# El Paso Community College Syllabus Part II Official Course Description

SUBJECT AREA	Medical Imaging Technology-Radiography
COURSE RUBRIC AND NUMBER	RADR 1563
COURSE TITLE	Clinical-Radiologic Technology/Science-Radiographer V
COURSE CREDIT HOURS	5 0 : 27
	Credits Lec Lab

#### I. Catalog Description

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. A grade of "C" or better is required in this course to take the next course. **Prerequisite: RADR 1463. (0:27). Professional Practice Insurance required.** 

#### **II.** Course Objectives

a.

- A. Unit I Radiography of the Thoracic Viscera
  - 1. Position the patient for any of the following examinations and projections:
    - Chest: Lungs and Heart
    - 1. PA/AP
      - 2. lateral
    - 3. PA/AP oblique
    - b. Pulmonary apices
      - 1. AP axial
      - 2. PA axial
    - c. Lungs and pleurae
      - 1. right/left lateral decubitus
      - 2. ventral/dorsal decubitus
  - 2. Explain the examination procedure to the patient, family member, or caregiver in ageappropriate terms.
  - 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
  - 4. Manipulate stationary or portable x-ray equipment in a safe manner to achieve the projection(s) desired.
  - 5. Utilize accessory devices, as needed, to assist in the positioning and/or immobilization of the patient and placement of the image receptor.
  - 6. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
  - 7. Practice standard precautions in the care of all patients.
  - 8. Ensure the radiographic image is recorded with the patient's name and other identifying information.
  - 9. Place the correct letter marker to make it visible on the radiographic image.
  - 10. Evaluate the radiograph for optimal visualization of the area of interest and proper positioning.
  - 11. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.

- 12. Maintain the integrity of the patient's intravenous lines, catheters, oxygen, and tubing.
- 13. Establish an examination setting that maintains the patient's comfort, privacy, and modesty.
- 14. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of all patients, including the very young, the elderly, and the special needs patient before, during, and after the radiographic examination.
- B. Unit II Radiography of the Abdomen

1.

- Position the patient for any of the following examinations and projections:
  - a. KUB AP supine/upright
  - b. PA-upright
  - c. AP left lateral decubitus
  - d. Lateral right or left recumbent
  - e. Right or left lateral dorsal decubitus
- 2. Explain the examination procedure to the patient, family member, or caregiver in ageappropriate terms.
- 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
- 4. Manipulate stationary or portable x-ray equipment in a safe manner to achieve the projection(s) desired.
- 5. Utilize accessory devices, as needed, to assist in the positioning and/or immobilization of the patient and placement of the image receptor.
- 6. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
- 7. Practice standard precautions in the care of all patients.
- 8. Ensure the radiographic image is recorded with the patient's name and other identifying information.
- 9. Place the correct letter marker to make it visible on the radiographic image.
- 10. Evaluate the radiograph for optimal visualization of the area of interest and proper positioning.
- 11. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 12. Maintain the integrity of the patient's intravenous lines, catheters, oxygen, and tubing.
- 13. Establish an examination setting that maintains the patient's comfort, privacy, and modesty.
- 14. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of all patients, including the very young, the elderly, and the special needs patient before, during, and after the radiographic examination.
- C. Unit III Radiography of the Upper Limb
  - 1. Position the patient for any of the following examinations and projections:
    - Digits (fingers) 2-5
      - 1. PA
      - 2. lateral
      - 3. PA oblique lateral rotation, mediolateral
    - b. First digit (thumb)
      - 1. ĀP
      - 2. lateral
      - 3. PA oblique
    - c. Hand

a.

- 1. PA
- 2. PA oblique lateral rotation
- 3. lateral extension and fan lateral

- d. Wrist
  - 1. PA
  - 2. lateral
  - 3. PA oblique lateral rotation
  - 4. PA ulnar deviation
  - 5. Scaphoid: PA axial (Stecher)
  - 6. Carpal canal: tangential (Gaynor-Hart)
- e. Forearm

f.

