

EMED 3990: Special Topics - Pediatric Emergency Medicine: Assessment and Evidence Based Resuscitation

Spring 2025 (4 credits)

Class meeting times: 1450-1605

Laboratory: Self Schedule

Program Director Roz King, MSN, RN

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Curriculum Overview

This course is for pre-health professional students who are interested in pediatric emergency medicine. The class focuses on teaching the foundations of pediatric emergency medicine (PEM) and is combined with a related clinical PEM experience. This course will cover topics ranging from developmental milestones, effective communication, and pediatric assessment to complex care plans and evidence based resuscitation pathways.

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Course Goals

Upon completion of the course, students will be able to:

- 1. Use skills learned from the class to establish professional, trusting, empathetic relationships with a variety of individuals
- 2. Appraise and interpret scientific articles comprehensively and appreciate the role of scientific literature in building evidence based pediatric practice
- 3. Utilize the pediatric assessment triangle to efficiently determine the acuity of a pediatric patient "sick/not sick"
- Integrate knowledge of disease and illness pathophysiology and its manifestation into physical symptoms
- 5. Formulate and implement evidence-based pediatric care plans based on disease pathophysiology
- 6. Demonstrate knowledge of common pediatric emergency and critical care medications
- 7. Demonstrate effective management of a pediatric trauma patient
- 8. Exhibit a strong understanding of the treatment pathways from prehospital care, to the emergency department, and finally to the acute or critical care inpatient setting

Clinical PEM experience

The lab component of this course provides students with a patient-oriented clinical experience. Students will shadow clinical staff members in the Emergency Department to witness the importance of a multidisciplinary approach to PEM, effective communication with pediatric patients and their families, and learn how to interact with pediatric patients of all ages.

Grading

Attendance	10
Child Psych	10
Clinical Presentation	10
Clinical Shadow	5
Clinical Journals	15
Module Exams	30
Final	20

Lecture Attendance

All lectures are mandatory, and absences are detrimental to the student's attendance grade. In the case of an absence, the student is required to meet with the instructor and develop a plan to make up the material and missed time. Any student having more than one absence may be considered ineligible for course completion. Students will be required to sign in for attendance daily. Occasionally, because of last minute changes in guest speakers' schedules, the order of classes may change. Students will receive as much advance notice as possible, both in class and on Brightspace.

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Examinations

Written module, midterm, and final examinations focus on lecture materials and assigned readings. Additional information on what each exam will cover will be distributed in class.

Laboratory Attendance

Students are responsible for attending their scheduled lab times. Points will be deducted from the student's attendance score for any absences. In the case of an absence, students are required to contact the instructor and will also be required to make-up the shift/lab. Any student having more than one absence or engaging in unprofessional behavior may be considered ineligible for course completion.

Hospital Dress Code for Shadowing, Sim Lab, Clinical presentations, and ED Tours PURPOSE: The appearance of employees working in a health care environment impacts the perception of quality service and care for our patients and the community we serve. Care is enhanced when patients, families, visitors, and staff feel a sense of trust and confidence in the care and the services being provided by staff at the hospital. The professional appearance of staff is key in promoting trust, comfort, and confidence while providing care and service in a safe environment.

Only two options of dress are permissible in the clinical environment: business casual or scrubs. Scrubs must not feature logos from other institutions. Business casual means: dress pants/skirt/dress, shirt, shoes (no sneakers). Shoulders must be covered, skirt/dress must go past fingertips.

General Appearance:

- Student Research Associates must be well groomed and non-odorous.
- Clothes must be without stains or damage.
- Denim is not allowed.
- Clean sneakers may only be worn with scrubs
- Absolutely no open-toed shoes
- Name badges must not be adulterated (e.g. stickers) and worn above the waist.
- Beards must not interfere with personal protection equipment (e.g. masks)
- Tattoos must be covered if potentially offensive.
- Surgical masks are required when patient facing, and will be provided (subject to change) You may dress as per University Policy for lectures and workshops during which you will not

have contact with patients, research subjects, or staff.

ED Shadow

As part of the lab component of this course, you will attend four hour shadow shifts Emergency Department. During this time, you will be assigned to a member of the clinical care team (ED RN, ED MD, Childlife etc) to observe pediatric cases presenting to the ED. You will be expected to write a clinical journal after each shift.

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Clinical Journal

Following each shadow experience, you are required to write a journal entry about what you witnessed. You should include the following:

- Describe your shift: what did you do? What did you see? Was it what you expected?
- Describe an interesting social situation/procedure/illness or accident you witnessed that
 you are unfamiliar with and discus in further detail, for example-if you saw a cardiac
 arrest for the first time, describe how the staff functioned, or if you saw a chest tube
 insertion- describe it.
- Find two research articles related to something you observed and provide a brief summary of the study. These must be cited in APA format.
- When writing clinical journals NEVER include any patient identifiers (name, MRN, DOB).
- Journals should be a minimum of 350 words and no longer than two pages.
- Journals are due at midnight on Sunday following your shadow. Journals must be submitted on Brightspace.
- In the rare (but possible) chance that you have a slow shift during your shadow time and feel that you have nothing to write about, e-mail David. Weiss@uvmhealth.org

Clinical Presentations

Students will create a clinical presentation on a topic of their choosing and present it to their peers. Students are not allowed to duplicate topics; there will be a sign up on brightspace for students to sign up for a topic on a first come first serve basis. Clinical presentations will be 10 minutes or less, with an additional 5 minutes for questions.

