

Emergency Medicine 709A Rotation Dates XXXXXXX - XXXXXXX

Our Mission is to...

Serve as a nationally-recognized DEM, providing excellence and leadership in emergency medicine education, patient care, community service and research while supporting OHSU's mission of teaching, healing and discovery.

Website: http://www.ohsu.edu/emergency/medstudent/



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Clinical Student Schedule



Conference Schedule

Located in the Vey Auditorium unless noted otherwise

(DATE)	Presenter:	Theme: Core
8:00am		QI Talk - Cognitive Error and Medical Decision Making
8:30am		Resident M&M
9:00am		Senior Grand Rounds
10:00am		R2 Topic Talk: Ultrasound Guided Nerve Blocks
10:30am		Pulmonary Medications
11:00am		
(DATE)	Presenter:	Theme: Faculty M&M
8:00am		Resident M&M
9:00am		
11:00am		
(DATE)	Presenter:	Theme: Core
8:00am		
9:00am		Chairs Conference
10:00am		
11:00am		
(DATE)	Presenter:	Theme: Core
8:00am		Faculty M&M
9:00am		Senior Grand Rounds
10:00am		Toxicology
11:00am		R2 Topic Talk:



Lecture/Lab Schedule

(DATE)	<u>Presenter</u>	<u>Topic</u>
9:00 AM		Splint/Suture
11:00 AM		Ultrasound Lab
(DATE)	<u>Presenter</u>	<u>Topic</u>
8:00 AM	Conference	Vey
1:30 PM		Sim Lab
(DATE)	<u>Presenter</u>	<u>Topic</u>
8:00 AM	Conference	Vey
1:00 PM		Lectures
(DATE)	<u>Presenter</u>	<u>Topic</u>
8:00 AM		Sim Lab
11:00 AM		Presentations & Exams



Course Objectives

EMED 709: Clinical Experience in Emergency Medicine

Patient Care

- 1. Perform a problem-focused history and physical examination
- 2. Recognize the patient with serious life and limb threatening conditions
- 3. Learn to manage several patients simultaneously
- 4. Be able to initially approach any chief complaint presenting to the ED and formulate a plan to present to the resident and/or supervising physician
- 5. Begin to develop confidence with any procedure your patient may require

Medical Knowledge

- 1. Develop an appropriate differential diagnosis for the undifferentiated patient
- 2. Describe the etiology, key historical and physical exam features, pathophysiology, and treatment of problems encountered during the rotation
- 3. Interpret laboratory, imaging and other diagnostic data appropriately
- 4. Explain the risks, benefits, and alternatives to the treatment options being considered

Interpersonal and Communication Skills

- 1. Develop listening skills to address patient's concerns respectfully and effectively
- 2. Ensure that patients (and their families) understand their ED course, diagnosis, treatment and follow-up
- 3. Develop and learn effective methods for communicating with colleagues in the ED
- 4. Develop and learn effective methods for telephone communication with consultants

Professionalism

- 1. Provide compassionate care to patients and their families
- 2. Learn and understand the role of the emergency physician as a patient advocate
- 3. Interact professionally with referring, consulting and admitting physicians
- 4. Provide care that incorporates sensitivity for the patient's age, gender, sexual orientation, religious beliefs and socioeconomic background

Practice-Based Learning and Improvement

- 1. Appropriately use the educational resources available in the ED, including online texts and databases
- 2. Appropriately learn to use the computer-based patient tracking and electronic medical records
- 3. Demonstrate willingness to acquire new knowledge and skills specific to EM
- 4. Demonstrate a desire for self-improvement by accepting and integrating feedback given by other members of the healthcare team



Expectations for Successful Course Completion

Procedure and Patient Logs

OHSU students complete the procedure and patient log in MedHub. Visiting students complete on the green card in your packet. Students should log a minimum of 4 procedures and 4 cases, but can log more. MedHub entry should include the name of the procedure or case, date performed, and name/initials of the Attending or Resident it was completed with.

Patient Follow-Ups

Each student will complete 10 patient follow-ups using the template provided. You are expected to email the follow-ups to Lauren Kerr, kerrl@ohsu.edu, at the end of the rotation. Follow-ups can be done by phone (for discharged patients), EPIC, or patient visits. On the exam day you will present your most interesting follow-up to the group. This will be done in an informal discussion format, preparation is not necessary, but participation is required. This is a brief presentation lasting 1-2 minutes.

