

## **IM 665**

# **Emergency Medicine Advanced Clerkship Elective Clerkship Rotation Syllabus**

## **Osteopathic Medical Specialties**

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At MSUCOM, we are constantly working to improve our curriculum and to meet new AOA accreditation guidelines. While major changes will generally be instituted at the beginning of the school year, most minor changes may be implemented semester to semester.

Please be mindful of the need to read your syllabus BEFORE beginning your rotations.

***This syllabus is active for any rotation August 1, 2019 to July 30, 2020***

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**Before you start to read the syllabus, please make a note of this important information below from Dr. Mary Hughes pertaining to the ER end-of-rotation exam (please see page 3 for more exam information):**

Due to the vast knowledge and possibilities for learning in EM, the faculty for elective rotations has chosen the following format to further your education and allow you an advanced understanding of EM as a specialty. To that end, modules have been created for your learning enhancement. These modules will all be placed online and during your 2<sup>nd</sup> or subsequent EM rotation(s) you will need to complete different modules than the original CORE IM 657 rotation. Each elective EM rotation will have a different set of modules, so make sure you are logging into the correct D2L site. Each module will have a 12-item quiz of which you must obtain 9 answers correct to successfully complete the module. There are four modules per elective rotation. Make sure you are completing the proper one. The syllabus is very self-explanatory if you read it carefully paying particular attention to the elective # of EM that you are completing.

Regarding the logs: There are several procedures and patient types that are expected to be completed on patients while on this rotation. It is your duty to seek them out, and then log them. For example, let the nurses know that you need to start two IV's, and then, even if it is not your primary patient they will come and get you to complete this task, and then you can log it. These are mandatory to ensure your breadth of exposure. You do not have to be the primary provider on the patient to log them, but do need to do the things requested in order to log the patient. Being proactive about these requirements will assure their completion, but waiting until the last week to read the syllabus will almost assure that you will need to go back for additional shifts to meet the minimum requirements.

## Pre-Approval and Pre-Requisites

- An application is required for every elective rotation.
- 30-day advance application approval required (applies to a rotation add, change or cancellation).

## Introduction and Overview

Welcome to the Emergency Medicine Service. We think you will find your experience with us a valuable one. Our physicians strive to treat patients with quality and compassionate care. We ask that you treat all patients with the same care that you would expect for those close to you.

This rotation is a balance of clinical encounters, didactic sessions and reading assignments. This blend will provide you with a strong foundation in your approach to urgent and critical emergency conditions. There will be much one-to-one teaching on this rotation. You will find our emergency department physicians to be easily approachable and readily available, but you ultimately will determine what your experience will be. The more interest you demonstrate in learning, the more teaching you will receive.

This syllabus lists the **minimum** didactic requirements that are due at the end of your rotation. Emergency Medicine conferences are mandatory and you must check with your local emergency department rotation office for time and date schedules that will be in effect for your rotation dates. **As far as scheduling goes, you must meet as per the syllabus of the department where you will be rotating to set up your initial assigned schedule. However, you may not work more than 5 shifts in a row, nor do 'double shifts' or be scheduled for more than 4 consecutive days off in a row. Additionally, you may not work more than one shift in a 24-hour period.** Failure to comply with this will result in further time at the emergency department or a letter to your student file stating that you were unable to follow syllabus directions.

**Regarding EMS:** You only need to complete this requirement once, typically while on your IM 657 CORE rotation, **UNLESS** the hospital where you are rotating requires it in addition to your shifts. If the hospital where you are completing a elective requires an EMS experience you are required to do it. They will be responsible for collecting and verifying your completion, which will affect whether you pass based on their criteria. You will not need to submit to MSUCOM as it is not a requirement for every student on IM 665.

## Evaluation:

To successfully complete this rotation you must do **ALL** of the following:

- A. Meet with the department where you will be rotating prior to the rotation and set your schedule, pick up your rotation book, obtain the conference schedule, and any other mandatory requirements as per the department. Complete all assigned shifts. All EM Rotations are 4 weeks in length whether your core or elective; absences due to vacations, interviewing, or other such activities are not acceptable. **You may not work more than 5 shifts in a row or be scheduled for more than 4 consecutive days off in a row. Additionally, you may not work more than one shift in a 24-hour period. There has to be shifts scheduled in each week of the four-week rotation. Conference lectures do not count as shifts worked. Because different hospitals have different lengths of shifts, the total number of shifts will vary by site, but may be no less than 14 of 28 days, excluding conference time.** Rotation schedules **are not** to be submitted until the last Friday-Sunday of the rotation. You must document your actual schedule worked. You are

required to document any time off for illness, boards, etc. that caused a deviation from the schedule you were provided. **All rotation days must be accounted for.**

- B. You will need to send in your shift schedule. If you have an electronic version of this schedule, please post it to the drop box in D2L. Otherwise, please mail or fax it by 11pm the last Sunday of the rotation to:**

MSU College of Osteopathic Medicine, Department of OMS  
ATTN: Steve Stone  
909 Wilson Rd., B315A West Fee Hall  
East Lansing, MI 48824  
Fax: 517-432-1062

- C. You must complete and return the required Patient types and Procedures checklist, and evaluations to the proper D2L course drop boxes for each EM Elective Rotation. All materials are to be posted in the D2L course site for IM 665 no later 11pm the last Sunday of the rotation.
- D. Log onto the D2L website for this course and complete four modules with their quizzes as described above. A 75% is needed to pass. All students who fail to complete four modules while on rotation will receive an "N" grade.
- E. Return all rotation books to the hospital emergency department office within one week of the end of the rotation.
- F. Attend all scheduled conferences as assigned.
- G. Complete any additional didactic work as required by your local emergency department and return to their office by their deadlines. **This MAY include an EMS option.**
- H. If illness precludes you from completing a shift, you must make it up.
- I. Vacation may not be scheduled during this rotation.
- J. Interviewing time must occur on days that you are scheduled off. Any missed shifts must be made up.
- K. Maintain professional appearance and behavior at all times. You must achieve a satisfactory level on the direct observation rating form. Ratings of unsatisfactory in any category will be reviewed with you by a member of the MSU/COM Emergency Medicine faculty with a specific plan for remediation to be decided on a case-by-case basis.
- L. All written work must be original and completed on an individual basis.
- M. Board exams may be scheduled during this time, but most students should be able to schedule their shifts around their board schedule. If not, please email Katie Gibson-Stofflet ([katiegs@msu.edu](mailto:katiegs@msu.edu)) as soon as you are aware that there will be a problem ahead of the conflict so alternatives may be arranged.

