

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Medical Imaging Technology-Radiography</u>
COURSE RUBRIC AND NUMBER	<u>RADR 2401</u>
COURSE TITLE	<u>Intermediate Radiographic Procedures</u>
COURSE CREDIT HOURS	<u>4 2 :</u> <u>6</u>
	Credits Lec Lab

I. Catalog Description

A continuation of the study of the manipulation of radiographic equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for demonstration of anatomy. A grade of "C" or better is required in this course to take the next course. **Prerequisite: RADR 1411. (2:6). Lab fee.**

II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. List and describe the location of the five categories of the vertebral column.
- B. Recognize anatomy of typical vertebrae, as well as the unique anatomic features of each type of vertebrae on diagrams and radiographs.
- C. Recognize articulations of the vertebral column on diagrams and radiographs.
- D. Identify bony thorax anatomy on diagrams and radiographs including the three parts of the sternum and the important features of the ribs.
- E. List and define the three classifications of ribs.
- F. Recognize articulations of the bony thorax on diagrams and radiographs.
- G. Recognize skull anatomy and articulations on diagrams and radiographs.
- H. Define and identify radiographic positioning baselines.
- I. Define and identify skull topographic landmarks.
- J. Define trauma and common causes of injuries.
- K. Describe specialized trauma equipment.
- L. Explain the radiographer's role as part of the trauma team.
- M. Discuss appropriate radiation protection practices in trauma radiography.
- N. Identify anatomy of the mouth and salivary glands on diagrams and radiographs.
- O. Explain the procedural steps for sialography.
- P. Explain and demonstrate the proper positioning of the patient for projections of salivary glands.
- Q. Recognize the anatomy of the organs of the alimentary canal on diagrams and radiographs.
- R. Explain and demonstrate the proper positioning of the patient and part for all essential projections of this anatomy of the digestive system.
- S. Identify the basic structures of the urinary system.
- T. Differentiate among key types of pathologic conditions of the urinary system.
- U. Determine which projections or positions will best demonstrate the structures of the urinary system.
- V. Discuss the physical, cognitive, and psychosocial aspects of aging.
- W. Describe the physiology of aging by body system.
- X. Discuss pathologies common in geriatric patients.
- Y. Recognize male and female reproductive anatomy on diagrams and radiographs.
- Z. Differentiate among reproductive procedures for nonpregnant and pregnant females.

- AA. Explain purpose of reproductive radiographic procedures.
- BB. Define contrast arthrography.
- CC. List joints that might be imaged with contrast arthrography.
- DD. Describe and locate the injection site for knee, wrist, hip, shoulder, and TMJ arthrography.
- EE. State the type of contrast media used for each of the above contrast arthrography procedures.
- FF. Assess the basic levels of neurologic and cognitive functioning.
- GG. List the three classifications of shock and describe the shock continuum.
- HH. Define distributive shock and the three different types.
- II. Practice surgical aseptic technique when required.
- JJ. Demonstrate the correct method of opening a sterile pack.
- KK. Develop operating skills which are appropriate and safe.
- LL. Demonstrate how to research various medications that are used in radiologic procedures.
- MM. Recognize various side effects and/or adverse effects to commonly used medications in the radiologic procedures.
- NN. Respond to various side effects and/or adverse effects in patients.
- OO. Become knowledgeable about an ECG.
- PP. Place electrodes on patients.
- QQ. Recognize normal sinus rhythm.

III. THECB Learning Outcomes (WECM)

Upon completing this course, the student will be able to:

1. Manipulate equipment.
2. Perform intermediate level procedures in positioning.
3. Align anatomic structures and equipment.
4. Evaluate images.

IV. Evaluation

A. Didactic Grading Scale

100 - 93 = A
 92 - 85 = B
 84 - 75 = C
 65 - 74 = D
 64 & below = F

Grades below "C" are not acceptable for successful completion of a professional RADR course. Any grade of .5 or greater will be rounded off to the next whole number and any grade less than .5 will be rounded to the next lowest whole number.

B. Laboratory Grading Scale

100 - 96 = A
 95 - 91 = B
 90 - 85 = C

Grades below "C" are not acceptable for successful completion of a professional RADR course. Any grade of .5 or greater will be rounded off to the next whole number and any grade less than .5 will be rounded to the next lowest whole number.

C. Weighted Percentage Breakdown

Didactic	70% of Final Grade
<u>Laboratory</u>	<u>30% of Final Grade</u>
TOTAL	100%

D. Evaluation Methods

1. **Didactic:**
Homework and quizzes, unit examinations, and a final comprehensive examination will be given to assess the mastery of the course objectives for RADR 2401.
2. **Laboratory:**
Individually administered laboratory performance test will be given. Students are required to perform at or above the minimum mastery level of 85%. A laboratory grade of below 85% is considered failure of a performance test and remediation will be assigned. In addition, a final comprehensive laboratory test will be given at the end of the semester.
3. **Remediation:**
The remediation will consist of: 1) reviewing the positioning text and 2) performing a minimum of two additional hours of practice in the positioning lab before being eligible to be re-evaluated in that particular unit.

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.

VII. Title IX and Sex Discrimination

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.