

EXHIBIT A: CURRICULUM



ROSS UNIVERSITY
SCHOOL OF MEDICINE

RUSM CLINICAL CURRICULUM GUIDELINES SURGERY

Overview:

The clinical core clerkships at Ross University School of Medicine (RUSM) are conducted at approximately 30 clinical sites around the United States. The purpose of this document is to:

1. Provide guidance to both educators and students on expectations for Ross students during their core clerkship rotations.
2. Achieve consistency in the educational materials presented to students during their core clerkships.

RUSM recognizes that each site presents its own unique learning opportunities, unique patient populations, and unique styles of teaching for our students. The University encourages experienced medical educators to pursue their educational methods that have proven successful in their own institutions. This guide is meant to assist students in understanding the core learning objectives that faculty in the Ross University School of Medicine apply across all sites and that students should strive to achieve.

Surgery Curriculum

(Interim Clinical Chair: Mercedes Dullum, MD, FACS, FACC, MD, FACS)

Course Information:

Course Title: Surgery

Course Number: CSRC5006

Credit Hours: 12 credits

Course Pre-requisites: IMF

Course Overview: The core Surgery clerkship is an introduction for the students to the practice of surgery. The students will be expected to acquire a broad base of knowledge and ability to enact the surgical approach of comprehensive patient management, expeditious differential diagnosis, intervention and medical management. Students will develop skills in pre-, intra-, and post-operative care of patients. This will include indications and options and timing and patient preparation for surgical intervention, surgical procedures, postoperative care including intensive care unit management and discharge management and follow up. Students also need to understand the importance of effectively functioning on a surgical team, patient safety measures and performance measures.

General Clerkship Expectations:

1. **Study Hours:** Reading/Case assignments are outlined and organized by week. Students should set aside time in review and preparation for the NBME subject exam. Case reviews and formative questions are great tools for surface learning, but the textbook and articles give comprehensive review of topics. In-depth understanding fosters greater retention.
2. **Work Hours:** Students are subject to the same ACGME work hour restrictions as PGY-1 residents. However, clinical activity is limited to 70 hours/week. Students should also be limited to 17 hours of continuous clinical activity.

Please see the current Student Handbook for details.

3. **Patient Interaction:** Students are expected to interact with and be responsible for an adequate number of patients at any given time. Under the supervision of residents/faculty members, and in conjunction with the interdisciplinary team, robust clinical experiences and learning opportunities are assured.
4. **Case Presentations:** Students are expected to present cases and receive feedback of their presentation skills, medical reasoning, differential diagnosis and management plans. Formal didactic presentations may also be required.
5. **Patient Notes:** Clerkship students must follow the procedures and qualifications for both paper chart and electronic medical record patient notes as detailed by the hospital to which they are assigned.
6. **Essential Patient Encounters / Procedures:** A list of the minimum number and types of patients to be seen during a clerkship is provided. All EPEs and EPPs must be recorded in the Patient Log as either a real patient or if needed, a Complementary Case. Although the sequence of each encounter will vary by location and assignment during each rotation, we encourage you to log each encounter soon after the interaction.

Learning Objectives:

Core Clerkship Purpose and Goals:

Purpose:

"The management of surgical disorders requires not only the application of technical skills and training in the basic sciences to the problems of diagnosis and treatment but also a genuine sympathy and indeed love for the patient. The surgeon must be a doctor in the old-fashioned sense, an applied scientist, an engineer, an artist, and a minister to his or her fellow human beings. Because life or death often depends upon the validity of surgical decisions, the surgeon's judgment must be matched by courage in action and by a high degree of technical proficiency." *J. Englebert Dunphy, MD*, Lawrence W. Way, MD* **CURRENT**
Diagnosis & Treatment: Surgery, 13e. Chapter 1. Approach to the Surgical Patient

The core surgery clerkship is an introduction for the students to the practice of surgery. The students will be expected to acquire a broad base of knowledge and ability to enact the surgical approach of comprehensive patient management, expeditious differential diagnosis, intervention and medical management. Students will develop skills in pre-, intra-, and post-operative care of patients. This will include indications and options and timing and patient preparation for surgical intervention, surgical procedures, postoperative care including intensive care unit management and discharge management and follow up. Students also need to understand the importance of effectively functioning on a surgical team, patient safety measures and performance measures.

Goals:

By the conclusion of the clerkship, each student will be able to:

1. Diagnose, evaluate, and treat patients with surgical conditions taking into account:
 - Recognition of surgical problems
 - Knowledge of appropriate surgical interventions and alternative treatment
 - Appropriate pre-operative surgical work up and preparation
 - How to care for the patient in the post-operative period including the intensive care unit
 - Appropriate patient "handoff" as the patient moves through the different stages of their care
 - How to recognize post-operative complications needing further surgical care
 - Cost/risk/benefit, as it applies to patient care, and as it relates to appropriate monitoring and/or screening of surgical conditions
 - Prevention of medical errors
 - Adherence to patient safety principles
 - Importance of performance measures
2. Be aware of, understand and apply specific surgical protocol in the operating room; e.g., informed consent, immediate preop safety check list, scrubbing, gowning, gloving, draping, prepping, "time out" and effective "hand off" immediately postop.

Patient Care (PC) Competencies:

Direct Patient Care:

- **Students will observe and have performed under supervision the following:**
 - Perform simple surgical procedures.
 - Use and handling of an endoscope intraoperatively.
 - Suturing lacerations and surgical wounds.
 - Stapling of lacerations and surgical wounds.
 - Removal of sutures and skin staples.

