

Course Title:	OCOM 862 General Surgery
Instructor of Record:	Peter B. Dane, D.O.
Credit Hour:	12 Credit Hours
Rotation Length:	4 weeks
Prerequisites:	Successful completion of the 6-week Family Medicine Clerkship

Syllabus Components

1. Rotation Description, Purpose and Philosophy
2. Rotation Objectives
3. Orientation to Rotation
4. Required Activities and Assignments
5. Student Performance Evaluation
6. Recommended Resources
7. Standards of Professional Conduct
8. Tips for Successfully Completing the Rotation

Appendix A: Skills and Procedures Log for this rotation

Last update: 10/10/2007

General Surgery

1. Rotation Description, Purpose, and Philosophy

The purpose of this rotation is to provide the student with an overview of the clinical specialty of General Surgery. This rotation is not intended to transform the student into a surgeon, but rather it is to provide the clinical clerk a survey of the specialty. In this combined hospital and ambulatory rotation, the student is encouraged to apply concepts of diagnosis and management to patients with surgical conditions. To achieve the rotation objectives, the student will have the opportunity to: receive “hands-on” practice in the surgery suite, observe and handle post-operative care, and develop surgical diagnostic skills.

2. Rotation Objectives

A set of learning objectives is provided below. The objectives are intended to guide for the student’s learning activities and to serve as a baseline for assessment of the student’s knowledge, skills, and professional behavior. Not all of the objectives listed below will be encountered during any single rotation. While each student is expected to further expand his/her knowledge base and to care for all assigned patient cases, he/she is also expected to avail him/herself of the educational materials provided and to master the following objectives.

Rotation Objectives: Knowledge Domain

A statewide survey of CORE preceptors identified the following as the most common diseases/conditions found on the General Surgery Rotation at the CORE Hospitals. The post-rotation exam may include questions on any of the topics listed.

1. Gall bladder disease
2. Hernias
3. Appendicitis
4. Breast disease – Cyst/cancer
5. Colon cancer
6. Bowel obstruction
7. GI bleeding
8. Anorectal disease (Hemorrhoids, fissures/abscesses)
9. Fluid and Electrolytes
10. TPN (total peripheral nutrition)
11. Inflammatory Bowel Disease/Abdominal pain/Irritable Bowel
12. Post-op complications – wound infections
13. Systemic infections
14. Wound management

For each disease or condition listed above, the student should be able to describe/assess the following:

1. Presenting signs and symptoms
2. Physical findings
3. Basic interpretations of appropriate diagnostic studies
4. Major differential diagnoses
5. Management alternatives, including: treatment plans, patient education, and addressing modifiable risk factors
6. Possible complications
7. Prognosis

General Surgery

8. Follow-up care
9. Somatic dysfunction related to the disease/condition and the osteopathic treatment(s) for the somatic dysfunction

NOTE: Students are expected to interact with and provide appropriate care for *all* patients they encounter on a rotation regardless of whether or not the patient's condition is listed above. However, for purposes of the post-rotation exam, students will be responsible only for the diseases and conditions listed above. Students are expected to master the objectives related to the listed disease/conditions regardless of whether or not they encounter any patients with those diseases/conditions while on rotation.

Rotation Objectives: Clinical Skills Domain

During the General Surgery Rotation, students are expected to develop their competencies in many basic clinical skills. While not every skill listed below can be performed during this brief rotation, the student should avail him/herself of as many of the following procedures as possible, and to seek out opportunities to perform these skills in other rotations as well.

