



WINDSOR UNIVERSITY SCHOOL OF MEDICINE

SURGERY



THIS INSTITUTION IS POSITIONED AS AN AFFORDABLE INTERNATIONAL ENVIRONMENT FOR CULTURALLY DIVERSE STUDENTS TO GAIN CORE COMPETENCIES REQUIRED FOR GRADUATE AND POST GRADUATE TRAINING.

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LINKS FOR EVALUATION FORMS

Midcore Evaluation: <http://www.questionpro.com/t/ALT4jZS0fQ>

Final Preceptor Evaluation: <http://www.questionpro.com/t/ALT4jZS0fc>

Student Evaluation of Clinical Preceptor: <http://www.questionpro.com/t/ALT4jZSwFo>

Student Evaluation of Clinical Rotation: <http://www.questionpro.com/t/ALT4jZSymE>

INTRODUCTION:

Surgery is a 12-week core clinical rotation which includes in-hospital patient care which might be coupled with outpatient office experience where permitted by state law, creating a learning environment in which clinical competence can be achieved. In addition to acquiring knowledge and skill, students should gain the ability to gather essential and accurate patient information by medical history and physical examination. Students develop investigatory and analytical clinical thinking based on the understanding of the pathophysiology of disease. They should apply knowledge of the structure function of the body, major organ systems and of the molecular cellular and biochemical mechanisms. The student should develop an understanding of the scientific basis of the practice of medicine. In the course of the clinical rotations they should develop a personal program of self-study and professional growth with the guidance of the clinical teaching faculty. They should also demonstrate compassion and empathy in patient care maintaining the highest moral and ethical values. There should be a demonstrative sensitivity to culture, age, gender, and disability as they apply to patients. The students should demonstrate an understanding of the relationships among the various aspects of healthcare delivery.

Students gain general knowledge of general surgery, which includes health promotion, disease prevention, diagnosis and treatment of men and women from adolescence through old age, from times of health through all stages of acute and chronic illness. Additionally, students develop skills in problem solving, decision making and an attitude of caring driven by humanistic and professional values. This rotation incorporates a consideration of human biology, behavior, and understanding of the epidemiology and pathophysiology of disease and the mechanisms of treatment. Students master clinical skills in interviewing, physical examination, differential diagnosis, diagnostic testing strategies, therapeutic techniques, counseling, and disease prevention.

SPECIFIC LEARNING OBJECTIVES FOR SURGERY-

1. MEDICAL KNOWLEDGE

To apply and reinforce knowledge of the basic sciences, especially anatomy and physiology to the understanding, presentation and treatment of diseases that are commonly addressed within the field of surgery. To identify how and when evidence - based information and other aspects of practice - based Learning and improvement affect the care of the surgical patient and the alternatives in management.

To develop an understanding of the cost to benefit ratio, the role of payment and financing in the healthcare system, the role of multi - disciplinary care including ancillary services such as home-care and rehabilitation and other aspects of systems-based practice in the implementation of the available technologies used in surgical treatment.

To develop an understanding of the Core Topics (listed below) and to apply the associated surgical knowledge to clinical analysis and problem solving.

To utilize distributive learning through the use of on-line resources for surgical learning and problem-solving.

2. CLINICAL SKILLS

To apply the principles of surgical practice, including operative and non-operative management, to common conditions. To develop and apply the tools of clinical problem solving for surgical conditions including the process of data collection (history, physical examination and laboratory and imaging studies) in establishing a list of differential diagnoses and a primary working diagnosis for treatment and further investigation.

To develop interpersonal and communication skills, in conjunction with the broad- range of clinical skill acquisition, by accessing and completing modules of the Drexel University communications course.

To identify the importance of and approach to informed consent for surgical operations and procedures, with emphasis on the risks, benefits, and alternatives.

To identify the importance of interpersonal and communication skills and to apply those skills in the multidisciplinary care of the surgical patient in an environment of mutual respect. To demonstrate the ability to conduct proper sterile preparation and technique.