- Steristrip.TM use in laceration and surgical wounds.
- Start an intravenous (IV).
- Dressing change
- Incision and drainage of abscess.
- Insert and remove Foley catheter in male and female.
- Place and remove a nasogastric (NG) tube.
- Meaningful appropriate documentation in patient charts.
- **Student will be expected to learn:**
 - Pathophysiology.
 - Presenting symptoms (Symptomatology).
 - Positive physical findings.
 - Differential diagnosis.
 - Fluid and electrolyte management.
 - Surgical nutrition.
 - Metabolic response to injury.
 - Cancer staging.
 - Investigations (including laboratory tests and imaging).
- **Treatment including:**
 - Medical/surgical alternatives.
 - When treated medically; indications for surgical intervention.
 - Risk factor assessment.
 - Pre-operative management.
 - Post-operative management.
 - Complications.
 - Recognition and treatment.
 - Adjuvant therapies - indications and outcome
 - Prognosis
- **Discharge including:**
 - When appropriate.
 - Discharge instructions
 - Medication reconciliation
 - Patient education.
 - Follow-up care.
 - Resumption of normal activities.

Medical Knowledge:

The Medical Knowledge competency domain addresses the ability to establish and maintain knowledge necessary for patient care, along with skills in clinical diagnosis, test ordering, and application of therapeutic strategies for management of clinical problems. Students' progress along Medical Knowledge milestones by acquiring and maintaining

knowledge over time, utilizing problem solving skills, and continuing to apply knowledge in the care of progressively more complex patient care situations. Students also have the opportunity to develop, apply, and translate new medical knowledge through scholarly inquiry, discovery, and dissemination.

- **Essential Patient Encounters**

Students are expected to log all patient encounters. The following are the essential patient encounters deemed consistent with an adequate comparable experience on this rotation. For those encounters not experienced at your site, please review the diagnoses in the literature to understand the evaluation and treatment. Not all surgical patients will require an operation and it is important for the students to learn the evaluation and optimal management for these patients. For cases that do require operation, please review the complementary cases if you did not have the opportunity to participate in the procedure on your rotation. The following are the essential patient encounters, organized by organ system:

- Gastro Intestinal
 - Peritonitis
 - GastroEsophageal Reflux
 - Peptic Ulcer Disease
 - Esophageal cancer
 - Gastric Cancer
 - Obesity/metabolic syndrome
 - Inflammatory Bowel Disease
 - Small Bowel Obstruction
 - Large Bowel Obstruction
 - Appendicitis
 - Colon Cancer
 - Diverticular Disease
 - Anorectal Disease
- Hepato-Biliary
 - Disease
 - Biliary Colic & Cholecystitis
- Pancreas
 - Pancreatitis
 - Pancreatic Cancer
- Hernia
 - Inguinal
 - Umbilical
 - Ventral Hernia
- Breast
 - Breast Cancer
 - Benign Breast Conditions
- Thoracic
 - Lung Cancer

- Pleural Effusion
- Pneumothorax
- Thyroid/Parathyroid
- Thyroid tumor
- Vascular
 - Pulmonary Embolism
 - Deep Venous Thrombosis
 - Venous Disease
 - Abdominal Aortic Aneurysm
 - Carotid Artery Disease
 - Peripheral Vascular Disease
- Urology
 - Benign Prostatic Hypertrophy
 - Prostate Cancer
- Integument
 - Cellulitis
 - Cancer
- Shock/Trauma
 - Critical Care Management
 - Sharp and blunt trauma encounters
- Presentation with Abdominal Pain
 - Presentation with Rectal Bleeding
- **Essential Patient Procedures (EPP)**

Students must also log the following essential patient procedures either through personal experience or through an alternate clinical experience. The students can participate in these procedures on their own assigned patients on the rotation or by participating or observing other patients at their clinical site.

- History and Physical Exam
- Examination of the Acute Abdomen
- Informed Consent
- Fluid and electrolyte management
- Intravenous catheter placement and removal
- NG tube placement and removal
- Foley placement and removal
- Central line placement and removal
- Chest tube placement and removal
- Dressing Changes
- Discharge from hospital with follow up

- Intensive Care Unit Rounds and management
- Upper endoscopy
- Lower Endoscopy
- Gastric Cancer surgery
- Exploratory laparotomy (Laparoscopy)
- Cholecystectomy
- Small Bowel resection
- Large bowel resection
- Hemorrhoid treatment
- Hernia repair

Interpersonal Skills & Communication:

- a. In general, to demonstrate effective information exchange and teaming with patients, their families, and other health professionals.
- b. Specifically to demonstrate:
 - A sensitivity to understand and relate to the emotional and social background of patients.
 - Collaboration as a member of an inter-professional team.
 - Good communication skills and rapport with patients, families, other health care professionals, staff, and supervisors.
 - Effective communication with patients and their families.
 - Understand how to properly counsel a patient and their family to obtain informed consent.

Professionalism:

- a. In general, to demonstrate a commitment to professional responsibilities and sensitivity to a diverse patient population.
- b. Specifically to demonstrate:
 - Ability to relate and perform professionally in a working situation with other members of the Health Care Team.
 - An openness to recognize limitation by using resources referrals and consultation with supervising preceptor or others, when appropriate.
 - A constructively self-critical manner.
 - Ability to perform duties within a professional comportment encompassing such areas as attendance, dress code, and general demeanor.
 - Understanding and adhering to HIPAA rules.

System Based Practices:

- a. In general, to demonstrate knowledge of the health care system and to understand how to effectively use health care system resources to provide optimum patient care.
- b. Specifically to demonstrate:
 - An understanding of what resources are appropriate.
 - A general concern for patients, as demonstrated in thoroughness of monitoring patients and attitudes toward record keeping specifically timely, valuable documentation of notes.

- Independent reading concerning problems seen and knowledge of the anatomy of procedures performed.
- Understanding of measures to prevent medical errors.
- Understanding and adherence to performance improvement measures.
- Understanding process improvement initiatives.

