

Cardiac-Interventional (CI) Radiography

- **FALL (13)**

- RAD 407 (3) - Patient Interactions and Management – A focus on ECG analysis, hemodynamics, lab assessment, wave form analysis and cardiac output. Basic life support is also covered along with medicolegal aspects of healthcare. The history of interventional radiography is also discussed. Prerequisite: concurrent enrollment in RAD 417, RAD 427 and RAD 437. Restricted to Cardiac-Interventional Radiography students only.
- RAD 417 (4) - Imaging Procedures – Quality control is covered along with contrast agents, pharmaceuticals, cardiac-interventional procedures and equipment. The cardiac procedures reviewed are cardiac output calculations, hemoximetry, shunt detection, pulmonary angiography, hemodynamics, valve measurement, right and left ventriculography, coronary angiography, coronary artery bypass graft angiography, aortography and ventricular volume measurement/ejection fraction (EF). Prerequisite: concurrent enrollment in RAD 407, RAD 427 and RAD 437. Restricted to Cardiac-Interventional Radiography students only.
- RAD 427 (3) - Sectional Anatomy & Pathology – This course gives the student a comprehensive understanding of sectional anatomy as well as pathologic identifications. Prerequisite: concurrent enrollment in RAD 407, RAD 417 and RAD 437. Restricted to Cardiac-Interventional Radiography students only.
- RAD 437 (3) - Physics, Instrumentation and Cardiac Image Acquisition– An examination of the physics and dosimetry of ionizing radiation and the use of radiation for image formation. Dose tracking and patient safety is included as well as imaging techniques. Prerequisite: concurrent enrollment in RAD 407, RAD 417 and RAD 427. Restricted to Cardiac-Interventional Radiography students only.

- **SPRING (12)**

- RAD 447 (10) - Cardiac-Interventional Clinical I – Scheduled clinical time at an affiliated clinical site to perform competency-based examinations. Students will also be required to take call as well. Direct supervision is provided by the hosting facility staff. This experience will give students the confidence and insight needed to perform as autonomous technologist upon graduation of the program. Prerequisite: RAD 407, RAD 417, RAD 427 and RAD 437, as well as concurrent enrollment in RAD 457 Restricted to Cardiac-Interventional Radiography students only.
- RAD 457 - (2) - Special Problems in Cardiac-Interventional Radiography – A thorough review of the fundamental principles and foundational readings of the field. Newly published literature will also be used to reflect the didactic teachings of previous coursework. Prerequisite: RAD 407, RAD 417, RAD 427 and RAD 437, as well as concurrent enrollment in RAD 447 Restricted to Cardiac-Interventional Radiography students only.

- **SUMMER (6)**

- RAD 467 (4) – Cardiac-Interventional Clinical II – Scheduled clinical time at an affiliated clinical site to perform competency-based examinations. Students will also be required to take call as well. Direct supervision is provided by the hosting facility staff and physicians. This experience will give students the confidence and insight needed to

perform as autonomous technologists upon graduation of the program. Prerequisite: RAD 407, RAD 417, RAD 427, RAD 437, RAD 447 and RAD 457, as well as concurrent enrollment in RAD 477 Restricted to Cardiac-Interventional Radiography students only.

- RAD 477 (2) - Seminar in Cardiac-Interventional Radiography – This course is a review of the fundamentals listed in the ARRT exam requirements. This will be a board review, laden with mock exams, outlines and a final examination required for program completion. Prerequisite: RAD 407, RAD 417, RAD 427, RAD 437, RAD 447 and RAD 457, as well as concurrent enrollment in RAD 467 Restricted to Cardiac-Interventional Radiography students only.