

COURSE OUTCOME MATRIX COURSE SYLLABUS PART 2 of 3

Course Number and Title	RA 209: Radiologic Science III
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Credit Hours	3
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Course Description	Includes electromagnetism, electromagnetic spectrum, circuitry and components, atomic structure as well as advanced principles and components of digital imaging acquisition and display, quality control testing, improvement and management. Apply knowledge with laboratory experiences
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Prerequisite(s) and/or Corequisite(s)	RA 208 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 atomic structure, electromagnetism, and the electromagnet spectrum.	C Remembering 1	1,4	1	1	1	0	0	0
2	Describe potential difference, current and resistance.	C Remembering 1	1,4	1	1	1	0	0	0
3	Explain the general components and functions of the x-ray circuit including the tube and filament circuits.	C Understanding 2	1,4	1	1	1	1	0	0
4	Implement associated testing method and evaluate results of Quality Control medical imaging testing.	C Applying 3	2,4	1	1	1	1	1	0
5	Differentiate between quality assurance and quality management.	C Analyzing 4	4	1	1	1	0	0	0
6	Use advanced digital imaging concepts and processes for acquisition and display.	P Embody 5	1-4	1	1	1	1	1	1

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
Reviewed: October 29, 2021