- 1. AP
- 2. lateral
- Elbow
  - 1. AP
  - 2. lateral
  - 3. AP oblique medial rotation
  - 4. AP oblique lateral rotation
  - 5. distal humerus: AP (partial flexion)
  - 6. distal humerus: AP (acute flexion)
  - 7. proximal forearm: AP (partial flexion)
  - 8. proximal forearm: AP (acute flexion)
  - 9. radial head, coronoid process: axiolateral, lateral (Coyle)
- g. Humerus
  - 1. AP (upright and recumbent)
  - 2. lateral (upright and recumbent)
- 2. Explain the examination procedure to the patient, family member, or caregiver in ageappropriate terms.
- 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
- 4. Manipulate stationary or portable x-ray equipment in a safe manner to achieve the projection(s) desired.
- 5. Utilize accessory devices, as needed, to assist in the positioning and/or immobilization of the patient and placement of the image receptor.
- 6. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
- 7. Practice standard precautions in the care of all patients.
- 8. Ensure the radiographic image is recorded with the patient's name and other identifying information.
- 9. Place the correct letter marker to make it visible on the radiographic image.
- 10. Evaluate the radiograph for optimal visualization of the area of interest and proper positioning.
- 11. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 12. Maintain the integrity of the patient's intravenous lines, catheters, oxygen, and tubing.
- 13. Establish an examination setting that maintains the patient's comfort, privacy, and modesty.
- 14. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of all patients, including the very young, the elderly, and the special needs patient before, during, and after the radiographic examination.
- D. Unit IV Radiography of the Shoulder Girdle
  - 1. Position the patient for any of the following examinations and projections:
    - a. Shoulder
      - 1. AP (external, neutral, internal rotation)
      - 2. glenoid cavity: AP oblique (right or left posterior) Grashey Method
      - 3. transthoracic lateral: right of left Lawrence Method
      - 4. shoulder joint: inferosuperior axial Lawrence Method

- 5. shoulder joint: scapular Y PA oblique (right or left anterior oblique)
- b. Acromioclavicular articulations: AP (bilateral) Pearson Method
- c. Clavicle
  - 1. AP
    - 2. AP axial lordotic
    - 3. PA
    - 4. PA axial
- d. Scapula
  - 1. AP
  - 2. lateral right or left anterior oblique
- 2. Explain the examination procedure to the patient, family member, or caregiver in ageappropriate terms.
- 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
- 4. Manipulate stationary or portable x-ray equipment in a safe manner to achieve the projection(s) desired.
- 5. Utilize accessory devices, as needed, to assist in the positioning and/or immobilization of the patient and placement of the image receptor.
- 6. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
- 7. Practice standard precautions in the care of all patients.
- 8. Ensure the radiographic image is recorded with the patient's name and other identifying information.
- 9. Place the correct letter marker to make it visible on the radiographic image.
- 10. Evaluate the radiograph for optimal visualization of the area of interest and proper positioning.
- 11. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 12. Maintain the integrity of the patient's intravenous lines, catheters, oxygen, and tubing.
- 13. Establish an examination setting that maintains the patient's comfort, privacy, and modesty.
- 14. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of all patients, including the very young, the elderly, and the special needs patient before, during, and after the radiographic examination.
- E. Unit V Radiography of the Lower Limb
  - 1. Position the patient for any of the following examinations and projections:
    - a. Toes
      - 1. AP/AP axial
      - 2. AP oblique (medial rotation)
      - 3. lateral (mediolateral or lateromedial)
    - b. Foot
      - 1. AP/AP axial
      - 2. AP oblique (medial rotation)
      - 3. lateral (mediolateral)
    - c. Calcaneus
      - 1. axial (plantodorsal)
      - 2. lateral (mediolateral)
    - d. Ankle
      - 1. AP
      - 2. lateral (mediolateral)
      - 3. AP oblique medial rotation
      - 4. PA ulnar deviation
      - 5. Mortise joint: AP (medial rotation)
      - 6. AP stress view

- e. Forearm
  - 1. AP
  - 2. lateral
    - Leg (tibia and fibula)
  - 1. AP
    - 2. lateral (mediolateral)
- g. Knee

f.

i.

- 1. AP (recumbent and standing [weight-bearing])
- 2. lateral (upright and recumbent)
- 3. oblique (medial and lateral rotation)
- 4. intercondylar fossa: PA axial (Holmblad)
- 5. intercondylar fossa: PA axial (Camp-Coventry)
- h. Patella
  - 1. AP/PA
  - 2. lateral (mediolateral)
  - 3. patellofemoral joint: tangential (Settegast)
  - Femur
  - 1. AP
    - 2. lateral (mediolateral)
- 2. Explain the examination procedure to the patient, family member, or caregiver in ageappropriate terms.
- 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
- 4. Manipulate stationary or portable x-ray equipment in a safe manner to achieve the projection(s) desired.
- 5. Utilize accessory devices, as needed, to assist in the positioning and/or immobilization of the patient and placement of the image receptor.
- 6. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
- 7. Practice standard precautions in the care of all patients.
- 8. Ensure the radiographic image is recorded with the patient's name and other identifying information.
- 9. Place the correct letter marker to make it visible on the radiographic image.
- 10. Evaluate the radiograph for optimal visualization of the area of interest and proper positioning.
- 11. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 12. Maintain the integrity of the patient's intravenous lines, catheters, oxygen, and tubing.
- 13. Establish an examination setting that maintains the patient's comfort, privacy, and modesty.
- 14. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of all patients, including the very young, the elderly, and the special needs patient before, during, and after the radiographic examination.
- F. Unit VI Radiography of the Pelvis and Hip
  - Position the patient for any of the following examinations and projections:
  - a. Pelvis and upper femora: AP (supine)
  - b. Femoral necks: AP oblique (Modified Cleaves)
  - c. Hip