Skill Stations and Simulation Workshops

Success in Pediatric Emergency Medicine does not only come from didactic memorization, but from practical implementation of skills. Throughout this course you will have class time that is dedicated to hands-on psychomotor skills as well as high fidelity simulations. You are expected to participate to the best of your abilities. Successful completion of the "Stop The Bleed" portion of the course will give you a certificate of completion which includes the ability to become an instructor of the course.

Badges

You are required to wear your hospital ID badge in the hospital during your shifts. Since the ED is a locked unit, you will need to present your badge to Security before they will buzz you in. You will receive an email when your badge is ready to be made. Go to the 5th floor of UHC (up elevator A) to find the badge office and a photo ID will be made for you when you arrive. If you lose your badge, email David.Weiss@uvmhealth.org

UVM Administrative Policies

Student Learning Accommodations: If you have a formal accommodation plan developed in conjunction with UVM's ACCESS Office or would like to discuss the

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supports that you need in order to learn well in this class, please contact david.weiss@uvmhealth.org at the beginning of the semester. Adaptations and instructional support are available through consultation with the instructor(s) and the ACCESS Office. www.uvm.edu/~access/

UVM's policy on disability certification and support: www.uvm.edu/~uvmppg/ppg/student/disability.pdf

Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence in writing by the end of the second full week of class. You will be permitted to make up work within a mutually agreed-upon time.

Academic Integrity: The policy addresses plagiarism, fabrication, collusion, and cheating. www.uvm.edu/policies/student/acadintegrity.pdf

Grade Appeals: If you would like to contest a grade, please follow the procedures outlined in: www.uvm.edu/~uvmppg/ppg/student/gradeappeals.pdf

Grading: For information on grading and GPA calculation, please go to www.uvm.edu/academics/catalogue and click on Policies for an A-Z listing.

Code of Student Rights and Responsibilities:

www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf

FERPA Rights Disclosure: The purpose of this policy is to communicate the rights of students regarding access to, and privacy of, their student educational records as provided for in the Family Education Rights and Privacy Act (FERPA) of 1974. http://uvm.edu/~uvmppg/ppg/student/ferpa.pdf

Final Exam Policy: The university final exam policy outlines expectations during the final exam period, explaining timing and process: http://catalogue.uvm.edu/undergraduate/academicinfo/examsandgrading/



EMED 3990-A Special Topics: Pediatric Emergency Medicine

Schedule: Spring 2025

			Lecture	Notes
WEEK 1	Tu	01/14	Module I: Introduction to Pediatric Emergency Medicine	Tour of UVMMC Emergency Department
	Th	01/16	Physiologic Developmental Milestones	
WEEK 2	Tu	01/21	Pediatric Public Health	
	Th	01/23	Pediatric Emergency Medical Research	
WEEK 3	Tu	01/28	Pediatric Pain Scales / ChildLife	
	Th	01/30	Pediatric Assessment Triangle / Tips and Tricks	
WEEK 4	Tu	02/04	Child Psychology Presentations	
	Th	02/06	Module I Exam	
WEEK 5	Tu	02/11	Module II: Medical Emergencies: Emergency Childbirth / Neonatal Assessment	
	Th	02/13	Cardiac Emergencies / Congenital Heart Abnormalities	
WEEK 6	Tu	02/18	Respiratory Emergencies	
	Th	02/20	Oncologic / Fevers	
WEEK 7	Tu	02/25	Altered Mental Status	
	Th	02/27	Psychiatric / Behavioral Emergencies	
WEEK 8	Tu	03/04	Gastrointestinal Emergencies	
	Th	03/06	Module II Exam	
WEEK 9	Tu	03/11	Spring Break	
	Th	03/13	Spring Break	
WEEK 10	Tu	03/18	Module III Trauma: Head and Neck Trauma	
	Th	03/20	Chest and Abdominal Trauma	
WEEK	Tu	03/25	Burns	

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	Th	03/27	Non-Accidental Trauma	
WEEK 12	Tu	04/01	Trauma Lightening Rounds	
	Th	04/03	Pediatric Massive Transfusion Protocol	
WEEK 13	Tu	04/08	Stop the Bleed	
	Th	04/10	Module III Exam	
WEEK 14	Tu	04/15	Module IV: Pediatric Readiness School Resource Officer / Rescue Task Force	
	Th	04/17	School Nursing	
WEEK 15	Tu	04/22	Pediatric Readiness / VT EMS Protocols	
	Thu	04/25	Catch Up Day	
Week 16	Tue	04/29	Ambulance / Equipment Day	Meet at UVM Rescue
	Thu	05/01	Simulations	