

MLT 1040L INTRODUCTION TO MEDICAL LABORATORY TECHNOLOGY

Course Description

Lectures and demonstrations in laboratory and clinical facilities are used to develop the role of the medical laboratory technician and proficiency in use of medical terminology, performance of routine urinalysis and collection of blood samples. Prerequisites: permission of department chairperson; corequisites: MLS 1000L, BCH 1020, APB 2190, 2191, 2190L, 2191L.

Course Competency	Learning Outcomes
<p>Competency 1: The student will demonstrate knowledge, comprehension, and application in venipuncture techniques by:</p>	<ol style="list-style-type: none"> 1. Ethical Issues 2. Cultural / Global Perspective 3. Communication
<ol style="list-style-type: none"> 1. Using proper patient identification techniques. 2. Identifying the proper tube color and anticoagulant for the test. 3. Listing the steps for a proper venipuncture and finger stick procedure 4. Performing a venipuncture and finger stick procedure 5. Adhering to OSHA and Standard (Universal) Precautions guidelines. 	
<p>Competency 2: The student will demonstrate knowledge, comprehension, and application in the use of the laboratory equipment by:</p>	
<ol style="list-style-type: none"> 1. Recognizing, identifying and using the parts of the microscope. 2. Using various pipettes according to laboratory guidelines. 3. Recognizing and identifying the different types of glassware and their use. 4. Operating a centrifuge 	

<p>Competency 3: The student will demonstrate knowledge, comprehension, and application of responsible and ethical behavior in the profession by:</p>	<ol style="list-style-type: none"> 1. Critical thinking 2. Aesthetic / Creative Activities
<ol style="list-style-type: none"> 1. Understanding pre-analytical, analytical and post analytical sources of error in the laboratory 2. Understanding Patient Safety Goals 3. Recognizing HIPPA violations 4. Recognizing and identifying the different departments and their function. 5. Recognizing and identifying the laws governing clinical laboratories 6. Recognizing and identifying the importance of proficiency testing. 	
<p>Competency 4: The student will demonstrate knowledge, comprehension, and application in reference to safety guidelines by:</p>	<ol style="list-style-type: none"> 1. Environmental Responsibility
<ol style="list-style-type: none"> 1. Recognizing and identifying the proper storage and disposal of biohazardous and chemical materials. 2. Recognizing and identifying the proper personal protective equipment and engineering controls for use in potential exposure situations. 3. Using proper hand washing technique. 4. Adhering to OSHA and Standard (Universal) Precautions guidelines. 	
<p>Competency 5: The student will demonstrate knowledge, comprehension, and application of basic quality control techniques by:</p>	<ol style="list-style-type: none"> 1. Numbers / Data
<ol style="list-style-type: none"> 1. Calculating the mean of a group of data. 2. Calculating the standard deviation of a group of data. 3. Calculating the coefficient of variation of a group of data. 4. Examining a Levey-Jennings chart for troubleshooting problems. 	

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