3. PROFESSIONAL BEHAVIOR

To function as a part of the surgical care team in the inpatient and outpatient setting. To demonstrate proper behavior in the procedural setting, including the operating room, at all times.

To understand the limits of one's position within the surgical care team in order to appropriately engage each patient, their friends and associates and their family.

To appropriately seek supervision as provided through the hierarchical structure of the surgical care team. To identify and respond sensitively to cultural issues that affect surgical decision- making and treatment. To develop an understanding of and approach to the principles of professionalism as they apply to surgery through the observation of the role-modeling provided by the surgical faculty.

- Describe the process used to specify the number and kind of patients and the clinical settings needed to meet the clerkship objectives.
- The patient conditions and procedural skills expected of students are based on the learning objectives and competencies described above and also other information pertaining to list of cases found on page number 33-36 in the appendix on Clinical curriculum manual.
- Also, it is based on Based on hospital volume and Ambulatory clinic volume for that service.

WINDSOR UNIVERSITY CLINICAL PROGRAM'S CORE TOPICS:

These 12 surgical Topics that will form the basis for learning within the Surgical Core Clerkship follow by Quiz after each lecture session (end of week).

Week 1. Gastrointestinal (GI): Upper GI:

- Peptic Ulcer Disease
- Gastro Esophageal Reflux Disease
- Gastric Cancer
- Bariatric Surgery
- Esophageal Cancer
- GI bleed and Emergencies

Quiz I: Gastrointestinal Upper GI (End of Week 1)

Week 2: Lower GI:

- Diverticular Disease
- Colon Cancer
- Acute and Chronic Abdominal Pain
- GI vascular disorders
- -Small Bowel Obstruction
- -Large Bowel Obstruction

Quiz II: Gastrointestinal Lower GI (End of Week 2)

Week 3. Hepato-Biliary:

- a) Gallbladder
- b) Hepatic pathology
- c) Pancreatic (acute and chronic infectious, benign and malignant)

Quiz III: Hepato-Biliary (End of Week 3)

Week 4.

1. Traumatic and Critically ill Surgical Patient:

- a) Including cases like shock, trauma, head injuries, burns, acute abdomen, gastrointestinal hemorrhage

2. Breast Pathologies (benign and malignant)

Quiz IV: Traumatic and Critically ill patients and Breast Pathologies (End of Week 4)

Week 5. Vascular

- a) Abdominal Aortic Aneurysm
- b) Peripheral Vascular Disease
- c) Carotid Artery Disease
- d) Hemodialysis Access
- e) Venous Disease (deep vein thrombosis, pulmonary embolism and post phlebitis syndrome)
- f) Lymphedema

Quiz V: Vascular (End of Week 5)

Week 6. Hernias and Skin Lesions

- a) Incisional
- b) Inguinal
- c) Femoral
- d) Umbilical
- e) Skin lesions

Quiz VI: Hernias and Skin Lesions (end of Week 6)

Week 7. Endocrine

- a) Thyroid
- b) Parathyroid
- c) Adrenal
- d) Diabetic related complications

Quiz VII: Endocrine (end of Week 7)

Week 8. Thoracic

- a) Pulmonary Nodule (benign and malignant)
- b) Pneumothorax/ Hemothorax
- c) Rib Fractures
- d) Pleural effusion
- e) Pericardial Effusions

Quiz VIII: Thoracic (End of Week 8)

Week 9. Urology

- a) Renal Colic
- b) Benign Prostatic Hypertrophy/Prostate Cancer
- c) Hematuria/Renal Cancer
- d) Testicular (benign and Malignant)
- e) Scrotal Masses and tortions

Quiz IX: Urological (End of Week 9)

Week 10.

