

LABETTE COMMUNITY COLLEGE BRIEF SYLLABUS

SPECIAL NOTE:

This brief syllabus is not intended to be a legal contract. A full syllabus will be distributed to students at the first class session.

TEXT AND SUPPLEMENTARY MATERIALS USED IN THE COURSE (if any):

Please check with the LCC bookstore <http://www.labette.edu/bookstore> for the required texts for this class.

<u>COURSE NUMBER:</u>	DMS 221
<u>COURSE TITLE:</u>	SONOGRAPHY CLINICAL TRAINING II
<u>SEMESTER CREDIT HOURS:</u>	6
<u>DEPARTMENT:</u>	Diagnostic Medical Sonography
<u>DIVISION:</u>	Health Science
<u>PREREQUISITES:</u>	DMS 220 Clinical Training I

COURSE DESCRIPTION:

This course is a continuation to the Introductory Clinical Course. The student will still be observing some procedures and progress to assisting with and performing procedures. This course will cover general Sonography procedures of the abdomen, thyroid, scrotum, breast, MSK, non-cardiac chest, and major vasculature structures of the abdomen, and small parts. The student will attend 24 hours of clinical per week. Hours and days are subject to change.

COURSE OUTCOMES AND COMPETENCIES:

Students who successfully complete this course will be able to:

1. Interact appropriately with the patient, physicians, and staff.
 - Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results.
 - Practice appropriate communication skills with patients and colleagues.
 - Act in a professional and ethical manner, while protecting patient rights and confidentiality.
 - Provide patient education related to medical ultrasound and /or other diagnostic vascular techniques, and promote principles of good health.
 - Exercise discretion and judgment in the performance of Sonographic and / or other diagnostic services.
 - Practice correlation of studies on the same patient within the same time frame.

2. Compare Sonography procedures and identify anatomy, pathology and physiology of structures being imaged.

- Ask the pertinent clinical questions which in turn will aid in the examination.
- Organize significant clinical information and historical facts from the patient and the medical records, which may impact the diagnostic examination.
- Compare data from current and previous examinations to produce a written/ oral summary of technical findings, including relevant changes, for the interpreting physician's reference.
- Distinguish between normal and abnormal abdominal structures.
- Interpret preliminary report to radiologist.

3. Apply the correct transducer type and frequency for the examinations being performed.

- Modify instrument controls including examination presets, scale size, focal zones, overall gain, time gain compensation, and frame rate to optimize image quality.
- Demonstrate Doppler ultrasound principles, spectral analysis, and color flow imaging relevant to specialty being assessed.
- Identify anatomy, physiology, pathology, and pathophysiology relevant to exam being assessed. Complete abdomen, thyroid, scrotum, aorta, and inferior vena cava.
- Be prepared and prevent possible hazards to the person being examined.

4. Demonstrate the ability to perform Sonographic examinations of the abdomen, thyroid, scrotum, breast, and major vasculature within the structure imaged.

- Differentiate normal from abnormal structures and document the abdominal, MSK, non-cardiac, breast, scrotum, thyroid, and other small parts appropriately.
- Document correctly patterns of disease processes, pathology, and pathophysiology of the major organs and areas of interest.
- Modify the scanning protocol based on the Sonographic findings and the differential diagnosis.
- Perform related measurements from Sonographic images or data.
- Utilize appropriate examination recording devices to obtain pertinent documentation of examination findings and organize it in the preliminary report to the Doctor.
- Apply Doppler applications when required during the examination, and be able to explain the findings.
- **Perform 11 assisted competencies:** Abdomen Complete, Abdomen (Abnormal), Abdomen Limited, Renal, Renal Artery Doppler, Thyroid, Scrotum, Aorta, Aorta Duplex, Inferior Vena Cava, Breast, and Breast with pathology.

5. Categorize all procedures performed.

- List all procedures observed, assisted with, or performed while protecting the patient confidentiality.
- Utilize the appropriate clinical verification form to document each specialty area.
- Organize all paperwork, computer images, and required documentation for reading.
- Demonstrate patient permanent record storage. CD, PACS, or any other storing device.

6. Perform general and specific department duties.

- Perform Sonographic examinations of the abdomen, superficial structures, MSK, and non-cardiac chest with little to no assistance.
- Assist with OB/GYN and Vascular examinations.
- Reproduce the image on follow up exams and evaluate changes.
- Identify normal vs. abnormal Doppler waveforms throughout the body.
- Perform clean and sterile technique to reduce spread of disease.
- Compare images from ultrasound to images from different modalities including computed tomography, MRI, MRA, angiogram, and nuclear medicine.