All students who fail to take four module exams and achieve a 75% on each, complete patient logs of required/observed patient types and procedures and procedure logs by 11pm on the last Sunday of the rotation may receive an N grade. It is the duty of the student to assure their arrival, so therefore it is always a good idea to keep a copy of everything you send in. An N grade will result in a meeting with the Committee on Student Evaluation.

Although it is recognized that rotation evaluations are not under the complete control of the student, it is still the responsibility of the student to assure their timely completion. Any rotation evaluation not received by the end of the semester in which the rotation was completed will result in an ET grade for the student. The evaluation must be completed and submitted within the two-week deadline and preferably sent in during that time period. Any student who does not complete 4 weeks of Emergency Medicine will receive an N grade unless excused. This is a elective 4-week rotation, and therefore, vacation and interviewing time may not be taken during this month if it compromises the total number of shifts you are required to complete.

## Summary of MSUCOM Requirements and Submission Methods for Elective EM Rotations

Item	Submission Method	Due Date
Module Quizzes	Taken in D2L – grade must be 75% or higher on all four modules	11:59 pm Last Sunday of Rotation
EM Shift Schedule	Online D2L Drop Box if you have access to a scanner -or- Mail to: MSUCOM, Dept of OMS ATTN: Steve Stone 909 Wilson Rd., B315A West Fee Hall East Lansing, MI 48824	<b>Not to be submitted until the last Friday-Sunday of the rotation, and must be the schedule you worked, not what you were scheduled to work.</b>
Logs of required/observed patient types and procedures. <b><i>Make sure to use the one for EM Elective rotations</i></b>	Online D2L Drop Box See page 29 of syllabus	11:59 pm Last Sunday of Rotation
Student Evaluation of the Rotation	Submit electronically by 11:59 pm the last Sunday of the rotation online through your clerkship schedule.	By 11:59 pm last Sunday of course. Must submit to receive a passing grade, student will have an “ET” grade until the evaluation is completed.
Attending Evaluation of your Performance on Rotation	Submit completed form to your hospitals per the instruction on the evaluation form	Final Day of Rotation

Failure to do any of the above will result in an “N” grade and require remediation as determined by the Department of Osteopathic Medical Specialties at MSU/COM. Failure to upload/fax or mail required materials by 11pm the last Sunday of the rotation may result in an “N” grade as stated above as well.

### Special Considerations

- A. Medicare Cases Per HCFA regulations, medical students may not perform the primary documentation on the chart of a patient with Medicare Insurance if the department wishes to obtain reimbursement for this care. Medical students may participate in the care of these patients but may not be the primary caregiver. There may be other special types of insurance that have the same rules in the area where you are performing your emergency department rotation and you must follow the department rules regarding who you may and may not see.

## B. Special Cases

Due to the delicate nature and legal issues, alleged criminal sexual conduct, assault and child abuse cases are not to be seen by students rotating in the emergency department. If during a patient encounter you suspect such is the case, notify the attending physician immediately and remove yourself from the care of this patient. Do not write on this patient's chart.

## C. Attire

First impressions are very important. **You must wear a clean lab jacket and professional attire at all times. Name tags must be worn at all times, and above the waist.** Clean scrubs are generally acceptable, but **blue jeans are never acceptable.** Due to occupational safety and health administration regulations, socks must be worn at all times, even with sandals. No open toed sandals may be worn.

## D. Sharps

After using suture trays, all sharps must be disposed of in the appropriate manner and the tray brought to the dirty utility room. This is a responsibility of the person performing the procedure and you must take care to remove all sharp instruments to avoid injury to your coworkers.

## E. Keys to Good Care

See a limited number of patients and give them exceptional care. At all times know the status and results of all labs and x-rays. Constantly reassess your patients and update them of their status in the process. Your attending physician should be able to easily access information through you. In short, take full responsibility for all aspects of the patient's care.

## References

For the didactic portion from MSU/COM Department of Osteopathic Medical Specialties all readings and answers are to be referenced from the following sources, which should be available in every emergency department in which you rotate and are available through MSU Libraries Access Emergency Medicine or Access Medicine with your login.

***Tintinalli's Emergency Medicine – A Comprehensive Study Guide***, 8<sup>th</sup> edition, by Judith E. Tintinalli, M.D., et al.

<http://ezproxy.msu.edu/login?url=http://accessmedicine.mhmedical.com/book.aspx?bookID=1658>

***Academic Emergency Medicine; The 3-Minute Emergency Medicine Medical Student Presentation: A Variation on a Theme.*** Davenport C., Honigman B., Druck J. 2008 Jul; 15(7):683-7 <http://onlinelibrary.wiley.com.proxy1.cl.msu.edu/doi/10.1111/j.1553-2712.2008.00145.x/abstract>

**Available through MSU Libraries.** On the website homepage select "Resources" then select "E-resources" Under "Find Electronic Journals" type in "Academic Emergency Medicine" then click "Search" select "From 1997 to Present". Under "Find Issues" select "All issues" Select "2008" then select "Volume 15, Issue 7" Article is listed under heading "Special Contributions".

<http://onlinelibrary.wiley.com.proxy1.cl.msu.edu/doi/10.1111/acem.2008.15.issue-7/issuetoc>



**Create an account in Access Emergency Medicine if you have not done so yet and use for this rotation.**

- Access EM directions
- On the MSU Libraries main page: *Quick Links*, click on *Electronic Resources*
- Under *E-resources*, click on *Texts and Links*
- Under *Texts and Links*, you can search for Access Emergency Medicine.
- Clicking on that will then take you to the MSU NetID login site and then you can get access.
- Other readings as per each module.

