



**COLLEGE OF MEDICINE
AND LIFE SCIENCES**

THE UNIVERSITY OF TOLEDO

2024-
2025

Emergency Medicine Student Handbook

Table of Contents

| | |
|--|----|
| Emergency Medicine Clerkship Student Handbook- General Overview | 2 |
| Contact Information: | 2 |
| Introduction: | 2 |
| About the Emergency Department (ED) at The University of Toledo Medical Center: | 3 |
| About the Emergency Department (ED) at Promedica Toledo Hospital | 3 |
| About the Emergency Department (ED) at Promedica Flower Hospital | 5 |
| About the Emergency Department (ED) at Promedica Bay Park Hospital | 6 |
| The Emergency Center features: | 6 |
| About the Emergency Department (ED) at Promedica Monroe Regional Hospital | 7 |
| The Emergency Center features: | 7 |
| About The University of Toledo Emergency Medicine Residency: | 7 |
| Diagnoses we typically treat include: | 8 |
| Underlying conditions that contribute to non-healing wounds: | 8 |
| Our multidisciplinary care approach includes: | 8 |
| Medical Student Conduct | 9 |
| Students Requiring Special Accommodations | 9 |
| Rotation Requirements, Goals and Objectives | 9 |
| Attendance | 9 |
| Interview Season | 9 |
| Schedule | 9 |
| Didactics and EM Residency Conference | 10 |
| SPECIAL NOTES | 10 |
| FACE COVERINGS | 10 |
| VACCINATION | 10 |
| Dress Code | 10 |
| Equipment | 10 |
| Patient and Procedure Logs | 11 |
| Required Procedures: | 11 |
| Feedback and Evaluations: | 11 |
| Patient Flow in the ED | 12 |
| Grade scale: | 14 |
| Supplemental Information | 14 |
| Timed Mock Code Exam: | 15 |
| CASE PRESENTATION EXAMPLE: | 16 |
| AI SIM EXAM: | 18 |
| 4 Week Core Elective UTMC/TTH survival quick guide Refer to Handbook for full details | 21 |
| PA UTMC ED survival quick guide Refer to Handbook for full details | 22 |
| 4 Week AI Elective UTMC/TTH- Monroe- survival quick guide Refer to Handbook for full details | 23 |
| Two Week Elective survival quick guide | 24 |



COLLEGE OF MEDICINE AND LIFE SCIENCES

THE UNIVERSITY OF TOLEDO

Emergency Medicine Clerkship Student Handbook- General Overview

Contact Information:

Allen Williams MD
Clerkship Director, Emergency Medicine
419.383.6523 (office)
419.383.2044
Allen.Williams3@utoledo.edu

Amy Blevins
Clerkship Coordinator, Emergency Medicine
419.383.6318 (office)
419.383.2044 (fax)
Amy.Blevins@utoledo.edu

Mohamad Moussa, MD, RDMS
Program Director, Emergency Medicine Residency
419.291.8140 (TTH Office)
419.383.6369 (UTMC Office)
Mohamad.Moussa@utoledo.edu

Program Coordinator, Emergency Medicine Residency
419.291.8154 (TTH Office)
419.383.6369 (UTMC Office)

Introduction:

We would like to welcome you to your EM rotation! You will find your rotation with us beneficial to your educational expectations regardless of what specialty you are considering. The ED at UTMC sees a wide variety of complaints and we have an extremely diverse patient population. The ED serves many different roles throughout our community. It is our hope that the information included in the Student Handbook will help provide you with all the information that you need to complete a successful rotation. If at any time you have any questions or concerns, do not hesitate to contact any member of our staff.

About the Emergency Department (ED) at The University of Toledo Medical Center:

3065 Arlington Ave.

Toledo, Ohio 43614

UTMC offers emergency care and more 24 hours a day, seven days a week in the Toledo area. Our team of board-certified emergency physicians, trauma surgeons, advanced practice providers, registered nurses and other specially trained staff will provide the immediate care you need for any medical or surgical emergency.

Designated a Level II Trauma Center Our trauma program meets the American College of Surgeons national standards for the ability to provide prompt assessment, resuscitation, emergency care, surgery, intensive care, and stabilization of injured patients. Our emergency medicine and trauma teams are certified in Advanced Trauma Life Support.

About the Emergency Department (ED) at Promedica Toledo Hospital

2142 N. Cove Blvd.

Toledo, Ohio 43606

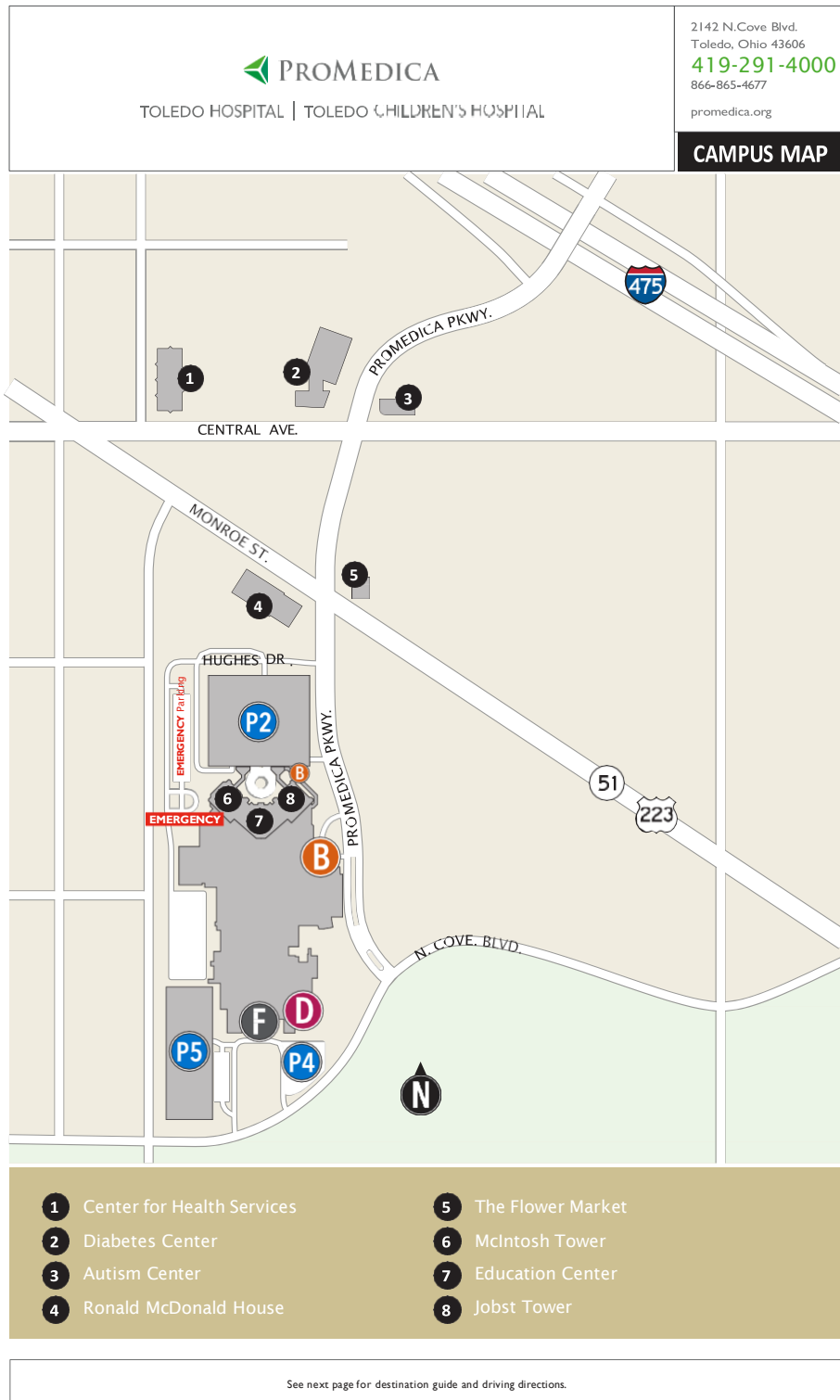
We're your Level I Trauma Center. Severe injuries, the kind that threaten life or limb, require swift and specialized treatment. We're one of only 11 Level I Trauma Centers in all of Ohio. Being awarded the highest national recognition that a trauma center can obtain confirms that you're in a place equipped to handle the most critical injuries. Among other requirements for a Level, I Trauma Center, we offer 24/7 access to medical staff and surgeons who are specially trained in trauma care.