1.

- 1. AP (supine)
- 2. lateral (mediolateral): supine (Lauenstein, Hickey)
- 3. axiolateral (Danelius-Miller)
- d. Acetabulum: AP oblique (Judet, modified Judet)
- e. Anterior pelvic bones: AP axial outlet view (Taylor)
- f. Anterior pelvic bones: superoinferior axial inlet view (Bridgeman)

- 2. Explain the examination procedure to the patient, family member, or caregiver in ageappropriate terms.
- 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
- 4. Manipulate stationary or portable x-ray equipment in a safe manner to achieve the projection(s) desired.
- 5. Utilize accessory devices, as needed, to assist in the positioning and/or immobilization of the patient and placement of the image receptor.
- 6. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
- 7. Practice standard precautions in the care of all patients.
- 8. Ensure the radiographic image is recorded with the patient's name and other identifying information.
- 9. Place the correct letter marker to make it visible on the radiographic image.
- 10. Evaluate the radiograph for optimal visualization of the area of interest and proper positioning.
- 11. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 12. Maintain the integrity of the patient's intravenous lines, catheters, oxygen, and tubing.
- 13. Establish an examination setting that maintains the patient's comfort, privacy, and modesty.
- 14. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of all patients, including the very young, the elderly, and the special needs patient before, during, and after the radiographic examination.
- G. Unit VII Radiography of the Vertebral Column

a.

b.

e.

- 1. Position the patient for any of the following examinations and projections:
  - Cervical/Cervicothoracic Spine
    - 1. Dens (Fuchs Method)
    - 2. Atlas and axis AP open mouith
    - 3. AP axial
    - 4. Lateral (Grandy Method)
    - 5. Lateral flexion and extension
    - 6. Intervertebral foramina AP/PA axial oblique
    - 7. Cervicothoracic region lateral (Swimmer's technique)
  - Thoracic Spine
    - 1. AP
    - 2. Lateral
  - c. Lumbar Spine/Lumbosacral Junction
    - 1. AP
      - 2. Lateral
      - 3. Lumbar zygoapophyseal joints AP obliques
      - 4. L5/S1 lumbosacral junction AP/AP axial (Ferguson Method)
      - 5. L5/S1 lumbosacral junction lateral
  - d. Sacrum and Coccyx
    - 1. AP/PA axial
      - 2. Lateral
    - 3. Sacroiliac joints AP oblique
    - Thoracolumbar Spine
      - 1. PA/lateral (Frank et al)
      - 2. PA (Ferguson Method)
- 2. Explain the examination to the patient or family member in age-appropriate terms.
- 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.

- 4. Manipulate stationary or portable x-ray machinery in a safe manner to achieve the projection(s) desired.
- 5. Elicit the patient's cooperation (when possible) in obtaining proper body/part positioning and motion control.
- 6. Utilize accessory devices, as needed, to assist in the positioning of the patient and placement of the image receptor.
- 7. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
- 8. Practice standard precautions in the care of all patients.
- 9. Ensure the radiographic image is recorded with the correct patient's name and other personal identifying information.
- 10. Identify the radiographic anatomy with the correct letter marker.
- 11. Evaluate the radiograph for optimal visualization of the area of interest and proper anatomical alignment.
- 12. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 13. Maintain the integrity of any patient IV's, catheters, oxygen, and tubing.
- 14. Establish an examination setting that maintains the patient's privacy and modesty.
- 13. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of the elderly and/or special needs patient before, during, and after the radiographic examination.
- H. Unit VIII Radiography of the Bony Thorax
  - 1. Position the patient for any of the following examinations and projections:
    - a. Sternum
      - 1. PA oblique (RAO)
      - 2. Lateral
    - b. Sternoclavicular articulations
      - 1. PA
      - 2. PA oblique (body rotation method)
      - 3. PA oblique (central ray angulation method)
    - c. Ribs
      - 1. Upper anterior ribs PA
      - 2. Posterior ribs AP
      - 3. Axillary ribs AP oblique
      - 4. Axillary ribs PA oblique
  - 2. Explain the examination to the patient or family member in age-appropriate terms.
  - 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
  - 4. Manipulate stationary or portable x-ray machinery in a safe manner to achieve the projection(s) desired.
  - 5. Elicit the patient's cooperation (when possible) in obtaining proper body/part positioning and motion control.
  - 6. Utilize accessory devices, as needed, to assist in the positioning of the patient and placement of the image receptor.
  - 7. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.
  - 8. Practice standard precautions in the care of all patients.
  - 9. Ensure the radiographic image is recorded with the correct patient's name and other personal identifying information.
  - 10. Identify the radiographic anatomy with the correct letter marker.
  - 11. Evaluate the radiograph for optimal visualization of the area of interest and proper anatomical alignment.

