Bossier Parish Community College Master Syllabus

Course Prefix and Number: SONO 204L

Credit hours: 1

Course Title: Ultrasound Learning Lab

Course Prerequisites: Enrollment in the DMS program courses is limited to those students who have been selected and admitted to the professional phase of the program. Program courses are sequenced by semester and must be taken as a group each semester per program requirements and policies.

Textbook(s): Required Textbooks:

Course Description:

Hands on lab experience with ultrasound equipment and direct instructional oversight to supplement the students skills and knowledge to successfully perform the duties of a sonographer. Students will learn the basic mechanisms of good scanning techniques and begin recognizing normal sonographic anatomy. Students will practice scanning on test objects and phantoms.

Learning Outcomes:

- A. Demonstrate a basic understanding of the ultrasound machine and its function to produce quality diagnostic images.
 - a. Button Placement
 - **b.** Probe Selection
 - c. Image optimization techniques
 - d. Machine care and cleaning
- B. Demonstrate the ability to scan with ergonomic practices for sonographer safety and career longevity.
- C. Establish critical thinking skills to combine patient history, symptoms, and physicians orders to provide the proper and complete diagnostic exam for the patient.
- **D.** Possess a foundation of understanding the diagnostic imaging process to include a written exam report for radiologist review.

To achieve the learning outcomes, the student will or will be able to:

• Properly turn the machine on and off.

- Scan with probe in right hand while simultaneously running the machine with left hand with little to no assistance.
- Properly annotate each image.
- Select the appropriate probe for each exam.
- Demonstrate a basic knowledge of scanning protocol for each exam taught.
- Understand image optimization and appropriately adjust gain, TGC, harmonics, focus point, frame rate, frequency and any other available optimization.
- Clean the machine and ultrasound probes with the correct cleaning solutions and know how to determine what is safe and not safe to use with the sensitive equipment.
- Demonstrate sterile scanning techniques.
- Scan in proper ergonomic form and demonstrate ways in which to position the patient and machine to remain in the safest scanning position possible for difficult situations.
- Describe the appropriate steps to obtain a thorough account of patient history and symptoms.
- Use deductive reasoning to ensure the most appropriate exam is order for the patients needs.
- Establish proper imaging jargons and descriptions to include in exam reporting.
- Demonstrate the ability to accurately record measurements and findings in report.

Course Requirements: In order to pass the course, the student must earn 76% of the total possible points on the unit tests for the course and make a minimum score of 70% on the final exam. The student must achieve an overall course average of 76%. Grades will not be rounded. Failure to complete any of the course requirements listed below will result in an "F" for the course.

The student will:

- Participate in/complete all classroom/laboratory experiences (such as discussion questions; quizzes; section test; case studies; concept mapping; DVD, video, web-site, or reading assignments).
- Be held responsible for the content of the entire course. The final exam is mandatory, will be cumulative, and worth 25% of the overall grade for the course.

Course Grading Scale:

93–	100%=	Α
85-	92%=	В
76-	84%=	С
68–	75%=	D
0 –	67%=	F

Attendance Policy: The college attendance policy (for the classroom) is available at http://catalog.bpcc.edu/content.php?catoid=5&navoid=369#class-attendance

Course Fees: (if applicable)

Nondiscrimination Statement

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA Angie Cao, Student and Disability Services Specialist Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111 318-678-6511 acao@bpcc.edu Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator Teri Bashara, Director of Human Resources Human Resources Office, A-105 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6056 Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.