RADIOLOGICAL SCIENCES (RADSC)

RADSC 101: Radiographic Introduction and Procedures/Lab I
4 Credits
Radiology history, basic radiation protection principles, medical terminology, introduction to radiography and radiographic procedures/lab.

RADSC 102: Radiographic Procedures/Lab II
4 Credits
Continuation of Radiographic Procedures/Lab I to include appendicular skeleton and introduction to head work.
Prerequisite: RADSC101, RADSC110

RADSC 103: Radiographic Procedures/Lab III
3 Credits
Continuation of Radiographic Procedures/Lab II to include digestive, urinary, and biliary systems and facial bone work.
Prerequisite: RADSC102

RADSC 110: Patient Care in Radiologic Sciences
3 Credits
Basic concepts of routine and emergency patient care procedures addressed from the radiographer’s perspective. RADSC 110 Patient Care in Radiologic Science (3) The content of this course includes the basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures are addressed from the radiographer’s perspective. Students will learn proper infection control techniques and will prove competency in CPR. This course is a requirement of the radiography (radiologic technology) curriculum and could be utilized as an option for students interested in patient care procedures such as health science majors.

RADSC 204: Radiographic Exposure I
3 Credits
Fundamental knowledge base of factors that govern and influence the production and recording of radiologic images.
Prerequisite: RADSC103

RADSC 205: Radiographic Exposure II
3 Credits
Continuation of exposure factors concerning radiographic imaging; film, electronic imaging, processing, quality assurance and related areas will be emphasized.
Prerequisite: RADSC204

RADSC 206: Advanced Radiographic Procedures
3 Credits
Emphasis on specialized positioning and advanced radiographic procedures; includes introduction to cross-sectional anatomy.
Prerequisite: BIOL 141, RADSC205

RADSC 207: Registry Review
4 Credits
Registry Review includes material from all radiological science courses, with emphasis on National Certification Examination, and career planning.
Prerequisite: RADSC206

RADSC 210: Radiographic Pathology
3 Credits
Writing intensive study of theories of disease causation and the pathophysio-logic disorders compromising health systems with emphasis on radiographic presentation. RADSC 210W Radiographic Pathology (3) A writing-intensive study of the basic fundamentals of pathology (disease process) with emphasis placed on radiographic presentation. Material covered includes the basic concepts of disease and terms related to pathology, systemic classifications of disease including etiology, examples, complications and prognosis, radiographic procedures and presentation, and the health process. Writing requirements include two short papers and a longer sequenced paper. All papers will receive instructor feedback and subsequent submission of a final revised paper. An informal writing assignment with peer review is also required. The writing process evolves throughout the course as the student applies knowledge learned to current assignments. This course is a requirement of the radiography (radiologic technology) curriculum and could be utilized as an option for students interested in a visual study of disease process such as health science and biology majors or for students in need of a writing-intensive course. As is consistent with the core courses in the Radiography program, a passing grade for enrolled radiography students is 75%.

Prerequisite: BIOL 129, BIOL 141

RADSC 220: Radiation Biology and Protection
3 Credits
Study the principles of interaction of radiation with living systems, effects on cells and tissues, biological response, and radiation protection. RADSC 220 Radiation Biology & Protection (3) The content of this course includes the basic fundamentals of radiation interactions, basic biology with emphasis placed on effects of radiation exposure on cells and on radiation protection mandates and techniques. This course is a requirement of the radiography (radiologic technology) curriculum and could be utilized as an option for other students interested in radiation effects such as health science, biomedical engineering, health physics or physics and biology majors.

Prerequisite: RADSC 210, BIOL 141
Writing Across the Curriculum

RADSC 220: Radiation Biology and Protection
3 Credits
Study the principles of interaction of radiation with living systems, effects on cells and tissues, biological response, and radiation protection. RADSC 220 Radiation Biology & Protection (3) The content of this course includes the basic fundamentals of radiation interactions, basic biology with emphasis placed on effects of radiation exposure on cells and on radiation protection mandates and techniques. This course is a requirement of the radiography (radiologic technology) curriculum and could be utilized as an option for other students interested in radiation effects such as health science, biomedical engineering, health physics or physics and biology majors.

Prerequisite: RADSC 210, BIOL 141
Writing Across the Curriculum
RADSC 230: Radiographic Physics

3 Credits

Basic knowledge of atomic structure, characteristics of radiation, x-ray production, photon interactions, circuitry, imaging equipment and quality control. RADSC 230 Radiographic Physics (3) The content of this course includes the basic fundamentals of atomic structure, characteristics of radiation, x-ray production, photon interactions, circuitry, imaging equipment and quality control. This course is a requirement of the radiography (radiologic technology) curriculum and could be utilized as an option for other students interested in radiation interactions and imaging equipment such as health science, biomedical engineering, health physics or physics majors. As is consistent with the core courses in the Radiography program, a passing grade for enrolled radiography students is 75%.

RADSC 240: Pharmacology and Drug Administration

2 Credits

Basic concepts of pharmacology, the basic techniques of venipuncture, and the administration of diagnostic contrast agents and/or intravenous medications. RADSC 240 Pharmacology and Drug Administration (2) The content of this course includes the basic concepts of pharmacology, basic techniques of venipuncture, and the administration of diagnostic contrast agents and intravenous medications. Material covered includes drug nomenclature and categories, routes of administration, current practice status, and legal and ethical issues of medication administration. Students are required to prove competency in venipuncture using the arm phantom. This course is a requirement of the radiography (radiologic technology) curriculum and could be utilized as an option for other students interested in pharmacology such as Health Science and Biology majors. As is consistent with the core courses in the Radiography program a passing grade for enrolled radiography students is 75%.

Prerequisite: BIOL 141, RADSC110

RADSC 295: **SPECIAL TOPICS**

1-2 Credits/Maximum of 2

RADSC 295A: Radiologic Science Clinical Internship I

1-1.5 Credits/Maximum of 1.5

Supervised clinical education activities under the direction of registered radiologic technologists.

Prerequisite: admission to 2RSCC program

RADSC 295B: Radiologic Science Clinical Internship II

1 Credits

Supervised clinical education activities under the direction of registered radiologic technologists.

Prerequisite: RADSC295A

RADSC 295C: Radiologic Science Clinical Internship III

1 Credits

Supervised off-campus, nongroup instruction including field experiences, practica, or internships. Written and oral critique of activity required.

Prerequisite: RADSC295B

RADSC 295D: Radiologic Science Clinical Internship IV

1 Credits/Maximum of 1

Supervised off-campus group instruction including field experiences, practica, or internships. Written and oral critique of activity required.

Prerequisite: RADSC295C

RADSC 295E: Radiologic Science Clinical Internship V

1-2 Credits

Supervised off-campus, nongroup instruction including field experiences, practica, or internships. Written and oral critique of activity required.

Prerequisite: RADSC295D

RADSC 295F: Radiologic Science Clinical Internship VI

1-2 Credits

Supervised off-campus, non-group instruction including field experiences, practica, or internships. Written and oral critique of activity required.

Prerequisite: RADSC295E

RADSC 295G: Radiologic Science Clinical Internship VI-A

1 Credits

Supervised clinical education activities under the direction of registered radiologic technologists.

Prerequisite: RADSC 295E

RADSC 295H: Radiologic Science Clinical Internship VII

2 Credits/Maximum of 2

Supervised clinical education activities under the direction of registered radiologic technologists.

Prerequisite: RADSC 295G