Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. Medical Laboratory Technician  COURSE NUMBER: MDLT 2120

NUMBER OF CREDITS: 3  Lecture: 2  Lab: 1

Course Title:
Hematology II

Catalog Description:
This course is a continuation of MDLT 1130 (Hematology I). Student will study the disease processes that occur in the red blood cells of the blood with emphasis on anemias. This course also covers the theory and testing of the coagulation aspects of the blood.

FULFILLS MN TRANSFER CURRICULUM AREA(S)
Goal 1: Communication: by meeting the following competencies:

Goal 2: Critical Thinking: by meeting the following competencies:

Goal 3: Natural Sciences: by meeting the following competencies:

Goal 4: Mathematics/Logical Reasoning: by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: by meeting the following competencies:

Goal 7: Human Diversity: by meeting the following competencies:

Goal 8: Global Perspective: by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: by meeting the following competencies:

Goal 10: People and the Environment: by meeting the following competencies:

Prerequisites or Necessary Entry Skills/Knowledge:
MDLT 1100 Introduction to Laboratory Science and MDLT 1130 Hematology I
### Topics to be Covered

<table>
<thead>
<tr>
<th>Safety and infection control</th>
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<tbody>
<tr>
<td>Specimen collection</td>
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<tr>
<td>Microscopy</td>
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<tr>
<td>Hematopoiesis with emphasis on erythropoiesis</td>
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<tr>
<td>Routine laboratory testing in Hematology</td>
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<td>Examination of peripheral blood smears</td>
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<td>Anemias and hemoglobinopathies</td>
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<td>Mathematical calculations</td>
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<td>Hematology instrumentation</td>
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<td>Hemostasis</td>
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</tbody>
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### Student Learning Outcomes

1. Apply principles of safety, quality assurance, and quality control in Hematology.
2. Describe, define, and evaluate basic principles of hematology and hemostasis
3. Compare and contrast hematology values under normal and abnormal conditions
4. Demonstrate proficiency in the skills necessary to perform blood cell counts, and evaluation of blood elements within stated limits of accuracy.
5. Evaluate normal and abnormal red blood cell morphology with associated diseases.
6. Practice teamwork and communication
7. Recognize normal and abnormal coagulation test results and correlate the data with appropriate pathologic conditions

### Is this course part of a transfer pathway: Yes ☐ No ☒

Revised 01/2020