Practice Based Learning and Improvement:

- In general, to demonstrate appraisal and assimilation of scientific evidence, evaluation and improvement of patient care.
- Specifically to demonstrate:
 - Ability to perform the admitting history and physical examination.
 - Ability to participate in, and assume appropriate responsibility for, the daily care of the surgical patient, as determined by the preceptor.
 - Ability to understand diagnostic procedures and incorporate these into patient management.
 - Preparation and understanding of the anatomy of any procedures in which the student is participating.

Interprofessional Collaboration (IC):

The student will be able to:

Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care.

Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust. Use the knowledge of one's own role and the roles of other health professionals to appropriately assess and address the health care needs of the patients and populations served.

Personal and Professional Development (PPD):

The student will be able to:

Demonstrate the qualities required to sustain lifelong personal and professional growth.

Develop the ability to use self awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors. Practice flexibility and maturity in adjusting to change with the capacity to alter one's behavior.

Weekly Assignments:

We are providing a weekly study plan for assuring that you acquire the fundamental knowledge required of this clerkship. Adherence to this list of tasks and assignments will help maximize your comprehension of important topics, and will also be instrumental in your NBME Subject Clerkship Exam (SCE) preparation.

SURGERY CLERKSHIP WEEKLY ASSIGNMENT SCHEDULE

Assignments - Cases and Readings

Week Presentation / Topic	Exercise / Case Review	Required Reading	Reviews
	MedU WISE-MD Skills Module (SM) or Case Module (CM) Access Medicine	Essentials of General Surgery: Lawrence , 5th edition (EGS)	Becker Surgery Step 2 eCoach Review Lectures

1	Preoperative Evaluation and Management of Surgical Patients	SM - Ultrasound: For Vascular Access	EGS Chapter 1 pp. 1-20	Becker - Chapter 1 - 1
	Fluid and electrolyte management	Video 487e-1 Clinical Procedures Tutorial: Phlebotomy.	EGS Chapter 2	Becker - IM, Vol. II Chapter 23 Water and Electrolyte Disorders
	Surgical nutrition and wound healing	SM - Suturing and instrument tie	EGS Chapter 3	
	Intraoperative Evaluation and Management of Surgical Patients	SM - Foley cathetr placement SM - Two handed knot tie	EGS Chapter 1 pp. 20-25	
	Postoperative Evaluation and Management of Surgical Patients	ASE Module #1 PO PE	EGS Chapter 1 pp. 25-32	Becker - Chapter 1 - 2
2	Surgical Bleeding		EGS Chapter 4	
	Surgical Infections		EGS Chapter 8	
	Wound and Healing		EGS Chapter 7	
	Surgical Critical Care		EGS Chapter 6	1. Undefined Respiratory failure (IM II Chapter 43)
3	Trauma Surgery	ASE Module #5 Stab Wound SM - Ultrasound E-Fast Exam CM - Trauma Resuscitation	EGS Chapter 9	Becker - Chapter 2
	Shock		EGS Chapter 5	
	Burns	CM - Burn Management ASE Module #3 Burns	EGS Chapter 10	Becker - Chapter 22
4	Colon, Rectum and Anus	CM - Anorectal Disease	EGS chapter 15	Becker - Chapters 12 & 13
	Hernias and other surgical pathology of abdominal wall	CM - Inguinal Hernia ASE Module #7 Hernia CM - Pediatric Hernia	EGS Chapter 11	Becker - Chapter 23

	Small Intestine & Appendix	ASE Module #2 Appy CM - Bowel Obstruction	EGS chapter 14	Becker - Chapter 11
5	Biliary Tract	CM - Cholecystitis	EGS chapter 16	Becker - Chapter 15
		SM - Ultrasound: Cholelithiasis/Cholecystitis		
	Pancreas	CM - Pancreatitis	EGS chapter 17	Becker - Chapter 16
	Liver		EGS chapter 18	Becker - Chapter 14
		ASE Module #8 Abn MGM		
		ASE Module #9 Breast Mass		
6	Breast mass	ASE Module # 10 Breast CA	EGS Chapter 19	Becker - Chapter 8
		CM - Breast Cancer UWISE SM - Ultrasound: Breast Video 490e-1		
		Clinical Procedures Tutorial: Fine Needle Aspiration of Breast Cyst.		
	Surgical Endocrinology	SM - Ultrasound: Thyroid	EGS Chapter 20	Becker - Chapter 3 & 4
		CM - Adrenal Adenoma		Becker - Chapters 5 & 6
	Spleen & Lymph Nodes	CM - Thyroid Nodule	EGS Chapter 21	Becker - Chapter 17
MCR	Confirm your Mid-Clerkship Review Session.	Print & present your patient log.		
7	Surgical Oncology	CM - Colon Cancer	EGS Chapter 24	Chapter 22. Integumentary
		CM - Lung Cancer (Preview)		Chapter 22. Integumentary
	Transplantation		EGS Chapter 23	
	Vascular (Surgery) System	CM Carotid Stenosis	EGS Chapter 22	Chapter 19. Vascular Surgery
		ASE Module # 11 Leg Pain		

SM U/S aortic Aneurysm SM Carotid
Artery CM - Abdominal Aortic
Aneurysms

8	Cardiothoracic Surgery	ASE Module #4 Pneumothorax		Becker - Chapter 20
	Stomach & Duodenum		EGS Chapter 13	Becker - Chapter 10
	Bariatric Surgery	CM - Bariatric	EGS Chapter 12	
9	Urology	Case File Pathophysiology #114 BPH		Becker - Chapter 24
		Case File Pathophysiology #13 Testicular Cancer		
		Case File Pathophysiology #115 Male Infertility		
	ENT	Case File Emergency Medicine Bell's Palsy		Becker - Chapter 25
		Case File Pathophysiology #102 Thyroid Nodule		
10	Orthopedics	CORE CM: 16. MSK: Trauma		Becker - Chapter 27
	Anesthesia	Video 484e-1 Clinical Procedure Tutorial: Endotracheal Intubation		
		SM - Epidural		
11	Neurosurgery	Case File Emergency Medicine Stroke		Becker - Chapter 28
		Case File Neurology Subarachnoid Hemorrhage		
12	Review for Shelf Exam		Review WISE-MD Videos	Review Lawrence Chapter Questions

