

**LAST REVIEW:** 2010-2011      **NEXT REVIEW:** 2015-2016      **STATUS:** A

**COURSE TITLE:** Radiographic Procedures II

**COMMON COURSE NUMBER:** RTE 1513

**CREDIT HOURS:** 3

**CONTACT HOUR BREAKDOWN**

**CLOCK HOURS:**

Lecture: 48      Lab:

Clinic:      Other:

**PREREQUISITE(S):** RTE 1000, RTE 1111, RTE 1503, RTE 1503L, RTE 1804

**COREQUISITE(S):**

**PRE/COREQUISITE(S):** RTE1418, RTE 1418L, RTE 1513L, RTE 1613, RTE 1814

**COURSE DESCRIPTION:** A study of radiographic procedures of the upper limb, humerus & shoulder girdle, lower limb, femur & pelvic girdle, bony thorax, and related trauma, mobile, and pediatric examinations. Students will study the radiographic positions/projections for each body part and its associated anatomy.

### **UNIT TITLES**

- 1. Anatomy & Positioning of the Upper Limb**
- 2. Anatomy & Positioning of the Humerus & Shoulder Girdle**
- 3. Anatomy & Positioning of the Lower Limb**
- 4. Anatomy & Positioning of the Femur & Pelvic Girdle**
- 5. Anatomy & Positioning of the Bony Thorax**
- 6. Trauma & Mobile Radiography of the Extremities, Shoulder & Pelvic Girdles**
- 7. Pediatric Radiography of the Extremities, Shoulder & Pelvic Girdles**

**EVALUATION:** Assessment includes written examinations & assignments.

**Common Course Number: RTE 1513**

**UNITS**

**Unit 1 Anatomy & Positioning of the Upper Limb**

**General Outcome:**

- 1.0 The student shall be able to accurately describe the radiographic procedures employed to demonstrate the anatomy of the upper limb.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 1.1** Identify anatomy of the upper limb on diagrams, models, & radiographs.
- 1.2** Identify & classify the articulations of the upper limb.
- 1.3** Describe the projections/positions used for imaging of the upper limb.
- 1.4** State the direction & location of the central ray for each projection.
- 1.5** Describe the collimation to be used for each projection/position.
- 1.6** Describe the technical factors used for each projection/position.
- 1.7** Describe breathing considerations for imaging of the upper limb.
- 1.8** Describe patient shielding for imaging of the upper limb.
- 1.9** Identify the anatomy best demonstrated on each projection/position.
- 1.10** State the criteria for determining if the image is of diagnostic quality.

**Common Course Number: RTE 1513**

**UNITS**

**Unit 2 Anatomy & Positioning of the Humerus & Shoulder Girdle**

**General Outcome:**

- 2.0 The student shall be able to accurately describe the radiographic procedures employed to demonstrate the anatomy of the humerus & shoulder girdle.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 2.1** Identify anatomy of the humerus & shoulder girdle on diagrams, models, & radiographs.
- 2.2** Identify & classify the articulations of the humerus & shoulder girdle.
- 2.3** Describe the projections/positions used for imaging of the humerus & shoulder girdle.
- 2.4** State the direction & location of the central ray for each projection.
- 2.5** Describe the collimation to be used for each projection/position.
- 2.6** Describe the technical factors used for each projection/position.
- 2.7** Describe breathing considerations for imaging of the humerus & shoulder girdle.
- 2.8** Describe patient shielding for imaging of the humerus & shoulder girdle.
- 2.9** Identify the anatomy best demonstrated on each projection/position.
- 2.10** State the criteria for determining if the image is of diagnostic quality.

**Common Course Number: RTE 1513**

**UNITS**

**Unit 3 Anatomy & Positioning of the Lower Limb**

**General Outcome:**

**3.0 The student shall be able to accurately describe the radiographic procedures employed to demonstrate the anatomy of the lower limb.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 3.1** Identify anatomy of the lower limb on diagrams, models, & radiographs.
- 3.2** Identify & classify the articulations of the lower limb.
- 3.3** Describe the projections/positions used for imaging of the lower limb.
- 3.4** State the direction & location of the central ray for each projection.
- 3.5** Describe the collimation to be used for each projection/position.
- 3.6** Describe the technical factors used for each projection/position.
- 3.7** Describe breathing considerations for imaging of the lower limb.
- 3.8** Describe patient shielding for imaging of the lower limb.
- 3.9** Identify the anatomy best demonstrated on each projection/position.
- 3.10** State the criteria for determining if the image is of diagnostic quality.

