

CVT A224: ECHOCARDIOGRAPHY CLINICAL LAB 2

Item	Value
Curriculum Committee Approval Date	02/26/2025
Top Code	121300 - Cardiovascular Technician
Units	1 Total Units
Hours	54 Total Hours (Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Pass/No Pass (B)

Course Description

Intermediate clinical experience. Continue in cardiac and vascular sonographic scanning in assigned clinical facility and perform related patient care. Begin to determine normal and abnormal sonographic findings. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Perform 2D, M-Mode, and Doppler ultrasound imaging with measurements in a patient care setting and identify normal anatomy.

Course Objectives

- 1. Perform echocardiographic studies with sufficient diagnostic quality with assistance.
- 2. Identify each cardiac structure and its orientation or anatomical relationship.
- 3. Perform measurements of cardiac structures/chambers/valves accurately for diagnostic evaluation.
- 4. Demonstrate the use of 2D/M-Mode/Doppler studies on adults.
- 5. Demonstrate the use of Doppler interrogation when indicated to create ultrasound images for diagnostic interpretation.
- 6. Submit for evaluation an echocardiographic exam and completed clinical workbook towards final grade.

Lecture Content

This is an assigned clinical experience in cardiac echocardiography for routine and advanced imaging, Doppler, and color flow Doppler studies for adult and pediatric patients. In the clinical setting, the student will observe, assist, and perform echocardiographic studies under direct supervision of a clinical instructor. Written progress evaluations will be maintained weekly to monitor skill development and proficiency demonstration. Evaluation of effective and appropriate communication skills with clinical staff, patients, and physicians will be assessed.

Lab Content

This course is attended in a clinical setting with hands on skills assessment.

Method(s) of Instruction

- Lab (04)
- Work Experience (20)
- Field Experience (90)

Instructional Techniques

Observation, hands-on scanning, image evaluation.

Reading Assignments

Reading Assignments: It is recommended that the student read 2-6 hours per week from the sonography textbook.

Writing Assignments

Weekly, monthly, and final evaluation of work and progress by student and clinical preceptor.

Out-of-class Assignments

Students are encouraged to attend sonographic conferences or webinars. These are typically 2 hours in length. Sonographers or clinical preceptors may give students a topic to research and present to staff. This may be 1-3 hours.

Demonstration of Critical Thinking

Differentiate abnormal from normal anatomy and pathology.

Required Writing, Problem Solving, Skills Demonstration

Perform Echocardiography weekly with a final evaluation of imaging and progress by clinical educator.

Eligible Disciplines

Cardiovascular technology: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required DeWitt, Susan King. Echocardiography from Sonographers Perspective The notebook 7, 8 ed. Launch Printing Promotions, 2022

Other Resources

1. CVT 224 Clinical Workbook