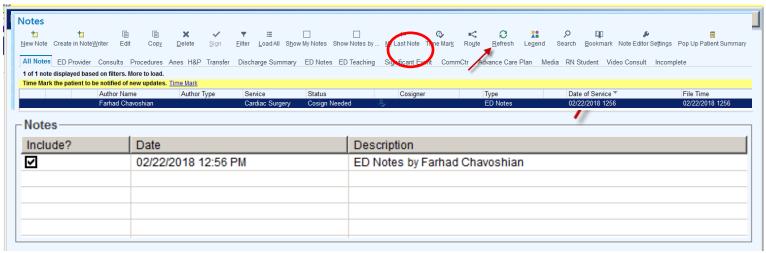
Clinical Shifts and Activities

Complete all Clinical, AMR, and Oregon Poison Center shifts.

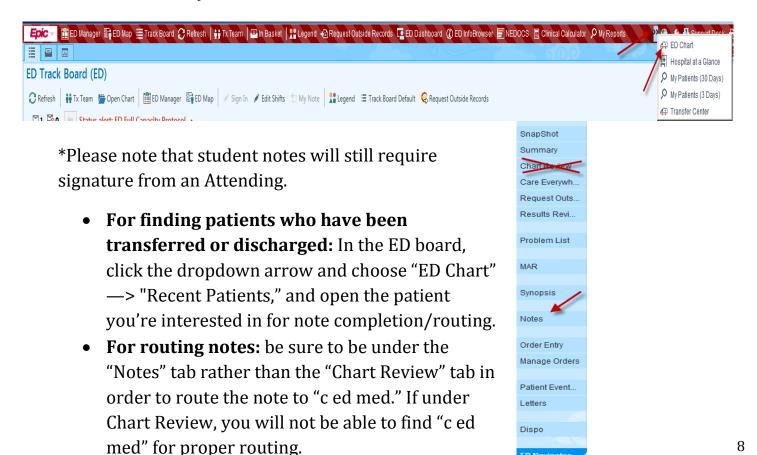
- Clinical Shifts
 - The clinical shifts are 7-9 hours in length and include a variety of shifts at OHSU and, occasionally, Doernbecher Children's Hospital ED.
 - For each shift at OHSU you are expected to:
 - Manage one patient with an attending alone.
 - Complete at least 3 H&Ps per shift; notes must be finished before leaving your shift and sent to the <u>attending</u> physician for cosignature. Route signed notes to Lauren Kerr in Epic. Here are the instructions:
 - 1) Medical Student writes a note.



Highlights the note and clicks on the Route button. 2)



- In the search all contacts box, type in "c ed med". 3)
- Click send 4)



ED Navigator



- Ambulance Ride-Along
 - Each student will complete a 12 hour shift to learn about pre-hospital care.
- Poison Center
 - Each student will spend time in the Oregon Poison Center to experience how a poisoned patient or toxic exposure is handled prior to hospital care and subsequently evaluated by the physician toxicologists.

Written and Oral Exam

The written exam consists of 60 multiple choice questions covering the assigned readings. For the oral exam, each student will have 15-20 minutes with one of the education faculty where they will manage a case presented to them in oral boards format. Oral exam topics are taken from the readings or lectures.

Evaluations

You are required to give an evaluation form to each attending and resident you work with each shift. It is recommended that you give out our evaluation form at the beginning of your shift (to remind the evaluator to pay attention to your performance that day) and remind them again at the end of your shift. This also provides a good opportunity to solicit oral feedback on your performance. If we do not receive a minimum of 10 returned evaluations for you, we will not be able to give you a passing grade for the course.

Didactics/Labs

Attend all Didactic Sessions and Labs

- Wednesday Resident Conference (8a-12p)
 - The Wednesday conference reviews the core content of the Emergency Medicine resident curriculum. Please write your name on the **yellow** attendance sheet for credit.
- Student Lectures and Labs as they appear on the schedule
 - Students are to attend the Wednesday lectures given by Emergency Medicine faculty and residents. Topics and content are directly geared toward the medical student and course objectives



- Labs which could include, but are not limited to: Simulation, Ultrasound, Suture/Splint, and Airway. Participation in these labs is a required component of the rotation.
- Most Interesting Follow-up
 - o Review most interesting follow-up case with the group prior to the exam.
 - o Objective is to reflect on the evolution of your patient's clinical course beyond the Emergency Department.

