

# Virginia Western Community College

## RAD 131

### Elementary Clinical Procedures I

#### **Prerequisites**

Admission to the Radiography Program

#### **Course Description**

Develops advanced technical skills in fundamental radiographic procedures. Focuses on introduction to radiography, basic radiation safety manipulation of equipment, patient care, osseous studies, skull procedures, and contrast studies. Provides clinical experience in cooperating health agencies. Part I of II.

**Semester Credits: 3**

**Lecture Hours:**

**Lab/Clinical/Internship Hours: 15**

#### **Required Materials**

##### **Textbook:**

Radiographic Positioning & Related Anatomy. 9<sup>th</sup> ed. Kenneth L. Bontrager & John P. Lampignano. Elsevier ISBN: 9780323399661

Radiographic Positioning & Related Anatomy: 9<sup>th</sup> ed. Workbook. ISBN: 970323481878

Intorduction to Radiologic & Imaging Science & Patient Care, 7<sup>th</sup> ed., Arlene Adler& Richard Carlton Elsevier ISBN: 9780323566711

##### **Supplementary Materials:**

Several resource textbooks are located in the Radiography Lab

Laboratory facilities are available to radiography students during the day

One-on-one tutoring sessions are available upon request

#### **Course Outcomes**

**At the completion of this course, the student should be able to:**

- Understand the historical aspects of radiography and the Clinical Educational Setting environment
- Understand and practice radiation safety, and patient care responsibilities
- Perform and critique radiographic procedures of the abdomen and extremities
- Practice positive affective domain characteristics in the clinical environment

## **Topical Description**

I	Historical Aspects of Radiography
II	Clinical Educational Center
III	Radiation Protection Practices and Principles
IV	Patient Care Responsibilities of the Radiographer
V	Clinical Learning Experiences
VI	Assisting / Performing Radiographic Examinations
VII	Evaluate the student's affective domain

## **Specific Course Outcomes**

**At the end of the course, the student should be able to:**

### I: Orientation

- Locate, discuss, draw and demonstrate with 80% accuracy the basic Hospital Clinical education site plan
- Earn a minimum of 80% on a clinical test dealing with the rules of operation specific to the clinical education center
- Relate specific Radiology Department rules, regulation and policies
- Obtain Radiology consent forms from the educational center(s) and be able to interpret them for the C.I.
- Discuss departmental ethics

### II: Radiation Protection

- Earn a minimum of 80% on an objective classroom test dealing with all radiation protection handouts and lecture material
- Demonstrate with 100% accuracy a clinical setting, the ability to apply correct shielding technique and collimator operation
- Earn a minimum of 80% on a clinical worksheet dealing with clinical application of all radiation protection practices

### III: Patient Care

- Assist the radiologist during radiographic procedures
- Assist the patient during radiographic procedures
- Determine and meet physical and emotional needs of patient
- Protect/shield the patient
- Provide basic radiographic information to the patient
- Manipulate wheelchairs, stretchers, and other transportation devices
- Assist in lifting/turning of patients demonstrating correct techniques
- Assist patients, assuring comfort and demonstrating patient care procedures in a variety of considerations and situations. (Trauma, handicapped, pediatrics, geriatrics, casts, tubes, IV's, etc.)

- List and relate the appropriate patient care for emergencies commonly found in the X-ray departments
- Demonstrate effective and safe use of emergency X-ray department equipment
- List and define isolation procedures used at the clinical educational center
- Define and demonstrate asepsis

#### IV: Clinical Worksheets – if assigned

- Complete the RAD 131 clinical worksheets with a minimum Grade of 80%

#### V: Affective Domain

- The purpose of evaluating the affective domain is to ensure that the student is:
- Concerned with human welfare and the alleviation of suffering (patient care)
- Able to begin and follow through with a plan and/or task (initiative)
- Able to exchange ideas and information effectively to patients, peers, and staff (communication)
- Able to work together for a common goal (cooperation)
- Capable of being depended upon (dependability)
- Able to put into deliberate order and operation the steps necessary to perform radiographic examinations (organization)
- Generally in a positive frame of mind (attitude)
- Deemed responsible for self and others (responsibility)
- Demonstrate emotional stability and psychological health in day to day interactions with patients, staff, instructors, and other in routine and non-routine decision making processes (emotional health)

### **Note to Instructors**

1. One-on-one tutorial sessions are available upon request.
2. Students may utilize the energized laboratory under supervision of a faculty member while on campus.
3. Students must adhere to the program's Direct/ Indirect Supervision procedure & Repeat Policy per JRCERT standards.
4. Students must adhere to VWCC Student Radiation policy for holding during exposures per JRCERT standards.