Clerkship Grading:

Clerkship Grading Overview:

2. Clinical Clerkships Assessment of Medical Student Performance - **65% of your final clerkship grade**
3. NBME SCE - 25%
4. Online Curriculum Requirements - 10% (in order to receive full credit a student must:
 - A. Log 100% of EPEs/EPPs
 - B. Confirm a Mid-Clerkship Review
 - C. Complete the End of Clerkship Evaluation)

Clinical Clerkship Assessment of Medical Student Performance:

Clinical Clerkship Assessment of Medical Student Performance (CCAMSP) - 65% of your final clerkship grade
The Clinical Clerkship Assessment of Medical Student Performance form, exhibit A.1, will be completed by your site clerkship director with input from all of those who have worked with you throughout the clerkship.

National Board of Medical Examiners (NBME) Subject Clerkship Exam (SCE) – 25% of your final grade:

Students will have a 14-day "window" to sit for the subject clerkship exam. The window begins on the last Monday of the rotation.

Students are required to coordinate their exam date with the office of medical education and the director of medical education at their respective site to minimize impact on clinical responsibilities.

Failure of a SCE exam results in an "Incomplete" with an opportunity to re-take the exam and receive a maximum grade of "C" for the SCE. Other policies related to the Clinical Clerkship Assessment of Medical Student Performance component of the grade are established and unchanged (i.e., two or more "F" grades results in a failing grade for the rotation).

Please refer to the Latest Student Handbook for further details.

Online Curriculum Participation - 10% of your final grade:

Online Curriculum Requirements consist of:

- A. Log 100% of EPEs/EPPs
- B. Confirm a Mid-Clerkship Review
- C. Complete the End of Clerkship Evaluation.

Adherence to the above is made possible through the many resources within the eCollege course, and use of E*Value for recording.

Failure to complete **all** components of the Online Curriculum Requirements will result in an "Incomplete" or failing grade for this portion of the final core clerkship grade.

Required Clinical Experiences:

During your rotation, you will be required to be familiar with certain diagnoses and several procedures. We have used the terms Essential Patient Encounters (EPE) and Essential Patient Procedures (EPP) to designate these conditions. Aware that you might not actually experience every condition, we have provided Complementary Cases (MedU WISE-MD Cases) to help you fulfill these requirements. These simulated cases may also be used as a review, or to prepare for encounters at your clinical site.

EPEs:

You can access the e-book here: [Essentials of General Surgery](#)

Essential Patient Encounters (EPEs) Essential Patient Encounters RUSM Surgery Curriculum - Clinical Scenarios and Diseases (average about 5 per week)	Number Numbers of each patient case (experience) required by end of Surgery clerkships	Complementary Cases Alternate means of fulfilling the EPE requirements - typically a MedU/WiseMD Case	Textbook Reference Required student- level textbook available on Vital Sources - Lawrence - Essentials of General Surgery (EGS)
Abdominal pain	2	WISE-MD Module: Acute Appendicitis	EGS chapter 14
Rectal bleeding	1		EGS chapter 8
Adominal Wall Hernia	2	WISE-MD Case Module: Hernia	EGS chapter 11
Colorectal Cancer	2	WISE-MD Case Module: Colon Cancer	EGS chapter 15
Bowel Obstruction	1		EGS chapter 14
Hepato-Biliary and Pancreatic Disease	2	WISE-MD Case Module: Cholecystitis	EGS chapter 16 , 17, 18
Breast Mass	1	WISE-MD Case Module: Breast Cancer Surgery	EGS chapter 19
Neck Mass	1	WISE-MD Case Module: Thyroid Nodule (They also have a Thyroid U/S module)	EGS chapter 20
Peripheral Artery and venous Disease	1	WISE-MD Case Module : Carotid Stenosis	EGS chapter 22
Fluid and electrolyte management	1		EGS chapter 2
Diverticular Diseases	2	Case Module	EGS chapter 15
Anorectal Diseases	1	WISE-MD Case Module: Anorectal Diseases	
Digestive Neoplasm	1		EGS chapter 12
Lung Mass	1		
Abdominal Aortic Aneurysm	1		
Benign Prostatic Hyperrophy		WISE-MD Case Module : Foley catheter placement	TURP
Common orthopedic surgical diseases	1		

Essential Patient Encounters (EPEs) Essential Patient Encounters RUSM Surgery Curriculum - Clinical Scenarios and Diseases (average about 5 per week)	Number Numbers of each patient case (experience) required by end of Surgery clerkships	Complementary Cases Alternate means of fulfilling the EPE requirements - typically a MedU/WiseMD Case	Textbook Reference Required student-level textbook available on Vital Sources - Lawrence - Essentials of General Surgery (EGS)
Surgical Trauma, Shock and Burns	1		EGS chapter 5, 6, 9, 10
Burn Patient			
Surgical Oncology	1		
Obesity/Bariatric Surgery		WISE-MD Case Module : Bariatric Surgery and Obesity	
Cardiac Surgery			
Colorectal cancer- screening, diagnosis and management	2	WISE-MD Case Module : Colon Cancer	
Transplantation			EGS chapter 23
Malignancy of Skin	1		EGS chapter 24
Patient safety in surgical patient			
Peritonitis			
GastroEsophageal Reflux			
Peptic Ulcer Disease			
Esophageal cancer		Esophageal Adenocarcinoma Diagnosis, Staging, and Surveillance by Mary Tharayil, Gillian Lieberman, M.D.	
Gastric Cancer			EGS chapter 12
Obesity/metabolic syndrome		WISE-MD Case Module : Bariatric Surgery and Obesity	
Inflammatory Bowel Disease			
Small Bowel Obstruction		WISE-MD Case Module: Bowel Obstruction	EGS chapter 14

