

Special Permission Required

Course Description	<p>The goal of the Emergency Ultrasound Elective is to expose fourth year medical students to the core ultrasound applications used in daily practice by emergency medicine physicians. This elective will allow students to develop hands on skills in image acquisition and bedside interpretation of images. Students will develop competency in performing FAST, AAA, Cardiac, Biliary, Renal, Thoracic, and Soft tissue/Abscess imaging. Students will also be exposed to more advanced emergency ultrasound applications including ocular, advanced cardiac, DVT, testicular, and procedural applications.</p>
Course Objectives	<ul style="list-style-type: none"> • Demonstrate understanding of basic ultrasound physics • Understand the indications for performing a bedside ultrasound examination • Demonstrate how to appropriately drape patients, and be respectful of patient comfort and privacy while performing exams • Develop competence in basic image acquisition. They will learn basic operation of the ultrasound machine, how to select the proper probe, how to adjust the gain and depth to optimize the image, and proper probe placement on the patient. • Develop confidence in image interpretation: <ul style="list-style-type: none"> ○ Learn to identify the key anatomic landmarks for studies such as FAST, AAA, cardiac, biliary, renal, thoracic, and soft tissue/abscess. ○ Learn to identify the key ultrasonographic findings used to diagnose the following pathologic conditions: cholecystitis, pneumothorax, pericardial effusion, hydronephrosis, ascites, AAA, abscess, and foreign body. ○ Learn to identify free fluid (ascites or blood) on an abdominal ultrasound. ○ Learn to identify fluid (pleural effusion or hemothorax) on a thoracic ultrasound ○ Learn the types of ultrasound artifacts and their role in image acquisition. ○ Perform at least 100 independent ultrasound exams over the course of the rotation
Course Activities	<p>This elective is designed to be longitudinal throughout the academic year, but in rare cases may be completed during a single block. Each student will need to meet with the course director prior to the beginning of the academic year to develop a plan for completing the rotation. Students will complete 14 scanning shifts in the Emergency Department, working directly with</p>



	<p>Ultrasound credentialed faculty and will be directly observed performing bedside ultrasounds. Students will complete a didactic curriculum that is available online, watch SAEM-AEUS educational videos, and complete Sono-Sim modules. Students will complete quizzes testing their knowledge gained through the didactic curriculum and are expected to participate in at least one half-day ultrasound session in the simulation lab (this session is offered monthly).</p> <p>This is a Pass/Fail course. Each student will need to complete a minimum of 100 scans over the course of the rotation to pass. All student-performed scans will be directly supervised by emergency ultrasound credentialed faculty. Each student will need to pass all the subject quizzes available online with a score of 70% or greater to pass.</p>
Course Schedule Requirements	No on-call requirement. Student is present during usual clinical hours (8:00am – 5:00pm, Monday – Friday, excluding holidays as determined by the ECU calendar).

Duration	4 weeks	Location	Online, Vidant Medical Center
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Designation	Elective	Revised	10.03.2019
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