

FLORIDA STATE UNIVERSITY

COLLEGE OF MEDICINE

Third Year Clinical Clerkship in Surgery BCC 6160 Student Syllabus 2006-2007

Course Description

Surgery is an eight week experience in becoming familiar with the role of surgery and surgeons in 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 examination.

Students will be assigned to a single 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. You will enjoy reading it!

Suggested

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, 2003, 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. Topics are outlined and all pertinent information 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", 17th Ed, edited by Townsend, CM Jr., W. B. Saunders, Phila. 2005, 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", 3rd Ed., edited by O'Leary, J.P., Lippincott Williams & Wilkins, Phila., 2002, 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 it.

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 you 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 single 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.**

Clerks will be personally responsible for mastering the surgical topics described in Appendix A.

In addition to mastering the listed topics, each student will be responsible for writing a 1000 word “Controversies in Surgery” paper (three pages, 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
- c. Form your own conclusion and justify your position.

This paper is due on the last day of the rotation, and should be sent to me by email. Failure to submit the paper on time may be considered a breach of professionalism.

Our surgical curriculum consists of 8 weeks and you will be tasked with learning the material in this period of time. Accordingly, it will be necessary for you to set up a *daily reading schedule* designed to cover the contents of your chosen surgical text within the allotted eight weeks. Words to the wise: do *not* fall behind in your reading!

Examinations and Grading

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. Students will be provided with frequent feedback about their performance. Mid-clerkship formative feedback will be given to the students by their clerkship faculty and local clerkship director.

The following items will be used for student evaluation:

- (1) NBME shelf exam in Surgery – given on the last morning of the rotation.
- (2) Clinical evaluations by Clerkship Faculty, the Clerkship Director, with a final summation by the Education Director for Surgery.
- (3) “Controversies in Surgery” paper.
- (4) Staff and patient evaluations.
- (5) CDCS data entry

Students must pass all five components to pass the course. The final grade for each student will be based upon the same Honors, Pass, and Fail scale shared by each of the clerkships.

A student may be assigned an “Honors” grade if he meets **either** of the “Honors Criteria” below:

Honors Criteria 1:

- 1) A student must receive affirmation (a “yes” rating) in all 6 subcategories of the clerkship assessment form pertaining to “Professionalism” and “Ethical Standards”; AND
- 2) A student must receive “Consistently excellent and exemplary performance” ratings in at least 12 of the 17 remaining subcategories and have no “Needs considerable improvement, showed little growth or progress” or “Very problematic, area of grave concern” ratings on the assessment form; AND
- 3) A student must achieve a score on the NBME specialty shelf examination that is at least 1.0 SD above the national mean for shelf exam scores by students completing clerkships of comparable length at a similar time in the academic year AND
- 4) A student must satisfactorily complete the Controversies in Surgery paper, AND
- 5) CDCS data entry must be satisfactory, AND
- 6) Patient and staff evaluations must be satisfactory

Honors Criteria 2:

- 1) A student must receive affirmation (a “yes” rating) in all 6 subcategories of the clerkship assessment form pertaining to “Professionalism” and “Ethical Standards”; AND
- 2) A student must receive “Consistently excellent and exemplary performance” ratings in at least 15 of the 17 remaining subcategories and have no “Needs considerable improvement, showed little growth or progress” or “Very problematic, area of grave concern” ratings on the assessment form; AND
- 3) A student must achieve an NBME score in at least the 70th percentile when compared with shelf exam scores by students completing clerkships of comparable length at a similar time in the academic year, AND
- 4) A student must satisfactorily complete the Controversies in Surgery paper, AND
- 5) CDCS data entry must be satisfactory, AND
- 6) Patient and staff evaluations must be satisfactory

A student may receive a “Pass” grade if they meet the “Pass Criteria” below:

Pass Criteria:

- 1) A student must receive affirmation (a “yes” rating) in all 6 subcategories of the clerkship assessment form pertaining to “Professionalism” and “Ethical Standards”; AND
- 2) A student must receive “Consistently good, performance improved with experience” ratings in at least 15 of the 17 remaining subcategories on the assessment form and have no more than 2 “Needs considerable improvement, showed little growth or progress” in the remaining 17 subcategories; AND
- 3) A student must achieve a score on the NBME specialty shelf examination that is at or above the 10th percentile for shelf exam scores by students completing clerkships of comparable length at a similar time in the academic year, AND
- 4) A student must satisfactorily complete the Controversies in Surgery paper, AND
- 5) CDCS data entry must be satisfactory, AND
- 6) Patient and staff evaluations must be satisfactory