Honors Project (optional for 709A students)

• Students who want to be **considered** for honors are expected to complete a write-up and a 5 minute presentation on a clinical question of your choice. The format should be based on the Best Evidence Topic (BET) format, so a focused clinical question is recommended (examples available upon request - email Lauren). Use of PowerPoint is optional. Turn in a copy of your report at the end of your rotation. *Further information can be found at www.bestbets.org.* You are encouraged to submit these for publication on the BET website and may have the opportunity to have your presentation published on our website; Dr. Nelson can help you with this if you're interested. Additionally, there may be an opportunity for you to present your findings during the rotation to an EM faculty member.

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	Return Textbook
	Home School Evaluation Form (visiting students)
	Return plastic folder Orientation packet is in.

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Assessment of Final Grade

Your final grade will consist of four components:

Clinical Performance & Completion of Course Requirements

The shift evaluations from EM residents and faculty will be averaged, and completion of rotation requirements (notes routed, Patient follow-ups, and Procedure/Case log) will be factored in. This will account for 65% of your grade.

Written Exam

This will account for 15% of your grade.

Oral Exam

This will account for 15% of your grade.

Attendance

Conference Attendance will account for 5% of your grade.

Important Notes

- You must score greater than 80% on both the written and oral exams to be considered for Honors and you must score greater than 70% on both the written and oral exams to be considered for Near Honors.
- You must score greater than 60% on both the written and oral exams to pass the rotation.
- Unapproved absences will lower your final grade by one level.

Letter of Recommendations (LORs):

Please inform Lauren if you would like a departmental letter of recommendation for your ERAS application. This will be written on the standard letter of evaluation (SLOE) form by the clerkship director using feedback from the resident and attending feedback forms. You are welcome to ask other faculty to write a letter as well.

***Don't forget to turn in all required rotation paperwork!



Reading Assignments

Textbook-

Toy EC, Simon BC, KY Takenaka, TH Liu, AJ Rosh: *Case Files Emergency 4th edition*. New York: McGraw Hill Education; 2017.

PLEASE do not write in the book!!

This is a very user-friendly, case-based handbook with clinical vignettes and practice questions to learning about the clinical practice of emergency medicine.

Please start by reading Section I: How to approach clinical problems. Pages 1-15.

Please read the following Cases in Section II:

1-11, 14, 16-17, 19, 21, 26, 28-29, 31-32, 34, 36, 40, 43, 46, 49, 57

Feel free to use the other chapters when you encounter interesting patients or to answer you own clinical questions.

Other Readings:

Ultrasound Handout
BET Report Handout
Emergency Medicine Clerkship Primer (found below)
http://beta.saem.org/docs/students/emclership_primer_manual_1.pdf?sfvrsn=2



Ambulance Ride-Along Information

Requirements

- Dress in light blue or white button-up shirt, dark blue or black slacks and black shoes/boots (no tennis shoes). **No exceptions!**
- Facial hair must be very short and professional, moustache or goatee only. <u>If you have a full</u> <u>beard you WILL be asked to shave.</u>
- If riding at night, bring a flashlight
- Review, complete and bring the AMR Ride-Along Observer Policy
- Bring picture ID (OHSU Badge)
- All shifts are 12 hours and unpredictable Bring reading materials and snacks

Directions

American Medical Response One SE Second Portland, OR 97214

I-5 Northbound: Take the Central Eastside/OMSI exit off 1-5. The signal at the end of the exit ramp is for Water Ave. At the signal, turn LEFT onto Water Ave and follow the street around to 2nd Ave (1 block past the railroad tracks). Turn LEFT on 2nd Ave and continue down the street 4 blocks. AMR is located on the LEFT side.

I-5 Southbound: Take Rose Quarter exit. Go to the 2^{nd} stop light and turn LEFT onto Weidler. Stay in the right hand lane and travel to MLK Blvd (\sim 2nd light) and turn RIGHT. Travel south past the Burnside Bridge (\sim 6 lights). Go 1 more block and turn RIGHT onto Ankeny. Go 2 blocks and AMR is located directly in front of you.

I-84 Westbound: Take the Lloyd Center exit and continue to go straight to MLK Blvd ($\sim 5^{th}$ light). Turn left of MLK Blvd and travel 4 blocks to Ankeny, turn RIGHT. Go 2 blocks and the AMR building is directly in front of you.

