteoarthritis, knee effusion, ligamentous instability of the knee, anterior knee pain
- **Shoulder:** Impingement, partial and full thickness rotator cuff tears, shoulder instability, biceps tendonitis, frozen shoulder.
- **Tennis elbow / lateral epicondylitis.**
- **Foot and ankle sprain, ankle fracture, plantar fasciitis.**

Other common orthopedic problems that may well be seen during the two week clerkship include: carpal tunnel syndrome, deQuervain’s stenosing tenosynovitis, trigger finger, trigger thumb, cervical disk disease, lumbar disk disease, low back pain, hip arthritis, trochanteric bursitis, compression fracture of the spine, fracture reduction with IV sedation and / or hematoma blocks.

**Attendance Policy**

Standard COM Attendance Policy

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**Selective Clerkship In Urologic Surgery**

**Course Description**

This two-week clerkship will introduce students to common urologic conditions seen in primary care practices, and will focus on the diagnosis and treatment of these conditions. The student will be assigned a preceptor who will work directly with the student. Although the clerkship will stress office-based urology, exposure to surgical procedures in the operating room and hospital rounds will also be included.
Required Reading

The Chapter on Urology in your chosen text is required. Smith’s *General Urology* (16th Edition 2003) will be available during the clinical clerkship as a resource.

Teaching Methods

On the two-week clerkship, the precepted student will be exposed to approximately 50 urologic patients in the clinic and between 10 and 20 surgical procedures.

Grading

Grading will follow the FSU College of Medicine Guidelines as outlined in the syllabus for Surgery.

Course Evaluation

The student must provide feedback to the clerkship director and preceptor following the two-week clerkship. This will assist both the preceptor and clerkship director in evaluating the effectiveness of the clerkship so that improvements can continually be made to meet the needs of the students.

Course Objectives

The student will learn to diagnose common urologic problems. The student will learn to take an accurate and directed history, as well as perform an appropriate physical examination. By the second week of the clerkship, students will be expected to evaluate urologic patients prior to their being seen by the preceptor, thereby receiving immediate feedback and instruction on the development of an appropriate physician/patient interpersonal and professional relationship, history taking and appropriate physical exam as well as interpretation of appropriate laboratory and radiographic studies.

Opportunity will be afforded each student to learn the basics of plain radiography, excretory urography, and computed tomography as they apply to urologic conditions. Ultrasonography will also be covered, particularly as it relates to the examination of the prostate.

The student should be able to describe appropriate nonoperative measures for common urologic problems. The student will also be able to differentiate between what can be treated conservatively by a primary care physician and what should be referred to a urologic specialist. The student will be expected to exhibit proficiency in the microscopic evaluation of the urinary sediment.

The student will become familiar with commonly prescribed medications for urologic disorders. The judicious and appropriate use of antibiotics for urinary tract pathogens will be stressed.

The student will be exposed to office cystoscopy, urodynamic evaluation, and vasectomy. During the two-week clerkship it is likely that the student will encounter the following urologic problems:
- Prostate: PSA elevation, Benign Prostatic Hyperplasia, Prostate Cancer, Prostatitis
- Urinary tract infections
- Hematuria
- Urinary incontinence
- Erectile Dysfunction
- Urinary stone disease
- Renal masses and cysts
- Urothelial tumors

**Academic Honor Code:**

Students are expected to uphold the Academic Honor Code published in the Florida State University Bulletin and the Student Handbook: *The Academic Honor System of the Florida State University is based on the premise that each student has the responsibility (1) to uphold the highest standards of academic integrity in the student’s own work, (2) to refuse to tolerate violations of academic integrity in the University community, and (3) to foster a high sense of integrity and social responsibility on the part of the University community.*

**Students with Disabilities (ADA Statement):**

Students with disabilities needing academic accommodations should:

1. Register with and provide documentation to the student disability Resource Center (SDRC);
2. Bring a letter to the instructor from the SDRC indicating you need academic accommodations. This should be done within the first week of class. Specific arrangements should be settled with the instructor 5 working days prior to each exam for which accommodations are being requested.

**APPENDIX A**

**Student Self-Study Program**

This self-study program has been designed to assist the student in selecting the “**core course material**” from the vast amount of surgical information available. While you are certainly free to design your own learning program, adherence to this program will result in exposure to the core concepts and breadth of knowledge deemed necessary for students to have acquired during this Clerkship, and will favorably position you for the NBME exam.

The keys to success during this rotation lie principally in two areas: (1) Enthusiastic attendance at all clinical functions, and (2) A daily text reading program covering not only the clinical encounters of the day, but also that daily amount of text necessary to complete the core material by the end of the clerkship.

Note that the standardized surgical examination which you will take and must pass at the end of the clerkship (National Board of Medical Examiners Examination in Surgery) will assume that you have become familiar with the material listed as Topics below.