We are a pediatric Level II Trauma. The Region's Only Dedicated Children's Emergency Center. After all, kids are special. And that's just the way we treat them. At ProMedica Ebeid's Children's Hospital, *formerly ProMedica Toledo Children's Hospital*, Emergency Center:

- Features nine child-friendly pediatric care rooms.
- Is served by pediatric and emergency physicians 24 hours a day, seven days a week.
- Is staffed by professionals who are specially trained to treat children's medical needs and have pediatric advanced life support (PALS) certification.
- Is furnished with kid-sized treatment and diagnostic equipment.

We have a dedicated area for victims of assault, domestic violence, child and elder abuse, and sexual assault. You can be sure that compassionate medical attention and your privacy are our top priorities.

Parking at TTH: Use P2 Garage



© 2016 ProMedica 1.0106-A.R033116.DS

About the Emergency Department (ED) at Promedica Flower Hospital

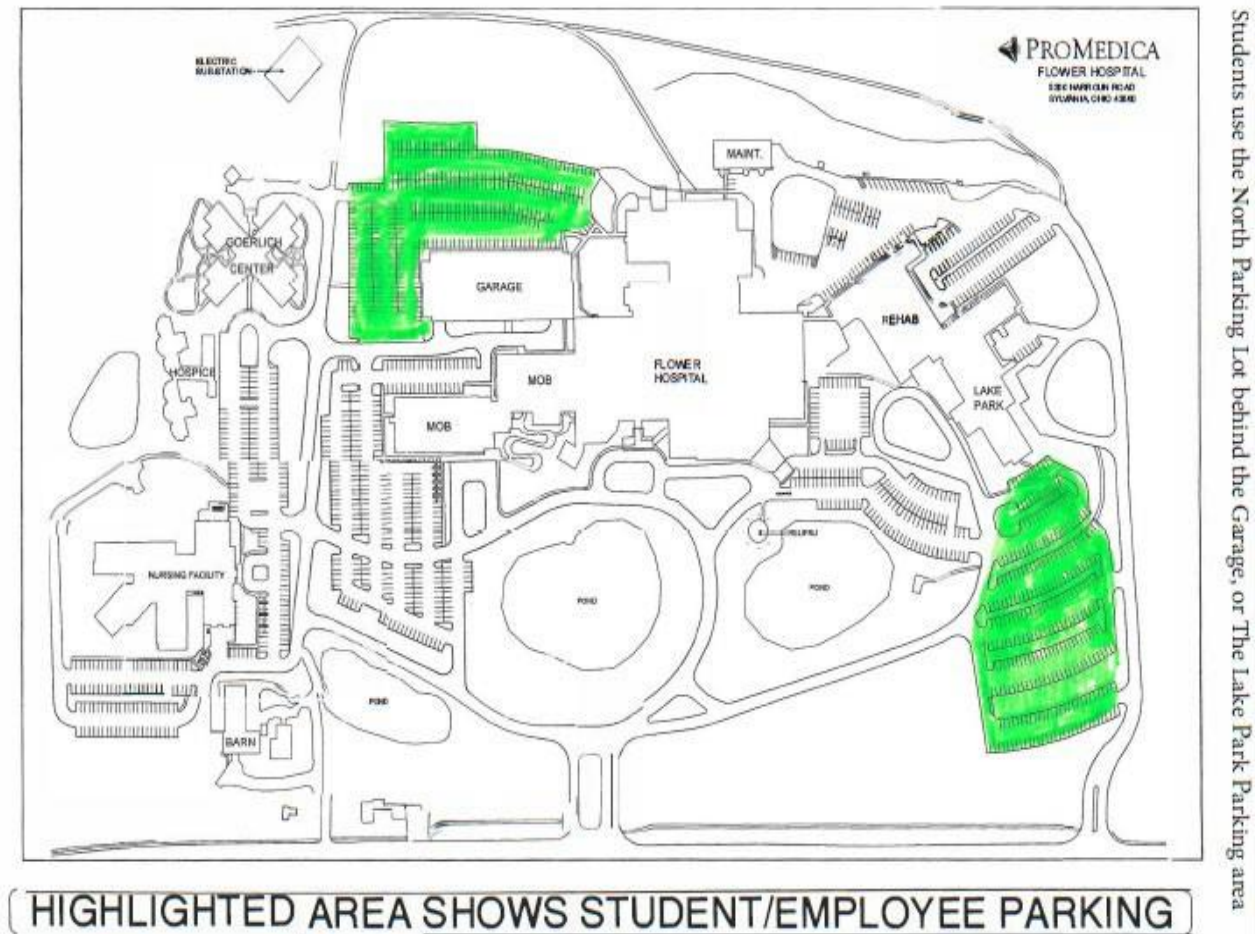
5200 Harroun Rd

Sylvania, Ohio 43560

The Emergency Center features:

- 25 private beds.
- Two radiology suites that provide convenient diagnostic imaging services for fast responses.
- Immediate access to a dedicated 64-slice CT scan.
- Primary Stroke Center.

For our most urgent cases, ProMedica Air and Mobile Transportation Network is available to transport patients who require the specialized treatment available at ProMedica Toledo Hospital.