- 12. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 13. Maintain the integrity of any patient IV's, catheters, oxygen, and tubing.
- 14. Establish an examination setting that maintains the patient's privacy and modesty.
- 13. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of the elderly and/or special needs patient before, during, and after the radiographic examination.
- I. Unit IX Radiography of the Skull
  - 1. Position the patient for any of the following examinations and projections:
    - a. Cranium
      - 1. PA
      - 2. Lateral supine, erect, dorsal decubitus
      - 3. PA axial (Caldwell Method)
      - 4. AP axial
      - 5. AP axial (Towne Method)
      - 6. PA axial (Haas Method)
      - 7. Submentovertex (Schüller Method)
    - b. Facial Bones
      - 1. Lateral erect, recumbent
      - 2. Parieto-acanthial erect, recumbent (Waters Method)
      - 3. Acantho-parietal erect, recumbent (Reverse Waters Method)
      - 4. PA axial erect, recumbent ((Caldwell Method)
      - 5. Lateral nasal bones erect, semiprone
    - c. Zygomatic arches
      - 1. Submentovertex supine, erect
      - 2. Tangential
      - 3. AP axial (Modified Towne Method)
    - d. Mandible
      - 1. PA
      - 2. PA axial
      - 3. PA oblique lateral rotation
      - 4. Axiolateral oblique
    - e. Temporomandibular joints
      - 1. AP axial
      - 2. Axiolateral oblique
    - f. Paranasal sinuses
      - 1. Lateral erect
      - 2. Frontal and anterior ethmoid sinuses: PA axial erect (Caldwell Method)
      - 3. Maxillary sinuses: parieto-acanthial erect (Waters Method)
      - 4. Maxillary and sphenoid sinuses: parieto-acanthial erect open mouth (Waters Method)
      - 5. Ethomoid and sphenoid sinuses: submentovertex erect
  - 2. Explain the examination to the patient or family member in age-appropriate terms.
  - 3. Formulate optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
  - 4. Manipulate stationary or portable x-ray machinery in a safe manner to achieve the projection(s) desired.
  - 5. Elicit the patient's cooperation (when possible) in obtaining proper body/part positioning and motion control.
  - 6. Utilize accessory devices, as needed, to assist in the positioning of the patient and placement of the image receptor.
  - 7. Protect the patient, yourself and other personnel from unnecessary radiation exposure and physical harm.