Essential Patient Encounters (EPEs) Essential Patient Encounters RUSM Surgery Curriculum - Clinical Scenarios and Diseases (average about 5 per week)	Number Numbers of each patient case (experience) required by end of Surgery clerkships	Complementary Cases Alternate means of fulfilling the EPE requirements - typically a MedU/WiseMD Case	Textbook Reference Required student-level textbook available on Vital Sources - Lawrence - Essentials of General Surgery (EGS)
Large Bowel Obstruction		WISE-MD Case Module: Bowel Obstruction	EGS chapter 14
Appendicitis		WISE-MD Module: Acute Appendicitis	EGS chapter 14
Colon Cancer		WISE-MD Case Module: Colon Cancer	EGS chapter 15
Diverticular Disease		WISE-MD Case Module : Diverticular Disease	EGS chapter 15
Anorectal Disease		WISE-MD Case Module: Anorectal Diseases	
Liver Disease		Radiologic Evaluation of RUQ Pain: Hepatic and Biliary Possibilities Mayra E. Lorenzo; Gillian Lieberman, M.D.	
Biliary Colic & Cholecystitis		WISE-MD Case Module: Cholecystitis	EGS chapter 16 , 17, 18
Pancreatitis		WISE-MD Case Module : Pancreatitis	
Pancreatic Cancer		Radiologic Workup of Pancreatic Masses by Carl Aschkenasi, Gillian Lieberman, M.D.	
Inguinal Hernia		WISE-MD Case Module: Inguinal Hernia	EGS chapter 11
Breast Mass / Cancer		WISE-MD Case Module: Breast Cancer	EGS chapter 19
Lung Cancer		WISE-MD Case Module : Lung Cancer	
Pleural Effusion			
Pneumothorax		MedU Core Case 3 : Chest Trauma	
Pulmonary Embolism		Pulmonary Embolism: Diagnostic Approach and Algorithm Tolulope Adesiyun; Gillian Lieberman M.D.	

Essential Patient Encounters (EPEs) Essential Patient Encounters RUSM Surgery Curriculum - Clinical Scenarios and Diseases (average about 5 per week)	Number Numbers of each patient case (experience) required by end of Surgery clerkships	Complementary Cases Alternate means of fulfilling the EPE requirements - typically a MedU/WiseMD Case	Textbook Reference Required student-level textbook available on Vital Sources - Lawrence - Essentials of General Surgery (EGS)
Deep Venous Thrombosis		Radiologic Evaluation of Peripheral Arterial Disease by Grace Tye; Gillian Lieberman M.D.	
Venous Disease		Visualizing the Venous System: Upper Extremity & Thorax by Heather E. Gunter; Gillian Lieberman M.D.	
Abdominal Aortic Aneurysm		WISE-MD Case Module : Abdominal Aortic Aneurysm	
Carotid Artery Disease		WISE-MD Case Module : Carotid Stenosis	
Peripheral Vascular Disease		WISE-MD Case Module : Carotid Stenosis	EGS chapter 22
Benign Prostatic Hypertrophy			
Prostate Cancer		Prostate Cancer:..Imaging in Diagnosis and Treatment David Sher; Gillian Lieberman, M.D.	
Cellulitis			
Cancer			
Sharp or blunt trauma		WISE-MD Case Module : Trauma resuscitation MedU Core Case 8 : GI Trauma	EGS chapter 5, 6, 9, 10
Neck Mass	1	WISE-MD Case Module: Thyroid Nodule (They also have a Thyroid U/S module)	
http://eradiology.bidmc.harvard.edu/			

EPPs:

<u>Essential Patient Procedures RUSM Surgery Curriculum - each must be logged as a real patient or by an alternate method</u>	<u>Number Numbers of each procedure/task required by end of Surgery Clerkship</u>	<u>Complementary Case Alternate means of fulfilling the EPP requirements</u>	<u>Reference Required student-level textbook available on Vital Sources (Lawrence) or other appropriate resource</u>
<u>History & Physical Exam</u>	<u>1</u>	-	-
<u>Examination of the Acute Abdomen</u>	<u>1</u>	Exam Accute Abdomen	-
<u>Obtain Informed Consent</u>	<u>1</u>	-	<u>EGS –Chapter 3 and 7</u>
<u>Fluid and electrolyte management</u>	<u>1</u>	-	<u>EGS chapter 2</u>
<u>Intravenous catheter placement and removal</u>	<u>1</u>	Intravenous Catheter Placement and Removal	-
<u>NG tube placement and removal</u>	<u>1</u>	-	-
		<u>WISE-MD Case Module : Foley Catheter Placement</u>	
<u>Foley placement / removal</u>	<u>1</u>	Male Foley Placement and Removal	-
		Female Foley Replacement and Removal	
<u>Central line placement and removal</u>	<u>1</u>	Access Medicine: Central Venous Catheter Placement	-
<u>Chest tube placement and removal</u>	<u>1</u>	Chest Tube Placement	-
<u>Dressing Changes</u>	<u>1</u>	-	-
<u>Discharge from hospital with follow up</u>	<u>1</u>	-	-
<u>Intensive Care Unit Rounds and management</u>	<u>1</u>	-	-
<u>Upper endoscopy</u>	<u>1</u>	Upper Endoscopy	-
<u>Lower Endoscopy</u>	<u>1</u>	-	-
<u>Gastric Cancer surgery</u>	<u>1</u>	-	-
<u>Exploratory laparotomy</u>	<u>1</u>	Exploratory Laparotomy	-

