SCHOOL OF RADIOGRAPHY
Course Descriptions

The following courses have a grading scale of A = 100 – 90, B = 89 – 80, C = 79 – 70, D = 69 – 60, and F ≤ 59.

Human Anatomy I

This course will provide the student with knowledge of human anatomy and physiology from cell structure to the organism. The human systems will be introduced in lecture format followed by laboratory.

Radiographic Physics I

This course will present the student with the fundamental physics of radiation science. Lecture topics will include the mechanics of x-ray production, interaction and the effects upon the patient and image receptor.

The clinical courses have a grading scale of A = 100 – 97, B = 96 – 93, C = 92 – 89, F ≤ 88.

Clinical I

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase their proficiency in applied radiography. This course will provide introduction into the various modalities of radiology.

Clinical II

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase proficiency in applied radiography. The student will rotate on a two-week schedule in reception, transport, P.A.C.S and routine diagnostic imaging.

Clinical III

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase proficiency in applied radiography. Rotations in fluoroscopy will allow the student the opportunity to participate in Alimentary examinations correlating with didactic instruction.

Clinical IV

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase proficiency in applied radiography. The student will

also demonstrate increasing technical ability through simulations on phantom models and production of quality radiographs.

Clinical V

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase proficiency in applied radiography. Additional rotations of specialized fields of radiology such as Computed Tomography and Interventional Radiology are introduced in this course. The student will be instructed in the basic concepts of producing quality radiographs.

Clinical VI

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase proficiency in applied radiography. Additional rotations through specialized fields of radiology such as Ultrasound, Nuclear Medicine, and Radiation Therapy are introduced during this course.

Clinical VII

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate competency and increase proficiency in applied radiography. This course also allows the student three specialty rotations of their choice to develop and identify individual interests.

Clinical VIII

This course will provide the student with the opportunity to gain entry-level competency in the field of radiologic technology by observing and participating in the production of radiographs. During this course, the student will demonstrate increased proficiency in applied radiography. The student will also demonstrate performance under pressure, patient rapport, interpersonal relationships, and professional ethics.

The following courses have a grading scale of A = 100 – 93, B = 92 – 85, C= 84 – 77, D = 76 – 69, F ≤ 68.

Analysis of Patient Care in Positioning I

This course provides the student with the opportunity to review previously covered material in Procedures and Patient Care.

Imaging Equipment I

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This course will introduce the student to the various types of equipment used in the production of diagnostic images. The components of both permanent and mobile radiographic equipment will be presented to the student. The equipment used in testing for quality control will be discussed.

Introduction to Computers I

This introductory course will present the student with historical information relating the use of computers in medicine. Upon completion of the course, the student will be able to demonstrate knowledge of applications used in Radiology.

Introduction to Radiography I

This course will present the student with introductory knowledge in the field of radiology pertaining to the history, radiation protection and general positioning terminology.

Math Review I

This course will review the basic math concepts used in the field of radiology. The course topics will include how to add, subtract, multiply, and divide decimals, fractions and exponents. Conversion factors and basic algebra will be presented.

Medical Ethics I

This course will provide the student with the framework of the responsibilities of a radiologic technologist regarding ethical and professional conduct, cultural diversity, as well as medical/ legal aspects of the profession.

Medical Terminology I

This course is intended to facilitate student learning of medical terminology through text, illustrations, and review questions.

Pathology I

This course will introduce the student to the pathological processes that radiographers are most likely to encounter. Lecture topics will include the mechanism of the disease as well as how the disease will affect the imaging modality decision. Discussion of radiographs will demonstrate the effect disease has on the technical quality.

Patient Care I

This course will introduce the student to the clinical environment and how the various areas of the hospital interrelate.

Patient Care II

This course will provide the student with the information needed to recognize general and specific needs of the radiographic patient and demonstrate how to respond with appropriate patient care. The student will learn to obtain the patients vital signs and provide life support in emergencies.

Patient Care III

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This course will provide the student with the information needed to recognize general and specific needs of the radiographic patient and demonstrate how to respond with appropriate patient care. The student will learn to administer IV's, Oxygen and take a patient history prior to contrast administration.

Patient Care IV

This course will provide the student with the information needed to recognize general and specific needs of the radiographic patient and demonstrate how to respond with appropriate patient care.

