

## 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.

<b><u>COURSE NUMBER:</u></b>	DMS 220
<b><u>COURSE TITLE:</u></b>	SONOGRAPHY CLINICAL TRAINING I
<b><u>SEMESTER CREDIT HOURS:</u></b>	2
<b><u>DEPARTMENT:</u></b>	Diagnostic Medical Sonography
<b><u>DIVISION:</u></b>	Health Science
<b><u>PREREQUISITES:</u></b>	DMS 205 Sonography Sectional Anatomy & Abdominal Pathology

### **COURSE DESCRIPTION:**

An introductory course to Sonography scanning, procedures, and protocols. The student will begin with observation 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 a clinical rotation for 24 hours 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.
  - Demonstrate 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.

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

- Identify the pertinent clinical questions and the goal of the examination.
- Recognize significant clinical information and historical facts from the patient and the medical records, which may impact the diagnostic examination.
- Review 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.

- Adjust 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.
- Recognize and prevent possible hazards to the person being examined.

4. Perform Sonographic examinations of the abdomen, thyroid, scrotum, breast, and major vasculature within the structure imaged.

- Recognize, identify and document the abdominal, MSK, non-cardiac, breast, scrotum, thyroid, and other small parts.
- Identify 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.
- Apply Doppler applications when required during the examination.

5. Document 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.
- Locate all paperwork, computer images, and required documentation for reading.
- Demonstrate patient permanent record storage. CD, PACS, or any other storing device.

6. Describe the general learning concentration.

- Demonstrate the ability to perform Sonographic examinations of the abdomen, superficial structures, MSK, and non-cardiac chest.
- Show the ability to perform Sonographic examinations of the small parts, and major vessels of the abdomen.
- Reproduce the image on follow up exams.
- Identify normal vs. abnormal Doppler waveforms.
- Apply clean and sterile technique to reduce spread of disease.
- Distinguish between different modalities including computed tomography, MRI, MRA, angiogram, and nuclear medicine.