About the Emergency Department (ED) at Promedica Bay Park Hospital

2801 Bay Park Drive
Oregon, Ohio 43616

The Emergency Center features:

- 13 private beds
- Three triage bays

Along with typical emergencies, we are equipped to treat more critical patients by:

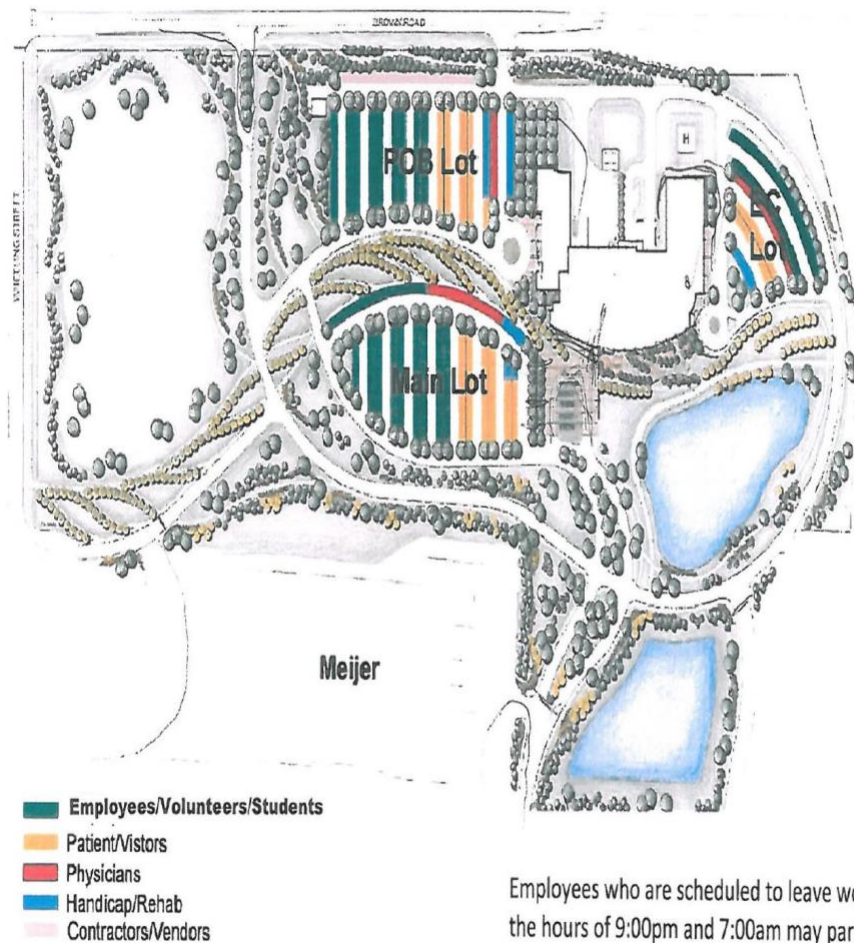
Offering PCI for interventional cardiology

Providing immediate diagnosis and treatment for stroke patients (Certified Primary Stroke Center)

Employing ICU physicians who are trained in critical care

For our most urgent cases, [ProMedica Transportation Network](#) (Air and Mobile) is available to transport patients who require the specialized treatment available at ProMedica Toledo Hospital.

Bay Park Community Hospital Parking Plan



Employees who are scheduled to leave work between the hours of 9:00pm and 7:00am may park in the designated employee section of the EC parking lot.

Parking in the EC lot is prohibited at all other times.

About the Emergency Department (ED) at ProMedica Monroe Regional Hospital

718 N. Macomb St.

Monroe, Michigan 48162

The Emergency Center features:

- 30 private beds
- Three radiology suites that provide convenient diagnostic imaging services for quick responses including x-ray, CT, and MRI
- [Offering PCI for interventional cardiology](#)
- Providing immediate diagnosis and treatment for stroke patients (Certified Primary Stroke Center)
- Employing ICU physicians who are trained in critical care

For our most urgent cases, [ProMedica Transportation Network](#) (Air and Mobile) is available to transport patients who require the specialized treatment available at ProMedica Toledo Hospital.

All shifts you can park anywhere there are yellow lines with NO numbers whether it's in the ER parking lot, the main parking lot, or north of the hospital there are offices that look like apartments with a big parking lot.

When you arrive for your first shift enter through the ER entrance, stop at the ER check in desk and let the nurse know you are a UTCOM medical student working with the senior resident listed on your schedule. You may wear your own scrubs or when you arrive the resident will provide you access to the ED doctor's lounge to change into ProMedica scrubs. The resident will show you where the resident lounge is located and provide you the entrance code. Here is where you'll keep your any belongings and food you brought. Please wear your lab coat, badge, and bring stethoscope, bring your personal N-95 mask, as well as other items you might need when on service.

In addition to your attached schedule there is a procedure log you'll maintain while on the service, a brief power point to review prior to the rotation, the Student Evaluation of the Rotation, and a copy of the shift evaluation sheet to be completed at the end of every shift by the senior resident you work with. Blank shift evaluation forms are kept in a folder in the ER doc box. The resident completing your shift evaluation will submit to me and I will email all of them to Amy at the end of your rotation. You must not take the completed evaluations with you.

The cafeteria has limited hours therefore I encourage you to bring food/snacks with you. We do have a 24 Market Fresh available offering coffee, other drinks, sandwiches, and snacks. Debit card only. A resident will have to get you in.

About The University of Toledo Emergency Medicine Residency:

Our goal is to train and develop the best emergency medicine physicians by effectively and efficiently addressing the needs of our patients. This training is supported by a robust and diverse faculty each of whom offer a necessary component of this training. This program employs the most modern and advanced technological tools to teach our residents emergency patient care including a state-of-the art simulation center, point-of-care ultrasound, and patient safety mechanisms. The combination of The University of Toledo and ProMedica health system creates opportunities for our emergency medicine residents to take care of many patients with critical medical conditions such as sepsis, trauma, and cardiovascular conditions.

The UT emergency medicine residents develop an immediate sense of ownership of their residency and strengthen their academic experience through friendship and comradery. We ensure they have opportunities to travel to Emergency Medicine academic conferences together and participate in local activities to support their well-being. Importantly, we believe it is valuable to focus on their clinical and academic education from day one to ensure their success as future Board-Certified Emergency Medicine Physicians. Students interested in pursuing residency in Emergency Medicine are encouraged to meet with the Residency Director.

The Emergency Medicine residency program at ProMedica Monroe Regional Hospital (PMRH) launched in 2014. Our program now offers the best of community and large urban medical centers. In addition to the onsite didactic experiences, the Emergency Medicine residents participate in various simulation labs. PMRH also has a Family

Practice Residency with 18 residents and transitional year program with 6 residents. This leaves the PMRH emergency medicine residents virtually unopposed to learn procedural skills. Please visit the link below for more information. [Emergency Medicine Residency \(promedica.org\)](http://promedica.org)

WOUND CARE & HYPERBARIC CENTER- Located in the Main hospital.

Main hospital registration desk → past Main Lab → through 2 doors→ continue straight through a set of double doors→ @ next main hallway the Nurse/MA office is on the left (corner office) →the wound care chamber is on the right. Check in at the Nurse/MA office- introduce yourself.

