

OHIO
UNIVERSITY

Ohio University
College of Osteopathic Medicine
Centers for Osteopathic Research and Education
Years III and IV Clerkship Curriculum



CORE Clinical Rotation: General Surgery

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
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3. Orientation to Rotation
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Appendix A: Skills and Procedures Log for this rotation

Last update: 02/06/2007

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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

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5. Management alternatives, including: treatment plans, patient education, and addressing modifiable risk factors
6. Possible complications
7. Prognosis
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.

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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.
- 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).

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. Set up a time with the CORE staff to complete the written post-rotation exam. This must be done during the last few days of the rotation or up to 1 week following the completion of the rotation, at the discretion of the CORE staff. See CORE staff for additional information about the post-rotation exam website, logon, and passwords.
- 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.

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- i. Fulfill all required responsibilities identified by the preceptor during orientation.

5. Student Performance Evaluation

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

a. The Post-Rotation Exam

An online, computer-based post-rotation exam will cover the diseases and conditions listed in the objectives section of this syllabus. The computer will instantly grade the test and provide information to the student. If a student fails the exam, receives below 60%, s/he has one opportunity to retake the exam. In the event of a second failure, a remediation plan will be developed between the student and the CORE assistant dean.

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 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.

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7. Standards of Professional Conduct

The OU-COM Honor Code applies to all activities in the CORE as well as on the Athens campus.

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. Violation 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. Such professional conduct shall be evaluated by the CORE Assistant Dean through observation of and interaction with the student, his/her preceptor, other hospital attendings 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.

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

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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.

ABG interpretation	Dilation and Curettage	suturing
Adenoidectomy	Direct ophthalmoscopic exam	Laparoscopic surgery
Administration of blood and blood products	Drain placement/management	Laryngoscopy
Airway management/intubation		Liver biopsies
Anesthesia, general	Dressing placement	Lumbar puncture
Anesthesia, regional	Ear lavage	Nasal packing
Appendectomy	Ear, Cerumen removal	NG tube placement
Arterial Catheter Insertion	EGD	OMT
Arterial puncture	EKG	Osteopathic Exam
Arthrocentesis	EKG interpretation	Pacemaker insertion
Arthroscopy	Excision, skin lesion	Pap smear
AV fistula	Foreign body removal ear	Patient education
Biopsy procedures (punch and shave)	Foreign body removal eye	PEG tube placements
Biopsy, Stereotactic Breast	Foreign body removal nose	Pelvic examination
Bladder catheter insertion (Foley)	Foreign body removal skin	Peritoneal lavage
Bone Marrow Aspiration/Biopsy	Foreign body removal throat	PFT interpretation
Bowel resection	Fracture reduction	PPD interpretation
Breast examination	Gastric lavage	Prescription writing
Breast surgery or lumpectomy	Glucose by fingerstick	Sclerotherapy
Bronchoscopy	Hemicolectomy	Septoplasty
Cast application	Hemocult	Sigmoidoscopy (flexible)
Cast removal	Hernia repair	Sigmoidoscopy (rigid)
Central line (TPN)	Hysterectomy	Sphincterotomy
Central Venous Line insertion	Hysteroscopy	Splint application
Chest tube insertion	Ileocollectomy	Splint removal
Chest tube removal	Imaging CT	Staple removal
Cholecystectomy	Imaging MRI	Steri-strip application
Circumcision	Imaging x-ray	Surgical site prep
Colonoscopy	Incision and drainage of abscess	Suture removal
Colposcopy	Incision closure	Taping procedure for sprains etc.
Comprehensive Hx (new admit/new patient)	Injection, Intradermal	Thoracentesis
CPR	Injection, intramuscular	Tonometry
cryosurgery	Injection, intravenous	Tonsillectomy
Culture, blood	Injection, joint	Tubal ligation
Culture, sputum	Injection, subcutaneous	Tympanometry
Culture, stool	Insertion of peripheral IV	urinalysis (dipstick and microscopic)
Culture, throat	Laceration/wound stapling	Vasectomy
Culture, urine	Laceration/wound	Venipuncture (for blood sampling)
Culture, vagina		Visual acuity/visual field testing
Culture, wound		Wart Removal