**Common Course Number: RTE 1513**

**UNITS**

**Unit 4 Anatomy & Positioning of the Femur & Pelvic Girdle**

**General Outcome:**

- 4.0 The student shall be able to accurately describe the radiographic procedures employed to demonstrate the anatomy of the femur & pelvic girdle.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 4.1** Identify anatomy of the femur & pelvic girdle on diagrams, models, & radiographs.
- 4.2** Identify & classify the articulations of the femur & pelvic girdle.
- 4.3** Describe the projections/positions used for imaging of the femur & pelvic girdle.
- 4.4** State the direction & location of the central ray for each projection.
- 4.5** Describe the collimation to be used for each projection/position.
- 4.6** Describe the technical factors used for each projection/position.
- 4.7** Describe breathing considerations for imaging of the femur & pelvic girdle.
- 4.8** Describe patient shielding for imaging of the femur & pelvic girdle.
- 4.9** Identify the anatomy best demonstrated on each projection/position.
- 4.10** State the criteria for determining if the image is of diagnostic quality.

**Common Course Number: RTE 1513**

**UNITS**

**Unit 5 Anatomy & Positioning of the Bony Thorax**

**General Outcome:**

**5.0 The student shall be able to accurately describe the radiographic procedures employed to demonstrate the anatomy of the bony thorax.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 5.1** Identify anatomy of the bony thorax on diagrams, models, & radiographs.
- 5.2** Identify & classify the articulations of the bony thorax.
- 5.3** Describe the projections/positions used for imaging of the bony thorax.
- 5.4** State the direction & location of the central ray for each projection.
- 5.5** Describe the collimation to be used for each projection/position.
- 5.6** Describe the technical factors used for each projection/position.
- 5.7** Describe breathing considerations for imaging of the bony thorax.
- 5.8** Describe patient shielding for imaging of the bony thorax.
- 5.9** Identify the anatomy best demonstrated on each projection/position.
- 5.10** State the criteria for determining if the image is of diagnostic quality.

**UNITS**

**Unit 6 Trauma & Mobile Radiography of the Extremities, Shoulder & Pelvic Girdles**

**General Outcome:**

- 6.0 The student shall be able to accurately describe optional trauma & mobile radiographic procedures employed to demonstrate the anatomy of the extremities, femur & pelvic girdles.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 6.1** Describe the projections/positions used for trauma/mobile imaging of the extremities, femur & pelvic girdles.
- 6.2** State the direction & location of the central ray for each projection.
- 6.3** Describe the collimation to be used for each projection/position.
- 6.4** Describe the technical factors used for each projection/position.
- 6.5** Describe breathing considerations for trauma/mobile imaging.
- 6.6** Describe patient shielding for trauma/mobile imaging.
- 6.7** Identify the anatomy best demonstrated on each projection/position.
- 6.8** State the criteria for determining if the image is of diagnostic quality.

**Common Course Number: RTE 1513**

**UNITS**

**Unit 7 Pediatric Radiography of the Extremities, Shoulder & Pelvic Girdles**

**General Outcome:**

**7.0 The student shall be able to accurately describe pediatric radiographic procedures employed to demonstrate the anatomy of the extremities, femur & pelvic girdles.**

**Specific Measurable Learning Outcomes:**

**Upon successful completion of this unit, the student shall be able to:**

- 7.1** Describe the process of bone development in children.
- 7.2** Describe the projections/positions used for pediatric imaging of the extremities, femur & pelvic girdles.
- 7.3** State the direction & location of the central ray for each projection.
- 7.4** Describe the collimation to be used for each projection/position.
- 7.5** Describe the technical factors used for each projection/position.
- 7.6** Describe breathing considerations for pediatric imaging.
- 7.7** Describe patient shielding for pediatric imaging.
- 7.8** Identify the anatomy best demonstrated on each projection/position.
- 7.9** State the criteria for determining if the image is of diagnostic quality.