In addition, your hospital may require additional articles, videos, or other forms of information to be obtained and utilized by you to further answer didactic questions that they may assign. The chief of the emergency department at your hospital will be responsible for assigning a grade to their specific material.

## Overview and Goals

The clerkship consists of four weeks of more advanced emergency department experiences. This service should expose the student to various aspects of management of patients in an emergency department. These experiences should include reading, lectures, seminars, and patient care management.

Emergency medicine has enjoyed increasing popularity and stature in osteopathic medical schools throughout the United States. It occupies a unique niche in medical education in that it provides students with the opportunity to see an undifferentiated patient population with varying modes of presentation. This experience will stress diagnostic skills, ability to prioritize patient care and exposure to new diagnostic skills, i.e., toxicology and environmental injuries, and different views of problems that you may have only seen in the hospital or other practical settings.

### Goals of the Emergency Medicine Elective Clerkship

- I. Provide the student with more advanced knowledge of specific topics in emergency medicine.
- II. Introduce the student to basic procedures relevant to the practice of emergency medicine.
- III. Facilitate an understanding of the approach to acute care clinical problem solving.
- IV. Continue to promote the acquisition of basic skills for the diagnosis and management of common emergencies.
- V. Encourage the continued development of the student's professional attitude and behavior.

### **Objectives**

Learning objectives for the emergency medicine clerkship relate to the following areas: a) cognitive knowledge; b) psychomotor skills; c) problem solving; and d) professional development. By the end of the four-week emergency medicine elective clerkship, the student is expected to have achieved, at a minimum, the following objectives through reading, conference attendance, observation, discussion, and hands-on clinical experience:

## College Program Objectives

In addition to the above course-specific goals and learning objectives, this clerkship rotation also facilitates student progress in attaining the College Program Objectives. Please refer to the complete list provided on the MSUCOM website.

## Student Responsibilities

During the 4 weeks of the rotation, the student is required to meet clinical and academic responsibilities:

- *The student **will** meet the following **clinical responsibilities** during this rotation:*
  - Students are expected to function collaboratively on health care teams that include health professionals from other disciplines in the provision of quality, patient-centered care.
- *The student **will** meet the following **academic responsibilities** during this rotation:*
  - Students are expected to identify, access, interpret and apply medical evidence contained in the scientific literature related to patients health problems.
  - Students are expected to: assess their personal learning needs specific to this clinical rotation, engage in deliberate, independent learning activities to address their gaps in knowledge, skills or attitudes; and solicit feedback and use it on a daily basis to continuously improve their clinical practice.

**Meeting or not meeting the above responsibilities will be used by the instructor of record in the determination of the final grade in the course (See “Corrective Action Process for Deficient Academic Requirements” Below).**

## Learning Activities

Learning activities will vary among hospital emergency departments, however, certain activities should be completed in each emergency medicine clerkship. The following are examples of learning activities each student should accomplish when on an emergency medicine clerkship:

1. **READING:** See modules' individual lists.
2. **HISTORY AND PHYSICAL REVIEW:** An important portion of your learning will be in the evaluation of patients while obtaining historical data and performing physical examinations. For each patient this information will be reviewed with an intern, resident, or attending physician.
3. **LECTURES:** Lectures on various topics are usually given at least once a week. They are intended to provide up-to-date information on clinical and research findings and techniques in various fields. They may be given by a guest speaker who is an expert on the topic. If your hospital has a mid-day or other regular lecture program, you are expected to attend.

**IM 665 is the course number given to any general emergency medicine elective following your core IM 657 rotation, and therefore you must follow the directions carefully so as to be completing the correct items to receive your grade. Each subsequent rotation will have the same IM 665 course number, but the materials required to be completed for a passing grade will be different for each. You may not do more than three elective rotations in any one specialty.**

Each week's material will have a 12 item quiz that you will take in D2L. A score of 75% is required to successfully complete the module. If you do not achieve a 75% you may request one time only to have the test reset. It would be recommended that you restudy the content before attempting the quiz a second time. If you do not complete successfully (75%) on the second attempt, then you must complete a two-page paper with references on a question given to you by the instructor of record. You will have 2 weeks to complete it and submit it to the instructor of record for review. Each quiz has a question bank associated with it so you will receive similar but not identical questions on each quiz as they are randomly generated by the computer.

**Elective #1 The following four modules are to be completed on your first IM 665 elective rotation, whenever that occurs.**

**IM 665: Elective #1: Module #1: Introduction to Ultrasound (NB)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Differentiate between B-mode and M-mode ultrasound modalities.
2. Identify the purposes of the FAST Exam.
3. Identify the 4 positions of the FAST exam.
4. Describe the appearance of free intraperitoneal fluid on an ultrasound image.
5. Identify sufficient ultrasound image findings that can exclude an ectopic pregnancy in a low risk, non-fertility treatment pregnant female presenting with abdominal pain and bleeding.
6. Identify ultrasound findings suggestive of an ectopic pregnancy.