The University of Toledo Wound and Hyperbaric Center includes board-certified physicians, nurses, and other health-care professionals, all specially certified in the management of wound care and hyperbaric oxygen therapy. Our multidisciplinary team of medical experts includes vascular and plastic surgeons, infectious disease specialists and podiatrists with access to additional specialists including general and orthopaedic surgeons, endocrinologists, and physical rehabilitation specialists. Here at UTMC, we specialize in the care of a wide range of wound problems. Our team provides services in many settings including inpatient, outpatient, emergent care, and nursing homes. We treat chronic or non-healing wounds, which are defined as ulcers or wounds that have not improved with conventional care. Non-healing wounds have underlying diseases related to inadequate circulation, poorly functioning veins, and immobility, and they lead to a decrease in quality of life and may lead to amputations. Typically, a wound that does not respond to normal medical care within 30 days is considered a problem or chronic wound.

Diagnoses we typically treat include:

- Diabetic foot ulcers
- Arterial ulcers
- Non-healing surgical wounds
- Venous stasis ulcers
- Pressure ulcers
- Chronic osteomyelitis
- Radiation-related tissue damage
- Any ulcer/wound that persists for more than 4-weeks despite medical care

Underlying conditions that contribute to non-healing wounds:

- Diabetes
- Arterial Disease
- Cancer
- Venous insufficiency
- Obesity
- Immobility
- Poor nutrition
- History of cancer and radiation treatments
- Autoimmune diseases

Our multidisciplinary care approach includes:

- Vascular assessment and testing if indicated
- Transcutaneous oxygen measurements
- Nutritional assessment and intervention
- Infection assessment and intervention
- Pain assessment, intervention, or referral
- Advanced wound care including, hyperbaric oxygen therapy, negative pressure wound therapy, bioengineered skin substitutes, compression therapy and other advanced modalities

Medical Student Conduct

In accordance with The [Student Code of Conduct Policy, Policy Number 3364-30-04](#), students of The University of Toledo and its affiliates are to conduct themselves in the utmost professional manner. This includes conduct between students, interactions with faculty, staff, patients, visitors, and the public. Students are expected to review the policy prior to starting their Emergency Medicine rotation.

Students Requiring Special Accommodations

<https://www.utoledo.edu/offices/student-disability-services/>

The University of Toledo embraces the inclusion of students with disabilities. We are committed to ensuring equal opportunity and seamless access for full participation in all courses. For students who have an Accommodations Memo from the Office of Accessibility and Disability Resources, I invite you to correspond with me as soon as possible so that we can communicate confidentially about implementing accommodations in this course.

For students who have not established accommodations with the Office of Accessibility and Disability Resources and are experiencing disability access barriers or are interested in a referral to health care resources for a potential disability, please connect with the office by calling 419.530.4981 or sending an email to

StudentDisability@utoledo.edu.

Rotation Requirements, Goals and Objectives

The Emergency Medicine Curriculum can be located at: <http://www.utoledo.edu/med/md/curriculum/> Students rotating in Emergency Medicine are required to read the curriculum prior to the start of the rotation. The curriculum sites list all pre-requisites, recommendations, and requirements during your rotation. Grading guidelines are also indicated. Detailed grading rubrics are included in the handbook. Students with any questions on the grading scale should contact either the Program Director or Clerkship Coordinator.

Attendance

Students are required to report directly to the ED on the days they are scheduled. Students will work directly with the attending physicians and residents (consisting of EM and off service residents). You are expected to arrive 5-10 minutes prior to the start of your shift to get settled in and promptly start at your scheduled time. Because we work in shifts versus doing rounds you are not required to log your hours in Rocket Med. Students should stop seeing patients 15 minutes prior to the end of their shift allowing them time to complete charting, orders, selecting co-signing physicians and report off. [ELECTRONIC. Absence Request Form.062117](#)

Interview Season

During interview season it may be necessary for MS4's to schedule interviews during your rotation with us. Please provide us with as much notice as possible regarding your interviews. We will need the date(s) that you will be gone and the location. We will make every effort to accommodate your interview schedule without you forfeiting your spot in the rotation. If you have questions or concerns, please contact the Program Director or Program Coordinator.

Schedule

During your Emergency Medicine rotation, we will utilize a third-party scheduling software for scheduling and time off tracking. Students should monitor their Rockets email daily for emails from the coordinator and the software for login instructions. Schedules are in place months to weeks in advance.

<https://whentowork.com/logins.htm>

Students who need additional days off will need to do this through a request with final approval needed from either the Clerkship Director or the Clerkship Coordinator. Schedule requests must be turned in at least **30 days**

prior to the start of the rotation. Students may trade days with approval of the coordinator. Requested dates are not a guarantee.

Tardiness: Students who are going to be late for their shift are expected to contact the ED and Clerkship Coordinator. Also, students who are tardy will be expected to stay over to make up the amount of time they were late. **Absences:** Students who will miss an assigned shift or any mandatory educational sessions are expected to email Clerkship Coordinator prior to the absence. Students are required to complete an excused absence form and submit it to Clerkship Coordinator prior to the absence (if applicable). **All missed clinical shifts or education sessions must be made up before the end date of the students' registration. There will be no exceptions to this rule. (Attendance Policy)-** [pdf version](#)

If a student fails or refuses to make up missed shifts, the students' final grade will be adjusted, and a professionalism report filed with the Dean.

Didactics and EM Residency Conference

Throughout the Emergency Medicine Rotation Students are required to attend didactic sessions as scheduled. If EM Residency Conference is on your schedule, you are expected to attend. Conference will be held on Wednesdays This will be on your calendar, or an email with the location and agenda will be sent at least 1 day prior to the event.

Please note that if you are on the Monroe rotation, you will attend didactics with Monroe.

SPECIAL NOTES

It is important to note, that based on the unpredictability of the COVID-19 virus, things can change at any time. So please be patient and understanding as we move through the semester. Please refer to <https://www.utoledo.edu/coronavirus/> on a regular basis for updates to current requirements or mandates. I also ask that you keep me informed of concerns you may have about class, completing course work/assignments timely and/or health concerns related to COVID.

FACE COVERINGS

Face coverings are currently not required while on campus, but students should feel free to wear them. The health experts on campus will continue to monitor the situation and may amend this policy as determined by CDC and County Health Department guidelines as infection rates fluctuate if necessary to maintain campus safety.

VACCINATION

Doctors and other health care professionals agree that the best way to protect each other and ourselves is to get vaccinated. Case data clearly show that vaccines remain highly effective at preventing serious illness from COVID, including the highly contagious delta variant. If you have not yet received your COVID vaccine, the University encourages you do so as soon as possible. No appointment is needed to get the shot at the UTMC Outpatient Pharmacy, University Health Clinic or Main Campus Pharmacy. Once you receive the COVID vaccination, please register on the COVID Vaccine Registry site at: <https://utvaccinereg.utoledo.edu/>.

Dress Code

The dress code for your EM rotation is University of Toledo provided scrubs. All students will wear their lab coats and have their name badge displayed above the waist with their picture and name showing. Visiting students will be provided with access to UT scrub machines and provided with a UT picture ID. Visiting student will wear their home institutions lab coat. Students may also wear professional attire including their lab coat. Boots or sturdy shoes must be worn (no flip flops, Crocs, Birkenstocks, or sandals).

https://www.utoledo.edu/depts/supplychain/webforms/scrub_request_form.html

Equipment

Students are required to provide their own stethoscope, pen light, paper, and pen. We do not stock any extra supplies. Students reporting for a shift without any of the above listed supplies will be sent home to obtain these

and are expected and required to return.