1. Demonstrate and discuss the principles that underlie clean and sterile technique.
2. Demonstrate and discuss proper isolation technique.
3. Demonstrate ability to scrub, gown, and glove and maintain proper sterile techniques in the surgical setting.
4. Demonstrate knowledge of and proper usage of commonly used surgical instruments.
5. Perform the following simple surgical procedures:
 - Suturing lacerations and surgical wounds
 - Stapling of lacerations and surgical wounds
 - Removal of sutures and skin staples
 - Steri-Strip use in lacerations and surgical wounds
 - Drainage of abscesses
 - Placement and management of surgical dressings
 - Placement and management of drains (open and closed).
6. List indications for and demonstrate proper procedures for nasogastric tube.
7. List indications for and demonstrate proper procedures for urinary catheter placement.
8. Demonstrate the following methods of giving injections:
 - Intradermal
 - Subcutaneous
 - Intramuscular
9. Demonstrate knowledge of equipment and technique for starting IV therapy.
10. Describe and observe arterial puncture techniques.
11. Describe and observe placement of central venous line.
12. Describe and observe placement of long-term central venous catheters.

3. Orientation to the Rotation

The rotation orientation provides an opportunity to answer questions and define roles, assess skill level and experience, set expectations, and anticipate and proactively resolve problems. The student should try to meet with the preceptor either prior to or early on the first day of the rotation. Clarifying the following details with the preceptor will help to ensure a rewarding and successful rotation:

- a. Student responsibilities on the service.
- b. Preceptor expectations of the student on the service.
- c. Goals, objectives, and the structure of the rotation.

General Surgery

- d. Required rotation assignments and responsibilities in the preceptor's practice (e.g. clinics, lectures, conferences, other didactics, journal clubs, rounds, office hours, morning report).
- e. Discuss the Evaluation of Student Clinical Performance form.
The student should ask for feedback several times during the rotation, especially at mid-rotation. In addition, he/she should be prepared to share past clinical experiences and personal objectives for this rotation with the preceptor.

4. **Required Learning Activities, Assignments, and Responsibilities for ALL OU-COM STUDENTS in order to earn credit for this rotation** The following activities are required for satisfactory completion of this rotation:

- a. Successfully complete the pre- and post-rotation exams as detailed in section 5a of this syllabus.
- b. Attend and participate in all CORE education day presentations.

NOTE: If the student is absent from any of the CORE education day presentation without prior approval, he/she will be required to complete a remediation activity. Remediation may consist of a 5-page paper for each missed lecture, or some other assignments at the discretion of the CORE Assistant Dean. These must be completed and accepted by the CORE Assistant Dean in order to receive a grade for the rotation to which you are assigned at the time of the absence.

- c. Attend and participate in any other workshops, seminars, or professional development activities assigned by the CORE Assistant Dean.
- d. Present all clinical case conferences, as assigned by the CORE Assistant Dean.
- e. Ensure that your preceptors' written evaluation is completed and submitted within 2 weeks of the end of the rotation.
- f. Submit the online Student Evaluation through New Innovations. If you need instructions, please ask your CORE staff.
- g. Submit Procedures Log through New Innovations.
- h. Submit a copy signed by your preceptor of the log summary (from New Innovations) at the end of this rotation.
- i. Fulfill all required responsibilities identified by the preceptor during orientation.

5. **Student Performance Evaluation**

A student's grade for the General Surgery Rotation will be based on the following criteria. The student must pass both parts in order to pass the rotation.

a. Rotation Exams

Pre-rotation Exam

During the first week of this rotation you must complete an on-line (BlackBoard) 20-item pre-rotation test in 20 minutes. The purpose of this pre-test is to introduce you to the types of questions that will make up the post-rotation exam and help focus your reading during the rotation.

Scheduling The exam is self-scheduled during the first week of the rotation.

Computer requirement The exam can be taken on any computer that meets the requirements for using Blackboard. The exam cannot be taken over a dial-up connection.

Required Score No specific grade is expected or required on this pre-test.

Limitations You may only attempt to take this pre-test once. Once you start the exam, you must complete it in one sitting. It may not be saved to resume at a later time.

Scoring Upon submitting the exam, you will receive your score along with the correct answers and information on the chapter of the required text on which the question is based.