**Reading List:**

- Access Emergency Medicine: Ma and Master's Emergency Ultrasound. Chapter 3: Physics and Image Artifacts  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=686&sectionid=45956940>
- Access Emergency Medicine: Ma and Master's Emergency Ultrasound. Chapter 5: Trauma  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=686&sectionid=45956942>
- Access Emergency Medicine: Ma and Master's Emergency Ultrasound. Chapter 14: First Trimester Pregnancy  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=686&sectionid=45956951>

**Questions to Ponder:**

- Access Emergency Medicine: Ma and Master's Emergency Ultrasound. Chapter 5: Trauma: Introduction-CASE STUDIES at the end of the Chapter  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=686&sectionid=45956942>

## **IM 665: Elective #1: Module #2: Toxicology: Introduction to the Poisoned Patient (MH)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. State the basic principles of drug absorption, metabolism, and excretion
2. State the components of the COMA cocktail
3. Discuss the use of activated charcoal, including single and multiple dose, and its contraindications
4. Discuss the use of sorbitol as a laxative and its contraindications
5. Discuss the use of whole bowel irrigation and its indications
6. Discuss the concept of half-life and what it means in terms of antidote treatment and monitoring
7. Discuss the concept of fat soluble, water soluble and first pass effect in the context of an overdose

### **Reading list - syllabus material provided in D2L**

- **PowerPoint slide presentation** - found on D2L

## **IM 665: Elective #1: Module #3: Trauma: Introduction to the Traumatized Patient (MH)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Organize the evaluation of a trauma patient by primary survey, resuscitative phase, secondary survey and definitive care.
2. List the components of primary survey, resuscitative phase, secondary survey and definitive care.
3. List the components of the AMPLE history.
4. Be able to identify the clinical scenario of tension pneumothorax, cardiac tamponade, sucking chest wound, and flail chest.
5. Be able to identify the clinical scenario of a patient likely to have a splenic or hepatic injury with blood loss.
6. Be able to recognize the patient who has hypovolemic shock.
7. Be able to identify the differences in presentations between adults, children and the elderly as it relates to traumatic conditions.
8. Be able to identify the differences between the adult female who is pregnant in various trimesters from the non-pregnant adult female who suffers a traumatic injury.

### **Reading list**

- **Access Emergency Medicine:** Tintinalli's Emergency Medicine Manual, A Comprehensive Study Guide, 8th edition Judith E. Tintinalli, et. al.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/book.aspx?bookID=1658>

### **Section 21: Trauma**

- **Trauma in Adults**
- **Pulmonary Trauma**
- **Cardiac Trauma**
- **Abdominal Trauma**
- **Trauma in Children**
- **Trauma in the Elderly**
- **Trauma in Pregnancy**

**Questions to ponder:**

- Does blood pressure alone define hypovolemic shock in the patient with a traumatic injury?
- Be able to identify different activities that are appropriate to be conducted during the primary survey, resuscitative phase, secondary survey and definitive care.
- Differentiate the typical presentations for pediatric and geriatric trauma patients and why they might be different from the typical adult patient.
- Why is it important to resuscitate the mother before the baby?
- What are the normal respiratory changes in pregnancy?
- Which procedures need to be performed differently in the pregnant patient?

**IM 665: Elective #1: Module #4. Pediatrics: Approach to the Febrile Child (NB)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Define the neonatal period.
2. Define a fever in terms of temperature and method of obtaining.
3. Recognize hypothermia as a sign of sepsis in the neonatal period.
4. State the appropriate evaluation for a febrile neonate.
5. Identify characteristics that characterize febrile children >3mo old to have low risk for SBI
6. Explain the mechanisms humans use to maintain thermoregulation
7. Identify signs and symptoms that indicate toxicity in children
8. State the appropriate emergent management for children who are exhibiting signs or symptoms of toxicity
9. Identify risk factors in otherwise well appearing children that place them at risk for serious bacterial infection

**Reading list**

- Access Emergency Medicine: Pediatric Emergency Medicine 4e. Gary R. Strange, William R. Ahrens, Robert W. Schafermeyer, Robert A. Wiebe  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/book.aspx?bookID=1345>
- Section 1: Cardinal Presentations. Ch. 2: The Febrile- or Septic-Appearing Neonate.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1345&sectionid=72120941>
- Access Emergency Medicine: Pediatric Emergency Medicine 4e. Section 1: Cardinal Presentations. C. 3: The Febrile- or Septic-Appearing Infant or Child.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1345&sectionid=72120965>

**Questions to ponder:**

- Access Emergency Medicine: Case Files: Emergency Medicine, 3e. Fever without a source in a 1-3 month old infant.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/CaseContent.aspx?gboSID=218365&gboContainerID=70&viewByNumber=false#141653563>

## Elective #2 The following four modules are to be completed on your second IM 665 Elective rotation, whenever that occurs.

### IM 665: Elective #2: **Module #1: Review of anticoagulant medications: Their indications, contraindications and antidotes (NB)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Identify the location of action of warfarin, Xa Inhibitors, heparin, low molecular weight heparins, and fibrinolytics on the coagulation cascade.
2. Describe the mechanism of action of antiplatelet medications.
3. Determine the pharmaceutical management for a patient with an elevated INR in the presence and absence of bleeding.
4. Identify the indications for vitamin K, platelets, fresh frozen plasma, and Prothrombin complex concentrate (PCC).

#### Reading List:

- Access Emergency Medicine: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8<sup>th</sup> ed. Section 18: Hematologic and Oncologic Emergencies. *Ch 232: Tests of Hemostasis*. Section: Normal Coagulation  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/book.aspx?bookID=1658>.
- Access Emergency Medicine: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8<sup>th</sup> ed. Section 18: Hematologic and Oncologic Emergencies. *Ch 239 : Anticoagulants, Antiplatelet Agents, and Fibrinolytics*.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1658&sectionid=109386810>

#### Questions to Ponder:

- For a more context-oriented overview: Access Emergency Medicine: Goldfrank's Toxicologic Emergencies: Chapter 22. Hematologic Principles  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1163&sectionid=65091652>
- For a more detailed review: Access Emergency Medicine: Goldfrank's Toxicologic Emergencies: Chapter 60. **Antithrombotics**  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1163&sectionid=65096168>

### IM 665: Elective #2: **Module #2: Toxicology: Acetaminophen, aspirin, alcohols (MH)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. State the different rates of absorption of various salicylate containing products, and sources of salicylate besides aspirin.
2. Discuss the various stages of salicylate intoxication, and the assorted biochemical derangements that occur with each, including the various acid base disturbances.
3. Know the signs and symptoms of mild, moderate and severe poisoning with salicylates.
4. Discuss the various modalities used to treat mild, moderate and severe salicylate poisoning.
5. Know the recommended doses and potentially toxic doses of acetaminophen in adults and children.
6. Recognize the stages of acetaminophen poisoning.
7. Understand the use and limitations of the Rumack - Matthew nomogram in acetaminophen poisoning.

