

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

**ACADEMIC AFFAIRS**

Course Number: CLLS 141 Department: Clinical Lab Sciences

Course Title: Clinical Lab Assistant Skills 2 Semester: Spring Year: 1999

**Objectives/Competencies**

<b>Course Objective</b>	<b>Competencies</b>
1. Students will communicate (verbally/written) effectively and appropriately in the workplace.	1. Model professional appearance and appropriate behavior. 2. Maintain confidentiality of privileged information on individuals. 3. Interact appropriately and professionally with other individuals.
2. Students will use the (LIS) computer necessary to accomplish job junction.	1. Follow standard operating procedures for labeling, transport and processing of specimens including transport to reference laboratories. 2. Follow laboratory protocol for storage and suitability of reagents, standards and controls.
3. Students will prepare blood/body fluid specimens for analysis (SOP).	1. Recognize and report contamination and/or deterioration in reagents, standards and controls.
4. Students will identify and report potential preanalytical errors that may occur during specimen collection, labeling, transporting and processing.	1. Perform quality control procedures. 2. Define mean, standard deviation, Levy-Jennings chart. 3. Record quality control rejects.

Course Objective	Competencies
<p>5. Students will prepare and reconstitute reagents, standards and controls (SOP).</p>	<ol style="list-style-type: none"> <li>4. Identify and report control results that do not meet pre-determined criteria.</li> <li>5. Explain how to prepare a procedural manual, have knowledge of NCDS format.</li> <li>6. Follow written and verbal instructions in carrying out testing procedures.</li> <li>7. Compare test results to reference intervals.</li> <li>8. Record results by manual method or computer according to laboratory protocol.</li> <li>9. Report Stat. Results of completed tests according to laboratory protocol.</li> <li>10. Recognize critical values and follow established protocol regarding reporting.</li> <li>11. Clean glass and plastic labware.</li> <li>12. Use pipetting equipment.</li> <li>13. Use measurement equipment such as beakers and flasks.</li> </ol> <ol style="list-style-type: none"> <li>1. Identify training competencies of individuals allowed to perform Ab6's.</li> <li>2. Demonstrate arterial puncture site selection, preparation and puncture.</li> <li>3. Discuss the Allen's test used to check for collateral circulation.</li> <li>4. Identify by name and location arteries used in the Aby's collection.</li> <li>5. List procedural steps in the performance of an AB6 stick</li> <li>6. Discuss the AB6's specimen collection, processing and</li> </ol>

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<p>6. Students will perform appropriate tests (POCT) at CCA level according to (SOP).</p>	<p>transport of specimen.</p> <p>7. Name (AB6) test results and discuss their diagnostic significance.</p> <p>8. Identify sampling errors and list criteria for specimen rejection.</p>
<p>7. Discuss the purpose, collection and diagnostic significance of the (SB6) arterial blood gases.</p>	<p>1. Determine suitability of specimens for hematology procedures related to:</p> <ul style="list-style-type: none"> <li>a. The test requested.</li> <li>b. Appropriate patient preparation/method of collection.</li> <li>c. Time of collection/processing.</li> <li>d. Storage.</li> <li>e. Interfering substances</li> <li>f. Assemble/prepare reagents, standards and controls for hematology tests.</li> <li>g. Prepare and stain slides for further analysis.</li> </ul>
<p>8. Discuss the CBC, and name the tests routinely considered part of the CBC.</p>	<p>1. Perform hematology procedures at the clinical assistant level.</p> <p>2. Recognize technical testing errors for each test performed.</p> <p>1. Follow established quality control procedures specific to hematology tests including maintenance and instrument calibration.</p> <p>2. Maintain inventory control and supplies for hematology tests.</p>

Course Objective	Competencies
<p>9. Use common hematology terminology as it relates to the point-of-care or clinical laboratory environment (hemoglobin, hematocrits, ESR/BSR).</p> <p>10. Prepare, store and dispose of specimens for hematology analysis according to SOP.</p> <p>11. Discuss the coagulation screening tests (PT/Prothrombin).</p> <p>12. Use common clinical chemistry terminology as it relates to the point-of-care on clinical laboratory environment.</p> <p>13. Prepare, store and dispose of specimens for chemistry analysis according to standard operating procedure</p>	<ol style="list-style-type: none"> <li>1. Determine suitability of specimens for chemistry procedures according to:               <ol style="list-style-type: none"> <li>a. The test requested.</li> <li>b. Appropriate patient preparation/method of collection.</li> </ol> </li> <li>1. Assemble and prepare reagents, standards and controls for chemistry tests.</li> <li>2. Perform appropriate tests at the CLA level (glucose/ glucometer, cholesterol).</li> <li>3. Recognize technical testing errors for each test performed.</li> <li>4. Report results of procedures using pre determined criteria.</li> <li>5. Follow established quality control procedures specific to chemistry tests, including maintenance and instrument calibration.</li> <li>6. Plot "qc" values on Levy-Jennings chart.</li> <li>7. Maintain inventory controls and supplies for chemistry tests.</li> </ol>

Course Objective	Competencies
<p>14. Use common immunology terminology as it relates to the point-of-care or clinical laboratory environment.</p> <p>15. Prepare, store and dispose of specimens for immunology testing according to standard operating procedures.</p>	<ol style="list-style-type: none"> <li>1. Determine suitability of specimens for immunology procedures related to:               <ol style="list-style-type: none"> <li>a. Test requested</li> <li>b. Appropriate patient preparation/method of collection.</li> <li>c. Time of collection/processing</li> <li>d. Storage</li> <li>e. Interfering substances</li> </ol> </li> <li>2. Assemble/prepare reagents, standards and controls for immunology tests.</li> <li>3. Perform immunology tests at the CLA level:               <ol style="list-style-type: none"> <li>a. Infectious mononucleosis</li> <li>b. (HCG) pregnancy test</li> <li>c. (LH) fertility test</li> <li>d. (JGAS) rapid strep test</li> </ol> </li> <li>4. Recognize technical testing errors for each test performed.</li> <li>5. Report results of tests using predetermined criteria.</li> <li>6. Follow established quality control procedures specific to immunology tests, including maintenance and instrument calibration.</li> <li>7. Maintain inventory control and supplies for immunology tests.</li> </ol>
<p>16. Use common microbiology terminology as it relates to the point-of-care or clinical laboratory environment.</p> <p>17. Follow special safety procedures and aseptic technique required for processing microbiology specimens.</p>	<ol style="list-style-type: none"> <li>1. Determine suitability of specimens for microbiology procedures related to:               <ol style="list-style-type: none"> <li>a. The test requested.</li> <li>b. Appropriate patient/preparation method of collection.</li> <li>c. Time of collection/processing.</li> </ol> </li> </ol>

Course Objective	Competencies
<p>18. Prepare, store, dispose of and properly transport specimens for microbiology testing according to standard operating procedure.</p>	<ul style="list-style-type: none"> <li>d. Storage.</li> <li>e. Interfering substances.</li> <li>2. Assemble reagents, standards and controls for microbiology procedures.</li> <li>3. Prepare and stain slides for further analysis.</li> <li>4. Perform microbiology testing at the CLA level.               <ul style="list-style-type: none"> <li>a. Identify <i>Helicobacter pylori</i>.</li> </ul> </li> <li>5. Recognize technical errors for each test performed.</li> <li>6. Report results of procedures using pre-determined criteria.</li> <li>7. Perform pre-determined quality control procedures specific to microbiology testing including maintenance and instrument calibration.</li> <li>8. Maintain inventory control and supplies for microbiology procedures.</li> </ul>