

CVT A210: ECHOCARDIOGRAPHY CLINICAL LAB 1

Item	Value
Curriculum Committee Approval Date	09/07/2022
Top Code	121300 - Cardiovascular Technician
Units	5.5 Total Units
Hours	261 Total Hours (Lecture Hours 18; Lab Hours 243)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Pass/No Pass (B)

Course Description

Experience in echocardiography in a clinical facility to include conferences or lectures by physicians, sonographers, and guest lecturers to relate patient clinical presentations to diagnostic findings. PREREQUISITE: CVT A160. COREQUISITE: CVT A200 and CVT A205. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate effective oral and written communication skills in the classroom and clinical setting.
2. Perform and integrate diagnostic cardiac imaging with an emphasis on cardiac structures in the clinical environment

Course Objectives

- 1. Perform 2D and M-mode echocardiography with assistance on patients.
- 2. Recognize normal cardiac anatomy in all echocardiographic views.
- 3. Differentiate normal and abnormal cardiac anatomy in echocardiographic views.
- 4. Communicate with patients, staff and physicians in an effective manner.
- 5. Communicate effectively in an oral presentation format.
- 6. Submit a comprehensive written report on oral presentation information.
- 7. Demonstrate an ability to access on-line computer information.
- 8. Correlate Doppler information in echocardiographic studies.
- 9. Perform limited Doppler interrogations of cardiac valves and chambers.
- 10. Obtain a satisfactory clinical experience evaluation.

Lecture Content

Seminar topics will be obtained from the clinical experience and presented to the class. Topics will be student driven. Oral and communication skills will be demonstrated. Emphasis will be placed

on critical thinking skills used in the clinical environment with different scenarios and case studies presented for discussions by the students in the classroom.

Lab Content

This is the first clinical rotation in the series which will integrate and refine the knowledge and skills learned in CVT A150, CVT A160, CVT A200, and CVT A205. Emphasis will be placed on critical thinking, patient, and clinical staff interaction and communication skills which are essential to employment in the cardiovascular technology field. Students will observe and perform procedures under staff supervision on patients at an assigned affiliated clinical facility. Patient populations, pathologies and clinical procedures will vary in each clinical site. Students will use the instructional objectives listed in the course clinical syllabus for direction on the level of expectations to be attained during this experience. The clinical will require 24 hours per week of direct clinical practice and a 1 hour per week seminar discussion.

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- Lab (04)
- DE Live Online Lab (04S)
- Work Experience (20)
- Non-Directed Clinical (NDR)

Instructional Techniques

1. Physician, sonographer lectures. 2. Interactive computer learning modules/Internet and web sites. 3. Group discussions. 4. Observation, hands-on scanning and the review of studies 5. Video/Slide presentations 6. Program graduate presentations or guest lecturer.

Reading Assignments

It is recommended that students read 4 hours per week from an assigned text

Writing Assignments

Proficiency demonstration required in obtaining cardiac images. Written and oral presentation of a case study. Proficiency demonstration required in computer data/information retrieval.

Out-of-class Assignments

Students are encouraged to attend ultrasound conferences and lectures when they are offered.

Demonstration of Critical Thinking

1. Satisfactory clinical experience performance evaluation. 2. Oral presentation with satisfactory level performance. 3. Written report submission or case study with satisfactory content evaluation.

Required Writing, Problem Solving, Skills Demonstration

Proficiency demonstration required in obtaining cardiac images. Written and oral presentation of a case study. Proficiency demonstration required in computer data/information retrieval.

Eligible Disciplines

Cardiovascular technology: Any bachelors 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, 7 ed. St. Marys, GA: Launch Printing Promotions, 2018 Rationale: -

Other Resources

1. CVT Clinical Workbook