

COURSE OUTCOME MATRIX

COURSE SYLLABUS

PART 2 of 3

Course Number and Title	RA 106: Radiologic Science I
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Credit Hours	3
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Course Description	Fundamentals of radiation, conditions for, exposure, production, characteristics, interactions, safety, components and functions of x-ray tubes and accessories, plus an introduction to digital imaging systems and receptors. Application of mathematical concepts and laboratory experiences are included.
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Prerequisite(s) and/or Corequisite(s)	RA 100 None
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Required Textbooks/References/Course Materials:
None.

General Education Outcomes	
1	Utilize written and verbal language to discuss and comprehend information, incorporating a variety of technologies, such as text, data, and images (written language, verbal language, and information technology).
2	Identify and interpret relevant information in order to formulate an opinion or conclusion (critical thinking).
3	Demonstrate and communicate computational methods and mathematical reasoning in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate) (quantitative literacy and fluency).
4	Communicate in appropriate ways with those who are culturally diverse (intercultural competence).

Program/Department Outcomes	
1	Prepare students to become safe and competent radiographers.
2	Provide educational opportunities for students to possess critical thinking skills.
3	Demonstrate responsible professional attitudes and behaviors.
4	Use effective communication.

	Course Outcomes (CO)	Bloom's Domain for CO (C, A, P), Category, and Level	Program/ Department Outcome(s)	Written Language	Verbal Language	Information Technology	Critical Thinking	Quantitative Literacy and Fluency	Intercultural Competence
1	Describe image production, exposure, characteristics, interactions and properties.	C Remembering 1	1	1	1	1	0	0	0
2	Identify components and functions of an x-ray tube.	C Remembering 1	1,4	1	1	1	1	0	0
3	Recognize accessory equipment purposes and demonstrate correct, safe use and operation.	C Remembering 1	1,4	1	1	1	1	0	0
4	Demonstrate effects of accessory equipment on image quality.	C Applying 3	1,2	1	1	1	1	0	0
5	Describe different digital equipment and image receptor types.	C Remembering 11	4	1	1	1	0	0	0
6	Solve mathematical calculations.	C Applying 31,4	1,2,4	1	1	1	1	1	0

Bloom's Domain Legend

C = Cognitive
A = Affective
P = Psychomotor

General Education Outcome Legend

2 = Included and Measurable
1 = Introduced and/or Minimally Addressed and Not Measurable
0 = Not included

Approved: May 2021
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