1. Ortho/Trauma
 - a) Bone Fracture (long bones, extremities)
 - b) Pelvic Fractures
 - c) Osteoarthritis
2. Peripheral Nerves
 - a) Nerve Entrapments
 - b) Diabetic Neuropathy

Quiz X: Ortho, Trauma and Peripheral Nerves (End of Week 10)

Week 11. Wound Management

- a) Ulcers (acute, chronic)
- b) Fistulas, fissures
- c) Burn management
- d) Extremities (diabetic, venous stasis, traumatic)
- e) Pressure ulcers

f) Traumatic (laceration, gunshot, car accidents)

Quiz XI: Wound Management (End of Week 11)

PRECEPTOR'S "TEACHING SCHEDULE TEMPLATE":

Preceptor's name: _____

	Morning Rounds	OR schedules (schedule 2-3 students per day OBSERVATION ONLY)	Out-Patient Clinics	Private Office (schedule 2-3 students per day OBSERVATION ONLY)	Hospital Ground Rounds and CME rounds	Hospital Morbidity Rounds	Didactic Teaching (Core Topics 5-6 hours /week)	Preceptor or Resident On-call Schedule (2-3 students/call)	Help Schedule (2 hours Per week)
Mon									
Tues									
Wed									
Thurs.									
Fri									

SURGICAL PROCEDURES TO BE OBSERVED BY STUDENT DURING THIS SURGICAL ROTATION:

A. General Surgery

1. Abdominoperineal Resection with Total Colectomy and End-Ileostomy
2. Anal Fistulotomy-Seton Placement
3. Arterial Line Placement
4. Axillary Lymph Node Dissection
5. Axillary Sentinel Lymph Node Biopsy
6. Central Venous Line Placement
7. Chest Tube Placement
8. Colonoscopy
9. Cricothyrotomy
10. Excisional Biopsy (any kind)
11. Fine-Needle Breast-Aspiration
12. hemorrhoidectomy
13. Incision, drainage for soft tissue infections
14. Laparoscopic Anti-Reflux Procedure
15. Laparoscopic Cholecystectomy Without Cholangiography
16. Laparoscopic Rectosigmoid Colon Resection-Low Anterior Resection
17. Laparoscopic Splenectomy
18. Laparoscopic Ventral Hernia Repair
19. Laparoscopic Wedge Resection of the Liver
20. Open Adhesiolysis
21. Open or laparoscopic Appendectomy
22. Open Exploratory Laparotomy
23. Open or laparoscopic of Inguinal Hernia
24. Open Small Bowel Resection
25. Open Ventral Hernia Repair
26. Parathyroidectomy
27. Partial Thyroidectomy
28. Pediatric Inguinal Hernia Repair
29. Percutaneous Endoscopic Gastrostomy
30. Pilonidal Cystectomy
31. Primary Arteriovenous Fistula Formation for Hemodialysis Access
32. Pulmonary Artery Catheterization
33. Punch Biopsy
34. Revision Arteriovenous Access
35. Right Hemicolectomy
36. Simple Mastectomy
37. Sigmoidoscopy
38. Splenectomy for Disease — Open
39. Stapled Closure of Loop Ileostomy
40. Subcutaneous Lateral Internal Sphincterotomy
41. Subtotal Gastrectomy

42. Total Gastrectomy
43. Total Skin-Sparing Mastectomy
44. Totally Extraperitoneal Laparoscopic Repair of Inguinal Hernia
45. Transabdominal Preperitoneal Laparoscopic Repair of Inguinal Hernia
46. Ultrasound-Guided Breast Biopsy
47. Ultrasound-Guided Lumpectomy
48. Umbilical Hernia Repair
49. Varicose Vein Excision
50. Appendectomy (any form)
51. Spinal/epidural anesthesia
52. Exploratory laparotomy
53. Cystoscopy
54. Joint arthroplasty
55. Fracture fixation
56. Endovascular procedure
57. Strabismus surgery
58. Cataract surgery

BASIC SURGICAL PROCEDURES A STUDENT MUST BE SUPERVISED AND PERFORMED DURING THIS SURGICAL ROTATION:

1. Insertion of an NG tube
2. Insertion of a urinary catheter
3. Peripheral IV insertion and hanging and starting an IV bag
4. Removal of surgical clips and sutures (+/- suturing)
5. Wound Dressing (+/- wound debridement)
6. Hand scrubbing for Operating Room
7. Observing an OR from beginning to end
8. Surgical Examination of an Abdomen
9. Rectal examination
10. Guaiac testing
11. Complete breast examination (+/- submaxillary lymph node) with supervision

WEB BASED EDUCATIONAL ASSIGNMENTS FOR INDEPENDENT LEARNING

Proof of completion of the following three web-based assignments along with your patient log will complete your portfolio for surgery. As part of their evaluation students need to bring this portfolio to the end-of-clerkship oral exam.