We do not have enough lockers to assign each student a locker. Therefore, students choosing to bring and leave personal items in a classroom, call room, lounge or other area of the facility that is unsecured will accept full responsibility for the loss of any of those items as well. Please only take what is necessary for your shift. Leave valuable items at home.

Patient and Procedure Logs

We require that patients (.75 patient per hour, or equivalent of 6 patients per 8-hour shift. MINIMUM) and procedures be logged using Rocket Med. Must have a minimum of 10 completed for the 2-week rotation. All must be completed if on a 4-week rotation. PA students will be provided with a copy of the log as well as document procedures and cases in system as required. Visiting students will be provided a copy of the procedure logs as well as use their home institutions documentation process. These should be completed and signed off throughout the rotation and returned to the coordinator at the end of the rotation.

Verification of completed procedures will be run via report before grades are calculated. Failure to log cases and procedures will result in loss of evaluation points or an incomplete. <https://rocketmed.utoledo.edu/>

Diagnostic Categories:

| | | |
|-----------------------------|--------------------------------|-------|
| Abdominal Pain, Chest Pain, | Neurology, Pediatrics, Trauma, | (ENT) |
| Pulmonary, Orthopedics, | General Medicine, | |
| OB/Gyn, Psychiatric, | Ophthalmology, Otolaryngology | |

Required Procedures:

| | | |
|------------------------------|----------------------------------|---------------------------|
| Airway with Assist= 1 | Foley Catheter Insertion=1 male, | Slit Lamp= 1 |
| Blood Specimen Collection= 2 | 1 female | Splinting= 2 |
| EKG Interpretation= 2 | IV-line placement= 1 | Sutures= 4 |
| FAST Exam= 2 | L1 Trauma assist/witness =2 | Triage witness= 2 |
| CPR- Assist= 1 | NG Tube Insertion= 1 | Wound Dressing (burn, s/p |
| | Pelvic exam = 1 male, 1 female | suture, etc.) = 1 |

Feedback and Evaluations:

Students will have daily feedback forms to be completed by any preceptors (residents, off service residents, NP's, PA's and attending physicians) after each shift. Daily feedback forms are to be placed in the Academic box located in the ED @ UTM & TTH, Flower. At Bay Park evaluations are returned to the medical directors' office in the folder above the light switch. Monroe- the residents will take the forms and put them where they need to go. Student should complete end of rotation evaluations on the faculty and residents you worked with in Rocket Med. All evaluations must be completed before a final grade and evaluation can be submitted. Students will be provided with the appropriate number of feedback forms at orientation. Copies may also be in the ED's and folder on the coordinators office door. (DOW 2457).

It is your responsibility to ASK for this!

Patient Flow in the ED

Patients arrive one of three ways to our ED; by private transportation (drove themselves, brought by family or friends, or public transportation), by squad, or by Life Flight. Patients arriving by squad are either taken to triage or directly to a room dependent on their chief complaint, with higher acuity going directly to a room and lower acuity being directed to triage. Flight patients will always go directly to a room, Cath Lab, Intensive Care Unit, or the OR.

Patient triage is a vital step in the flow of patients in the Emergency Department. When a patient arrives, they are registered then sent to triage for a skilled and detailed nursing assessment.

Patients complaining of SOB and chest pain bypass this step and are routed directly to a room and the attending physician will complete the initial assessment. All other patients are asked detailed questions pertaining to their complaints. From here the nurse will assign a triage level to the patient. Our triage level is based on a number based and color-coded system, outlined below:

| Patient Acuity | Primary Assignment | Secondary Assignment's (Students) | Supervising Physician |
|------------------------------------|---|--|------------------------------|
| Level 1-Critical-Blue BL | EM resident | MS3, MS4 or PA | Attending physician |
| Level 2- Emergent-Red RD | EM resident | MS3, MS4 or PA | Attending physician |
| Level 3-Urgent-Yellow YW | Any resident, MS 3 or MS 4, PA student, or mid-level provider | MS3, MS4 or PA | Attending physician |
| Level 4-Non-Urgent-Green GN | Any resident, MS 3 or MS 4, PA student, or mid-level provider | MS3, MS4 or PA | Attending physician |
| Level 5-Minor-No color | Any resident, MS 3 or MS 4, PA student, or mid-level provider | MS3, MS4 or PA | Attending physician |

Patients with triage levels of 1 (blue), 2 (red), and 3 (yellow) are placed in rooms 1-13, with those having the potential of being an ICU patient and trauma patients being placed in rooms 10, 11A, 11B or 12. Patients with a triage level of 4 (green) and 5 (no color) will be placed in rooms 13-25. During certain times throughout the day patients of any triage level will be placed in rooms 1-16, with rooms 10-12 being held for high acuity patients, ICU, and trauma patients. Please note that room assignments are flexible and do not always follow the above criteria.

Patients with a triage level of 1-3 are managed directly by the attending physician. And those with a triage level of 4-5 are managed directly by the Physician Assistant or Nurse Practitioner on shift. Occasionally depending on coverage in the department Physician Assistants and Nurse Practitioners will assist the attending on duty with all triage levels, apart from triage Level 1 (critical, light blue).

In the event of an incoming trauma, only two (2) students are allowed in at a time. Trauma cases are extremely fast paced, and the room gets packed and busy so limiting the number of students per case is necessary. Students are encouraged to get as much exposure as they would like, depending on the approval from the attending physician or senior resident.

Charting

ALL students are required to chart all patient encounters in the EMR regardless of level of training.

You must present your patients to the attending and/or resident that you are covering the patient with PRIOR to charting. All student charting is to be done as a free text note. It is good practice to carry a small notebook for H&P notes. Students will enter the information they receive from the patient on the notebook and then also as a free text note. You are required to sign out on your patients in the EMR. To do this, go to Review in the EMR and select the appropriate co-signing physician. Residents are not to be selected in this step, only the attending physician. Students are expected to enter patient orders. This includes laboratory studies, imaging studies, medications, and diagnostic testing. Once orders are entered students should notify the attending/resident for review. Once reviewed the practitioner will co-sign the orders entered. At the end of each shift students are required to report off to the attending(s) and resident(s) on duty.

Learning Environment, Student Mistreatment and Professionalism

Professionalism or mistreatment issues can also be reported to any Block or Clerkship Director/Coordinator as well as the Dean's Office. Cards with contact information are available from Clerkship Coordinators.

