BAKER COLLEGE
STUDENT LEARNING OUTCOMES

RAD2220 Radiologic Science II

6 Semester Hours

Student Learning Outcomes and Enabling Objectives

1. Summarize biological effects of radiation exposure.
    a. Identify cellular, molecular, and biological aspects of radiation exposure.
    b. Analyze radiation energy transfer and effects.
    c. Differentiate between types and sources of ionizing radiation.
    d. Compare radiosensitivity and response.
2. Analyze imaging equipment components and their functions.
    a. Explore x-ray acquisition systems and associated errors.
    b. Investigate data management and picture archival and communication systems.
    c. Describe the features of image intensified and digital fluoroscopy systems.
    d. Evaluate Images viewed on the digital display for appropriate quality.
    e. Identify exposure latitude and quality assurance and maintenance concerns.
3. Investigate quality assurance elements in imaging.
    a. Evaluate image appearance standards and apply corrective adjustments.
    b. Appraise the importance of quality control in imaging.
    c. Explore exposure's relationship to brightness on the digital display and film density.
    d. Formulate effective exposure factors.
4. Summarize basic physics principles related to radiation.
    a. Dissect structure of the atom.
    b. Employ safe radiation practices.
    c. Examine the nature of scatter and secondary radiation.
    d. Summarize x-ray photons interaction with matter.
    e. Categorize radiation units, detection, and measurement.
    f. Discuss essential physics concepts as a foundation for understanding radiation.

These SLOs are not approved for experiential credit.

Effective: Spring 2018