General Surgery

Honor Code The OU-COM Honor Code guides your behavior related to this exam. Form HC (posted on-line at http://www.oucom.ohiou.edu/AcademicAffairs/Yr3-4Manual/2007-2009/HC_Exam_Signature_Sheet_07.pdf) must be signed and submitted to your CORE Administrator after submitting your exam. You will not receive a passing grade for the rotation unless this form is on file in the CORE office.

Time Penalty Blackboard will alert you when one minute remains to complete the exam. Blackboard does **not** automatically stop the test when you reach the time limit. You must manually submit the exam within 1 minute of receiving the 1-minute warning. **Your exam score will be reduced by 2 points for every minute that you exceed the time limit.** If you exceed the time limit, you will be notified via e-mail that your score has been reduced.

Post-rotation Exam

During the last few days of the rotation (or no later than two weeks after the rotation ends), you must successfully complete (score at least 60 percent) on an online, 50-item, 50-minute post-rotation exam that will cover the diagnosis, treatment, and prevention of diseases and conditions listed in Section 2: Rotation Objectives: Knowledge Domain of this syllabus. The answers to all of these questions are referenced to the text listed as required reading for this rotation.

Scheduling The exam is self-scheduled. It may be scheduled during the last few days of the rotation, but must be taken no later than two weeks after the rotation ends.

Computer requirement The exam can be taken on any computer that meets the requirements for using Blackboard. The exam cannot be taken over a dial-up connection.

Limitations You may only attempt to take this post-test once. Once you start the exam, you must complete it in one sitting. It may not be saved to resume at a later time.

Scoring Upon submitting the exam, you will receive your score along with the correct answers and information on the chapter of the required text on which the question is based.

Honor Code The OU-COM Honor Code guides your behavior related to this exam. Form HC (posted on-line at http://www.oucom.ohiou.edu/AcademicAffairs/Yr3-4Manual/2007-2009/HC_Exam_Signature_Sheet_07.pdf) must be signed and submitted to your CORE Administrator after submitting your exam. You will not receive a passing grade for the rotation unless this form is on file in the CORE office.

Time Penalty Blackboard will alert you when one minute remains to complete the exam. Blackboard does **not** automatically stop the test when you reach the time limit. You must manually submit the exam within 1 minute of receiving the 1-minute warning. **Your exam score will be reduced by 2 points for every minute that you exceed the time limit.** If you exceed the time limit, you will be notified via e-mail that your score has been reduced.

Reassessment Failure to achieve a 60 percent on the examination will result in a second opportunity to take the exam. You may retake this exam no sooner than 48 hours after completion of the first post-clerkship exam. In the event of a second failure to achieve a score of 60 percent, you will meet with the CORE assistant dean to discuss areas of knowledge deficiency and to construct a plan for remediation.

If you have any questions regarding your exam, please contact your CORE Administrator.

b. The Preceptor's Written Evaluation

A student must receive a passing grade from the preceptor in order to pass the rotation. If the preceptor considers the student *Marginal*, then a remediation recommendation should be made by

General Surgery

the CORE Assistant Dean, in consultation with the preceptor, and submitted to the Associate Dean for approval. If the preceptor fails the student, the student is awarded a grade of “F” for the rotation regardless of the grade s/he received on the post-rotation exam. The failure must be forwarded to the CSP.

NOTE: It is the responsibility of the student to ensure that the preceptor’s evaluation is submitted to the CORE office within 2 weeks of the end of the rotation.

6. Recommended Resources

The following resources have been identified for this rotation by the instructor of record. Note: Post-rotation exam questions are referenced to the required texts.

Required:

Lawrence, P., Bell, R & Dayton. M. (2006) *Essentials of general surgery* (4th ed.). Baltimore: Lippincott Williams & Wilkins., Chapters: 2, 3, 4, 5, 7, 8, 9, 12, 14, 15, 16, 17, 18, 20

Reference for additional information:

Townsend, C. (2004) *Sabiston textbook of surgery* (17th ed.), Philadelphia: W. B. Saunders.