Areas of principal emphasis on the NBME exam include the following physician tasks: (1) establishing a diagnosis, (2) applying principles of management, and (3) understanding mechanisms of disease. Note well that there is no concern for students learning actual surgical techniques, an area of knowledge that is for residents. Although major emphasis on the exam will be placed upon nutritional and digestive disorders, other organ systems and subspecialty surgery will make up an additional two-thirds of the exam. Many of the questions appear in clinical vignette form.

Make no mistake! This is a **difficult** examination! However, if you remember the general orientation is toward diagnosis and workup (and not surgical technique), read one of the recommended texts and cover the Topics listed below, you will be all right. If you choose any other...
learning path, you may experience difficulties. Now that the course has been given for five years, it has been possible to make some correlations. Those students who follow this recommended path are achieving higher exam scores. Students who elect to “short-cut” the recommended program by studying exam questions, Surgical Recall, or other similar substitutes, frequently have difficulty with the NBME exam.

Because of the importance of abdominal pain to every clinical medical specialty, a separate text (Cope’s Early Diagnosis of the Acute Abdomen) covering this area has been assigned for you to read. I would recommend that you finish reading this text as early in your clerkship as possible, so that you can put its teachings into practice on rounds and when you are on call.

Interspersed throughout the Topics listed below are a series of interactive computerized problem-based learning cases, called Med Cases that can be accessed via your Blackboard. Twelve Med Cases have been selected for Surgery, each individually numbered, that have been assigned to the specific Topic that you will cover in your text. I recommend that you finish reading the companion text chapter first before doing the assigned Med Case, as the selected Med Case acts as a clinical summary vignette of the Topic material. I think that you will find them both fun and informative. The format of these Med Cases is very much like the NBME question format. You can go over them with your Clerkship Director at your weekly meetings.

Listed below are the General Topics for which you will be held responsible, along with any assigned Med Case(s). Included within each Topic are several Sub-topics that have proved to be of frequent interest to test-writers. Once you have mastered the information included in the larger Topic, make certain that you are familiar with the Sub-topics as well.

Please note that the General Topics below are linked directly to the e-book, Current Surgical Diagnosis and Treatment by Lawrence W. Way and Gerard M. Doherty. This book has been licensed by the College of Medicine for your use and is available via the Maguire Medical Library website. It is important that you remember that copying or printing an entire copyrighted text is against US copyright law. However, you are allowed to copy portions of this text to your desktop and/or print for your own personal use. Do not revise, copy, or distribute these materials to anyone not currently an FSU faculty, student or staff member.

1. **Preoperative and Postoperative Care**
   Med Case: none
   Subtopics: nutritional assessment, immunocompetence, infection risks, factors affecting wound healing, respiratory failure

2. **Postoperative Complications**
   Med Case: none
   Subtopics: fat embolism, aspiration, myocardial infarction, cardiac failure, gastric dilatation, wound dehiscence, geriatric problems, such as delirium, dementia, and the propensity to fall

3. **Special Medical Problems in Surgical Patients**
   Med Case: none
   a) **Endocrine Disease in the Surgical Patient**
      Subtopics: diabetes, hyperparathyroidism, hypothyroidism, adrenal insufficiency
   b) **Heart Disease and the Surgical Patient**
      Subtopics: coronary artery disease
c) **Renal Disease and the Surgical Patient**
Subtopics: renal failure

d) **Hematologic Disease**
Subtopics: surgery in patients with hematologic malignancies and/or receiving anticoagulants, disorders of hemostasis; coagulation factor concentrates.

4. **Wound Healing**
   Med Case: none
   Subtopics: biochemistry of healing; factors retarding healing

5. **Inflammation, Infection, and Antibiotics**
   Subtopics: infection risk factors, necrotizing infections, antibiotic colitis, tetanus, rabies, venomous bites.
   Med Case: none

6. **Fluid and Electrolyte Management**
   Subtopics: know this chapter cold; particularly acid-base balance! If given values for HCO3, pH, PaCO2 you must be able to identify acidosis/alkalosis, metabolic/respiratory, compensated/uncompensated states.
   Med Case: none

7. **Surgical Metabolism and Nutrition**
   Subtopics: complications of parenteral nutrition, desirability of enteral nutrition
   Med Case: none

8. **Anesthesia**
   Subtopics: nerve injuries due to malpositioning, complications of anesthesia
   Med Case: none

9. **Shock and Acute Pulmonary Failure**
   Subtopics: cardiac compressive shock, cardiogenic, neurogenic, and septic shock, ARDS, fat embolism, pulmonary embolism.
   Med Cases: none

10. **Management of the Injured Patient**
    Subtopics: tension pneumothorax, flail chest, aortic rupture, arteriovenous fistula, liver/pancreas injuries.
    **Med Case: # 530**

11. **Burns and Other Thermal Injuries**
    Subtopics: burn complications, heat stroke, frostbite.
    Med Case: none

