

**SOUTHEAST COMMUNITY COLLEGE**  
**HEALTH SCIENCES DIVISION**  
**MEDICAL LABORATORY TECHNOLOGY**  
**Revision Date: 10/2020**  
[Syllabus Statements](#)

**I. CATALOG DESCRIPTION**

**Course Number:** MEDT 1160  
**Course Title:** Hematology 1  
**Prerequisites:** MEDT1100, MEDT 1150

**Catalog Description:** Study of the cellular constituents of blood, both normal and abnormal. Study of normal hemostasis, including clotting factors, fibrinolysis, and oral anticoagulants Identification of normal and abnormal cellular constituents of the blood. Skills and laboratory techniques corresponding to theoretical information presented in the lecture. Laboratory is concurrent with lecture.

**Credit Hours:** 3  
**Class Hours:** 30  
**Lab Hours:** 45  
**Total Contact Hours:** 75

**II. COURSE OBJECTIVES:** *Course will:*

1. Describe the field of hematology.
2. Explain and discuss the theory of hematopoiesis.
3. Outline normal and abnormal blood cell morphology.
4. Discuss hemostasis and fibrinolysis.
5. Explain oral anticoagulants.

**III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:**

**A. STUDENT LEARNING OUTCOMES:** *Student will be able to:*

1. Describe hematopoiesis.
2. Describe and explain the maturation sequence of red blood cells, white blood cells, and platelets.
3. Identify the different types of blood cells in their maturation sequence.
4. Discuss the characteristics and functions of each of the blood cells.
5. Describe the normal and abnormal morphology of each of the blood cells.
6. Assess the statistical parameters of routine hematological testing.
7. Discuss the theory of hemostasis.
8. List and describe the coagulation factors.
9. List and describe the natural inhibitors.
10. Discuss fibrinolysis.

**B. GENERAL EDUCATION LEARNING OUTCOMES**

**1. GELO #3: Critical Thinking & Problem Solving**

Collect, identify, interpret and analyze data.

Evaluate the validity of arguments, alternatives, data, outcomes, and/or impacts of actions.

#### **IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)**

##### **A. UNITS**

1. Hematopoiesis
2. Erythropoiesis
3. Leukopoiesis
4. Thrombopoiesis
5. Coagulation

#### **INSTRUCTIONAL MATERIALS**

##### **A. Required text(s):**

Turgeon, Mary L. **Clinical Hematology Theory & Procedures.** (most current edition)  
Carr, J. **Clinical Hematology Atlas.** (most current edition)

##### **B. Other Required Resources:**

Packet of handouts

#### **V. METHODS OF PRESENTATION/INSTRUCTION**

A. Methods of presentation typically include a combination of the following:

1. Technology enhanced lecture/discussion
2. Videos
3. Slides
4. Demonstrations
5. Lab exercises
6. Computer exercises
7. Video microscope

#### **VII. METHODS OF EVALUATION**

A. Methods of evaluation typically include a combination assignments, quizzes, exams, projects, laboratory competencies, etc. For grading expectations please see the course information document.

##### **SCC STANDARD GRADING SCALE POLICY:**

<b>A+</b>	<b>95-100</b>	<b>C+</b>	<b>75-79</b>
<b>A</b>	<b>90-94</b>	<b>C</b>	<b>70-74</b>
<b>B+</b>	<b>85-89</b>	<b>D+</b>	<b>65-69</b>
<b>B</b>	<b>80-84</b>	<b>D</b>	<b>60-64</b>
		<b>F</b>	<b>Below 60</b>

#### **VIII. SPECIFIC COURSE REQUIREMENTS**

##### **A. GRADING**

Lecture and laboratory must be passed with a 75% or higher. If either the Lecture Grade or Lab Grade is below 75% (C+), the student will receive the lower grade as the Grade for the course.

##### **B. ATTENDANCE**

Attendance is crucial to the success of this course. The attendance policy can be found in the MLT Student Handbook.

Attendance for lecture is expected. Missing lecture will result in valuable information being missed and may have a negative effect on a student's grade in the course.

Attendance for laboratory sessions is required. The MLT attendance policy will be followed and applied in this course. Failure to attend laboratory sessions will have a negative effect on a student's grade in the course.

**C. OTHER**

Please see the Course Information Document for course policies related to grading, expectations, assignments, assessment, and participation