A student is at risk for a grade of “Fail” if they achieve any of the “Fail Criteria” below:

Fail Criteria:

- 1) A student does not receive affirmation (a “yes” rating) in all 6 subcategories of the clerkship assessment form pertaining to “Professionalism” and “Ethical Standards”; OR
- 2) A student receives one or more “Very problematic, area of grave concern” ratings in any of the remaining 17 subcategories on the rating form; OR
- 3) A student receives a “Needs considerable improvement, showed little growth or progress” rating in 3 or more of the remaining subcategories; OR
- 4) A student achieves a score below the 10th percentile of students completing clerkship of comparable length at a similar time in the academic year
- 5) He/she does not achieve the minimum passing score on the retake of the internal clerkship-specific exam.
- 6) Unsatisfactory CDCS data entry, unacceptable Controversies in Surgery paper, unsatisfactory patient and staff evaluations

Students who fail the initial post-clerkship NBME subject exam

Students who fail the initial post-clerkship NBME subject will receive an initial clerkship grade of “IR”. They will be given one additional opportunity to re-take the examination to achieve a passing score. If a passing score is achieved on the re-take examination, the “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.) This re-take examination must be completed prior to the beginning of the student’s fourth year curriculum. If a third year student does not pass the re-take examination, the student must repeat the entire clerkship prior to being promoted to his/her fourth year, at the discretion of the Student E and P Committee.

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. This makes accurate and timely data entry into the CDCS system imperative for clerkship students. Failure to comply with the CDCS data-entry standards established for the clerkship may result in a lowering of the student's clerkship grade, 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 are important pieces of 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, and in extreme cases, may result in a student's failing the clerkship due to concerns about professionalism. Consistently high evaluations by patients or staff may also result in elevating the student's grade from a "pass" to an "honors" grade for students who fall just below the "honors" cutoffs.

Course Evaluation

Each student will be given the opportunity to provide constructive feed-back 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 feed-back 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) Construct a meaningful differential diagnosis following initial work-up
- (3) Know the indications for surgical intervention in common surgical problems.
- (4) Be aware of the possible procedural options for commonly seen conditions.
- (5) Understand ethical, cultural, and public health issues in Surgery.
- (6) Discuss the major classes of drugs used in Surgery and demonstrate the knowledge required for their effective use.
- (7) Demonstrate facility in applying informatics to critical appraisal of the surgical literature, and to making surgical diagnostic and therapeutic management decisions.
- (8) 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.
- (9) Be familiar with the choice of anesthetic agents, their administration, and recovery from their usage.
- (10) Recognize and treat commonly encountered problems in Orthopedics, Urology, Otolaryngology, Thoracic and Cardiovascular, and Neurosurgery.
- (11) Recognize an acute surgical abdomen, and assign its probable cause
- (12) Effectively and respectfully communicate with colleagues, staff, and patients/families

COM Competencies and Course Objectives

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

CDCS Data Entry Policy 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

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.

Students must participate in anticipating projected shortfalls in any of these minimal numbers, and must bring expected shortfalls to the attention of the Clerkship Faculty and the Clerkship Director, if they have not already noted them, in time for any necessary adjustments in the student schedule to be made.

Attendance Policy

FSU COM ATTENDANCE POLICY

We believe that:

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 Regional Campus Dean, 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 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

If the student requests an absence in advance, the "Advance Request for Absence from Educational Activity" 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

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.

Remediation Policy for Students Who Fail a Course

Remediation of courses/clerkships will be planned and implemented by a combined decision of the Evaluation and Promotion Committee in collaboration with the Education Director.

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.

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 nonsteroidals, 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

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 alright. If you choose any other learning path, you may experience difficulties. Now that the course has been given for three 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. 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.

The links provided below are to the [Current Surgical Diagnosis](#) text by Way.

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
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](#)
Subtopics: blind loop syndrome, mesenteric occlusion, carcinoid tumors, Crohn`s disease.
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 aldosteronism, pheochromocytoma, incidentalomas, Cushing's.
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, arteriovenous 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, Hirschsprungs 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