

# BAKER COLLEGE STUDENT LEARNING OUTCOMES

RAD2510 CT Basics and Related Anatomy
3 Semester Hours

## **Student Learning Outcomes and Enabling Objectives**

- 1. Examine Cross Sectional Anatomy and related pathology.
  - a. Provide examples of current practice standards and imaging protocols for diseases of the head, thorax and abdomen.
  - b. Identify Sectional Anatomy on commonly performed procedures of the head, thorax and abdomen.
  - c. Examine the role of contrast agents in studies of the head, thorax and abdomen.
- 2. Explore CT Physics and Instrumentation.
  - a. Summarize the different generations of CT including their capabilities and limitations.
  - b. Explain image reconstruction and reformatting.
  - c. Identify the components, operation and processes of a CT scanner.
  - d. Describe the process of data acquisition to image display.
  - e. Describe scan field of view and display field of view.
- 3. Describe patient preparation and safety.
  - a. Summarize Radiation Dose minimizing strategies.
  - b. Explain patient preparation necessary for commonly performed CT contrast studies
  - c. List contrast screening factors and contraindications.
  - d. Identify adverse reactions to contrast media.
  - e. Name the type, dosage purpose, and route of contrast administration for common CT procedures.
  - f. Select appropriate technical factors for pediatric patients.

## **Big Ideas and Essential Questions**

### **Big Ideas**

- Sectional Anatomy
- CT Physics
- Instrumentation
- Dose Concerns

#### **Essential Questions**

- Why is it important for all Radiologic Technologists to be familiar with cross-sectional anatomy and its benefits for demonstrating certain pathologies?
- What are the differences in CT scanner "generations"?
- What technological innovations that have helped improve the patient experience and accuracy of disease diagnosis?

•	Why is	radiation	safety	such a	concern	in	CT?
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These SLOs are not approved for experiential credit.

Effective: Fall 2020