

RDT - RADIOLOGIC TECHNOLOGY

RDT 3100 Introduction to Radiologic Technology Cr. 2

This course is designed to acquaint the new student with the goals, philosophies, and organization of the radiography program and the radiology department. An appreciation of radiologic technology will be established through an understanding of medical history, the evolution of radiologic technology and professional organizations. Elementary terminology and explanation of all imaging modalities will also be introduced. Offered Fall.

Corequisite: RDT 3400

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$50

RDT 3200 Radiation Biology and Advanced Protection Cr. 3

Radiation protection procedures; radiation interaction with matter and dosage problem solving. Offered Winter.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, and RDT 3400 with a minimum grade of C

Corequisite: RDT 3500

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 3300 Radiographic Procedures I Cr. 3

Instruction and practical experience in procedures of positioning for the skeletal system with correlation to related anatomy in medical images. Offered Fall.

Corequisite: RDT 3305

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 3305 Radiographic Procedures I Lab Cr. 1

This course is designed to provide the student in Radiologic Technology with the application of information necessary to appropriately position patients for optimal radiographic imaging. Offered Fall.

Corequisite: RDT 3300

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 3400 Clinical Education I Cr. 4

Clinical course. Student participates in supervised practice of radiographic procedures, studied in conjunction with didactic coursework. Offered Fall.

Corequisite: RDT 3100

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$55

RDT 3500 Patient Care Cr. 3

Practical application of patient handling; patient assessment, implication of medications and contrast media. BLS certification. Offered Winter.

Prerequisite: RDT 3090 with a minimum grade of C and RDT 3100 with a minimum grade of C and RDT 6500 with a minimum grade of C

Corequisite: RDT 3600

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$35

RDT 3600 Clinical Education II Cr. 4

Application of didactic theory in practice on patients/clients under supervision of qualified technologists in a clinical setting. Offered Winter.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, and RDT 3400 with a minimum grade of C

Corequisite: RDT 3500

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$50

RDT 3700 Radiographic Procedures II Cr. 3

Continuation of RDT 3300. Additional advanced procedures, including skull, mammography, and gastrointestinal studies. Offered Spring/Summer.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, RDT 3400 with a minimum grade of C, RDT 3500 with a minimum grade of C, RDT 3200 with a minimum grade of C, RDT 4100 with a minimum grade of C, and RDT 3600

Corequisite: RDT 3705

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$35

RDT 3705 Radiographic Procedures II Lab Cr. 1

This course is designed to provide the student in Radiologic Technology with the application of information necessary to appropriately position patients for optimal radiographic imaging. Offered Spring/Summer.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, RDT 3400 with a minimum grade of C, RDT 3500 with a minimum grade of C, RDT 3200 with a minimum grade of C, RDT 4100 with a minimum grade of C, and RDT 3600

Corequisite: RDT 3700

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 3800 Cross-Sectional Anatomy Cr. 3

Presentation of anatomical structures in sectional format, as encountered in computed tomography or magnetic resonance imaging. Offered Spring/Summer.

Prerequisite: RDT 3300 with a minimum grade of C and RDT 3700 with a minimum grade of C

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 3900 Clinical Education III Cr. 6

Minimally supervised clinical experience. Skills practice to proficiency level; additional complex skills. Offered Spring/Summer.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, RDT 3400 with a minimum grade of C, RDT 3500 with a minimum grade of C, RDT 3200 with a minimum grade of C, RDT 4100 with a minimum grade of C, and RDT 3600

Corequisite: RDT 3700

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$50

RDT 4000 Radiographic Quality & Exposure I Cr. 2

This course is designed to provide the student in Radiologic Technology the introduction to practical and theoretical knowledge necessary to function in a radiographic room by setting technical factors, implementing accessory tools such as grids, filters, etc. This course will also provide knowledge of the relationship between radiographic exposure and image formation utilizing Computed Radiographic Imaging and Digital Radiography systems, as well as a historical summary of conventional methods. Upon successful completion of this course, the student will be introduced to various technical factors, variables, and radiographic equipment covered within, with the key aim of providing diagnostic radiographic image quality. Offered Fall.

Corequisite: RDT 3100

Restriction(s): Enrollment is limited to students with a major in Radiologic Technology.

