

COURSE OUTCOME MATRIX

COURSE SYLLABUS

PART 2 of 3

Course Number and Title	RA 201 Radiation Biology and Advanced Radiation Protection
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Credit Hours	2
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Course Description	This course focuses on the effect of ionizing radiation in the biological systems and the public's right to minimal radiation exposure. Discussions on genetic syndromes and somatic radiation will be stressed.
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Prerequisite(s) and/or Corequisite(s)	Admission to the program None
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Required Textbooks/References/Course Materials:

Radiation Protection in Medical Radiography - Workbook	8th	Statkiewicz-Sherer, Mary Alice	Elsevier	0323555098
Radiation Protection in Medical Radiography	8th	Statkiewicz Sherer, Mary Alice	Elsevier	0323446663

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	Know cell biology.	C Remembering 1	1,4	1	1	1	0	0	0
2	Explain the effects of ionizing radiation on body systems.	C Understanding 2	1,2,4	1	1	1	1	0	0
3	Differentiate SI and standard radiation quantities, units and perform conversions.	C Analyzing 4	1,2,4	1	1	1	1	1	0
4	Recognize dose standards for occupational, non-occupational and special populations.	C Remembering 1	1	1	1	1	1	1	1
5	Identify radiation safety measures including monitoring devices.	C Remembering 1	1-3	1	1	1	1	1	0
6	Discover a current legislative issue impacting radiation safety of the public.	C Applying 3	2-4	1	1	1	1	0	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
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