EMED 843: Wilderness Medicine

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Does this rotation accept visiting students? □ YES □ NO

**COURSE DESCRIPTION:**
Students will learn to save lives in the wilderness while earning Advanced Wilderness Life Support (AWLS) Certification. The course uses structured didactic sessions and hands-on practical instruction in a variety of outdoor settings to teach the diagnosis and initial management of the most common wilderness injuries and illnesses. There is a required course fee that will cover your Advanced Wilderness Life Support certification as well as some of the outdoor excursions. This fee will not exceed $200. Students are required to complete a waiver form. All students will be expected to be able to engage in moderate physical activity. Students that are pursuing Emergency Medicine as a career will have first preference for this course.

**LEARNING GOALS & OBJECTIVES:** At the completion of this clinical rotation students should be able to do the following:
1. Demonstrate the correct steps in patient assessment in the wilderness. (PC, MK)
2. Describe the initial treatment guidelines for life support in the wilderness. (PC, MK, SL)
3. Describe the management of common medical and trauma emergencies and urgencies in the wilderness while awaiting definitive care. (PC, MK, PL)

**INSTRUCTIONAL METHODOLOGIES AND ROTATION ACTIVITIES:** Students on this rotation will be expected to learn and achieve the educational goals and objectives through the following methodologies and activities:
1. Attend didactic sessions to gain medical knowledge about wilderness medicine.
2. Attend practical sessions to gain hands-on experience in patient assessment and stabilization.
3. Prepare and present to the group a lecture on a chosen topic.

**PATIENT ENCOUNTERS:** Students will be expected to work-up patients with these specified conditions:
1. Students will learn and practice patient assessment and stabilization skills utilizing learners in the scripted roles of standardized patients.

**EVALUATION / FEEDBACK METHODS:** Students will be evaluated using the following methods:
2. Written exam at the end of elective. (MK)
3. Practical exam at the end of elective. (PC, CS)
4. Evaluation of content and presentation of lecture. (MK, PL, CS)
5. Narrative description based on learner participation and teamwork skills. (CS, PR)

Will students be expected to participate in call? □ YES □ NO
COURSE DESCRIPTION:
The purpose of this course is to provide fourth-year medical students with the knowledge and skills to independently and successfully perform common Emergency Medicine life-saving procedures. Simulation-based education in the fourth year of medical school has been shown to increase the student’s preparedness for postgraduate training by increasing both confidence and competence. This 2-week elective course is geared towards the fourth-year medical student matching in Emergency Medicine (EM). It consists of didactic sessions focusing on core EM procedures, as well as hands-on simulations designed to help achieve competence in these procedures. Sessions will be instructed by an EM faculty member and a senior EM resident, and will take place both in classrooms and the MUSC Simulation Center.

LEARNING GOALS & OBJECTIVES: At the completion of this clinical rotation students should be able to do the following:
1. Identify the indications, contraindications, necessary equipment, methods and techniques, and complications of common EM procedures. (MK)
2. Perform the procedures in a simulated environment using deliberate practice. (MK, PC, PR, PL)
3. Integrate learned procedural skills into simulated patient encounters. (MK, PC, CS, PR, PL, SL)

INSTRUCTIONAL METHODOLOGIES AND ROTATION ACTIVITIES: Students on this rotation will be expected to learn and achieve the educational goals and objectives through the following methodologies and activities:
1. Lectures and discussion in a classroom format.
2. Simulation using both high-fidelity mannequins and part-task trainers.

PATIENT ENCOUNTERS: Students will be expected to work-up patients with these specified conditions:
1. ACLS
2. Difficult Airway
3. Central Venous Access
4. Lumbar Puncture
5. Chest Tubes
6. Cricothyrotomies
7. Adult Medical Resuscitation
8. Adult Trauma Resuscitation

EVALUATION / FEEDBACK METHODS: Students will be evaluated using the following methods:
1. E*Value Clinical Performance Evaluation. (PC, PR, MK, CS, PL, SL)
2. Feedback provided by instructors via direct observation, debriefing methodologies, and checklists to ensure a competency standard has been met. (MK, PC, PR, PL)

Will students be expected to participate in call? ☐ YES ☒ NO
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**Course Coordinator:** Melanie Pigott  
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Does this rotation accept visiting students? ☑ YES ☐ NO

**Course Description:**
The course consists of 15 nine-hour shifts in the Emergency Department (ED). During each shift, the student will interact with patients and learn how to perform an expeditious and focused H&P. The student will focus on how to order appropriate diagnostic tests and formulate a differential diagnosis. The student will work closely with the attending on duty and learn how to treat and manage many various illnesses and injuries. The ED operates 24 hours a day, 7 days a week. Orientation will occur on the first day of the rotation. Preference is that the months of July-November be reserved for those medical students entering Emergency Medicine as their chosen specialty.