[Website available for anonymous reporting of professionalism issues](#)

Professionalism: Core attributes of Professionalism:

| | |
|----------------|---------------------|
| Altruism | Duty |
| Accountability | Honor and integrity |
| Excellence | Respect |

Selected Institutional Policies Related to the Learning Environment Applicable to the College of Medicine and Life Sciences:

[Learning Environment and Faculty Professionalism Policy](#) (Policy # 364-81-04-018-00)

[Professionalism and Standards of Conduct/Disciplinary Actions and Due Process/Appeals](#) (Policy # 3364-81-04-017-02)

[Sexual Harassment and other forms of Harassment](#) (Policy 3364-50-01)

Clerkship Website – Curriculum

<https://www.utoledo.edu/med/md/curriculum/curriculum4/electives/>

How Grades are determined

Daily Feedback- Clinical Evaluation consists of clinical skills and class participation, professionalism (behavior, daily preparation, attendance, and interdisciplinary communication)

| MS4 710/ Global Health | |
|---------------------------------------|-----|
| Clinical Evaluations (Daily Feedback) | 40% |
| NBME or written Exam | 30% |
| SIM Exam | 20% |
| | |
| Case and Procedure log | 10% |

| MS4, AI-715 | |
|---------------------------------------|-----|
| Clinical Evaluations (Daily Feedback) | 40% |
| NBME or written Exam | 20% |
| SIM Exam | 20% |
| Case Presentation | 10% |
| Case and Procedure Logs | 10% |

| MS4, 709 2-week elective | |
|---------------------------------------|-----|
| Clinical Evaluations (Daily Feedback) | 40% |
| Written Exam | 30% |
| SIM Exam | 20% |
| Case and Procedure Logs | 10% |

| PA | |
|---------------------------------------|-----|
| Clinical Evaluations (Daily Feedback) | 50% |
| Procedure Log | 20% |
| SIM Exam | 30% |

Grade scale:

| | |
|------------------|---------------|
| PASS | 70-79 |
| HIGH PASS | 80-89 |
| HONORS | 90-100 |

NBME Cut-off= 65- MUST Pass NBME with a score of 79 to achieve an Honors grade. A score less than 65 will result in a defer for the course until a passing score achieved. Highest possible score for the rotation will be a Pass.

Supplemental Information

<https://www.emclerkship.com/>

<https://libguides.utoledo.edu/md/em>

www.AMBOSS.com

<https://quizlet.com/189236169/emergency-medicine-pretest-flash-cards/>

Emergency Medicine Pre-Test Self-Assessment

https://www.saem.org/docs/default-source/cdem/emergency-medicine-clerkship-primer.pdf?sfvrsn=2f56e821_0

<https://www.saem.org/about-saem/academies-interest-groups-affiliates2/cdem/for-students/online-education/m3-curriculum/motivation/how-to-get-the-most-out-of-your-emergency-medicine-clerkship>

ROSH Review is being provided for those who will be taking the NBME by the EM department and Faculty! *You are EXPECTED to utilize this resource.* <https://app.roshreview.com/>

Timed Mock Code Exam:

Know the major ACLS algorithms. V-tach, SVT, V-fib, PEA, and Asystole. For this Exam you should be able to:

Identify rhythms,

Verbalize the name of the rhythm,

Know stable vs. unstable and identify appropriate interventions,

Know medications including name, dose, route, and timing as well as any important information regarding any medication.

Identify H's and T's:

| Cause | Assessment | Treatment |
|-------------------------|---|--|
| 7 H's | | |
| Hypovolemia | Pt history, dry mucosa, poor urine output, sunken eyes | IV/IO fluid therapy |
| Hypoxia | Pt history, obtunded, cyanosis, ABG, obstruction | Ventilation, Oxygen |
| Hypoglycemia | Pt history, seizure, anxiety, <u>palor</u> , palpitations, sweating, mydriasis, <u>parasthesia</u> | 2ml/kg D50 IV Push |
| <u>Hyperkalemia</u> | Pt history, EKG, peaked T waves, serum K level, Renal patient, medication use | Glucose/Insulin, Bicarb, IV Calcium, Beta agonists |
| Hypokalemia | Pt history, muscle cramps, Serum K level, EKG, flattened or inverted T waves, QT prolongation | IV KCL with caution after finding cause |
| Hypothermia | Pt history, core temperature | Hypothermia algorithm Non-cardiac arrest: External rewarming, warm IV fluids Cardiac arrest: Glucose, thiamine, steroids, <u>Abx</u> , warm IV fluids, external rewarming, warm O2 |
| Hydrogen ion (Acidosis) | Pt history, diarrhea, renal patient, diabetic, ABG | Hyperventilation, bicarb, correction of cause |
| <u>Toxicosis</u> | Pt history, drug screen | Correction of cause depends on substance |
| Coronary Thrombosis | Pt history, 12 Lead EKG Lateral AMI: V5&V6, <u>avL</u> Anterior AMI: V1,V2,V3,V4 Inferior/Right AMI: II, III, <u>avF</u> , V4R Laboratory Tests | Acute Coronary Syndrome Algorithm O2, ASA, Nitroglycerin, Morphine, <u>thrombolytics</u> |
| Pulmonary Thrombosis | Pt history, anxious, SOB, often sudden onset, JVD | <u>Thrombolytics</u> , surgery |
| Cardiac Tamponade | Pt history, narrowing pulse pressure, increased HR, JVD, distant heart sounds to PEA | <u>Pericardiocentesis</u> |
| Trauma | Pt history, bruising, open wounds | IV Fluids, Transfusion, Surgery |

CASE PRESENTATION EXAMPLE:

MH, 19 years old

CC: Sore throat

Onset and Course: MH is a 19-year-old male complaining of sore throat and neck swelling for 3 days. He also complains of 3-5 episodes of emesis each day for 2 days. He affirms a subjective fever and chills. He complains of a bilateral parietal migraine HA with photophobia which is similar to past migraine HAs. He denies any trouble breathing or swallowing food but does have pain with swallowing secretions. He is a college student and denies any sick contacts. He also has had sinus congestion for the past 3 days. He has taken Ibuprofen, acetaminophen, and equest with no relief.

Vital Signs: BP -120/70, HR- 88bpm, RR- 20rpm, Temp - 97.3F Patient Is not on any regular medications.

Patient has a personal history and family history of migraines Physical Exam:

General-Presentation Vital signs reviewed. Alert. Appears to be in mild distress.

ENT- Erythema Is noted in the oropharynx. Pharyngeal exudate is present. No evidence of venous jugular distension. The neck is supple, with no evidence of meningismus. dry mucous membranes, no stridor or drooling tonsillar erythema and exudates 2+ tonsils swallowing secretions well. Cervical adenopathy is present. Patient has large anterior cervical lymphadenopathy approximately 2-3 cm on the left anterior cervical chain proximally. There Is visible soft tissue swelling of the neck on the left anterior cervical lymph node area there is no cellulitis or erythema. Trachea is midline. Cervical lymphadenopathy Is freely movable.

Eve-Pupils are reactive to light. Normal firm globe without tenderness or exophthalmos. Normal eyelids without swelling or inflammation. Normal conjunctivae without erythema or edema. Normal clear cornea. Normal equal and reactive pupils. Normal extraocular movements without diplopia or entrapment. Grossly normal peripheral vision to confrontation.

Pulmonary-Currently In no acute respiratory distress. Normal, non-labored respirations. The breath sounds are normal, with good equal air movement. The chest wall is not tender to palpation.

