

## CORE COURSES

<b>Course Number</b>	<b>Course Description</b>	<b>Trimester</b>	<b>Credit Hours</b>
<b>Rad 200</b>	<p>Introduction to Radiologic Science and Healthcare</p> <p>This course is designed to provide students with an overview of the foundations of radiography and the practitioner's role in the health care delivery system. Principles, practices, and polices of the health care organization(s), as well as the responsibilities of the radiographer, will be examined. Introduction to the principles of radiation protection includes protection for the patient, personnel, and the public. Instruction is given in nursing procedures, CPR/AED, guest relations, body mechanics, institutional safety, and infection control. Introduction to the classroom and clinic are also presented.</p>	1	2
<b>Rad 210</b>	<p>Patient Care in Radiologic Sciences I</p> <p>This course is designed to provide the basic concepts of patient care. This includes factors related to the healthcare team, professional communication, diversity, patient assessment and vital signs, infection control, asepsis, phlebotomy and drawing medications, portable exams, and specialized inpatient units. Students will be assigned lab rotations as a part of this course.</p>	1,2,3	3
<b>Rad 211</b>	<p>Patient Care in Radiologic Sciences II</p> <p>This course builds on concepts related to Rad 210. This course provides a more in-depth examination of acute situations, medications and administration, and IV contrast media.</p>	4,5	3
<b>Rad 220</b>	<p>Principles of Imaging I</p> <p>This course is designed to establish knowledge in factors that govern and influence the production of radiographic image acquisition. Instruction includes radiation production and characteristics, imaging equipment, and accessories, image display, prime factors, and radiation protection.</p>	1	2
<b>Rad 221</b>	<p>Principles of Imaging II</p> <p>This course is designed to establish knowledge in factors that govern and influence the production of radiographic image acquisition. Instruction includes film based imaging, fluoroscopy, tomography, exposure systems, characteristics of a radiograph, QA/QC, and radiation protection.</p>	2	2

		<u>Trimester</u>	<u>Cr Hr</u>
<b>Rad 222</b>	Principles of Imaging III This course is designed to establish knowledge in factors that govern and influence the production of radiographic image acquisition. Instruction concentrates on digital imaging with integration of course content from Rad 220 and 221	3	2
<b>Rad 230</b>	Radiographic Procedures I This course is designed to provide a foundation for performing radiographic procedures in the clinical setting. Discussion include assessing image quality, positioning, anatomy of interest, and problem solving techniques. Procedures lab is use to compliment the lecture portion of this course. Topics include chest, abdomen, GI procedures, upper extremity.	1	3
<b>Rad 231</b>	Radiographic Procedures II This course is designed to provide a foundation for performing radiographic procedures in the clinical setting. Discussion include assessing image quality, positioning, anatomy of interest, and problem solving techniques. Topics include shoulder girdle, lower extremity, pelvic girdle, spine	2	3
<b>Rad 232</b>	Radiographic Procedures III This course is designed to provide a foundation for performing radiographic procedures in the clinical setting. Discussion include assessing image quality, positioning, anatomy of interest, and problem solving techniques. Topics include bony thorax, mammography, skull, orbits, facial bones, sinuses, nasal bones, zygoma, mandible TMJ, IVU.	3	3
<b>Rad 300</b>	Radiographic Physics Course content is designed to review principles of radiographic imaging and delve more deeply into imaging equipment and image production.	4,5	3
<b>Rad 310</b>	Radiographic Pathology Course content is designed to introduce disease causation and the pathophysiologic disorders that compromise healthy systems. Terminology, etiology, radiographic appearance, and use of various radiographic modalities are presented.	6	1

		<u>Trimester</u>	<u>Cr Hr</u>
<b>Rad 320</b>	<b>Radiation Biology Radiation Protection</b> Content provides an overview of principles of radiation interaction with living systems. Radiation effects on molecules, cells, tissues, and the body as a whole, factors affecting biologic response, including acute and chronic effects of radiatio, are presented. Methods of radiation protection, responsibilities of the radiographer, regulatory agencies, and dose measurement are also incorporated.	5	3
<b>Rad 330</b>	<b>Intro to CT and Sectional Anatomy</b> Content is designed to introduce basic terminology, equipment operations and processes, procedural considerations, and radiation protection in CT. Images of gross anatomical structures in various anatomical planes will also be presented.	will vary	1
<b>Rad 340</b>	<b>Ethics and Law in the Radiologic Sciences</b> Content is designed to provide students with a fundamental background in ethics and healthcare law. The historical and philosophical basis of ethics, elements of ethical behavior, legal and ethical issues and dilemmas in clinical practice, and professionalism will be explored.	4,5	1
<b>Rad 350</b>	<b>Clinical Image Analysis</b> Content is designed to provide a basis for analyzing radiographic images. The importance of minimum standards, the discussion of problem solving techniques for image acquisition, and factors that affect image quality will be discussed. Student generated radiographs will be included for analysis. This course compliments Rad 230, 231 232, and the clinical practicum.	4,5,6	1
<b>Rad 240</b>	<b>Clinical Practicum</b>	1	5
<b>241</b>	Didactic courses are structured to compliment and correspond to the application of skills in the clinical setting.	2	6
<b>242</b>	Clinical experience is designed for sequential development, application, critical analysis, integration,	3	6
<b>360</b>	synthesis, and evaluation of concepts and theories when performing radiologic procedures. Through structured,	4	5
<b>361</b>	competency based clinical assignments, concepts of teamwork, patient centered and professional skills shall be	5	4
<b>362</b>	developed. Levels of competency and outcomes measurement shall ensure the well-being of the patient during all aspects of the radiologic procedure. Credit hours for 6th trimester include 1 cr. hr for Portfolio.	6	5
	<b>TOTAL CREDITS</b>		<b>64</b>

## Non Core Courses

### Registry Review

#### *Anatomy and Physiology*

This course is designed to review basic anatomy and physiology as it relates to imaging. The course consists of modules that review anatomy and physiology by system. The systems reviewed include Respiratory, Digestive, Urinary, Skeletal, Cardiovascular (Heart, Blood), Vascular, Lymphatic, Reproductive, and Nervous.

Tests are administered at the end of each module. Students are not required to obtain a minimum score of 75% or retake tests. The test grades are recorded under Registry Review.

#### *Medical Terminology*

This course is designed to review medical terminology. Students are provided with course content and tested over the content the following week. This course is divided into 15 modules covering various terminology and word parts. Students are not required to obtain a minimum score of 75% or retake tests. The test grades are recorded under Registry Review.

#### *Simulated Registry Exams*

This course is designed to acclimate the student to simulated registry questions and is used to identify areas where extra review is needed by the student prior to sitting for the national registry. Simulated registries are conducted via paper and pencil as well as computer. Scores are curved prior to the 6th trimester and recorded under Registry Review.

#### *Peer Teaching*

This course consists of a clinical and a class component. The class component requires the student to teach course material as a review. Students randomly draw a subject, prepare a lesson, and prepare a test for their peers on two separate occasions. Presentation and test evaluations are averaged for one grade and recorded as one registry review grade per occasion.

The clinic component requires the student to randomly draw from the spine category to teach underclassmen spinal positioning in the clinic. Students are evaluated on the presentation; the grade is recorded under Registry Review.

#### *Registry Review Project*

Students prepare and present assigned review content at the Information Session.