MedU Cases	Student will participate in the self-directed web-based learning course: SIMPLE (Simulated Internal Medicine Patient Learning Experiences - 9, 11, 12, 21, 30, 36) and FmCases - 10, 11, 15, 16, 19, 25) The assigned cases will be completed during your rotation.
Communication Skills Modules	Students are responsible for DOCCOM Communication Skills Modules 17. "Informed Decision - Making" 35. "Discussing Medical Error"
USMLE World	USMLE World Assignment approximately 170 Surgery questions

EVALUATIONS AND GRADINGS

A. The Formative Mid-core Evaluation

All clerkship directors must arrange for formative mid-core evaluations with all students. These consist of individualized face-to-face meetings with each student and completion of the mid-core evaluation form (Appendix D). This form is not part of students' permanent record and can be kept on file at the hospital with a copy to the Associate Dean of Clinical Sciences. The purpose of this evaluation is to provide students with informal, qualitative feedback early enough in the clerkship to allow time for remediation of deficiencies. This meeting also gives the clinical preceptors an opportunity to help students recognize their strengths. The mid-core evaluation also gives medical students the opportunity to measure their progress in learning.

B. The Summative Final Evaluation

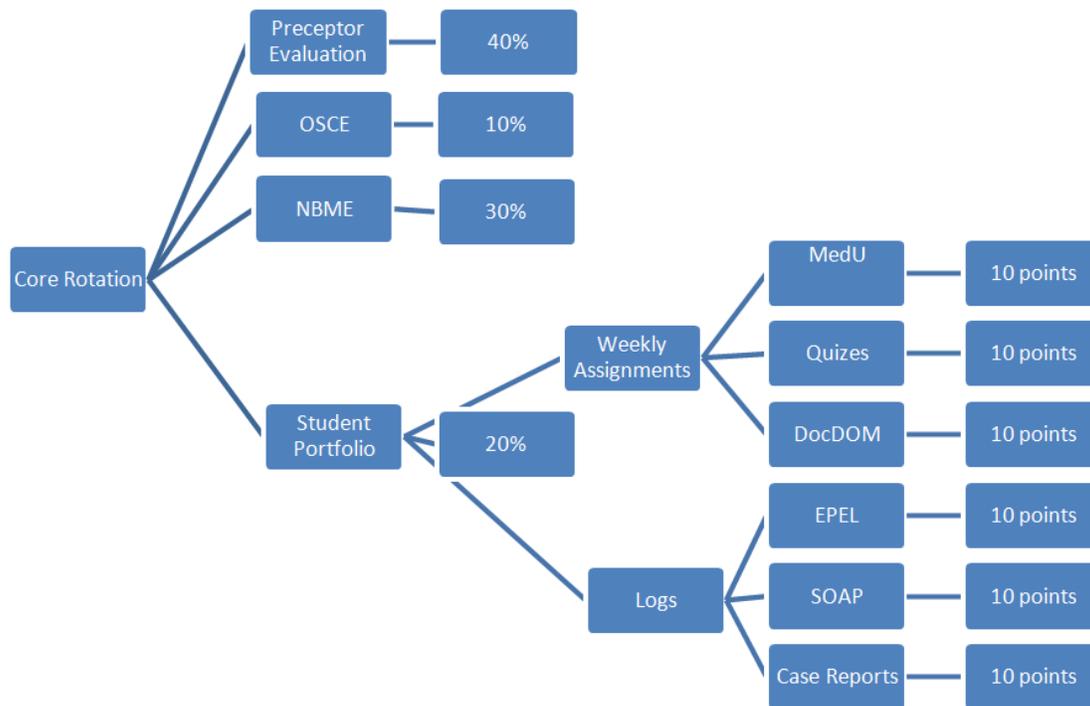
Grading Policy for the Clerkships

The Clinical preceptor completes a final evaluation form for each student in a core clerkship. The form requires narrative comments, grades in individual components and a final summative grade (Appendix C). The narrative comments summarize the student's clinical performance, professional behavior including attendance, rapport with patients and staff and the extent to which the students developed the required competencies for that core. This narrative section offers the faculty the opportunity to provide additional evaluative information beyond the letter grade. Students should make every effort to review these comments as soon as possible after completion of a rotation. The opinions of the physicians who have worked with a student are critical for self-improvement on the part of the student. Constructive criticisms can help a student develop into a more competent physician. Students should attempt to review these comments at the hospital, either from the clerkship director or from the medical education office. Alternatively, students can request a copy of the evaluation form from their clinical student coordinator in the Office of Clinical Studies.

The final grade in the clerkship represents a quantitative average of four components:

- 1) **40%: End of Clerkship Preceptor Evaluation of Student**
- 2) **30%: Core Rotation/ NBME Exam Score**
- 3) **10%: OSCE /Oral Examination.**
- 4) **20%: Student Portfolio**

Refer to Diagram below for further breakdown of student portfolio:



The final grade calculation= Cumulative of above 4 > 65 % to pass.

Grading:

Honors: If you get an A in all 4 areas of evaluation.

In progress: Failure of one area but pass all other areas of evaluation.

Failure: Fail two or more areas of evaluation.

Re-mediation

In progress:

- **Clinical evaluation:** successfully repeat 4 weeks of rotation
- **Clinical Log:** successfully complete all logs
- **OSCE/Oral:** successfully repeat the OSCE
- **Written Exam:** successfully pass exam, up to three attempts

The final grade will be calculated using the new data and will be downgraded one letter grade unless that grade is a "C".

Failure: The student must repeat the entire clerkship.

Clinical Performance:

(40% Preceptor Evaluation, 10% weekly quiz, and 10% Patient Log and 10% MedU and Doccom)

The teaching physicians who work with the student during the rotation evaluate the student's clinical performance in six core competency areas, medical knowledge, clinical skills, professional behavior, Interpersonal and Communication Skills, Proactive based learning and systems-based learning. The more

feedback the evaluator gets from different members of the medical staff that instructed the student, the more objective grades can be. The faculty evaluates the extent to which the student has developed the competencies required for that rotation. The following general goals form the basis of all evaluations. A more comprehensive list of competencies appears in Outcome Objectives of Medical education above.

A mid-core meeting with each student is required in order to discuss the student's performance. Students must print a copy of their Electronic Patient Encounter Log and procedural experience log and present it at the mid-core meeting for review by the Clinical Preceptor. The Clinical Preceptor discusses the log and the student's performance. This discussion should include encouragement if the student is doing well or a warning with constructive criticism if the student is doing poorly. The mid-core evaluation is formative and requires documentation on the WUSM Mid-core evaluation form (see Appendix D).

End of Clerkship Examinations for all Locations: (Virtual Patient or Actor Patient)

a. OSCE(s), Oral Examination

Each department has a form for the end-of-clerkship oral exam (appendix J) in conjunction with required document check list (refer to for on page 17 of this document). The end of clerkship oral exam should last at least 20 minutes and requires a one-on-one format involving the student and clinical faculty member. It is used to evaluate independent study and patient log documentation but is primarily a Step 2 CS-type exam.

The first part of the exam requires the examiner to review the portfolio, which each student brings to the exam. This portfolio consists of the patient log and the web-based exams. The examiner first confirms that the student has completed all assignments and has shown a commitment to documentation in the log. The portfolio can be used to evaluate the extent to which the student has studied actively and independently.

