Resident Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objectives:**

*Core*

* Describe the differences between the 4 transducer types and their ideal applications.
* Describe the differences between shadowing, reverberation, posterior enhancement, and mirror artifacts.
* Demonstrate the location of transducer placement and orientation for the E-FAST exam.
* Demonstrate the 4 basic windows for focused cardiac ultrasound.
* Describe how to determine ejection fraction.
* Describe the appearance of a pericardial effusion on cardiac US.
* Demonstrate the technique for assessing the volume status of the IVC with ultrasound.
* Describe the appearance of pleural effusion on lung US.
* Identify B-lines and describe their clinical significance.
* Identify and describe common renal ultrasound findings including hydronephrosis, simple cyst, and complex cyst.
* Demonstrate the technique for evaluation of early pregnancy via transabdominal and transvaginal approaches.
* Identify and describe the differences in appearance between soft tissue cellulitis and abscess.
* Demonstrate the technique for evaluation of biliary pathology, including cholelithiasis, cholecystitis, and choledocholithiasis.
* Describe the technique for evaluation of abdominal aorta pathology.
* Demonstrate the technique for evaluating for an abdominal fluid pocket for paracentesis.
* Successfully place 5 ultrasound-guided peripheral IV catheters.

*Reach*

* Describe common pathological findings on ocular US.
* Demonstrate the complete lower extremity DVT evaluation (2-region/3-point or whole leg).
* Describe the ultrasound findings of appendicitis.
* Describe the technique for ultrasound-assisted lumbar puncture.
* Demonstrate correct technique for US guided arthrocentesis.

**End-of-rotation exam:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Observed scanning case evaluation:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Application*: | Aorta | Cardiac | FAST | Gallbladder | Renal |
| *Grade*: | Pass | |  | Fail | |

**Subjective evaluation:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Course director signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_