8. List the metabolic pathways of acetaminophen poisoning.
9. Select appropriate therapy for a patient with an acetaminophen overdose.
10. Diagram and understand the metabolism of ethanol, isopropyl alcohol, methanol, and ethylene glycol.
11. Know the signs and symptoms and timeline for consequences of ingestion of ethanol, isopropyl alcohol, methanol, and ethylene glycol.
12. Know the appropriate use of antidotes and treatment guidelines for ingestion of ethanol, isopropyl alcohol, methanol, and ethylene glycol.

### Reading list

<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/book.aspx?bookID=1658>

- Cohen JP, Quan D. Cohen J.P., Quan D Alcohols. In: Tintinalli JE, Stapczynski J, Ma O, Cline DM, Cydulka RK, Meckler GD, T. Tintinalli J.E., Stapczynski J, Ma O, Cline D.M., Cydulka R.K., Meckler G.D., T eds. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide*. New York, NY: McGraw-Hill; 2016. Chapter 185  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1658&sectionid=109437660> Accessed July 25, 2016.
- Yip L. Yip L Salicylates. In: Tintinalli JE, Stapczynski J, Ma O, Cline DM, Cydulka RK, Meckler GD, T. Tintinalli J.E., Stapczynski J, Ma O, Cline D.M., Cydulka R.K., Meckler G.D., T eds. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide*. New York, NY: McGraw-Hill; 2016. Chapter 189  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1658&sectionid=109414632>. Accessed July 25, 2016.
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### Questions to ponder

- Why does the nomogram not work for extended release products or overdoses taken over a period of several hours for acetaminophen?
- Why do you need to alkalinize the urine on a patient with an aspirin overdose?
- Why do you need to do a complete physical exam on every intoxicated person, every time?
- What are household sources of methanol, ethylene glycol, and isopropyl alcohol?
- Not really an alcohol, but what compound is given off when methylene chloride

(chemical in paint stripper) is metabolized?

### IM 665: Elective #2: **Module #3: Pediatrics: Pediatric Rehydration and Calculation of Fluids and Electrolytes. (NB)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Identify the gold standard for determining and quantifying dehydration in children.
2. Differentiate between minimal, moderate, and severe dehydration in children.
3. Differentiate between patients that are suitable for oral rehydration therapy (ORT) vs patients suitable for IV hydration.
4. Calculate the volume of fluids required for fluid resuscitation in acutely dehydrated children based on body weight.
5. Identify the common additives to rehydration fluids.
6. Calculate weight based administration of maintenance intravenous fluids using the 4-2-1 rule.
7. Describe the rationale for administration of glucose for dehydration due to gastroenteritis.
8. Determine which children need admission and which can be discharged safely after initial treatment for dehydration.

#### Reading List:

- Access Emergency Medicine: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8<sup>th</sup> ed. Section 12: Pediatrics. Chapter 129: Fluid and Electrolyte Therapy in Infants and Children.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1658&sectionid=109434492>
- Access Emergency Medicine: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8<sup>th</sup> ed.  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/book.aspx?bookID=1658>

#### Questions to Ponder:

- Should children less than age 18 be given phenothiazine to stop their nausea and vomiting? These are commonly used medications in adults and come in suppository form. Why or why not?

### IM 665: Elective #2: **Module #4: Trauma: Mild Traumatic Brain Injury and Management: Concussion Management and PECARN head CT rules (MH)**

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Apply the PECARN head CT rules in children.
2. Define concussion.
3. List common sequelae of concussion.
4. Apply return to activity guidelines for patients recovering from a concussion.
5. Discuss the process of reading a head CT for trauma.
6. Know the components and classifications of the Glasgow Coma Scale.
7. Discuss the classification of head injury into mild, moderate, severe, primary and secondary.
8. Know the relationship between mean arterial pressure, systolic and diastolic blood pressure, intracranial pressure and cerebral perfusion pressure.
9. Identify patterns of head injury based on clinical examination.



## Reading list

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## Questions to ponder

- Why does elevation of the head of the bed decrease ICP?
- What is the effect of maintaining the head in the midline versus turned to one side on ICP?
- Regarding clinical decision rules, understand that they never supersede the clinician at the bedside's exam and/or gestalt and are only guidelines.

## Elective #3 The following four modules are to be completed on your third IM 665 Elective rotation, whenever that occurs.

### Module #1: Metabolic Derangements: Diabetic Ketoacidosis, Hyperosmolar Non-ketotic coma, electrolyte disturbances including hyponatremia, hyponatremia, hyperkalemia, hypokalemia (NB)

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Differentiate between DKA, HONK.
2. Compare venous and arterial pH testing in patients with DKA.
3. Discuss critical electrolyte abnormalities seen in both DKA and HONK.
4. Describe the purpose of Kussmaul breathing.
5. Define appropriate treatment of DKA once hyperglycemia has resolved.

#### Reading list

- Access Emergency Medicine: Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8<sup>th</sup> ed. Chapter: Diabetic Ketoacidosis  
<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1658&sectionid=109443771>

#### Questions to ponder

- Access Emergency Medicine: Case Files: Emergency Medicine 3e. Case 5.

### Module #2: Toxicology: CNS stimulants: cocaine, ecstasy, PCP, Crystal Meth, bath salts (MH)

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. List the drugs that are considered stimulants.
2. Understand the use of benzodiazepines in the management of the acutely agitated patient.
3. List the medications and chemicals that lead to hallucinations.
4. Understand the mechanism of hyponatremia and possible seizures from ecstasy.
5. Discuss cocaine related chest pain.
5. Understand the diagnostic scenario of cannabinoid hyperemesis syndrome.
6. Use the eye signs to help differentiate the various stimulants, especially those causing hallucinations.