Shires, T, Spencer F., Daly, J., Fischer, J., & Galloway A. (2005)
Schwartz principles of surgery (8th ed.) New York: McGraw-Hill.

The following have been identified as resources for ALL rotations by CORE preceptors.

Cooper, D., H, Krainik, A., J., & Lubner, S., J. (2007). *The Washington manual of medical therapeutics*. (32st ed.). Philadelphia: Lippincott Williams & Wilkins.

McPhee, S., J., Papadakis, M., A., & Tierney, L., M. (2007). *2007 Current medical diagnosis and treatment*. New York: McGraw-Hill. Also available on AccessMedicine

Ward, R. (2003). *Foundations for osteopathic medicine* (2nd ed.). Philadelphia: Lippincott Williams & Wilkins.

Medical Dictionary (Dorland or Taber)

CORE OMM Curriculum for Students and Interns. Materials available through CORE Office

PubMed (www.pubmed.gov) or
PubMed configured to show OU resources
(<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?myncbishare=oucom>) or
Medline available through OhioLINK (<http://rave.ohiolink.edu/databases/login/medl>)

National Guideline Clearing House (<http://www.guideline.gov/>)

AccessMedicine available to OU students at: http://www.library.ohiou.edu/cgi-bin/redir_athensonly.pl?http://www.accessmedicine.com/

General Surgery

Evidence-Based Medicine Resources available on OU-COM home page via Current Student dropdown menu:

Cochrane Library

InfoPOEMs/InfoRetriever

MD Consult (Available to COM students for \$25 fee through Office of Academic Affairs/Pre-Doctoral Education)

7. Standards of Professional Conduct

The OU-COM Honor Code applies to all activities in the CORE as well as on the Athens campus. “As a member of the medical profession, I will maintain the highest standards of academic and personal behavior. As a medical student I will not cheat or plagiarize or tolerate that behavior in others.” OU-COM Honor Code

Students are encouraged to study together and to share their knowledge freely with one another during the learning process. During examinations, however, no assistance from other students or from outside sources is allowed, unless explicitly permitted by the CORE office. Books, notes, and other materials must be left at the periphery of the testing area during examinations.

Professional standards required of a member of the Osteopathic profession are a requirement for passing this rotation, as is compliance with the professional standards of the hospital and outpatient offices of the student’s preceptor. Students are expected to maintain high professional standards of behaviors. They should exhibit such personal characteristics as honesty and integrity, as well as to maintain patient confidentiality at all times. Unprofessional behavior may result in a failing grade in this rotation, regardless of other academic performance on this rotation, and could subject the student to dismissal from the hospital in which they are based. Professional conduct shall be evaluated by the CORE Assistant Dean through observation of and interaction with the student, his/her preceptor, other hospital attending physicians and staff.

8. Tips for Successfully Completing the Rotation

Being successful on this rotation requires you to be a proactive student. Taking an interest in the specialty and becoming an active team member of the service is critical to learning in a clinical setting. Remember, the clinical learning environment differs from the classroom. You will be “thinking on your feet” and “learning as you go.” To capitalize on “the learning moment,” seek out opportunities to ask questions and speak up appropriately.

In addition, be sure to:

1. Review the syllabus to ensure that you understand all requirements.
2. Discuss with your preceptor your previous clinical experiences and personal goals and objectives for this rotation. The rotation orientation is an opportune time to initiate this discussion and to develop positive rapport with you preceptor.
3. Clarify your preceptor’s expectations of your activities.
4. Complete your skills and procedure log as you proceed through the rotation; avoid procrastinating until the end.
5. Come prepared to take advantage of the opportunities this rotation has to offer.

If you have any questions, contact your CORE Administrator or CORE Assistant Dean.