Patient Care Review I

This course will review the concepts presented during Patient Care. The objective is to encourage the student to begin review and selection of the most important ideas and concepts presented during the prior Patient Care courses. Subject specific testing will be used to gauge student performance.

Procedures Review I

This course will review the previous Procedures courses. It will review every body part discussed in earlier semesters and will discuss positioning and optimal radiographic qualities.

Radiobiology I

This course presents the student with the mechanism of damage that occurs when biologic tissue is exposed to radiation. Following a review of basic human biology, both early and late effects of radiation will be discussed.

Radiobiology Review I

This course will review the concepts presented during Radiobiology. The objective is to encourage the student to begin review and of the most important ideas and concepts presented during the prior courses. Subject specific testing will be used to gauge student performance.

Radiographic Critique I, II, III, IV, V, VI, VII, and VIII

Radiographic Critique course will demonstrate how to evaluate the diagnostic value of a finished radiograph. The purpose of this course is to enable the student to recognize the attributes of an optimum quality radiograph and bridge the gap between patient positioning and the anatomy demonstrated on the finished radiograph. This involves critique of the individual student's radiographs by other students and the instructor as well as presentation of examples of optimum and poor diagnostic quality.

Radiographic Exposure I

This course will introduce the student to the theory behind appropriate technique selection. Various principles of radiographic exposure will be presented with

correlated classroom lecture and exposure experimentation. This course will focus on the nature of radiation, image formation and photographic properties of an image.

Radiographic Exposure II

This course will introduce the student to the theory behind appropriate technique selection. Various principles of radiographic exposure will be presented with correlated classroom lecture and exposure experimentation. This course will focus on image quality, scatter control, image receptors and film processing.

Radiographic Exposure III

This course will introduce the student to the theory behind appropriate technique selection. Various principles of radiographic exposure will be presented with correlated classroom lecture and exposure experimentation. This course will focus on sensitometry and exposure factor selection.

Radiographic Exposure IV

This course will introduce the student to the theory behind appropriate technique selection. Various principles of radiographic exposure will be presented with correlated classroom lecture and exposure experimentation. This course will focus on automatic exposure control, digital imaging, technique conversion and experimentational research.

Radiographic Exposure Review I

This course will review the concepts presented during Radiographic Exposure. The objective is to encourage the student to begin review and selection of the most important ideas and concepts presented during the prior Exposure courses. Subject specific testing will be used to gauge student performance.

Radiographic Procedures I

This course will provide the student with the ability to distinguish between optimal and sub-optimal radiographs of human anatomy. Introductory instruction in correct terminology describing anatomy and positioning will be provided. Lab demonstrations will correlate didactic with clinical education. The course will focus on studies of the thoracic viscera and digestive system.

Radiographic Procedures II

This course will provide the student with the ability to distinguish between optimal and sub-optimal radiographs of human anatomy. Lab demonstrations will correlate didactic with clinical education. This course will allow the student to

gain comprehension over upper limb and shoulder girdle, lower limb, upper femora and pelvis, and vertebral column.

Radiographic Procedures III

This course will provide the student with the ability to distinguish between optimal and sub-optimal radiographs of human anatomy. Lab demonstrations will correlate didactic with clinical education. The student will gain knowledge and comprehension of the alimentary digestive system, mouth and salivary glands, anterior portion of the neck, skull, and I.V. punctures. In class, illustrations and demonstrations will prepare students for clinical participation in like exams.

Radiographic Procedures IV

This course will provide the student with the ability to distinguish between optimal and sub-optimal radiographs of human anatomy. Lab demonstrations will correlate didactic with clinical education. The course will focus on Circulatory and Central Nervous systems, and computed tomography with cross sectional anatomy.

Radiographic Physics Review I

This course will review the concepts presented during Radiographic Physics. The objective is to encourage the student to begin review and selection of the most important ideas and concepts presented during the prior Physics course. Subject specific testing will be used to gauge student performance.

Registry Review I

This course will prepare the student to take tests similar to the American Registry of Radiologic Technologists.

Research Project I

This course will use skills developed in the Computer Lab to research and present an approved topic. The topics can range from unique procedures to innovative imaging techniques.

Resume` and Interviewing I

This course is designed to prepare the student for the interview process. It will discuss how to write a resume including cover letter and reference page. At the end of the semester, the student will be required to prepare their own resume along with an interview with staff and classmates.