<u>Essential Patient Procedures RUSM Surgery Curriculum - each must be logged as a real patient or by an alternate method</u>	<u>Number Numbers of each procedure/task required by end of Surgery Clerkship</u>	<u>Complementary Case Alternate means of fulfilling the EPP requirements</u>	<u>Reference Required student-level textbook available on Vital Sources (Lawrence) or other appropriate resource</u>
<u>Laparoscopic Cholecystectomy</u>	<u>1</u>	<u>WISE-MD Case Module: Cholecystitis</u>	-
<u>Small Bowel resection</u>	<u>1</u>	-	-
<u>Large bowel resection</u>	<u>1</u>	-	-
<u>Hemorrhoid treatment</u>	<u>1</u>	<u>Hemorrhoid Treatment</u>	-
<u>Hernia repair</u>	<u>1</u>	-	-

Patient Logs:

Case Logger:

To meet the goals and objectives of the clinical core clerkship This content needs to be update so it is more generic - and it applies IMF and fulfill the requirements of the educational experience outlined in the curriculum guidelines, RUSM clinical students are required by the university to maintain a log of patient encounters.

The web and mobile-based Case Logger helps students to quickly log real and simulated patient encounters, procedures and diagnoses, build on their clinical portfolio, monitor and track progress, and maintain a history of daily clinical activities.

Case Logger Guidelines:

1. All patient encounters must be logged including actual, simulated and standardized patients as well as online interactive cases.
2. All patient encounters should be logged within 24 hours of the date of interaction.
3. The number of days allowable for backlog is 14 days. The date of interaction automatically defaults to the current date. The system will not accept an interaction date of 10 days prior to the current date.
4. Report E*Value technical problems to the E*Value Administrator at E-ValueAdmin@RossU.edu.

For your reference: [Evalue Case Logs Guide.pdf](#)

Lecture Series:

Students receive many quality lectures at their specific clerkship site. We have listed the most common topics presented and the corresponding Learning Outcomes.

In the event that you miss a lecture or do not receive an extensive discussion of a particular topic, please use the Online Lecture to supplement your local lecture schedule. You may also consider each online presentation for increasing your depth and breadth of knowledge.

Week #	Lecture Title/Content	Lecture Learning Outcomes - A student should be able to:	Surgery Lecture Series: Becker Step 2 GuideMD Reviews
1	Preoperative Evaluation and Management of Surgical Patients	<ol style="list-style-type: none"> 1. Describe the preoperative H&P and the importance of each screening test. 2. Recognize normal vs abnormal laboratory findings. 3. Discuss preoperative risk factors and their treatment. 	Becker - Chapter 1 - 1
	Postoperative Evaluation and Management of Surgical Patients	<ol style="list-style-type: none"> 1. Discuss the effect of renal dysfunction, hepatic dysfunction, diabetes, and advanced age on postoperative management. 2. Describe the documentation required in the medical record of a surgical patient, including physician's orders and daily progress notes. 3. Describe the most commonly used surgical tubes and drains. 4. Discuss common postoperative complications and their treatment. 	Becker - Chapter 1 - 2
	Fluids, Electrolytes, and Acid-Base Balance	<ol style="list-style-type: none"> 1. Understand the fluid compartments of the body and how they vary by age, gender, and obesity. 	Becker - IM, Vol. II Chapter 23 Water and Electrolyte Disorders
		<ol style="list-style-type: none"> 1. Know management of acute respiratory failure. 2. Describe the difference between inotropes and vasopressors. 3. Describe ventilator associated pneumonia. 	Becker - IM Vol. II Chapter 43 Respiratory Failure
2	Surgical Critical Care		
	Trauma	<ol style="list-style-type: none"> 1. Explain the Glasgow Coma Scale. 2. Define "damage control". 3. Calculate total blood volume (TBV), estimate blood loss, and total blood products. 	Becker - Chapter 2
3	Abdominal Wall, Including Hernia	<ol style="list-style-type: none"> 1. Describe the difference between a direct and indirect inguinal hernia. 	Becker - Chapter 23

Week #	Lecture Title/Content	Lecture Learning Outcomes - A student should be able to:	Surgery Lecture Series: Becker Step 2 GuideMD Reviews
		<ol style="list-style-type: none"> 2. Describe physical, X-ray, and laboratory findings of incarcerated inguinal hernia. 3. Know the embryology of abdominal wall hernias. 	
	Small Intestines & Appendix	<ol style="list-style-type: none"> 1. Describes the signs and symptoms of bowel obstruction. 2. Describe the signs and symptoms of appendicitis, Crohn's Dx, and Ulcerative Colitis. 	Becker - Chapter 11
4	Colon, Rectum, & Anus	<ol style="list-style-type: none"> 1. Describes the radiological differences between small and large bowel obstruction. 2. Discuss the differential diagnosis of Left Lower Quadrant Pain. 3. Define the TMN classification for colon-rectal carcinoma. 	Becker - Chapters 12 & 13
	Breast	<ol style="list-style-type: none"> 1. Discuss the major risk factors for breast carcinoma. 2. Know the differential diagnosis and work-up of a breast in a 20 y/o and a 60 y/o. 3. Define the stages of breast cancer. 	Becker - Chapter 8
5	Biliary Tract	<ol style="list-style-type: none"> 1. Define the types of gallstones and etiology. 2. Describe the anatomy of the biliary tract. 	Becker - Chapter 15
	Pancreas	<ol style="list-style-type: none"> 1. Explain the work-up of a "jaundice" patient. 2. Define the anatomic divisions of the pancreas. 3. Describe the Z-E syndrome. 4. Describe physical and lab findings in acute pancreatitis. 	Becker - Chapter 16
	Liver	<ol style="list-style-type: none"> 1. Explain work-up of a hepatic mass. 2. Discuss findings in portal hypertension. 	Becker - Chapter 14

