

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 | <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u>4</u></td> <td style="text-align: center;"><u>2</u></td> <td style="text-align: center;"><u>:</u></td> <td style="text-align: center;"><u>6</u></td> </tr> <tr> <td style="text-align: center;">Credits</td> <td style="text-align: center;">Lec</td> <td></td> <td style="text-align: center;">Lab</td> </tr> </table> | <u>4</u> | <u>2</u> | <u>:</u> | <u>6</u> | Credits | Lec | | Lab |
| <u>4</u> | <u>2</u> | <u>:</u> | <u>6</u> | | | | | | |
| Credits | Lec | | Lab | | | | | | |

I. Catalog Description

Continues 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. Correlate radiographic anatomy of the vertebral column with corresponding gross anatomy.
- B. Demonstrate positioning used in radiography through role-playing between patient and health care provider for the vertebral column.
- C. Correlate radiographic anatomy of the bony thorax with corresponding gross anatomy.
- D. Demonstrate positioning used in radiography through role-playing between patient and health care provider for the bony thorax.
- E. Correlate radiographic anatomy of the cranium with corresponding gross anatomy.
- F. Demonstrate positioning used in radiography through role-playing between patient and health care provider for the cranium.
- G. Correlate radiographic anatomy of the facial bones and orbits with corresponding gross anatomy.
- H. Demonstrate positioning used in radiography through role-playing between patient and health care provider for the facial bones and orbits.
- I. Correlate radiographic anatomy of the mandible, temporomandibular articulations, and paranasal sinuses with corresponding gross anatomy.
- J. Demonstrate positioning used in radiography through role-playing between patient and health care provider for the mandible, temporomandibular articulations, and paranasal sinuses.
- K. Identify the basic principles of mobile radiography.
- L. Consider the various technical factors for examinations performed with a mobile unit.
- M. Describe the most common exams done with a mobile x-ray unit in the ER trauma unit.
- N. Describe the special care needs of the pediatric, adolescent, adult and geriatric patient during radiographic imaging.
- O. List the precautions to be taken by the radiographer if the patient has a head injury, facial injury, spinal cord injury, fractures, or abdominal distress.
- P. Utilize radiographic equipment needed in the trauma suite with precision and efficiency, e.g., portable units, grids, oxygen tubing, cassette covers.
- Q. Describe the need to organize equipment and supplies prior to positioning patient.
- R. Produce medical images to verify tube and line placement.

- S. Implement corrective modifications to non-diagnostic medical imaging results.
- T. Achieve radiographic excellence with practice and reproducibility of medical imaging examinations.
- U. Obtain a complete understanding of the oral cavity to include the salivary glands in order to obtain fluoroscopic procedures of this anatomy.
- V. Evaluate all anatomical structures of the anterior part of the neck in order to be imaged during static and dynamic acquisitions.
- W. Generate diagnostic medical procedures of the entire alimentary canal.
- X. Recognize the anatomy and physiology of the urinary system and be able to produce contrast enhanced images of these structures.
- Y. Discuss characteristics of radiographic contrast media.. F1
- Z. Identify applications for different types of radiographic contrast media. B2
- AA. Relate contraindications for the use of various radiographic contrast media. F1, F3
- BB. Explain the preparation of different types of radiographic contrast media. F3
- CC. Recognize and respond appropriately to adverse reactions caused by radiographic contrast media. B2
- DD. Understand and practice the role of the medical imaging specialist during trauma radiography.
- EE. Identify and respond to emergency activation codes
- FF. Describe specialized trauma equipment
- GG. Explain the radiographer's role as part of the trauma team
- HH. Discuss appropriate radiation protection practices in trauma radiography
- II. Describe patient status changes that may occur in trauma radiography
- JJ. List the "best practices" in trauma radiography
- KK. Portray a professional approach to uncooperative and belligerent patients, visitors, and associates.

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.