General Surgery

Skills and Procedures List

Appendix A

During the General Surgery rotation you must complete your procedures log on New Innovations. At the end of your clerkship, you must print out your procedure log, ask your preceptor to sign it, and turn it into the CORE office.

Abdominal Aortic Aneurysm	Culture, vagina
ABG interpretation	Culture, wound
Adenoidectomy	D&C
Administration of blood and blood products	Debridement
Airway management/intubation	Dilation and Curettage
Anesthesia, general	Dislocated shoulder reduction
Anesthesia, regional	Drain placement/management
Aortic-femoral bypass	Dressing placement
Appendectomy	Ear lavage
Arterial Catheter Insertion	Echocardiogram
Arterial puncture	EGD
Arthrocentesis	EKG
Arthroscopy	EKG interpretation
Atherectomy	Endarterectomy
AV fistula	Endoscopic Retrograde cholangiopancreatography(ERCP)
Balloon angioplasty	Endoscopy
Biopsy procedures (skin and organ)	Excision, skin lesion
Biopsy, Stereotactic Breast	Excisional biopsy
Bladder catheter insertion (Foley)	Fine needle aspiration
Bone Marrow Aspiration/Biopsy	Foreign body removal ear
Bowel resection	Foreign body removal eye
Breast examination	Foreign body removal nose
Breast surgery - lumpectomy	Foreign body removal skin
Breast surgery - mastectomy	Foreign body removal throat
Bronchoscopy	Fracture reduction
cardiac catheterization	Functional endoscopic sinus surgery
Carotid endarterectomy	Gastric lavage
Cast application	Glucose by fingerstick
Cast removal	Hemicolectomy
Cataract surgery	Hemithyroidectomy
Central Venous Line insertion	Hemocult
Cerumen removal	Hernia repair
Chest tube insertion	Hysterectomy
Chest tube removal	Hysteroscopy
Cholecystectomy	Ileocolectomy
Circumcision	Imaging CT
Colonoscopy	Imaging MRI
Colposcopy	Imaging x-ray
CPR	Incision and drainage of abscess
cryosurgery	Incision closure
Culture, blood	Injection, Intradermal
Culture, sputum	Injection, intramuscular
Culture, stool	Injection, intravenous
Culture, throat	Injection, joint
Culture, urine	Injection, subcutaneous

Intravenous Catheter Insertion - Central
Intravenous Catheter Insertion - Peripheral
IVC filter placement
Laceration/wound stapling
Laceration/wound suturing
Laparoscopic surgery
Laparotomy
Laryngoscopy
Liver lobectomy
Lumbar puncture
Medial epicanthal cyst removal
Nasal packing
NG tube placement
OMT 1-2 regions
OMT 3-4 regions
OMT 5-6 regions
OMT 7-8 regions
Ophthalmoscopic exam
Osteopathic Exam
Pacemaker insertion
Pap smear
Parathyroidectomy
Patient education
PEG tube placements
Pelvic examination
Peritoneal lavage
PFT interpretation
PPD interpretation
Prescription writing
Rectal exam
Rhinectomy
Sclerotherapy
Septoplasty
Sigmoidoscopy (flexible)
Sigmoidoscopy (rigid)
Skin graft
SOAP notes
Sphincterectomy
Splint application
Splint removal
Staple removal
Steri-strip application
Submandibular node excision
Surgical site prep
Suture line revision
Suture removal
Taping procedure for sprains etc.
Thoracentesis
Thoracoscopy
Thyroidectomy
Tonometry
Tonsillectomy
Total Parenteral Nutrition (TPN)
Tracheostomy
Transfusion, blood and blood products
Trichomonas prep
Tubal ligation
Tuberculosis Testing
Tympanometry
Ultrasound
urinalysis (dipstick and microscopic)
Vascular bypass grafting
Vasectomy
Venipuncture (for blood sampling)
Visual acuity/visual field testing
Wart Removal