Circulatory-Regular rate and rhythm. No murmur. Peripheral pulses are strong and equal. Abdominal-The abdomen is soft and nontender to palpation. No organomegaly. Bowel sounds are normal. No guarding. No rebound tenderness. No hepatosplenomegaly no supraclavicular nodes Neurologic-Alert, oriented to person, place, and time. Cranial nerves II through XII are intact. No motor deficit. No sensory deficit.

Musculoskeletal-No extremity tenderness. Full range of motion in all extremities. No extremity edema. No calf tenderness.

Skin-Skin color is normal. No rash. Warm. Dry to touch. Not cyanotic. Not diaphoretic. No pallor evident.

Differential Diagnosis:

Viral Pharyngitis

Strep Pharyngitis

Infectious mononucleosis

Diphtheria Labs/Imaging

Results:

CBC ~ WBC of 11.93 (NL=4.0-10.6) with absolute lymphocyte count of $5.7 \times 10^3/\mu\text{L}$ (NL=1.2-4.0) and 47.4%

lymphocytes (NL=20.0-45.0)

CMP — AST of 72 IU/L (NL=13-39), ALT of 99 IU/L (NL=7-52), and alkaline phosphatase of 190 IU/L. (NL=34-104)

Rapid strep — negative

Monospot — positive

CT Soft tissue of the neck - Enlargement inflammation of the adenoid and petting tonsils causing narrowing of the nasopharynx there is also mucosal thickening in the nasopharynx bilateral neck adenopathy with the largest lymph node in the left neck level to a measuring 2.8 x 3.3 x 4.7 cm the lymph node has hypoattenuating Center representing necrotic lymph node.

Final Diagnosis:

Infectious Mononucleosis - patient discharged with 20mg of oral prednisone q 8 hr. for 5 days and 4mg of Zofran q 8 hrs. prn for nausea and vomiting.

Discussion:

Infectious mononucleosis is an infection caused by the Epstein-Barr Virus. The triad of symptoms typically seen in patients is fever, tonsillar 'pharyngitis, and lymphadenopathy. MH presented with the latter two of these symptoms but was also taking antipyretics, which could have masked a fever. Humans are the major reservoir for the virus and is spread person-person via saliva. The virus invades lymphoid tissue of the oropharynx and infects B-lymphocytes stimulating a response from the immune system in the form of atypical cytotoxic T-lymphocytes and heterophile IgM antibodies. (Paul R, John. The presence of heterophile antibodies in infectious mononucleosis. Reviews of Infectious Diseases 4(5):1062(1982)

In a study of 500 patients; 100% presented with lymphadenopathy, 98% with fever, and pharyngitis with 85%. Patients can also present with fatigue and headache, which MH both endorsed. Typically, IM lymphadenopathy is symmetric and located in the posterior cervical nodes, however MH had asymmetric anterior cervical lymphadenopathy. (Rea, TO. Prospective study of the natural history of IM caused by EBV, J Am Board of Family Practice 14(4). 234 (2001)

Typical laboratory findings include lymphocytosis and an elevated total white blood cell count. Patients can also have self-limited elevation in hepatic amino transaminases as seen in MH. Further support of the diagnosis can be found using the monospot test, EBV specific antibodies, or EBV PCR. The monospot test works by detecting heterophile positive antibodies and has a specificity of 100%. EBV viral capsid = antibody detection can be used in heterophile negative patients and has a specificity of 94%. (Linderhoim M, Boman. Comparative evaluation of kits for rapid diagnosis of infectious mononucleosis and EBV specific serology. Journal of Clinical Biology 32(1):259 (1994)).

Treatment of IM is primarily supportive. Acetaminophen can be given to reduce fever and sore throat. MH was prescribed prednisone upon discharge; however, studies have shown that corticosteroid treatment has not reduced duration of illness or the symptoms of illness. For every 1000 patients with IM, one will have splenomegaly, which typically occurs early in the disease course, so it is important to educate patients to refrain from contact sports for three weeks after diagnosis (Aldrete, S. Spontaneous rupture of spleen in patients with infectious mononucleosis. Mayo Clinic Proc 67(9):910 (1992)).

AI SIM EXAM:

You will be presented with a scenario and be assessed on the following:

Initial Assessment

History of Present Illness

Physical Examination

Differential

Work up

Diagnosis

Treatment

Communication

Topics for Written Quiz:

| | |
|-------------------|--|
| Sepsis | Sirs Criteria Diagnosis and management |
| Neuro | Stroke Gullian-Barre' Transverse Myelitis Bell's Palsy Headache- cluster, migraine, tension Temporal arteritis TIA (transient ischemic attack) Spinal cord compression |
| Pregnancy/GYN | Abdominal pain evaluation PROM Ectopic pregnancy Placenta abruptio Amniotic fluid embolism PID Ovarian torsion STD's Gonococcal arthritis Threatened abortion Spontaneous abortion Bartholin's cyst |
| Toxicology | Opioid Alcohol Cocaine Hypoglycemic agents Agents causing anion gap metabolic acidosis Salicylate β blocker Acetaminophen anticholinergic crisis Cholinergic crisis |
| Hematology | Hemolytic anemia Vasculitis HUS HSP TTP ITP |

| | |
|----------------------------------|--|
| | SS disease D/C Hemophilia |
| Orthopedics | Common fractures (wrist, ankle, hip) Shoulder/elbow dislocation Treatment and management Pelvic fractures Adhesive capsulitis Ankle sprain |
| Principles of Trauma Care | Head injury Chest injury Abdominal injury Extremity injury Smoke inhalation High speed MVC Falls Spinal cord injury ABCDE of trauma Vascular injury |
| Cardiology | Tachyarrhythmias Heart blocks Biomarkers (troponin) Hyper/Hypokalemia CHF Pleural effusion Atrial fibrillation STEMI/unstable angina pericarditis |
| PE | PERC criteria- management and diagnosis STEMI- management and diagnosis d-Dimer |
| Surgery | Appendicitis Diverticulitis Perforated viscous Bowel obstruction Volvulus Mesenteric ischemia Incarcerated hernia Aortic dissection pneumothorax |
| Infection | Lung abscess CAP HAP Osteomyelitis Cellulitis MRSA IVDA |

| | |
|----------------------|--|
| | Meningitis Necrotizing fasciitis Ileitis Diverticulitis |
| Urology | Testicular torsion Epididymitis Kidney stone Pyelonephritis STD's |
| Ophthalmology | Conjunctivitis Central retinal artery occlusion Central retinal vein occlusion Retinal detachment Papilledema Glaucoma Uveitis Keratitis Vitreous hemorrhage |
| Psychiatry | Suicide Bipolar Schizophrenia Delirium Dementia |
| Pediatrics | Neonatal resuscitation Vital signs Fluids Medications Neonatal fever Seizure Diarrhea Croup RSV Roseola Rubella Rubeola |
| ENT | Peritonsillar abscess Anterior/posterior nosebleed Epiglottitis Retropharyngeal abscess Tracheitis Vertigo Auricular hematoma |

4 Week Core Elective UTM/TTH survival quick guide

Refer to Handbook for full details

ERMD710 – MS4 – core elective (4-week rotation)

ERMD 722-MS4 Wood County (4-week rotation)

CORE ELECTIVES

- ED orientation/lecture/procedure lab
- 120 Clinical hours in the ED (UT/TTH) – Daily Feedback (40%)
- Hyperbaric wound care session
- Weekly didactic (except in the month of July or as scheduled)
- Written EM based test or NBME (75 questions written or NBME {Must take once in the 4th year}) (30%)
- Simulation Exam (20)
- Procedure/Case Logs (10 points)

NOTE:

If it is on your schedule you are expected to attend.