1-205: Take I-205 to 1-84 Westbound, then see above.

Parking: Parking has been an issue recently. If you are scheduled for a ride-along during the workday, please arrive early to allow time to locate a parking spot.

Access: Access to AMR Operations is best gained by the glass doors at the sound end of the building (to the left as you face the facility). During normal business hours, enter the lobby and tell the receptionist why you are there. If the doors are locked, ring the doorbell next to the glass doors and request to see the EMS supervisor on duty.

***If you must cancel your ride-along (unexpectedly at the last minute) please notify AMR (503)736-3425 and email Lauren to reschedule. AMR Ride-Along must be completed in order to complete the course.



Oregon Poison Center

The Oregon Poison Center is a 24-hour health care information and treatment resource serving the states of Oregon, Alaska, and Guam.

The Poison center was established by an act of the Oregon State Legislature in 1978 to provide emergency treatment information for patients experiencing a poisoning or toxic



exposure. The Oregon Poison Center is also responsible for providing public outreach and education to health care professionals.

Mission

The Oregon Poison Center's mission is to provide care for people exposed to poison in their homes and to make prompt referrals to hospitals or clinics when necessary. We are committed to cost-saving management of poison-exposed people. Poison prevention education is another important component of our mission.

Shift Information

During your OHSU Emergency Medicine rotation, you will spend one day at the Oregon Poison Center working with the Toxicology team. The team consists of faculty and fellows, all of whom have completed a residency in EM, as well as rotating EM and Pediatric residents. This day is meant for you to get more exposure to the Toxicology subspecialty of Emergency Medicine, and is intended for your learning benefit. As such, there is no need to prepare anything in advance. The day is generally low-key (you will not be responsible for any patient care or documentation), although we do ask that you take it seriously and actively participate while you are here.

- Please arrive at the Oregon Poison Center (Campus Services Building, 5th floor, this is the building next to the School of Nursing) at 9:00am for Poison Center conference.
- Dress professionally; you may have the opportunity to round in the hospital. You
 may wear scrubs if you have a shift after your Poison Center shift. Wear your OHSU
 ID badge.
- Check in with Charisse Pizarro-Osilla in room 547



- o Take the elevator to the 5th floor, turn left as you leave the elevator, turn right down the hallway. Room 547 is down the hall to your left. (Phone# 4-2199)
- Program for the Day:
 - o 8:45 am: Arrive to review cases/charts for presentation at rounds. These are found in the conference room at the end of the hall. The Poison Center is staffed with highly trained nurses (called Certified Specialists in Poison Information, or CSPIs ["spies"]), who handle all of the incoming phone calls. The call center is located across the hall from the conference room. If there are no charts to review, please introduce yourself to the CSPIs and ask for printouts. Please pick at least one interesting case and use the reference materials in the conference room (primarily the Goldfrank and Lange textbooks) to research the topic(s).
 - o 9 am to 11 am: Please introduce yourself to the Fellows, they arrive at 9am, and their office is located down the hall. Rounds in the poison center conference room 544 to discuss new cases admitted overnight. If there are any patients to see in the hospital, you will round with the Fellows for these bedside patient consults.
 - o 11 am 2:30pm: In-patient consults in both emergency department and ICUs.
 - o If there are no patients, please use the time listening in on calls with the CSPI's.
 - Afternoon didactic sessions may include lectures, journal clubs, morbidity and mortality cases, chapter reviews, toxic history or disaster presentations.
 Students may leave to go to their shift in the emergency department at 2:30.
 You will have time to get lunch from 12:00pm 1:00pm.
- Goals of Poison Center Experience:
 - Describe how state or regional poison centers reduce emergency visits and 911 calls on non-critical exposures.
 - Describe how medical toxicologists proved telephone case management to critical poisonings and environmental exposures.
 - Describe how medical toxicologist in-patient consultation service to emergency departments and intensive care units can improve utilization and treatment of toxicology patients.



History & Physical Documentation Guidelines

OHSU Patient H&Ps

You are required to write 3 H&P's per shift when working in the OHSU ED or Peds ED. You will route these notes in EPIC to Lauren Kerr. Instructions are on pages 7 & 8 of this handbook.

