

Course Competency

MLT 2809L HOSPITAL PRACTICUM: HEMATOLOGY

Course Description

Practical experience performed in a clinical hematology/hemostasis laboratory. Emphasis for the course includes the performance of diagnostic procedures and the application of knowledge from previous coursework with an emphasis on clinical correlations to hematological diseases.

Course Competency	Learning Outcomes
<p>Competency 1:The student will demonstrate knowledge of instrumentation and quality control by:</p>	<ol style="list-style-type: none"> 1. Numbers / Data 2. Communication 3. Critical thinking 4. Computer / Technology Usage
<ol style="list-style-type: none"> 1. Performing QC checks with supervision 2. Identifying the written protocol and understanding the procedure manual containing all of the pertinent information along with references, and adequate facilities and time should be available for the purpose of QC. 3. Identifying the three very important aspects of QC in hematology which are calibration of automated instruments, monitoring of accuracy and precision of instruments and procedures, and verifying the reliability of test results. 	
<p>Competency 2:The student will demonstrate knowledge of a complete blood count by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Numbers / Data 3. Critical thinking 4. Computer / Technology Usage
<ol style="list-style-type: none"> 1. Performing a complete blood count (CBC) 2. Recognizing all maturation stages of white cells. 3. Distinguishing normal and abnormal red 	

<p>and white cell maturation.</p> <ol style="list-style-type: none"> 4. Recognizing macrocytosis, microcytosis, anisocytosis, and poikilocytosis 5. Identifying and naming poikilocytes found in diseases of the blood. 6. Identifying and naming inclusion bodies in red and white cells 	
<p>Competency 3:The student will demonstrate knowledge of abnormalities in the blood smear by:</p>	<ol style="list-style-type: none"> 1. Critical thinking 2. Computer / Technology Usage
<ol style="list-style-type: none"> 1. Performing a blood smear 2. Correlating the morphological findings with the appropriate disease. 3. Identifying the presence of blasts and relating their presence to the type of leukemia. 4. Correlating the blood smear characteristics with the type of hemoglobinopathy 5. Correlating the blood smear characteristics with the type of leukemia 	
<p>Competency 4:The student will demonstrate knowledge of anemia, certain cancers of the blood, inflammatory diseases, blood loss and infection by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Numbers / Data 3. Critical thinking 4. Computer / Technology Usage
<ol style="list-style-type: none"> 1. Identifying symptoms and treatment of choice for the different hematological disorders 2. Providing aid in solving case studies relevant to the hematological abnormalities. 3. Performing or observing advanced hematology testing including flow cytometry testing for lymphomas, leukemias, plasma cell neoplasms, systemic mastocytosis, paroxysmal nocturnal hemoglobinuria and other lymphoproliferative disorders 	

Updated: FALL TERM 2022