#### Reading list

- Perrone J. Perrone J Chapter 105. **Drugs of Abuse**. In: Cline DM, Ma O, Cydulka RK, Meckler GD, Handel DA, Thomas SH. Cline D.M., Ma O, Cydulka R.K., Meckler G.D., Handel D.A., Thomas S.H. eds. *Tintinalli's Emergency Medicine Manual, 8e*. New York, NY: McGraw-Hill; 2012.  
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<http://accessemergencymedicine.mhmedical.com.proxy2.cl.msu.edu/content.aspx?bookid=1658&sectionid=109437807>. Accessed July 25, 2016.
- Simonetto, Douglas A. et al. **Cannabinoid Hyperemesis: A Case Series of 98 Patients**. Mayo Clinic Proceedings , Volume 87 , Issue 2 , 114 – 119 [http://www.mayoclinicproceedings.org/article/S0025-6196\(11\)00026-7/pdf](http://www.mayoclinicproceedings.org/article/S0025-6196(11)00026-7/pdf).
- Burnett, LB, Tarabar A, et al. "Cocaine Toxicity." <http://emedicine.medscape.com/article/813959-overview>.

### Questions to ponder

- Which class of antibiotics is known to cause hallucinations in the elderly?
- What one question can you ask that may get at the cause of intractable nausea and vomiting being related to excess cannabinoid ingestion in any form?
- What is the responsibility of the clinician if a child presents with obvious exposure to drugs of abuse?

### Module #3: Trauma: Environmental: Heat, Cold, Burns (MH)

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

1. Define trench foot, chilblains, hypothermia and the stages of frostbite.
2. Discuss the management of trench foot, chilblains, hypothermia and the stages of frostbite.
3. Discuss the common rhythm disturbances seen with hypothermia.
4. Recognize an Osborn J wave as a marker of hypothermia.
5. Calculate percent body surface area burned.
6. Calculate fluid requirements for the first 24 hours for a burn victim.
7. Differentiate prickly heat, heat exhaustion and heat stroke.
8. Understand the mechanisms by which the body dissipates excess heat.

### Reading list

- Wadman MC. Wadman M.C. Chapter 118. **Frostbite and Hypothermia**. In: Cline DM, Ma O, Cydulka RK, Meckler GD, Handel DA, Thomas SH. Cline D.M., Ma O, Cydulka R.K., Meckler G.D., Handel D.A., Thomas S.H. eds. *Tintinalli's Emergency Medicine Manual, 7e*. New York, NY: McGraw-Hill; 2012.  
<http://accessemergencymedicine.mhmedical.com/content.aspx?sectionid=41069049&bookid=521&ResultClick=2>. Accessed July 25, 2016.
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- Tran T. Tran T Chapter 119. **Heat Emergencies**. In: Cline DM, Ma O, Cydulka RK, Meckler GD, Handel DA, Thomas SH. Cline D.M., Ma O, Cydulka R.K., Meckler G.D., Handel D.A., Thomas S.H. eds. *Tintinalli's Emergency Medicine Manual, 8e*.  
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- Review Mediasite recording for dermatology on Heat and Cold Emergencies **Mediasite link found on D2L**
- **Case 45 on Accessemergencymedicine** Clip **Author(s)**: Eugene C. Toy, Barry C. Simon, Katrin Y. Takenaka, Terrence H. Liu, Adam J. Rosh

### Questions to ponder

- Think about the medications patients are on and which may make it difficult to thermoregulate

### Module #4. Pediatrics: Pediatric Poisoning (NB)

**Objectives:** By the end of this module, a 4<sup>th</sup> year medical student will be able to:

Identify at least 10 (ten) toxins of which the ingestion of a single pill or a single swallow can be lethal to a pediatric patient less than 2 years of age.

**Readings:** Perform an independent internet search to identify at least 10 'One Pill Can Kill' toxins.

**Exam:**

Complete and submit in D2L the completed table identifying at least 10 (more if possible) 'One Pill Can Kill' toxins along with identifying the mechanism of action.

Student Name:		Date:
One Pill can Kill Table: Identify at least 10 (ten) toxins		
Toxin:	Mechanism of Action:	
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
16.		

## **IM 665 Emergency Medicine Elective Corrective Action Policy**

In the case the student does not successfully complete the graded curricular requirement of this course, the student will be required to go through a “Corrective Action” process. The student will maintain an extended grade (ET) until they have successfully completed the corrective action.

The student who fails to turn in required paperwork, who has a verifiable reason why they failed to do so, will be allowed a 2-week grace period or more depending on the circumstances, Failure to meet this two week deadline will result in an N grade.

The steps of the “Corrective Action” process for IM 665 Emergency Medicine Elective are as follows:

- 1) The student will be required to submit answers to the objectives for modules in which they did not achieve a passing score to the course assistant, who will then forward them to the faculty for review, with comment back to student if needed for clarification of content
- 2) The student will then be required to retake another quiz to demonstrate attainment of knowledge
- 3) Should the quiz not be successfully completed a second time the faculty will review the content missed on both quizzes and provide individualized feedback as to where student needs to focus, and a third quiz attempt will then be allowed to demonstrate knowledge.

If the student completes the corrective action successfully (as determined by the Instructor of Record), he or she will receive credit for successfully completing the grading requirement in question.

If the student does not complete the corrective action successfully, the student will receive an “N” grade for the course and will then proceed to the “Remediation Policy” process as determined by the Committee on Student Evaluation (COSE).

### **Unsatisfactory Clinical Performance**

A student’s clinical performance will be assessed through the Attending Clinical Clerkship Rotation Evaluation. Unsatisfactory Attending Evaluations are governed by the Policy for Retention, Promotion and Graduation (4.e).

- A designation given to any student who:
- Receives on (1) and/or two (2) N grades in any Clerkship course; and/or
- Receives two (2) or more overall “Below Expectations” ratings on any Clerkship rotation evaluation: and/or
- Displays indicators of marginal performance on any clerkship rotation.
- The student will be required to appear before the COSE Clerkship Performance Subcommittee.
- Any student failing to appear, when directed, without due cause, or fails to meet any Subcommittee requirement, will be suspended from the College.