OHSU is committed to protecting the confidentiality, privacy and security of health information. This commitment to confidentiality applies in all settings where OHSU creates, receives, uses, processes, maintains or furnishes health information, including but not limited to classroom, clinical, research, administrative, telemedicine and telehealth settings.

Documentation

There is a note template in EPIC for you to use to document: **.edstudentnote** Please make sure that you use this template note and that it contains the header, "Medical student note: For educational purposes only". This is so that the coders know to not use your note for billing purposes (which would be fraud).

If you have difficulty with routing your notes please call the Epic Help Desk at 4-2222.

Please keep in mind that calling report is a learning tool that should be conducted with your attending or resident. OHSU does not permit medical students to independently call report, or call the initial consult to consultants.

Note example:

MEDICAL STUDENT EMERGENCY DEPARTMENT NOTE -- FOR EDUCATIONAL PURPOSES ONLY

CC: Abdominal pain

HPI: Mr. XXX is a 67 yo M who has a h/o HTN, HLD, COPD, afib on Coumadin who presents to the ED with 3 days of worsening left sided abdominal pain. Pain is most notable in LUQ and LLQ, sharp, throbbing, not positional, radiates to his left groin, nothing makes it better or worse. Started gradual, now constant. Tried



ibuprofen without relief. No fevers, chills. Decreased PO intake, mild nausea, no vomiting. No dysuria or hematuria. NI BM two days ago (which isn't unusual for him). No changes to medications. Never had this pain before.

PMH: HTN, HLD, MI, GERD, COPD, DM

Meds: Lisinopril Statin ASA

Omeprazole Insulin Albuterol

Spiriva

All: Codeine penicillin

SH: smokes, 2-3 alcohol drinks daily, no drugs

PCP is Dr. ABC

FH: unknown, patient was adopted

ROS:

Eyes/vision: negative

ENT: negative

Neuro: occasional headache, not currently

CV: intermittent angina, unchanged from baseline Resp: chronic SOB and cough, no change in sputum

GI: see HPI GU: negative Psych: negative MSK: negative Heme: negative

Infectious/allergic: negative

Physical Exam:

Filed Vitals:

T 37.6, HR 106, BP 109/60, RR 20, O2Sa 96%

Gen: alert, oriented, resting in bed in no acute distress

Head: NCAT

EENT: PERRL, EOMI, OP moist and no lesion

Neck: trachea midline, supple

CV: irregularly irregular, no murmurs, no rubs

Lungs: no increased WOB, nl lungs sounds throughout without wheezes, crackles, rales, symmetric chest wall



movement

Abd: soft, nl BS, TTP LUQ and LLQ without guarding or rebound, no surgical scars, no hernias

Ext: MAEW, no e/o trauma, no peripheral edema

Skin: warm, well-perfused, no rash

Psych: mood appropriate

ED Course/Medical Decision-Making/Results:

Patient triaged to Rm *** and nurses notes reviewed. The patient was staffed with Dr. Nelson who was involved in all pertinent aspects of this case.

EKG: atrial fibrillation, rate 96, nl axis, nl intervals, no ST or TW abnormalities

Labs notable for WBC 18, no anemia, nl platelets.

CMP normal.

Troponin negative.

He had already taken a full strength ASA this morning. He was given 2 mg morphine and then 1 mg dilaudid for abdominal pain. He was given 4 mg zofran for nausea. He was given 1L NS.

Mr. X is a 67 yo M with multiple medical problems who presents to the ED with acute L sided abdominal pain. He is alert, oriented. VS notable for mild tachycardia and tachypnea without hypotension. He is not febrile. His examination was notable for L sided abdominal tenderness without peritoneal signs. I considered acute abdominal pathology including diverticulitis, abscess, appendicitis, gastritis, perforated ulcer, as well as an unusual presentation for ACS, PNA, appendicitis. Given the leukocytosis and left sided abdominal tenderness on examination I ordered a CT A/P with contrast (renal function normal).

CT A/P: Notable for diverticulitis with micro-perforation and small abscess in descending colon without free air

Consult EGS (emergency general surgery) for possible perforation and abscess complicating the patient diverticulitis

A:

Diverticulitis
Leukocytosis
Abdominal pain
Tachycardia
Intra-abdominal abscess

P:

Admit to EGS
Zosyn ordered
Sign out given
Patient admitted in stable condition
Patient expressed understanding



Patient Follow Up

Please use this template to construct your 10 patient follow ups. Compile the follow-ups in a Microsoft Word document and email it to Lauren at rotation end.