Week #	Lecture Title/Content	Lecture Learning Outcomes - A student should be able to:	Surgery Lecture Series: Becker Step 2 GuideMD Reviews
6	Integumentary	<ol style="list-style-type: none"> 1. List the clinical features of squamous and basal cell carcinomas. 2. Outline the methods for the diagnosis and staging of skin cancer 	Becker - Chapter 22
	Spleen & Lymph Nodes	<ol style="list-style-type: none"> 1. Describe the anatomy and physiology of the spleen and lymph nodes. 2. Discuss the major risk associated post splenectomy. 3. Describe the workup of a patient with lymphadenopathy. 	Becker - Chapter 17
7	Vascular Surgery	<ol style="list-style-type: none"> 1. Discuss the risk factors (5) for developing artherosclerosis. 2. Define TIA, stroke, and amaurosis fugax. 3. Discuss the most common location for DVT and modes of treatment. 	Becker - Chapter 19
	Pediatric Surgery	<ol style="list-style-type: none"> 1. Define thyroglossal and branchial cysts. 2. Describe the embryology of an undescended testicle. 	Becker - Chapter 23
8	Cardiovascular & Thoracic Surgery	<ol style="list-style-type: none"> 1. Define the types of Cardiac failure 2. Describe the signs and symptoms of right and left heart failure. 	Becker - Chapter 20
	Bariatrics	<ol style="list-style-type: none"> 1. Determine BMI. 2. Describe surgical options for obesity. 	Wise MD: Bariatric Surgery
9	Orthopedics	<ol style="list-style-type: none"> 1. Discuss the concept of extremity compartment syndrome and indications for decompressive fasciotomy. 2. Describe common pelvic fracture patterns and their clinical significance. 	Becker - Chapter 22

Week #	Lecture Title/Content	Lecture Learning Outcomes - A student should be able to:	Surgery Lecture Series: Becker Step 2 GuideMD Reviews
	Gastric Surgery	<ol style="list-style-type: none"> 1. Compare and contrast the pathophysiology, evaluation, and treatment of gastric and duodenal ulcer disease. 2. Discuss the presentation, classification, and treatment of adenocarcinoma of the stomach. 	Becker - Chapter 10
10	Neurological Surgery	<ol style="list-style-type: none"> 1. Define the concept of intracranial pressure (ICP) monitoring in traumatic brain injury. 2. Discuss the various types of injuries to the spine and spinal cord, including their effects on hemodynamic status. 3. Define therapeutic interventions in traumatic brain injury. 	Becker - Chapter 28
	Esophagus	<ol style="list-style-type: none"> 1. Describe the general anatomy of the esophagus with respect to location, adjacent structures, and areas of narrowing. 2. Describe the symptoms of reflux esophagitis, and discuss the diagnostic procedures needed to confirm the diagnosis. 3. List the known etiologic factors for esophageal cancers. 	Becker - Chapter 9
11	Thyroid & Parathyroid	<ol style="list-style-type: none"> 1. Discuss the work-up of a thyroid nodule. 2. Describe the complications of parathyroid surgery. 3. Discuss treatment of hypercalcemia. 4. Discuss the diagnosis and treatment of pheochromocytoma. 	Becker - Chapter 3 & 4
	Adrenal Gland / Pituitary Gland	<ol style="list-style-type: none"> 1. Describe the clinical features of Cushing's syndrome (CS) and discuss how lesions in the pituitary, adrenal cortex, and extra-adrenal sites are distinguished diagnostically. 2. Discuss the medical and surgical management of CS. 	Becker - Chapters 5 & 6
12	Urology	<ol style="list-style-type: none"> 1. Identify and name the major anatomic and histologic features of the prostate gland. 2. Define BPH. 	Becker - Chapter 24

3. List the symptoms and signs of BPH.
4. List the signs & symptoms of prostate cancer.
5. Describe the natural history and the common patterns of progression of prostate cancer.
6. List the major components in the staging of prostate cancer.

Spleen & Lymph Nodes

1. Describe the anatomy and physiology of the spleen and lymph nodes.
2. Discuss the workup and management of a patient with splenic injury.
3. Discuss the associated risks and long-term consequences of splenectomy.

Becker - Chapter 17

Assessment & Evaluations:

Assessment Overview:

Mid-Clerkship Review – see exhibit A.2

Clinical Clerkship Assessment of Medical Student Performance – see exhibit A.1


**Ross University
School of Medicine**
**Office of Hospital Partnerships
and Compliance**
 2300 SW 145th Ave, Suite 200
 Miramar, FL 33027
 Phone: 754-208-4590

Clinical Clerkship Assessment of Medical Student Performance

At the conclusion of the clerkship, the physician overseeing this medical student's performance must complete this form.

Please also provide comments or examples to support your assessment.

Student's Last Name: _____

Name of Clerkship: _____

Student's First Name: _____

Clerkship Duration (# of Weeks): _____

Start Date: _____ End Date: _____

Hospital: _____

CRN: _____

Student ID: @ _____

Term: _____

- I. Knowledge for Practice (KP):** (Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care)

	A	B	C	F
a. Demonstrate an investigatory and analytic approach to clinical situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision making, clinical problem solving, and other aspects of evidence-based health care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- II. Patient Care (PC):** (Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Compassionate and effective treatment of health problems and health promotion.)

	A	B	C	F
a. Gather essential and accurate information about patients and their condition through history-taking, physical examination, and the use of laboratory data, imaging, and other tests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- III. Professionalism (P):** Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

	A	B	C	F
a. Demonstrate compassion, integrity, privacy, and accountability to patients, society, and the profession with commitment to ethical principle, laws, policy and regulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Last Name: _____

First Name: _____

CRN: _____

- IV. Interpersonal and Communication Skills (ICS):** Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

	A	B	C	F
a. Communicate effectively with patients, families, colleagues and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- V. Practice-Based Learning and Improvement (PBLI):** Demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

	A	B	C	F
a. Identify strengths, deficiencies, and limits in one's knowledge, expertise and incorporate feedback in daily practice and performs learning activities to address the gaps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- VI. Systems-Based Practice (SBP):** Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

	A	B	C	F
a. Coordinate care and work effectively in various health care delivery settings and systems relevant to one's clinical specialty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- VII. Interprofessional Collaboration (IPC):** Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient and population-centered care.