## Clerkship Attendance Policy

### Policy:

In order to gain the knowledge and skills to successfully complete the MSUCOM clerkship program, consistent participation/attendance in program activities is essential. Any time off must not interfere with the quality of the rotation.

1. In the event a student needs to be absent from any rotation for the reasons listed below and permissible by the rotation syllabus, students may request time off.
2. Any absence (unless emergent) must be approved in advance (at least 30 days) of absence by the medical education department (student coordinator/director or DME), utilizing the Clerkship Program Excused Absence Request Form. Students must notify rotation team and medical education of emergent/illness absences on day of absence.
3. A student may not be absent more than 2 days on any one 4 week rotation (no time off allowed for rotations of 2 weeks or less) for the reasons below (exception Interview absences or Conference absences as below).
4. Any additional time off any one rotation must be approved by the MSUCOM Instructor of Record for the course the absence will occur.

### **Absence due to interviews:**

For the purpose of interviewing only, a student may be absent 4 days on a 4 week rotation (2 days on a 2 week rotation) during the months of September to January in the OMS year 4. Interview invitations must accompany the Clerkship Program Excused Absence Request Form.

### **Absence due to examinations:**

<b>Examination</b>	<b>Maximum Time Off (includes travel time)</b>
COMLEX USA Level 2 CE/USMLE Step 2 CK/Canadian MCCEE	1 day
MSUCOM COMLEX PE Simulation at MSU	1 day for each scheduled simulation
COMLEX USA Level 2 PE/USMLE Step 2 CS(Canadian Students Only)	2 days
COMAT/SHELF examinations	Travel time and time for exam

### **Personal Day Absence:**

Students are allowed 5 personal days per academic year in OMS 3 and OMS 4. These days are not carried over from third year to fourth year. These are to be used for illness, physician appointments, and special events (weddings, graduations, special anniversary events) and must not exceed 2 days on any 4 week rotation (#3 above). Prolonged illness and bereavement will be handled on a case by case basis between MSUCOM Director of Clerkship and the base hospital/medical education department. Students must notify rotation team and medical education of emergent/illness absences on day of absence.

Hospital organized community events that might lead to periodic absence from rotations – student participation is encouraged and if base hospital approved, would be considered part of the rotation and not a personal day absence.

Jury duty – when obligated, student participation is not considered a personal day. Court excuses must accompany any absence. If absence is prolonged, this will be handled on a case-by-case basis between the base hospital/medical education and MSUCOM.

**Conference Absence:**

While on required/core rotations, no excused absences for any professional meeting will be allowed unless the student is presenting research in which they have participated.

- a. Appropriate paperwork with proof of presentation and copy of conference agenda must accompany the form.
- b. Time off in this situation will be for travel and presentation only.

While on elective rotations: A student may submit a request for an excused absence to attend one (1) professional meeting, time not to exceed 3 days off rotation. The meeting agenda must accompany the Clerkship Program Excused Absence Request Form.

Personal vacations/family reunions, etc are not part of this policy. Vacations can be scheduled periodically, provided all curriculum requirements will be met, with the assistance of your Student Support Advocate. Vacations will not be permitted on any core rotation or elective rotation.

Abuse of this policy, as determined by the GME office or a clinical preceptor, may be documented in a student evaluation(s) and/or reported to the Associate Dean of Student Services at MSUCOM via the Student Incident Report Form: <http://com.msu.edu/Students/Registrar/Policies.htm> or via phone call to the Associate Dean of Student Services (517-353-8799).

**Policy for Medical Student Supervision****Supervisors of the Medical Students in the Clinical Setting**

The MSUCOM curriculum includes required clinical experiences in a variety of clinical learning environments. The role of the student is to participate in patient care in ways that are appropriate for the student's level of training and experience and to the clinical situation. The student's clinical activities will be under the supervision of licensed physicians. This supervising physician may delegate the supervision of the medical student to a resident, fellow, or other qualified healthcare provider, however, the supervising physician retains full responsibility for the supervision of the medical students assigned to the clinical rotation and must ensure his/her designee(s) are prepared for their roles for supervision of medical students.

The physician supervisor and his/her designee(s) must be members in good standing in their facilities and must have a license appropriate to his/her specialty of practice and be supervising the medical student within that scope of practice as delineated by the credentialing body of the facility.

**Level of Supervision/Responsibilities**

Clinical supervision is designed to foster progressive responsibility as a student progresses through the curriculum, with the supervising physicians providing the medical student the opportunity to demonstrate progressive involvement in patient care. MSUCOM students will be expected to follow clinical policies of the facility regarding medical records and clinical care. Medical student participation in patient history/physical exam, critical data analysis, management, and procedures will include factors, but not limited to:

- The students demonstrated ability
- The students level of education and experience
- The learning objectives of the clinical experience

First and second year medical students will be directly supervised at all times (supervising physician or designee present or immediately available).



Third and fourth year medical students will be supervised at a level appropriate to the clinical situation and student's level of experience. For some tasks, indirect supervision may be appropriate for some students. Direct supervision would be appropriate for advanced procedures.

Supervising physicians will provide medical students with timely and specific feedback on performance. The supervising physician will complete a mid-rotation evaluative discussion with the medical student. Supervising physicians will complete a summative evaluation and are encouraged to contact the course/clerkship director with any gaps in student performance.

Medical students with any concern regarding clinical, administrative, and educational or safety issues during his/her rotation will be encouraged to contact the supervising physician or clerkship/course director.

## **Statement of Professionalism**

Principles of professionalism are not rules that specify behaviors, but guidelines that provide direction in identifying appropriate conduct. These principles include the safety and welfare of patients, competence in knowledge and skills, responsibility for consequences of actions, professional communication, confidentiality, and lifelong learning for maintenance of professional skills and judgments. Professionalism and professional ethics are terms that signify certain scholastic, interpersonal and behavioral expectations. Among the characteristics included in this context are the knowledge, competence, demeanor, attitude, appearance, mannerisms, integrity and morals displayed by the student to faculty, peers, patients and colleagues in other health care professions. Students are expected to conduct themselves at all times in a professional manner and to exhibit characteristics of a professional student.