RDT 4100 Radiographic Quality & Exposure II Cr. 2

Students will reference concepts from RDT 4000 Radiographic Quality/Exposure I to critically evaluate image quality and production. This course is designed to provide the student in Radiologic Technology with the information necessary appropriately evaluate images for their respective diagnostic value. This course requires students to critically evaluate images for image deficiencies and variances in patient presentation. Offered Winter.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, and RDT 3400 with a minimum grade of C

Corequisite: RDT 3200

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$35

RDT 4200 Radiation Physics and Circuitry Cr. 3

Radiation physics; tubes and circuits of radiographic equipment. Offered Fall.

Prerequisite: RDT 3200 with a minimum grade of C and RDT 3500 with a minimum grade of C

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 4300 Clinical Education IV Cr. 6

Continuation of RDT 3900. Offered Fall.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, RDT 3400 with a minimum grade of C, RDT 3500 with a minimum grade of C, RDT 3200 with a minimum grade of C, RDT 4100 with a minimum grade of C, RDT 3600 with a minimum grade of C, RDT 3700 with a minimum grade of C, RDT 3705 with a minimum grade of C, RDT 6500 with a minimum grade of C, and RDT 3900 with a minimum grade of C

Corequisite: RDT 4200

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$50

RDT 4400 Radiographic Pathology Cr. 3

Disease process and how they manifest in imaging modalities. Clarification of modality preference. Offered Winter.

Prerequisite: RDT 3500 with a minimum grade of C and RDT 4500 with a minimum grade of C

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 4500 Clinical Education V Cr. 6

Supervised clinical experience in performing radiographic procedures on patients in clinical setting. Evaluation of outcomes; application of knowledge at a progressive level. Offered Winter.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, RDT 3400 with a minimum grade of C, RDT 3500 with a minimum grade of C, RDT 3200 with a minimum grade of C, RDT 4100 with a minimum grade of C, RDT 3600 with a minimum grade of C, RDT 3700 with a minimum grade of C, RDT 3705 with a minimum grade of C, RDT 6500 with a minimum grade of C, RDT 3900 with a minimum grade of C, RDT 4200 with a minimum grade of C, RDT 4900 with a minimum grade of C, RDT 4800 with a minimum grade of C, and RDT 4300 with a minimum grade of C

Corequisite: RDT 4600

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$75

RDT 4600 Radiology Seminar Cr. 1

Introduction to imaging modalities beyond the scope and practice of the general radiographer; emphasis on interventional procedures. Offered Winter.

Prerequisite: RDT 3500 with a minimum grade of C and RDT 3700 with a minimum grade of C and RDT 4100 with a minimum grade of C

Corequisite: RDT 4500

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$20

RDT 4700 Clinical Education VI Cr. 6

Continuation of RDT 4500. Offered Winter.

Prerequisite: RDT 4500 with a minimum grade of C

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

Fees: \$50

RDT 4800 Independent Study Cr. 1

Satisfies General Education Requirement: Writing Intensive Competency Independent research in radiology. Offered Fall.

Prerequisite: RDT 3090 with a minimum grade of C and RDT 3500 with a minimum grade of C and RDT 3700 with a minimum grade of C

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 4900 Jurisprudence for Radiographers Cr. 3

Ethical and legal case studies; research and discussion correlated to philosophical theory and accepted best law practice for general situations in health care and those specific to radiography. Offered Winter.

Prerequisite: PHI 2320 with a minimum grade of C and RDT 3500 with a minimum grade of C

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.

RDT 6500 Pharmacology for Radiographers Cr. 2

This course is designed to teach Bachelor of Radiologic Technology (RDT) students the following a) the basic principles of Pharmacology, which includes Pharmacotherapeutics and Toxicology. Special emphasis will be given to Pharmacotherapeutics, which is comprised of Pharmacokinetics and Pharmacodynamics; b) the process of drug discovery and testing; and c) the chemical, generic and trade names of drugs that are commonly taken by patients, the mechanisms and duration of action of these drugs, the side effects of these drugs, and the interactions of these drugs. Offered Spring/Summer.

Prerequisites: RDT 4000 with a minimum grade of C, RDT 3300 with a minimum grade of C, RDT 3100 with a minimum grade of C, RDT 3305 with a minimum grade of C, RDT 3400 with a minimum grade of C, RDT 3500 with a minimum grade of C, RDT 3200 with a minimum grade of C, RDT 4100 with a minimum grade of C, and RDT 3600

Corequisite: RDT 3700

Restriction(s): Enrollment limited to students in the BS in Radiologic Technology program.