



BAKER COLLEGE
STUDENT LEARNING OUTCOMES

CAS2010A Cross Sectional Sonography
5 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Explore cardiac disease states
 - a. Compare symptoms, causes and treatments of different cardiac diseases states
2. Interpret heart sounds in cardiac auscultation and pulse traces
 - a. Explain the cardiac auscultation exam
 - b. Identify auscultation areas
 - c. Identify normal heart
 - d. Identify abnormal heart sounds
 - e. Identify abnormal pulse traces
3. Interpret the basic Color flow and Doppler exam
 - a. Differentiate between normal and abnormal flows
4. Demonstrate the basic 2D exam and measurements
 - a. Obtain quality parasternal images.
 - b. Obtain quality apical images.
 - c. Obtain quality subcoastal and SSN images.
 - d. Identify cardiac wall segments
 - e. Identify cardiac structures in 2D scan planes
 - f. Calculate 2D measurements as required.
5. Demonstrate the M-mode exam and measurements
 - a. Obtain quality M-mode traces
 - b. Identify cardiac structures in M-mode traces
 - c. Calculate M-mode measurements as required
6. Demonstrate professional communication skills
 - a. Apply verbal and non-verbal communication skills to professional situations.
7. Examine proper ergonomics for sonographers
 - a. Explain the role of proper ergonomics in sonography safety
 - b. Demonstrate proper ergonomic techniques

Big Ideas and Essential Questions

Big Ideas

- 2d exam
- M-mode exam
- Color flow and Doppler exam
- Ergonomics
- Cardiac disease
- Heart sounds
- Professional communication skills

Essential Questions

1. How do you properly perform a quality basic 2d and m-mode exam?
2. What role does ergonomics play in sonography?
3. What are the symptoms, causes and treatments of various cardiac disease states?
4. How are heart sounds and doppler affected by disease states?
5. Why is it important to have professional communication in healthcare?

These SLOs are not approved for experiential credit.

Effective: Spring 2021