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. During this course, the first week is spent in Charleston, the second week is spent in Boone, NC at Camp Broadstone. There is a required course fee that will cover the Advanced Wilderness Life Support certification, as well as some of the outdoor excursions and the costs of the camp. This fee will not exceed $600. 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 pursing Emergency Medicine as a career and members of the Wilderness Interest group will have first priority for this course. (*Please note: No refunds will be given within 30 days of the date of the start of the rotation. If you need to cancel within the 30-day period, your payment can be applied to a future Advanced Wilderness Life Support (AWLS) course of your choosing to be used within two years of the date of the canceled course. All refunds are subject to a 10% processing fee.)*

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. (MK3, PC1, IP3)
2. Describe the initial treatment guidelines for a variety of conditions in the wilderness. (SL1, PC3)
3. Describe the management of common medical and trauma emergencies and urgencies in the wilderness while awaiting definitive care. (PC4, MK8)

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:
1. E*Value Clinical Performance Evaluation.
2. Written exam at the end of elective.
3. Practical exam at the end of elective.
4. Evaluation of content and presentation of lecture.
5. Narrative description based on learner participation and teamwork skills.

Will students be expected to participate in call? ☐ YES ☒ NO

EMED 846: Medical Toxicology

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Course Coordinator: Melanie Pigott
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Does this rotation accept visiting students? ☐ YES ☒ NO

COURSE DESCRIPTION:
Poisoning is responsible for a significant portion of Emergency Department patient presentations and toxic effects of prescribed medications can be problematic in patients presenting with other illnesses. Combining lectures, case presentations, primary literature review, and bedside teaching we will review the most common and most serious toxic exposures due to medications, drugs of abuse, plants, and venomous creatures developing a standard approach to the poisoned patient. Students will take call and see patients in the Emergency Department who have potentially toxic exposures and present these cases to the group the following day.

LEARNING GOALS & OBJECTIVES: At the completion of this clinical rotation students should be able to do the following:
1. Recognize and suggest treatment for patients with toxicologic illnesses (MK3, PC3, PL3)
2. Understand the pathophysiology of common toxins and the antidotes and treatments used to counter their effects (MK2, PC3, PL3)
3. Risk stratify patients based on the epidemiology of poisonings and individual patient presentations (MK7, PL1)
4. Utilize the regional poison control center and understand its limitations (SL1, IP3)

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. Participate in small-group discussions of particular toxins and the associated clinical presentations.
2. See patients at the bedside and present a case succinctly and accurately to colleagues.
3. Read and analyze primary literature regarding topics in Medical Toxicology.
4. Present a focused twenty-minute lecture reviewing a specific toxicological issue.

PATIENT ENCOUNTERS: Students will be expected to work-up patients with these specified conditions:
1. Medication overdose
2. Illicit or street drug toxicity
3. Medication adverse drug effect
4. Environmental exposures and envenomations

EVALUATION / FEEDBACK METHODS: Students will be evaluated using the following methods.
1. E*Value Clinical Performance Evaluation.
2. Moodle quizzes during the rotations and an exam at the completion of the two weeks.
3. Bedside evaluation and formulation of a differential diagnosis, recommended evaluations and interventions, and presentation of the case to colleagues.
4. Presentation to the group of rotators on a toxicologic topic of each student's choice.

Will students be expected to participate in call? ☒ YES ☐ NO

EMED 852: **Emergency Medicine Externship**

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Does this rotation accept visiting students? ☒ YES ☐ NO

COURSE DESCRIPTION:
The course consists of 12 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. Weekly didactic sessions are mandatory. Blocks 1-5 will be reserved for those 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. Demonstrate skills expected of interns including giving and receiving a handoff, writing inpatient orders for signature, preparing a discharge summary to share, calling a consult, and assisting in obtaining informed consent for a procedure or treatment. (PC4, PC5, PC7, CS1)
2. Conduct an initial assessment of a patient in the ED and perform stabilization techniques. (PC1, MK3, MK4, CS1, CS2)
3. Establish a differential diagnosis, and order and interpret appropriate diagnostic tests (including imaging studies) related to the differential diagnosis. (PC2, PR1)
4. Manage acutely ill and/or injured patients. (PC3, PR2, SL2)
5. Perform procedural skills (i.e., I.V. access, blood drawing from femoral sticks, arterial sticks, sutures, I&Ds, wound care, fracture splinting). (MK5, PC1, PC7)
6. Participate in reading EKGs, ABG interpretation, and patient case discussions. (MK5, MK8)

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. Complete an Externship Log documenting level of participation in key entrustable professional activities.
2. Lectures, rounds, and discussion.
3. 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.
2. Direct observation of clinical and patient care skills as evaluated by the ED attending physician.
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.
4. Active participation in group discussion as evaluated by the ED attending physician.
5. Participation in the weekly EM didactic sessions as evaluated by the faculty as well as the residents.
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.
7. Mid-Point feedback – Student will receive feedback from attendings at the end of clinical shifts.

Will students be expected to participate in call? ☐ YES ☒ NO

EMED 854: Emergency Ultrasound

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Does this rotation accept visiting students? ☐ 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. (PL2, CS1, MK5, PC3)
2. Demonstrate skills in the utilization of bedside ultrasound for diagnosis in appropriate ED patients. (PC1, MK5)
3. Demonstrate skills necessary for ultrasound guided procedures (IVs, etc.). (PC7, MK5)
4. Describe the difference between normal and abnormal anatomy found on ultrasound and how these differences affect normal physiology. (MK1, MK2, MK4)
5. Outline situations in which a more complete US scan may be needed by consultative services (Radiology, Cardiology, OB/GYN). (PC3, SL2)

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:
1. E*Value Clinical Performance Evaluation.
2. Pre and post-test of ultrasound skills and assigned readings.
3. Ultrasound scan review sessions.
4. Observed hands-on time with EUS faculty during EUS scans.
5. Mid-point feedback will be given to students during direct hands-on scanning with the students.

Will students be expected to participate in call? ☐ YES ☒ NO