After the review of the patient log, the exam should proceed as a Step 2 CS OSCE exam, this has two parts:

1. The integrated clinical encounter (ICE). This is the "classic" exam. The examiner would choose a case, from the student's log for example, and ask the student to "integrate the history, physical findings, lab results, imaging studies, etc. into a reasonable discussion of pathophysiology, differential diagnosis, further work-up and management, etc."

2. Communication skills and interpersonal relationship (CS/IR). This is new and may require some creativity and play-acting on the part of the examiner. Departments could develop a list of "challenging" questions involving ethical issues, e.g., end-of-life decisions, informed consent, delivering bad news, etc. Evaluations here may be difficult and subjective. One way to look at this would be for examiners to ask themselves "If this was an interview, would I take this student into my residency program?" If the answer is negative, we would like to know, in order to remediate the student. The exam form should have a section for such comments. These students may be at high risk for a Step 2 CS failure and/or for not getting a residency because of their lack of interviewing skills. To a certain extent, this can be a formative as well as a summative exam.

b. NBME Exam

The NBME Clinical Subject (Shelf) Exam must be taken by all students toward the end of the core rotation and determines 30% of the final grade during 3rd year Core Rotations but 50% after 4th year (end of Clinical Rotation). Scheduling for this exam is done by Dean's office. Hospitals should excuse students for the entire day in order to take these exams. While the oral exam is based on the student's clinical experience during the rotation, the shelf exam is not. Instead the shelf exam tests students' understanding of the subject as, for example, it might be presented in a concise textbook. Students must sit the shelf exam before starting their next rotation.

c. Examination Policies and Procedures

- All students must attend the Oral Exam as scheduled. No excuses are permitted unless approved by the Clinical Preceptor or AHD.
- All students must attend the NBME exam as scheduled. With rare exception and only after approval by the Dean, a student can take a separate WINDSOR written exam.
- Students who are too ill to take the exam as scheduled should refer to the "Medical Excuse" policy in the Student Manual.
- If for any reason a student misses an oral exam, a make-up exam must be scheduled within 2 weeks with the Clinical Preceptor or AHD.
- If for any reason a student misses an NBME exam, a make-up exam must be scheduled within 2 weeks by contacting Dean's office.

SURGERY READING REQUIRED LIST

1. Print:

Essentials of General Surgery *and* Essentials of Surgical Specialties Lawrence, Williams and Wilkins

2. *Web-based*: doc.com (Drexel University communications skills-modules 17 & 35)

RECOMMENDED

Suggested additional print and on-line sources are:

Early Diagnosis of the Acute Abdomen Cope, Oxford University Press

Essentials of Diagnosis and Treatment in Surgery (Lange Current Essentials Series)

The Ethics of Surgical Practice Cases, Dilemmas and Resolutions, Jones JW, McCullough LB and Richman BW, Oxford University Press.

Lecture Notes: General Surgery Ellis and Calne, Blackwell;

Principles of Surgery, Schwartz, McGraw Hill

The ICU Book by Marino, Williams and Wilkins

Windsor University School of Medicine

Clinical Documentation Checklist

Student Name: _____ Student ID: _____

Hospital/Clinic: _____ Preceptor: _____

Date Started: _____ Date Ended: _____ Total Weeks: _____

S. No	Clinical Documentation/ Skills	Required	Completed	Student Initials
1.	Electronic Patient Encounter Logs (EPEL)	12		
2.	SOAP Notes	4		
3.	Case Reports	2		
4.	MedU Cases	6/12		
5.	DocCom Modules	2		
6.	Mid-core evaluation	1		
7.	Preceptor Evaluation	1		
8.	Core Examination (NBME Shelf)	1		
9.	Procedure Logs	1		
10	OSCE Skills	1		
11	Feedback Interview	1		
12	Student Evaluation of Rotation	1		
13	Student Evaluation of Preceptor	1		

Note: It is student's responsibility to complete the above requirements in its entirety with integrity and honesty. Students should get them evaluated by his attending, and submit the same to the clinical department. Failure to do so will result in receiving poor grade in the specific clinical rotation on the transcript.

Student Signature: _____ Date: _____

Attending/Preceptor: _____ Date: _____