	A	B	C	F
a. Communicate and work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- VIII. Personal and Professional Development (PPD):** Demonstrate the qualities required to sustain lifelong personal and professional growth.

	A	B	C	F
a. Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors and healthy coping mechanism to stress.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Last Name: _____

First Name: _____

CRN: _____

Comments in this section are for the student **ONLY** and will not be included in the Medical Student Performance Evaluation (MSPE):

Comments in this section will be included in the Medical Student Performance Evaluation (MSPE):

Last Name: _____ First Name: _____ CRN: _____

Clerkship Director and/or
Preceptor Signature: _____

Must be signed on or after the
last day of the clerkship

Print Name of Clerkship Director and/or
Preceptor: _____

Title: _____

Hospital: _____

Telephone: _____

Address: _____

City, State: _____

Zip: _____

Within thirty days after completion of clerkship, return the form to: Office of Hospital and Partnerships and Compliance, Ross University School of Medicine, 2300 SW 145th Avenue, Suite 200, Miramar, FL 33027. Please retain a copy for Hospital records.

CREDIT IS AWARDED ONLY FOR ORIGINAL ASSESSMENT

STATEMENT OF CLERKSHIP DIRECTOR and/or DIRECTOR OF MEDICAL EDUCATION

I, _____ certify that above student has _____ weeks in _____

At _____ (PLEASE PRINT).

Original Signature

Print or type the Name of Clerkship Director and/or Director of Medical Education

Instructions for Completing the Clinical Clerkship Assessment of Medical Student

Performance

Effective for all clinical clerkships with a start date of January 1st, 2017

Grading Policy

<p>You are asked to evaluate the student on measures. ¹</p> <p>I. <u>Knowledge for Practice (KP)</u></p> <p>II. <u>Patient Care (PC)</u></p> <p>III. <u>Professionalism (P)</u></p> <p>IV. <u>Interpersonal and Communication Skills (ICS)</u></p> <p>V. <u>Practice-Based Learning and Improvement (PBLI)</u></p> <p>VI. <u>Systems-Based Practice (SBP)</u></p> <p>VII. <u>Interprofessional Collaboration (IPC)</u></p> <p>VIII. <u>Personal and Professional Development (PPD)</u></p>	<p>The final grade will be calculated as follows:</p> <ul style="list-style-type: none">• A, (Honor) = 4 points• B, B+(High Pass) = 3 points• C, C+ (Pass) = 2 points• Each F (Fail) is given 0 points <ul style="list-style-type: none">▪ Please mark the chosen grade box.▪ Do not check more than one grade box per measure.▪ Do not check in between grade value boxes.▪ Evaluations must be submitted to RUSM no later than 30 days after the conclusion of the clerkship.
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For clerkships with direct patient contact, the points (40 maximum) will be added and the total divided by 10.

For clerkships which do **not** entail direct patient contact (e.g. pathology, radiology), the two ratings on II (Patient Care) and the two ratings on VIII (Interpersonal Collaboration) may remain ungraded. Calculation of the final grade will be determined using a modified denominator.

The student's final Clinical Clerkship Assessment of Medical Student Performance grade will be as follows:

A = 3.70 – 4.00
B+ = 3.30 – 3.69
B = 2.70 – 3.29
C+ = 2.30 – 2.69
C = 1.70 – 2.29
F = < 1.70


Any student who receives TWO (2) or more F's on the Clinical Clerkship Assessment of Medical Student Performance evaluation will fail their rotation regardless of the point calculation and must repeat the rotation. If you have questions related to performance, please contact the Associate Dean's Office for Academic and Student Operations and Affairs at Clinical@RossU.edu.

Comments

Clerkship Directors / Preceptors are encouraged to make formative comments by providing specific examples of skills / behaviors in Student Feedback Section ONLY. Specific examples of exemplary skills/behaviors should be entered in MSPE section.

Exhibit A.2 - Mid-Clerkship Review

Ross University School of Medicine	Office of Medical Education 2300 SW 145 th Ave, Suite 200 Miramar, FL 33027 Phone: 754-208-4590
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ROSS UNIVERSITY
 SCHOOL OF MEDICINE

Mid-Clerkship Student Progress (Formative Assessment)

In case of any concerns or queries please contact: Clinical@RossU.edu

The physician overseeing the medical student's clerkship must complete this formative assessment form. Please also provide comments or examples to support your assessment.

Date & Time: _____

Student's Last Name: _____ Name of Clerkship: _____

Student's First Name: _____ Clerkship Duration (# of Weeks): _____

Hospital: _____

For ROSS Official Use

CRN: _____ Student ID: @ _____
 Term: _____

Review of Clinical Experience

Patient Care: The Student provides patient care that is compassionate, appropriate and effective.

Exceeds Expectations	Meets Expectations	Needs Improvement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpersonal and Communication Skills: The Student communicates effectively with patients, families and the healthcare team.

Exceeds Expectations	Meets Expectations	Needs Improvement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Medical Knowledge: The Student demonstrates knowledge of established and evolving biomedical, clinical and social sciences.

Exceeds Expectations	Meets Expectations	Needs Improvement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Professionalism: The Students demonstrates a commitment to carrying out professional responsibilities, and to be responsive.

Exceeds Expectations	Meets Expectations	Needs Improvement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please fill this part with feedback to the student:

List this Students' Strengths	List this Students' Areas of Improvement
1.	1.
2.	2.
3.	3.

Action Plan (If required):

 Student Signature

 Preceptor or clerkship director Signature