

**SOUTHEAST COMMUNITY COLLEGE
HEALTH SCIENCES DIVISION
RADIOLOGIC TECHNOLOGY
Revision Date: 11/2021**

I. CATALOG DESCRIPTION

Course Number: RADT 2502
Course Title: Vascular Interventional Radiography
Prerequisite(s):

Catalog Description: This course is designed to meet the structured education required by the ARRT for radiologic technologists seeking post-primary certification in vascular-interventional radiography. Students are introduced to the principles of vascular-interventional radiography, patient care management and interactions; usage of medications and contrast media; and human anatomy and physiology. An overview of equipment & supplies; procedures and exposure technique; image production and quality; asepsis and sterile technique; and safety issues are presented.

Credit Hours: 1
Class Hours: 16
Lab Hours: 0
Total Contact Hours: 16

II. COURSE OBJECTIVES: *Course will:*

1. Apply principles of patient care management
2. Define image quality
3. Define safe contrast administration
4. Distinguish between different types of equipment and supplies and what they are used for
5. Identify and apply principles of sterile technique
6. Recognize digital image processing and acquisition
7. Apply clinical applications to vascular and non-vascular interventional procedures
8. Choose radiographic technique in relation to specific anatomy and patient's diagnosis and apply principles of radiation safety
9. Identify and understand pertinent lab values and indications/contraindications for all exams and procedures

Note: Unit objectives are located in the learning management system within each unit of study

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

1. Correlate patient care principles to clinical practice
2. Relate the production of quality images to equipment and to display and processing protocols.
3. Understand the application of the various vascular-interventional radiography exams as they relate to the clinical setting.

B. GENERAL EDUCATION LEARNING OUTCOMES

1. GELO 4: Global Awareness & Citizenship

The student will demonstrate awareness of personal responsibility in one's academic, civic, social, and vocational/professional life.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

A. PATIENT INTERACTIONS AND MANAGEMENT

1. Patient Care Techniques
2. Clinical History and Consent
3. Patient Assessment and Monitoring
4. Lab Values
5. Medications and Dosage
6. Sterile Technique and Infection Control
7. Emergency Care, Treatment and Medications, and Cardiac Life Support

B. IMAGE PRODUCTION

1. Digital Imaging
2. Image Processing and Display
3. Automatic Pressure Injectors
4. Procedural Supplies
5. Implantable Devices

C. NEUROLOGIC AND THORACIC ANGIOGRAPHY AND INTERVENTION

1. Neuro Angiography
2. Neuro Intervention
3. Thoracic Angiography
4. Thoracic Intervention

D. ABDOMINAL ANGIOGRAPHY AND INTERVENTION, GU AND GI NON-VASCULAR PROCEDURES

1. Abdominal Arteriography
2. Abdominal Venography
3. Abdominal Intervention
4. GU Non-Vascular Interventional Procedures
5. GI Non-Vascular Interventional Procedures

E. PERIPHERAL ANGIOGRAPHY AND INTERVENTION, DIALYSIS MANAGEMENT, AND VENOUS ACCESS

1. Peripheral Arteriography
2. Peripheral Venography
3. Peripheral Intervention
4. Dialysis Management
5. Venous Access

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):

Kandarpa, Krishna, Machan, Lindsay and Durham, Janette. *Handbook of Interventional Radiologic Procedures*, China, Wolters Kluwer, current ed., 2016

B. Other Resources:

Course Study Guide

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Lecture
2. Power Point
3. Other

VII. METHODS OF EVALUATION

A. Please see course CID for methods of evaluation.

SCC STANDARD GRADING SCALE POLICY:

A+	95-100	C+	75-79
A	90-94	C	70-74
B+	85-89	D+	65-69
B	80-84	D	60-64
		F	Below 60

See Course Information Document (CID) for course policies related to grading, expectations, assignments, assessments, and participation.