

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number:   SURG 308   Department:   Surgical Technology  

Course Title:   Pharmacology and Pathology   Semester:   Spring   Year:   2005  

Objectives/Competencies

Course Objective	Competencies
<p>1. Develop knowledge of medication calculations (conversions and dosages)</p> <p>2. Apply general terminology to medication use</p> <p>3. Develop an understanding of the preparation and appropriate management of medications and solutions frequently used in the OR.</p>	<p>1. Demonstrate knowledge of:</p> <ul style="list-style-type: none"><li>a. Conversion and equivalent tables</li><li>b. Measurement and delivery</li><li>c. Basic mathematics</li><li>d. Dosage calculations</li><li>e. Mixing medications</li></ul> <p>1. Demonstrate knowledge of:</p> <ul style="list-style-type: none"><li>a. General definitions</li><li>b. Types of medication actions/effects</li><li>c. Abbreviations</li></ul> <p>1. Demonstrate knowledge of:</p> <ul style="list-style-type: none"><li>a. Medication nomenclature</li><li>b. Control classifications</li><li>c. Medications/solution violations</li><li>d. Laws, policies, procedures, standards</li></ul>

Course Objective	Competencies
<p>4. Develop knowledge of the care and handling of medications and solutions</p> <p>5. Understand the groups, names, indications for and implications of the major medications and solutions frequently used in the OR.</p> <p>6. Develop an understanding of normal laboratory values.</p>	<p>e. Medication publications            f. Sources of medications            g. Drug forms (gas, liquid, etc.)            h. Routes of administration</p> <p>1. Demonstrate knowledge of the care and handling of medications and solutions</p> <p>    a. Medication identification            b. Medication preparation            c. Techniques of identification</p> <p>1. Develop an understanding of the groups, names, indications for and implications of the major medications and solutions frequently used in the OR.</p> <p>    a. Classifications of agents            b. Actions and implications of medications            c. IV fluids            d. Blood replacement            e. Dyes            f. Irrigation solutions</p> <p>1. Demonstrate a knowledge of laboratory values:</p> <p>    a. Chemistry            b. Cell counts (CBC)            c. C+S            d. Urinalysis            e. Enzyme assay            f. Acid fast</p>

Course Objective	Competencies
<p>7. Understand the implications of abnormal laboratory values.</p>	<p>1. Demonstrate an understanding of abnormal lab values and the relationship to pathophysiology:</p>
<p>8. Develop knowledge of diagnostic procedures, including the implications and procedures for them and the preparation for them.</p>	<p>1. Demonstrate knowledge of diagnostic procedures, including the implications and procedures for them:</p> <ul style="list-style-type: none"> <li>a. Radiological</li> <li>b. Direct visualization</li> <li>c. Physical exam</li> <li>d. Measures of cardiac and neurological functioning</li> </ul>
<p>9. Develop and understanding of pathological examinations</p>	<p>2. Demonstrate knowledge of the preparation for these procedures:</p> <ul style="list-style-type: none"> <li>a. Patient</li> <li>b. Supplies</li> <li>c. Equipment</li> <li>d. Safety precautions</li> </ul> <p>1. Demonstrate knowledge of pathological examinations:</p> <ul style="list-style-type: none"> <li>d. Permanent section</li> <li>e. Frozen section</li> <li>f. Hormone assay</li> <li>g. Cytology</li> </ul>
<p>10. Develop knowledge of the appropriate care and handling of pathological specimens</p>	<p>1. Demonstrate knowledge of the appropriate care and handling of pathological specimens:</p>

<b>Course Objective</b>	<b>Competencies</b>
	<ul style="list-style-type: none"><li>a. Identification</li><li>b. Labeling</li><li>c. Preservatives</li><li>d. Saline</li><li>e. Cultures</li></ul>