- You will be with MULTIPLE preceptors.
- One feedback form completed per each clinical shift. (Provided in welcome packet)
 - Drop Boxes are available for evals in the ER departments. (Grey metal lock box at nursing stations)

Procedure Log/Case Log- ROCKETMED

- Inform Preceptor of needed procedures
- .75 patient per hour, or equivalent of 6 patients per 8-hour shift. MINIMUM

Failure to log cases and procedures may result in loss of evaluation points or an incomplete

Attendance

- Attendance is tracked and reported to the Office of Student Affairs.
- **All missed clinical shifts or education sessions must be made up before the end date of the students' registration. There will be no exceptions to this rule. Absence form must be submitted for each missed assignment.**

Dress code:

- University Issued Scrubs or may wear your own scrubs
- White coat
- Name Badge
- Boots or sturdy shoes
- Stethoscope
- Penlight
- Pen/pad

Recommended study sites: SEE HANDBOOK for more detailed testing information.

- | <https://www.emclerkship.com/>
- | <https://libguides.utoledo.edu/md/em>
- | <https://www.uworld.com>

RECOMMENDED- NBME takers are provided with the ROSH Review at our cost.

PA UTM ED survival quick guide

Refer to Handbook for full details

PA (5-week rotation)

- ED orientation/lecture/procedure lab
- 150 Clinical hours in the ED (UT/TTH) – Daily Feedback (50%)
- Hyperbaric wound care session
- Weekly didactic (except in the month of July or as scheduled)
- Simulation Exam (30%)
- Procedure/Case Logs (20%)

NOTE:

If it is on your schedule you are expected to attend.

- You will be with MULTIPLE preceptors.
- One feedback form completed per each clinical shift. (Provided in welcome packet)
 - Drop Boxes are available for evals in the ER departments. (Grey metal lock box at nursing stations)

Procedure Log/Case Log- copy in handbook to have signed off. Due at the end of the rotation.

- Inform Preceptor of needed procedures
- .75 patient per hour, or equivalent of 6 patients per 8-hour shift. MINIMUM

Failure to log procedures may result in loss of evaluation points or an incomplete

Attendance

- Attendance is tracked and reported to the Office of Student Affairs.
- **All missed clinical shifts or education sessions must be made up before the end date of the students' registration. There will be no exceptions to this rule. Absence form must be submitted for each missed assignment.**

Dress code:

- University Issued Scrubs or may wear your own scrubs
- White coat
- Name Badge
- Boots or sturdy shoes
- Stethoscope
- Penlight
- Pen/pad

Recommended study sites: SEE HANDBOOK for more detailed testing information.

- | <https://www.emclerkship.com/>
- | <https://libguides.utoledo.edu/md/em>

4 Week AI Elective UTMC/TTH- Monroe- survival quick guide

Refer to Handbook for full details

ERMD 715 – AI @ UTMC (4-week rotation) rotation time split between UTMC and TTH.

ERMD725 – AI @ Promedica Monroe (4-week rotation)

(Students get an AI badge that must be returned at completion of rotation.)

MS4 (4 week) AI ELECTIVES

- ED orientation/lecture/procedure lab
- 120 Clinical hours in the ED - Evaluations (40%)
- Weekly didactic
- Weekly didactic (except in the month of July or as scheduled)
- Written EM based test or NBME (75 questions written or NBME {Must take once in the 4th year}) (20%)
- 1:1 Simulation Exam (20%)
- Case presentation (10%) (Written case due 2 days prior to presenting)
- Procedure/Case Logs (10 points)

NOTE:

If it is on you schedule you are expected to attend.

- You will be with MULTIPLE preceptors.
- One feedback form completed per each clinical shift. (Provided in welcome packet)
 - Drop Boxes are available for evals in the ER departments. (Grey metal lock box at nursing stations)

Procedure Log/ Patient Case Log- ROCKETMED

- Inform Preceptor of needed procedures
- (.75 patient per hour, or equivalent of 6 patients per 8-hour shift. MINIMUM
Failure to log cases and procedures may result in loss of evaluation points or an incomplete

Attendance

- Attendance is tracked and reported to the Office of Student Affairs.
- **All missed clinical shifts or education sessions must be made up before the end date of the students' registration. There will be no exceptions to this rule. Absence form must be submitted for each missed assignment.**

Dress code:

- University Issued Scrubs or may wear your own scrubs
- White coat
- Name Badge
- Boots or sturdy shoes
- Stethoscope
- Penlight
- Pen/pad

Recommended study sites: SEE HANDBOOK for more detailed testing information.

- | <https://www.emclerkship.com/>
- | <https://libguides.utoledo.edu/md/em>
- | <https://www.uworld.com>

RECOMMENDED- NBME takers are provided with the ROSH Review at our cost.

Two Week Elective survival quick guide

Refer to Handbook for full details.

ERMD – 2-week rotation

UTMC 709

TTH – 717

MONROE – 720

BAY PARK -719

FLOWER 718

- ED orientation/lecture/procedure lab
- 64 Clinical hours in the ED - Evaluations (40%)
- Weekly didactic (except in the month of July or as scheduled)
- Written EM based test (30%)
- Simulation Exam (20)
- Procedure/Case Logs (10 points)

NOTE:

If it is on your schedule you are expected to attend.

- You will be with MULTIPLE preceptors.
- One feedback form completed per each clinical shift. (Provided in welcome packet)
 - Drop Boxes are available for evals in the ER departments. (Grey metal lock box at nursing stations) Bay Park- Please place in folder next to medical directors' door.

Procedure Log- ROCKETMED

- Inform Preceptor of needed procedures
- (.75 patient per hour, or equivalent of 6 patients per 8-hour shift. MINIMUM). Must have a minimum of 10 completed procedures for the 2-week rotation. (10 procedures must = 100%)

Failure to log cases and procedures may result in loss of evaluation points or an incomplete

Attendance

- Attendance is tracked and reported to the Office of Student Affairs.
- **All missed clinical shifts or education sessions must be made up before the end date of the students' registration. There will be no exceptions to this rule. Absence form must be submitted for each missed assignment.**

Dress code:

- University Issued Scrubs or may wear your own scrubs
- White coat
- Name Badge
- Boots or sturdy shoes
- Stethoscope
- Penlight
- Pen/pad

Recommended study sites: SEE HANDBOOK for more detailed testing information.

- | <https://www.emclerkship.com/>
- | <https://libguides.utoledo.edu/md/em>
- | <https://www.uworld.com>