## **Students Rights and Responsibilities**

Each individual student is responsible for their behavior and is expected to maintain standards of academic honesty. Students share the responsibility with faculty for creating an environment that supports academic honesty and principles of professionalism. Proper relationship between faculty and student are fundamental to the college's function and this should be built on mutual respect and understanding together with shared dedication to the education process. It is a fundamental belief that each student is worthy of trust and that each student has the right to live in an academic environment that is free of injustice caused by dishonesty. While students have an obligation to assist their fellow students in meeting the common goals of their education, students have an equal obligation to maintain the highest standards of personal integrity.

## **MSU Email**

To facilitate communication from faculty and staff to students, students are required to have a functioning MSU email address. Students are responsible for checking their MSU email accounts daily and maintaining their MSU mailboxes so that messages can be received.

Forwarding MSU email to another email account or failure to check email are not valid excuses for missing a deadline or other requirements of the clinical education program.

Further, students must use secure email when working in a hospital, clinic or other health care setting if discussion of patient information is involved. MSUNet (msu.edu) email is secure; many web-based email systems including Hotmail, Gmail and Yahoo are not.

## Use of Electronic Devices

Students are expected to be fully engaged in the clinical education experience. Using electronic devices while on clerkships or during other required activities can be distracting and disrespectful to patients, preceptors, lecturers, and fellow students. Electronic devices are not to be used during rounds, meetings, small groups or lectures, or when in the room with patients: the only exception would be if instructed to do so by an attending or resident faculty member. Students wishing to retrieve information that may be relevant to the patient or small group discussion should get permission to do so from the faculty member. It is never appropriate for students to use electronic devices for reading e-mail, texting, surfing the web or other personal activities while on any clerkship required activity. Students may receive unprofessional behavior notation(s) for failure to use electronic devices appropriately.

### Faculty Responsibilities

It is the responsibility of the college faculty to specify the limits of authorized aid (including but not limited to exams, study aids, internet resources and materials from senior students) in their syllabi, and it is the responsibility of students to honor and adhere to those limits. Course instructors shall inform students at the beginning of the semester of any special criteria of academic honesty pertinent to the class or course.

It is the responsibility of the clinical faculty to provide students with ongoing feedback during rotation upon request. Clinical faculty are generally recommended (though not required) to limit student assigned duty hours from 40 to 60 hours weekly (and not exceeding 60 hours). Both faculty and students are to be treated fairly and professionally in order to maintain a proper working relationship between trainer and trainee.

### Course Grades

- **P-Pass** – means that credit is granted and that the student achieved a level of performance judged to be satisfactory according to didactic and clinical performance by the department.
- **N-No Grade** – means that no credit is granted and that the student did not achieve a level of performance judged to be satisfactory according to didactic and clinical performance by the department.
- **ET-Extended Grade** – means that a final grade (“Pass” or “No Grade”) cannot be determined due to one or more missing course requirements. Once all course requirements have been completed, received, and processed, the ET grade will be changed to a final grade. An “ET” will NOT remain on a student’s transcript.

### N-GRADE POLICY

- Remediation is not offered for Clerkship courses. Any student who receives an N grade in the Clerkship Program will be required to appear before the COSE Clerkship Performance Subcommittee (COSE).

## Rotation Evaluations

***Attending/Faculty/  
Resident  
Evaluation of  
Student***

Students are responsible for assuring that his/her clinical supervisor receives the appropriate evaluation form. Forms can be accessed via the “Attending Evaluation” link in the student’s Kobiljak online Clerkship schedule.

Students should assertively seek feedback on his/her performance throughout the course of the clinical rotation. Students should also sit down and discuss the formal evaluation with the clinical supervisor.

Students should keep a copy of the evaluation and turn the original in to the “Office of the Registrar” upon their return from the rotation. Any evidence of tampering or modification while in the possession of the student will be considered “unprofessional behavior” resulting in an “N” grade and review by the Committee on Student Evaluation (COSE) and/or the College Hearing Committee.

Grades are held until all rotation requirements, including evaluation forms, are received. Be sure you are using the correct form.

***Student Evaluation of  
Rotation***

Students will submit their rotation evaluations electronically at the conclusion of every rotation through the clerkship schedule.

## Exposure Incidents Protocol

You must also notify your attending and the DME Office of your base institution of the incident. A form has been developed by the University to report exposure incidents. These forms should be on file in your DME's office. While on rotations that occur outside of the base hospital system notify your attending immediately of any exposure, and follow the MSU procedure for evaluation and treatment. The form can be accessed at [www.com.msu.edu/AP/clerkship\\_program/clerkship\\_documents/exposure.pdf](http://www.com.msu.edu/AP/clerkship_program/clerkship_documents/exposure.pdf).

Please make yourself familiar with the procedure and the form.

Student Name \_\_\_\_\_ Student ID # \_\_\_\_\_

**Patient Types and Procedure Log**

	#Required	Pt. Initials	Date	Supervisor Initials
Toxicology (alcohol is a toxin)	1. 2.			
Major trauma	1. 2.			
EKG	1. 2. 3. 4. 5.			
Head CT	1. 2. 3. 4. 5.			
Geriatric Pt. (age >65)	1. 2. 3. 4. 5.			
Pelvic exam	1. 2.			
FAST exam w/ultrasound	1. 2.			
Laceration repair	1. 2.			
Structural exam (musculoskeletal)	1. 2.			
Chest x-ray	1. 2. 3. 4. 5.			
Pediatric evaluation (Age <8)	1. 2.			
Abdominal CT scan interpretation	1. 2.			
Local anesthesia for laceration repair	1. 2.			
IV's	1. 2. 3. 4.			
Draw ABG	1.			
Evaluate pt. with COPD or CHF	1.			