- 8. Practice standard precautions in the care of all patients.
- 9. Ensure the radiographic image is recorded with the correct patient's name and other personal identifying information.
- 10. Identify the radiographic anatomy with the correct letter marker.
- 11. Evaluate the radiograph for optimal visualization of the area of interest and proper anatomical alignment.
- 12. Identify and report obvious deviations from normal equipment performance to the appropriate clinical staff.
- 13. Maintain the integrity of any patient IV's, catheters, oxygen, and tubing.
- 14. Establish an examination setting that maintains the patient's privacy and modesty.
- 13. Safeguard the confidentiality of the patient's protected health information.
- 15. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
- 16. Recognize and facilitate the physical and psychological needs of the elderly and/or special needs patient before, during, and after the radiographic examination.
- J. Unit X Contrast and Special Examinations
  - 1. Prepare and position the patient for examinations of the:
    - a. Upper gastrointestinal tract
    - b. Lower gastrointestinal tract
    - c. Biliary tract
    - c. Genito-urinary tract
    - d. Central nervous system (e.g., myelography)
    - e. Joints (arthrography)
  - 2. Explain the examination to the patient in understandable terms.
  - 3. Select optimal exposure factors for each examination and projection based on the patient's age, body habitus, pathology, and physical condition.
  - 4. Manipulate equipment in a safe manner to achieve the projection(s) desired.
  - 5. Elicit the patient's cooperation (when possible) in obtaining proper body/part positioning and motion control.
  - 6. Utilize accessory devices, as needed, to assist in the positioning of the patient and placement of the image receptor.
  - 7. Protect the patient, yourself and other necessary personnel from unnecessary radiation exposure and physical harm.
  - 8. Identify the radiograph with the patient's name and with positioning markers.
  - 9. Evaluate the radiograph for proper alignment and exposure.
  - 10. Identify and report obvious deviations in normal equipment performance to the appropriate clinical staff.
  - 11. Maintain the integrity of the patient's IV's, catheters, and tubes (if applicable).
  - 12. Demonstrate a professional demeanor at all times in relations with instructors, peers, staff, patients, families and physicians.
  - 13. Recognize and facilitate the physical and psychological needs of the elderly and/or special needs patient before, during, and after the radiographic examination.
  - 14. Demonstrate a basic understanding of the pharmacology of common classes of drugs (including contrast media) used in the healthcare setting, in terms of:
    - a. indications
    - b. actions
    - c, contraindications
    - d. cautions
    - e. side effects and adverse reactions
    - f. interactions
    - g. management of adverse reactions
    - h. drug forms
    - i. routes of administration
    - j. metabolism
    - k. routes of excretion

- l. drug classifications
- m. drugs and infants, children, and geriatrics
- K. Unit XI Radiography in the Surgical Suite
  - 1. Identify the components of the mobile fluoroscope (c-arm) to include
    - a. c-arm tube travel and rotation locks
    - b. c-arm wheel locks
    - c. imaging intensifier or compact flat detector (CFD)
    - d. tube housing/x-ray generator
    - e. exposure control
    - f. emergency shut-off control
    - g. pulse-fluoro mode button
    - h. continuous fluoro mode button
    - i. fluoro boost (HLF) button/control
    - j. fluoro timer and timer reset buttons
    - k. shutter (collimator) vertical/horizontal/rotation controls
    - l. iris collimator
    - m. image vertical/horizontal/rotation controls
    - n. manual technique adjustment control
    - o. image store/recall controls
    - p. image zoom
    - q. magnification
  - 2. Discuss the components of the c-arm workstation to include
    - a. brightness/contrast controls
    - b. enhancement
    - c. annotation controls (keyboard)
    - d. post-processing controls
    - e. printer
    - f. monitor
  - 3. Identify the components of the mobile x-ray unit to include
    - a. tube/image intensifier (or CFD) travel and orientation locks
      - b. unit transport controls (forward, reverse, brake)
      - c. power on/off switch
    - d. light switch
    - e. collimators
    - f. field size indicator
    - g. distance indicator
    - h. mAs/kVp controls
    - i. exposure indicator
    - i. handswitch/footswitch and exposure control
  - 4. Describe proper sterile draping procedures for the c-arm.
  - 5. Orient the monitor image properly for the anatomy being visualized.
  - 6. Demonstrate the proper technique for intraoperative orthopedic and non-orthopedic procedures utilizing the c-arm.
  - 7. Demonstrate the ability to properly place and remove a radiographic grid/cassette in a surgical table without compromising the sterile field.
  - 8. Manipulate the c-arm to achieve oblique and lateral projections of the spine or peripheral anatomy without moving the patient.
  - 9. Navigate the mobile x-ray equipment in the surgical suite without compromising the sterile field.

## III. THECB Learning Outcomes (WECM)

As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

#### **IV.** Evaluation

- A. Methods
  - 1. Clinical Progress Evaluation
  - 2. Clinical Traits Evaluation
  - 3. Clinical Competency Evaluation
  - 4. Final Examination
- B. Grading Scale

CLIN	IIC				DID	ACTIC			
96	-	100	=	А	93	-	100	=	Α
91	-	95	=	В	85	-	92	=	В
85	-	90	=	С	75	-	84	=	С
80	-	84	=	D	70	-	74	=	D
Belo	w 80		=	F	Belo	w 70		=	F

A total final course grade of below C (i.e., less than 85%) is not acceptable for successful completion of this course. Grades for the unit exams and the final exam, will be converted from the didactic grade scale to the clinical grade scale (e.g., 75% didactic = 85% clinic). All final grades are rounded to the nearest whole number.

C. Final Grade Determination

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

Clinical Progress Evaluation	10%
Clinical Traits Evaluation	20%
Clinical Competency Evaluati	ons40%
Final Examination	30%
TOTAL	100%

#### IV. 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).

### IV. 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.