Course Outcome Guides Fall 2017

Course/Program Title:	RAD 102- Radiography II
Course/Program Team:	Megan Pepple

Expected Learning Outcomes for RAD 102

STUDENT LEARNING OUTCOMES:

- 1. Identify communication methods appropriate for use in the healthcare environment.
- 2. Describe health law, ethics, and the influence of morals on service provision.
- 3. Understand the concept of informed consent as it relates to the legalities of healthcare service provision.
- 4. Describe the function of health information management.
- 5. Identify the components of an x-ray unit and circuitry and their function.
- 6. State the guidelines for and demonstrate safe operation of a radiographic unit.
- 7. Identify and define the interactions that produce x-ray photons.
- 8. Identify and define the interactions that occur between x-ray photons and the patient.
- 9. Define the units of radiation exposure and the methods by which radiation is measured, and identify exposure/dose limits for the general population and radiation worker/personnel.
- 10. Identify the accessories utilized to enhance the production of quality radiographic images and their function.
- 11. Define prime factors and explain the impact prime radiation exposure factors have on the production of quality radiographic images.
- 12. Understand various pathological processes and how technical factors must be adjusted to accommodate them.

Assessment (How do or will students demonstrate achievement of each outcome?)

- Assessments exams, quizzes
- X-ray tube circuitry assignment

Validation (What methods have you used or will you use to validate your assessment?)

- Completion of course with an average grade of 75% or higher.
- 85% of students will correctly answer designed final exam questions correctly.

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

- Assessments have not yet been completed for these learning outcomes. Assessment will be completed at the end of Fall 2017 semester.
- Percentage of students answering the following final exam questions correct

Question #7 – informed consent	30/32	94%
Question # 15 – effective communication	28/32	87.5%
Question #27 – history taking	26/32	81%
Question # 38 – components of the x-ray	29/32	91%
circuit		
Question # 46 – ALARA	25/32	78%
Question # 50 - dose	21/32	65%

Question # 56 – brems interaction	23/32	72%
Question # 57- characteristic interaction	21/32	66%
Question # 86 – prime factors	32/32	100%
Question # 125 - grids	21/32	66%
Question # 137- pt. as a variable	31/32	97%

Follow-up (How have you used or how will you use the data to improve student learning?)

- For the questions below 85%, I plan to spend more time in lecture on these topics. This course was designed as an online course, which made learning this difficult material even more of a challenge for students. In future semesters, this course will be offered as a face-to-face course. I plan to utilize models to teach brems interactions and characteristic interactions. Students will complete dialogue activities to developing history taking skills.
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Budget Justification (What resources are necessary to improve student learning?)

• No resources needed at this time.