Follow-up example:

Student: Anna

Date: April 17, 2016

Resident/Attending: Dr. Nelson

Inpatient F/U	Interesting
	Case
Computer	Interesting X-
F/U	ray
Phone call	Referred for
F/U	M&M

DX: sepsis, unknown etiology

Dispo:	Home	ED	Ward	Unit
		Obs		

F/U: 9 yo F admitted to the PICU for sepsis of unknown etiology. The CXR was over-read by the attending the next day as concerning for pre-vertebral soft tissue infection. The CSF was negative. A neck CT with contrast was notable for retropharyngeal cellulitis and abscess. The patient was continued on broad spectrum antibiotics and ENT was consulted. Discharge still pending.



Milestones Passport/Objectives

	Milestone	X	Date	Comments
1.	Emergency Stabilization: Recognizes abnormal vital signs			
2.	Performance of Focused History and Physical Exam: Performs and communicates a reliable, comprehensive history and physical exam			
3.	Diagnostic Studies: Determines the necessity of diagnostic studies.			
4.	Diagnosis: Constructs a list of potential diagnoses based on chief complaint and initial assessment.			
5.	Pharmacotherapy: Knows the different classifications of pharmacologic agents and their mechanism of action. Consistently asks patient for drug allergies.			
6.	Observation and Reassessment: Recognizes the need for patient re-evaluation.			
7.	Disposition: Describes basic resources available for care of the ED patient.			
8.	Multi-tasking: Manages a single patient amidst distractions.			
9.	General approach to procedures: Identifies pertinent anatomy and physiology for a specific procedure. Uses appropriate Universal Precautions.			
10	Airway Management: Describes upper airway anatomy, performs basic airway maneuvers or adjuncts (jaw thrust/ chin lift/ oral airway/ nasopharyngeal airway) and ventilates/oxygenates patient using BVM.			



11. Anesthesia and Acute Pain Management:		
Discusses with the patient indications,		
contraindications and possible complications		
of local anesthesia. Performs local anesthesia		
using appropriate doses of local anesthetic and		
appropriate technique to provide skin to sub-		
dermal anesthesia for procedures.		
12. Goal-directed Focused Ultrasound:		
Describes the indications for emergency		
ultrasound.		
13. Wound Management: Prepares a simple		
wound for suturing (identifying appropriate		
suture material, anesthetize wound and		
irrigate). Demonstrates sterile technique.		
Places a simple interrupted suture.		
14. Vascular Access: Performs a venipuncture,		
places a peripheral intravenous line, and		
performs an arterial puncture.		
15. Medical Knowledge : Passes initial national		
licensing examinations, e.g. USMLE Step 1 and		
Step 2 or COMLEX Level 1 and Level 2.		
16. Professional values : Demonstrates behavior		
that conveys caring, honesty, genuine interest		
and tolerance when interacting with a diverse		
population of patients and families.		
17. Accountability: Demonstrates basic		
professional responsibilities such as timely		
reporting for duty, appropriate		
dress/grooming, rested and ready to work,		
delivery of patient care as a functional		
physician. Maintains patient confidentiality.		
Uses social media ethically and responsibly.		
Adheres to professional responsibilities, such		
as conference attendance, timely chart		
completion, duty hour reporting, procedure		
reporting.		
18. Patient Centered Communication:		
Establishes a rapport with and demonstrate		
empathy toward patients and their families.		
Listens effectively to patients and their		
families.		
19. Team Management: Participates as a member		
of a patient care team.		



20. Practice-based Performance Improvement: Describes basic principles of evidence-based medicine.	
21. Patient Safety : Adheres to standards for maintenance of a safe working environment. Describes medical errors and adverse events.	
22. Systems-based Management : Describes members of ED team (e.g. nurses, technicians, security).	
23. Technology : Uses the Electronic Health Record (EHR) to order tests, medications and document notes, and respond to alerts. Reviews medications for patients.	



End of Rotation Coursework Checklist

 Procedures/ Cases Logged in MedHub (OHSU Students) or on Green Card (Visiting Students)
 10 Completed Evaluation turned into box in ED
 3 University H&Ps per shift (routed in Epic)
 10 Patient Follow-Ups
 A copy of your Honors presentation (if applicable)
 Return Textbook
Return Plastic Folder