

## BAKER COLLEGE STUDENT LEARNING OUTCOMES

RAD1250 Radiation Safety
1 Semester Hour

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

- 1. Outline safety methods used to minimize patient exposure.
  - a. Identify effective dose limits for non-occupational radiation exposure.
  - b. Examine the technical factors used to produce quality diagnostic images with the lowest radiation exposure possible.
  - c. Appraise the legal and ethical radiation protection responsibilities of radiation workers.
  - d. Demonstrate how time, distance and shielding can be manipulated to keep radiation exposures to a minimum.
  - e. Describe the radiation protection features of the radiographic and fluoroscopic imaging systems.
- 2. Explain the basis for occupational exposure limits.
  - a. Explain how the ALARA concept is utilized as it pertains to occupational exposure.
  - b. Explain the objectives of a radiation protection program and identify dose limits for occupational radiation exposure.
  - c. Identify dose equivalent limits for the embryo and fetus in occupationally exposed women.
  - d. Distinguish between primary and secondary radiation barriers.
- 3. Differentiate methods of radiation exposure monitoring.
  - a. Describe the theory and operation of radiation detection devices.
  - b. Define radiation and differentiate applications of radioactivity units of measurement.
  - c. Classify units of radiation measurement.
  - d. Interpret personnel monitoring reports.

## **Big Ideas**

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- Minimizing Patient Exposure
- Personnel Protection
- Exposure Monitoring

These SLOs are not (choose one) approved for experiential credit.

Effective: Fall 2017