12. **Head and Neck Tumors**
    Subtopics: salivary gland tumors, squamous cell cancers.
    Med Case: none
13. **Thyroid and Parathyroid**
   Subtopics: evaluation of thyroid nodules, thyroid carcinoma, hypercalcemic crisis, secondary hyperparathyroidism.
   Med case: none

14. **Breast**
   Subtopics: Paget’s disease (including clinical appearance), carcinoma during pregnancy and lactation, non-invasive carcinoma, nipple discharge
   **Med Case: # 265**

15. **Thoracic Wall, Pleura, Mediastinum, and Lung**
   Subtopics: chylothorax, mesothelioma, superior vena caval syndrome, solitary pulmonary nodule, myasthenia gravis.
   **Med Case: # 267**

16. **The Heart**
   Subtopics: Acquired Heart Disease: valvular disease, aortic dissection
   Congenital Heart Disease: VSD, transposition, tetralogy, PDA, coarctation.
   Med Case: none

17. **Esophagus and Diaphragm**
   Subtopics: achalasia, scleroderma, Zenker’s diverticulum, GERD, Boerhaave’s syndrome, diaphragmatic hernias.
   Med Case: none

18. **The Acute Abdomen**
   Subtopics: you learned all of this when you read Cope
   **Med Case: # 509**

19. **Peritoneal Cavity**
   Subtopics: pseudomyxoma, retroperitoneal fibrosis, workup of abdominal masses
   Med Case: none

20. **Stomach and Duodenum**
   Subtopics: gastrinoma, volvulus, Mallory-Weiss, MALT tumors, GI bleeding
   Med Case: none

21. **Liver and Portal Venous System**
   Subtopics: hepatoma, hepatic metastases, hepatic adenoma, Budd-Chiari, splenic vein thrombosis
   Med Case: none

22. **Biliary Tract**
   Subtopics: gallstone ileus, cholangitis, emphysematous cholecystitis
   **Med Cases: # 359**

23. **Pancreas**
   Subtopics: cystic neoplasms, islet cell tumors, pancreatic ascites/effusion, adenocarcinoma
   **Med Case: #319**
24. Spleen
   Subtopics: hereditary spherocytosis, ITP, TTP, post-splenectomy sepsis, myeloid metaplasia
   Med Case: none

25. Appendix
   Subtopics: know this chapter!
   Med Case: none

26. Small Intestine
   Med Case: none

27. Large Intestine
   Subtopics: polyps, volvulus, colitis.
   Med Cases: # 266, # 310

28. Anorectum
   Subtopics: rectal prolapse, rectal fissure, fistula-in-ano, pilonidal cyst
   Med Cases: # 311

29. Hernias and Other Lesions of the Abdominal Wall
   Subtopics: femoral hernia, obturator hernia
   Med Cases: #312

30. Adrenals
   Subtopics: primary alsosteronism, pheochromocytoma, incidentalomas, Cushings.
   Med case: none

31. Arteries
   Subtopics: embolism, visceral aneurysms, thoracic outlet syndrome, renovascular hypertension, cerebrovascular disease
   Med Cases: #499, #526

32. Veins and Lymphatics
   Subtopics: deep vein thrombosis, thromboembolism, lymphedema
   Med Case: none

33. Neurosurgery and Surgery of the Pituitary
   Subtopics: subdural and epidural hemorrhage, meningiomas, ateriovenous malformations, trigeminal neuralgia
   Med Case: none

34. Otolaryngology
   Subtopics: facial nerve paralysis, vocal cord paralysis, inflammatory neck masses.
   Med Case: none
35. **The Eye and Ocular Adnexa**  
   Subtopics: glaucoma, retinal detachment  
   Med Case: none

36. **Urology**  
   Subtopics: calculi, renal carcinoma, prostatic and testicular carcinomas  
   Med Case: none

37. **Gynecology**  
   Subtopics: ectopics, cervical carcinoma, carcinomas of the uterus and ovary, molar pregnancy, endometriosis  
   Med Case: none

38. **Orthopedics**  
   Subtopics: compartment syndromes, Morton’s toe, hip fractures, lumbar discs  
   Med Case: none

39. **Plastic and Reconstructive Surgery**  
   Subtopics: basal cell and squamous carcinomas  
   Med Case: none

40. **Hand Surgery**  
   Subtopics: nerve injuries, hand space infections, carpal tunnel syndrome  
   Med Case: none

41. **Pediatric Surgery**  
   Subtopics: thyroglossal and branchial cysts, Hirschsprung’s disease, Wilms tumor, neuroblastoma, esophageal atresia, undescended testicle  
   Med Case: none

42. **Oncology**  
   Subtopics: sarcomas, Hodgkins, paraneoplastic syndromes, breast and colon chemotherapy  
   Med Case: # 293

43. **Organ Transplantation**  
   Subtopics: histocompatibility testing, pharmacology of immunosuppressive drugs  
   Med Case: none