

R T 70B: ADVANCED CLINICAL EXPERIENCE: INTERVENTIONAL RADIOGRAPHY II

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	13
Hours:	40 laboratory per week (480 total per quarter) This is a clinical laboratory course.
Prerequisite:	R T 70A.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Student Learning Outcomes

- Critique and distinguish relevant fluoroscopic anatomy and pathology related to neurological procedures.
- Demonstrate proper equipment manipulation and assist in the performance of neurological procedures, applying appropriate patient care and radiation protection principles in the clinical setting.

Description

Continuation of R T 70A, with emphasis on patient care, abdominal and pelvic procedures, thoracic procedures and neurological procedures.

Course Objectives

The student will be able to:

1. demonstrate understanding of radiation protection for the patient, personnel, and self.
2. exhibit knowledge in the proper use of the angiography equipment.
3. adhere to standards of attendance, punctuality and dependability.
4. conduct self in a professional manner.
5. apply theory to practice by exhibiting ongoing, satisfactory job performance skills.
6. select appropriate equipment, devices and patient positioning as outlined by the department protocols.
7. demonstrate knowledge and application of various patient care techniques.
8. differentiate anatomy and pathophysiology as it relates to various diagnostic, interventional, and nonvascular procedures, with an emphasis on abdominal and pelvic, thoracic and neurological procedures.
9. present a case study poster presentation based on literature search and clinical experience.

Course Content

1. Radiation protection
 - a. Patients
 - b. Personnel
2. Angiography equipment
 - a. Fluoroscopy
 - b. Digital angiography
 - c. Automatic injectors
3. Punctuality and dependability
 - a. Clinic time reporting
 - b. Absenteeism
 - c. Communicating whereabouts appropriately
4. Professional conduct
 - a. Taking initiative
 - b. Communicating effectively
 - c. Conducting oneself in a professional manner
5. Job performance
 - a. Effective procedural participation
 - b. Planning and organizing work efficiently
 - c. Being alert and interested in procedures
 - d. Reading and understanding requisitions
 - e. Communicating effectively
6. Procedures
 - a. Patient positioning
 - b. Tray set-up
 - c. Guidewires
 - d. Catheters
 - e. Sheaths
 - f. Needles
 - g. Vessel access
7. Patient care
 - a. Patient communication
 - b. Patient assessment and monitoring
 - c. Contrast administration
 - d. Asepsis and sterile technique
 - e. Patient discharge/post-procedure instructions
 - f. Emergency care
8. Diagnostic, interventional and nonvascular procedures
 - a. Abdominal and pelvic procedures
 - i. Aortography
 - ii. Selective visceral angiography
 - iii. Renal angiography
 - iv. Adrenal angiography
 - v. Pelvic angiography
 - vi. Inferior vena cavagram
 - vii. Paracentesis
 - viii. Angioplasty
 - ix. Stent placement
 - x. Endograft placement
 - xi. Caval filter placement
 - xii. Caval filter removal
 - xiii. Venous sampling
 - xiv. TIPS

- xv. Chemoembolization
- xvi. Radioembolization
- xvii. Embolization
- b. Thoracic procedures
 - i. Aortography
 - ii. Pulmonary arteriography
 - iii. Superior vena cavagram
 - iv. Embolization
 - v. Endograft placement
 - vi. Chest tube/drain placement
 - vii. Thoracentesis
 - viii. Thrombolysis/thrombectomy
 - ix. Angioplasty
 - x. Stent placement
- c. Neurological procedures
 - i. Neurologic angiography
 - ii. Spinal arteriography
 - iii. Embolization
 - iv. Thrombolysis/thrombectomy
 - v. Angioplasty
 - vi. Stent placement
 - vii. Vertebroplasty and/or kyphoplasty
 - viii. Discography
 - ix. Procedural based anatomy identification
- 9. Case study poster
 - a. Poster presentation
 - b. Oral presentation

Lab Content

- 1. Radiologic Technology clinical practice
 - a. Radiation protection
 - b. Equipment operation
 - c. Image production
 - d. Image evaluation
 - e. Abdominal and pelvic, thoracic and neurological interventional procedures
 - f. Patient care in a clinical setting

Special Facilities and/or Equipment

Clinical setting: interventional radiology procedures equipment

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Presentation project: case study
Clinical performance evaluation

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Discussion
Demonstration

Clinical practice

Representative Text(s) and Other Materials

Keefe, N., and Z. Haskal. IR Playbook: A Comprehensive Introduction to Interventional Radiology. 2018.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

Reading assignments as required by the Interventional Radiology Department. Development of a case study presentation.

Discipline(s)

Radiological Technology