

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

**ACADEMIC AFFAIRS**

Course Number: RADG 111 Department: Radiography

Course Title: Radiographic Positioning 1 Semester: Spring Year: 1997

**Objectives/Competencies**

<b>Course Objective</b>	<b>Competencies</b>
<ol style="list-style-type: none"><li>1. Recall radiographic positioning terminology.</li><li>2. Identify anatomic structures and landmarks as related to radiography.</li><li>3. Recognize the anatomic positions used for radiographic positions.</li><li>4. Distinguish between the correct and incorrect radiographic examinations.</li><li>5. Practice the radiographic position in the laboratory setting.</li><li>6. Associate the placement or rotation of body parts with the specified positions.</li><li>7. Demonstrate the proper radiographic positioning for specified examinations in the laboratory.</li></ol>	<ol style="list-style-type: none"><li>1. Student-patient relationship<ol style="list-style-type: none"><li>a. Assist patient</li><li>b. Explain procedure clearly to patient</li><li>c. Insure patient privacy/modesty</li></ol></li><li>2. Selection of film<ol style="list-style-type: none"><li>a. Select correct film/screen speed</li><li>b. Select correct grid type/ratio</li><li>c. Select correct cassette size</li></ol></li><li>3. Equipment manipulation<ol style="list-style-type: none"><li>a. Manipulate equipment to correct position</li><li>b. Utilize equipment locks correctly</li><li>c. Identify film with appropriate markers</li></ol></li><li>4. Technical factors<ol style="list-style-type: none"><li>a. Demonstrate suitable exposure factors</li></ol></li></ol>

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<p>Laboratory Objectives:</p> <ol style="list-style-type: none"> <li>1. When indicated, place a gonadal shield over male and female reproductive organs prior to taking radiograph.</li> <li>2. Place a protective shield over radiosensitive organs (other than gonads) in or near the primary beam prior to exposure, when repeated examination or high dosage levels are required for procedure.</li> <li>3. Collimate beam to the area to be radiographed to limit radiation exposure to the area of interest.</li> <li>4. Properly position patient, utilizing body landmarks, to achieve the best demonstration of the affected body part by adjusting table, radiographic equipment, and film cassette using knowledge of anatomy, and standard radiographic positions.</li> <li>5. Use immobilization device, when indicated, to prevent movement by patient, and to insure proper patient positioning during film exposure.</li> <li>6. Tape lead markers to margin of film cassette indicating time, body position (e.g., right left, RAO, LAO), etc.</li> <li>7. Select film, screen and/or grid combination appropriate for the part to be radiographed.</li> <li>8. Collimate beam to limit radiation exposure to the area of interest to improve image quality.</li> <li>9. Give patient appropriate breathing instructions (i.e., insp. exp.) prior to making exposure.</li> </ol>	<ol style="list-style-type: none"> <li>5. Positioning skills               <ol style="list-style-type: none"> <li>a. Position patient correctly</li> <li>b. Position anatomical landmarks correctly</li> <li>c. Center anatomical area of interest to film</li> <li>d. Align central ray to film</li> <li>e. Angulate central ray correctly.</li> <li>f. Use immobilizing devices correctly</li> <li>g. Instruct patient properly</li> </ol> </li> <li>6. Radiation protection methods               <ol style="list-style-type: none"> <li>a. Collimate beam properly</li> <li>b. Shield patient properly</li> </ol> </li> <li>7. Film critique               <ol style="list-style-type: none"> <li>a. Assess correctly patient position for diagnosis</li> <li>b. Assess correctly technical factors for diagnosis</li> <li>c. Recommend correct changes</li> <li>d. Distinguish anatomical area of interest</li> <li>e. Indicate evidence of radiation protection</li> </ol> </li> </ol>

Course Objective	Competencies
<p>10. Evaluate the developed radiograph using view box to make certain that radiographs are of suitable quality for interpretation by physician.</p> <p>11. Place film cassettes into correct and centered position (erect, tabletop, or Bucky tray).</p> <p>12. Remove all radiopaque materials (i.e., jewelry, hairpins, contrast materials) from patient and/or table that could interfere with the quality of the film.</p> <p>13. Question patient about the presence and location of any pain he/she may be experiencing to determine if additional radiographic views are needed - as well as any modifications that might be useful - using a knowledge of the department protocol for a given procedure.</p> <p>14. Assist the patient onto or off of table or stool to avoid patient injury, using proper body mechanics and “lifters” to avoid personal injury.</p>	