

Course Competency

MLT 1300 CLINICAL HEMATOLOGY

Course Description

Didactic study of blood cells and body fluids. This includes the origin, morphology, function/dysfunction of cells and related diseases of the blood.

Course Competency	Learning Outcomes
<p>Competency 1: The student will distinguish normal and abnormal hematological laboratory findings to predict the diagnosis of hematological disorders and diseases by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Cultural / Global Perspective 3. Numbers / Data 4. Critical thinking 5. Computer / Technology Usage
<ol style="list-style-type: none"> 1. Discussing the importance of the CBC parameters (WBC, RBC, Hb, HCT, RBC Indices, Platelet Count, and Differential) in the diagnosis of disease. 2. Identifying each stage of development in the red blood cell series 3. Listing the sites of formation and the function of granulocytes, lymphocytes, monocytes, and platelets 4. Describing molecular techniques used in the diagnosis of hematological disorders 	
<p>Competency 2: The student will recognize laboratory results consistent with leukemia and other white blood cell disorders by:</p>	<ol style="list-style-type: none"> 1. Numbers / Data 2. Critical thinking 3. Computer / Technology Usage
<ol style="list-style-type: none"> 1. Describing the acute and chronic leukemias with their clinical and morphologic characteristics. 2. Identifying the types of leukocytes (granulocytic, lymphocytic, and monocytic) and classify their stages of development. 	

<p>3. Describing the acute and chronic leukemias with their clinical and morphologic characteristics and classify leukemias according to their FAB classification.</p>	
<p>Competency 3: The student will analyze and compare the basic pathology related to these different abnormalities in the red and white blood cells by:</p>	
<ol style="list-style-type: none"> 1. Describing the general characteristics and laboratory data associated with acute/ chronic myeloid, lymphocytic, monocytic, and morphological classification of anemia according to their diagnostic features. 2. Identifying abnormal RBC morphology (Anisocytosis, hypochromic, poikilocytosis) and correlate with disease. 3. Describing the disease mechanism of the different anemias (Aplastic, IDA, ACD, Megaloblastic, Hemolytic, and Hemoglobinopathies). 	

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