

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

<b>SUBJECT AREA</b>	<u>Medical Imaging Technology-</u> <u>Radiography</u>
<b>COURSE RUBRIC AND NUMBER</b>	<u>RADR 2431</u>
<b>COURSE TITLE</b>	<u>Advanced Radiographic Procedures</u>
<b>COURSE CREDIT HOURS</b>	<u>4                      2                      :</u> <b>Credits                      Lec                      Lab</b>

### I. Catalog Description

Studies positioning and alignment of anatomical structures and equipment, evaluation of images for demonstration of anatomy and related pathology. A grade of “C” or better is required in this course to take the next course. **(2:6). Lab fee.**

### II. Course Objectives

- A. Unit I – The Study of Pathology
  - 1. Define terminology associated with the study of pathology. F1.
  - 2. Discuss disease classifications. F1
  - 3. Differentiate between structural and functional disease. B2, F1
  - 4. Discuss exogenous and endogenous injury, major causes of each, and examples of each..B2, F1, F2
  
- B. Unit II – Pathology of the Skeletal System
  - 1. Describe the formation of bone and the process of bone growth.
  - 2. Recognize and give examples of
    - a. congenital and hereditary bone disorders diseases
    - b. bone infections
    - c. metabolic bone diseases
    - d. fractures
    - e. nonneoplastic bone disorders
    - f. bone tumors
  
- C. Unit III – Pathology of the Respiratory System
  - 1. Describe the gross anatomy of the respiratory system. B4
  - 2. Relate major manifestations of respiratory disease. F2
  - 3. Discuss major pathological conditions of the respiratory tract in terms of etiology and structural changes. F3
  
- D. Unit IV – Pathology of the Digestive and Accessory Digestive System
  - 1. Describe the gross anatomy of the alimentary tract. B4
  - 2. Relate major manifestations of alimentary tract disease. F2
  - 3. Discuss major pathological conditions of the alimentary tract in terms of etiology and structural changes. F3

- E. Unit V – Pathology of the Urinary System
  - 1. Describe the gross anatomy of the urinary system. B4
  - 2. Relate major manifestations of urinary tract disease. F2
  - 3. Discuss major pathological conditions of the urinary tract in terms of etiology and structural changes. F3
  
- F. Unit VI – Pathology of the Cardiovascular System
  - 1. Describe the gross anatomy of the cardiovascular system. B4
  - 2. Relate major manifestations of cardiovascular disease. F2
  - 3. Discuss major pathological conditions of the cardiovascular system in terms of etiology and structural changes. F3
  
- G. Unit VII – Pathology of the Central Nervous System
  - 1. Describe the gross anatomy of the central nervous system. B4
  - 2. Relate major manifestations of central nervous system disease. F2
  - 3. Discuss major pathological conditions of the central nervous system in terms of etiology and structural changes. F3
  
- H. Unit VIII – Pathology of the Reproductive System
  - 1. Describe the gross anatomy of the reproductive system. B4
  - 2. Relate major manifestations of reproductive tract disease. F2
  - 3. Discuss major pathological conditions of the reproductive tract in terms of etiology and structural changes. F3
  
- I. Unit IX – Sectional Anatomy of the Brain and Skull.  
Locate topographical features of the brain and calvarium to include: B2, F1, F2
  - a. Lobes of the brain
  - b. ventricular system
  - c. coverings of the brain
  - d. structural components the brainstem
  - e. structures within the brain
  - f. major vessels of the brain
  
- J. Unit X – Sectional Anatomy of the Neck and Thorax.  
Locate the following anatomical features: B2, F1, F2
  - a. Major vessels.
  - b. Spine and central nervous system components.
  - c. Peripheral nerves.
  - d. Prominent bony and muscular anatomy.
  - e. Thyroid anatomy.
  - f. Components of the airway and pulmonary system.
  - g. Structures of the alimentary tract.
  - h. Cardiac structures.
  
- K. Unit XI – Sectional Anatomy of the Abdomen and Pelvis.  
Locate the following features: B2, F1, F2
  - a. Vascular anatomy.
  - b. Spine components and peripheral nerves.
  - c. Organs of the hematopoietic system.
  - d. Structures of the digestive tract..
  - e. Hepatobiliary organs.
  - f. Urinary tract.
  - g. Pelvic organs and reproductive tract.

**III. THECB Learning Outcomes (WECM)**

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

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

**IV. Evaluation**

A. Methods

1. Written assignments and quizzes
2. Research Paper
3. Unit examinations
4. Comprehensive final examination

B. Grading Scale

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

A total final course grade of below C (i.e., less than 70%) is not acceptable for completion of this course.

C. Final Grade Determination

The final grade determination for this course is calculated as follows:

Written assignments & quizzes	10% toward final grade
Research paper	10% toward final grade
Unit examinations	50% toward final grade
Comprehensive final examination	<u>30% toward final grade</u>
TOTAL	100%

**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.