**Learning Goals & Objectives:** At the completion of this clinical rotation students should be able to do the following:
1. Conduct an initial assessment of a patient in the ED and perform stabilization techniques. (MK, PC, CS, PR)
2. Establish a differential diagnosis, and order and interpret appropriate diagnostic tests (including imaging studies) related to the differential diagnosis. (MK, PL, SL)
3. Manage acutely ill and/or injured patients. (MK, PC, PR, CS)
4. Perform procedural skills (i.e., I.V. access, blood drawing from femoral sticks, arterial sticks, sutures, I&Ds, wound care, fracture splinting). (MK, PC, PL)
5. Participate in reading EKGs, ABG interpretation, and patient case discussions. (MK, PR, PL, SL)

**Instructional Methodologies and Rotation Activities:** Students on this rotation will be expected to learn and achieve the educational goals and objectives through the following methodologies and activities:
1. Lectures, rounds, and discussion.
2. Patient contact and patient load.

**Patient Encounters:** Students will be expected to work-up patients with these specified conditions:
1. Chest pain and abdominal pain
2. Trauma
3. Altered mental state
4. Procedures may include laceration repair, abscess incision and drainage, lumbar puncture, among others

**Evaluation / Feedback Methods:** Students will be evaluated using the following methods:
1. E*Value Clinical Performance Evaluation. (PC, PR, MK, CS, PL, SL)
2. Direct observation of clinical and patient care skills as evaluated by the ED attending physician. (MK, PC, PR, CS)
3. The students will be evaluated on their ability to follow the patient through the course of the ED which could include consultations, an admission or a discharge from the ED. (PR, CS, PL, SL)
4. Active participation in group discussion as evaluated by the ED attending physician. (MK, PC, PR, CS, SL, PL)
5. Participation in the weekly EM didactic sessions as evaluated by the faculty as well as the residents. (MK, PR, CS, PL, SL)
6. The student will be required to present a case report of their choosing during one didactic session – duration of no more than five minutes – and will be evaluated by their peers, the EM residents, and the faculty present. (MK, PC, PR, CS, PL, SL)
7. Mid-Point Feedback – Student will receive feedback from attendings at the end of clinical shifts. (MK, PC, PR, CS, SL, PL)

Will students be expected to participate in call? ☑ YES ☐ NO
Course Description:
This course is intended for students going into the field of Emergency Medicine. During the four-week rotation, the student will focus on Emergency Ultrasound (EUS) skills. They will complete a minimum of 50 scans in pertinent areas of EUS including Aorta, Biliary, Trauma, Cardiac, Renal, DVT, Soft Tissue/MSK, Thoracic, Ocular, Obstetric, and Procedural Ultrasound. There will be scheduled one on one time with EUS faculty, as well as a weekly scan review. Students will present one case at the end of their month, as well as complete interactive quizzes pertinent to required reading.

Learning Goals & Objectives:
At the completion of this clinical rotation students should be able to do the following:
1. Describe the clinical indications for which bedside ultrasound would be useful. (MK5, PC3)
2. Demonstrate skills in the utilization of bedside ultrasound for diagnosis in appropriate ED patients. (PC7)
3. Demonstrate skills necessary for ultrasound guided procedures (IVs, etc.). (PC7)
4. Describe the difference between normal and abnormal anatomy found on ultrasound and how these differences affect normal physiology. (MK4)
5. Outline situations in which a more complete US scan may be needed by consultative services (Radiology, Cardiology, OB/GYN). (PC3)

Instructional Methodologies and Rotation Activities:
Students on this rotation will be expected to learn and achieve the educational goals and objectives through the following methodologies and activities:
1. Perform at least 50 US scans in the basic areas of Emergency Ultrasound.
2. Participate in formal scan review as well as dedicated one on one time with the Emergency Ultrasound faculty.
3. Complete reading assignments (book chapters and journal articles) as required per the rotation handbook.
4. Present one interesting case during general Emergency Medicine Didactics.

Patient Encounters:
Students will be expected to work-up patients with these specified conditions:
1. Students will have encounters with patients in the emergency department with a broad spectrum of disease processes.
2. Patients presenting with injuries sustained from trauma.
3. Encounters related to medical and surgical processes requiring emergent evaluation.
4. Patients with exacerbations of chronic medical conditions.

Evaluation / Feedback Methods:
Students will be evaluated using the following methods:
2. Pre and post-test of ultrasound skills and assigned readings. (MK, PC)
3. Ultrasound scan review sessions. (PL, MK, PC)
4. Observed hands-on time with EUS faculty during EUS scans. (PR, PC)
5. Mid-point feedback will be given to students during direct hands-on scanning with the students. (MK, PC, PR, CS, SL, PL)

Does this rotation accept visiting students? ☐ YES ☒ NO