

**El Paso Community College
Syllabus
Part II
Official Course Description**

SUBJECT AREA	<u>Medical Imaging Technology-Radiography</u>
COURSE RUBRIC AND NUMBER	<u>RADR 2309</u>
COURSE TITLE	<u>Radiographic Imaging Equipment</u>
COURSE CREDIT HOURS	<u>3 2 : 4</u> Credits Lec Lab

I. Catalog Description

Studies the equipment and physics of x-ray production. Includes basic x-ray circuits. Examines the relationship of conventional and digital equipment components to the imaging process. A grade of "C" or better is required in this course to take the next course. **(2:4). Lab fee.**

II. Course Objectives

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

- A. Examine the theories of physics at the atomic and subatomic levels.
- B. Discuss the basic electronics involved in daily radiographic practice.
- C. Explain the multiple energy transformations required for the production of x-rays.
- D. Review the production of radiation in the radiographic tube.
- E. Discuss the nature of radiation.
- F. Discuss the components and use of a digital radiography system.

III. THECB Learning Outcomes (WECM)

- 1. Differentiate between conventional and digital equipment.
- 2. Explain the physics of x-ray production; describe x-ray circuits.
- 3. Relate conventional and digital equipment components to the imaging process.

IV. Evaluation

- A. Methods
 - 1. quizzes and laboratory assignments
 - 2. unit examinations
 - 3. 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 for this course is calculated as follows:

Quizzes/Worksheets/Labs	10% towards final grade
Unit Examinations	70% towards final grade
Comprehensive Final Exam	<u>20% towards final grade</u>
TOTAL	100%

Final grades will be determined by rounding the total points earned in the course to equal a whole number. A number followed by a decimal of .5 or more will be rounded to the next highest whole number. A number followed by a decimal of less than .5 will be rounded down to the next lowest whole number.

V. **Disability Statement (American 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.