

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	MLT 1330C
COURSE TITLE:	Hemostasis
PREREQUISITE(S):	None
COREQUISITE(S):	None
CREDIT HOURS:	2
CONTACT HOURS/WEEK:	3
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	
Laboratory:	
Other _____:	3 (Lecture/laboratory combination)
FACULTY WORKLOAD POINTS:	3
STANDARDIZED CLASS SIZE ALLOCATION:	20
CATALOG COURSE DESCRIPTION:	
This course presents the principles and laboratory procedures related to the assessment of hemostasis, including the functions of the vasculature, platelets, coagulation factors and the fibrinolytic system.	
SUGGESTED TEXT(S):	Cielsa, Betty, <u>Hematology in Practice</u> , Current Edition, F.A. Davis
	Carr, JH and Bernadette Rodak, <u>Clinical Hematology Atlas</u> , Current Edition
IMPLEMENTATION DATE:	January, 1989
REVIEW OR MODIFICATION DATE:	Fall Term, 1996 (971) Fall Term, 2002 (20031) Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Hemostasis Overview	3
A. Laboratory Safety, OSHA Regulations	
B. Components of Hemostasis	
II. Platelets	15
A. Formation	
B. Hemostatic Function	
C. Qualitative Laboratory Tests	
D. Quantitative Laboratory Tests	
E. Clinical Correlations	
III. Coagulation System	9
A. Nomenclature of Coagulation Factors	
B. Intrinsic Coagulation Cascade	
C. Extrinsic Coagulation Cascade	
D. Characteristics of Coagulation Factors	
IV. Coagulation Disorders	7
A. Inherited Coagulation Factor Deficiencies	
B. Acquired Coagulation Factor Deficiencies	
C. Multiple Coagulation Factor Deficiencies	
D. Laboratory Diagnosis of Factor Deficiencies	
V. Laboratory Evaluation of Coagulation Disorders	9
A. Routine Lab Procedures	
B. Special Lab Procedures	
C. Quality Control Parameters	
D. Coagulation Instrumentation	
VI. Fibrinolysis	2
A. Normal Fibrinolysis	
B. Fibrinolytic Disorders	
C. Laboratory Diagnosis of Fibrinolytic Disorders	

PROGRAM TITLE: Medical Laboratory Technology

COURSE TITLE: Hemostasis

CIP NUMBER: 0317.030900

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

23.0 DEMONSTRATE BASIC KNOWLEDGE OF HEMATOLOGY, PERFORM CLINICAL LABORATORY "WAIVED TESTS" -- The student will be able to:

23.05 Discuss techniques of hematology related to bleeding and clotting times.

25.0 DISCUSS THE GENERAL RESPONSIBILITIES AND FUNCTIONS ENCOUNTERED BY A MEDICAL TECHNICIAN-- The student will be able to:

25.01 Identify the major body systems and their anatomical features.

25.02 Explain the physiological processes in the human systems necessary to influence and maintain homeostasis.

26.0 DISCUSS THE GENERAL RESPONSIBILITIES AND FUNCTIONS ENCOUNTERED BY A MEDICAL TECHNICIAN-- The student will be able to:

26.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.

26.02 Organize and communicate the results obtained by and experimentation.

26.03 Demonstrate ability to evaluate and draw conclusions.

26.04 Demonstrate knowledge of anatomy and physiology of body system.

26.05 Demonstrate ability to report observations in written or oral form.

27.0 APPLY QUALITY ASSURANCE PRINCIPLES AND SAFETY PROTOCOLS-- The student will be able to:

27.01 Recognize specimen suitability and determine need for rejection/recollection using factors described in clinical protocol.

27.02 Describe special procedures for transporting and processing specimens.

27.03 Describe clinical laboratory role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.

27.04 Demonstrate all required calibration procedures.

27.05 Demonstrate and record all quality control procedures required for the test assayed and recognize unacceptable results.

27.06 Identify and report problems encountered in daily quality control according to standard operating procedures.

27.07 Adhere to current OSHA regulations regarding laboratory hazards.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

30.0 DEMONSTRATE KNOWLEDGE OF HEMOSTASIS AND RELATED DIAGNOSTIC PRINCIPLES AND PROCEDURES -- The student will be able to:

- 30.01 Discuss and define the interactive systems necessary to maintain hemostasis.
- 30.02 Describe the principles of and perform routine testing used in the evaluation of the vascular, platelet, coagulation factor and fibrinolytic systems.
- 30.03 Discuss conditions and commonly referenced diseases related to abnormal hemostasis.

39.0 DEMONSTRATE KNOWLEDGE OF ADVANCED HEMOSTASIS TESTING -- The student will be able to:

- 39.01 Discuss the principle of substitution testing for factor deficiencies.
- 39.02 Discuss the principle of specific factor assays.
- 39.03 Correlate the laboratory test results for fibrinolysis with conditions affecting the fibrinolytic system.
- 39.04 Discuss specialized platelet function tests.
- 39.05 Correlate laboratory results with possible inherited and/or acquired coagulation abnormalities.



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1	SEMESTER CREDIT HOURS (CC): <u>2</u>
COURSE PREFIX AND NUMBER: <u>MLT 1330</u>	CONTACT HOURS (NCC): _____
COURSE TITLE: <u>Hemostasis</u>	

Section 2
TYPE OF COURSE: (Click on the box to check all that apply)

<input type="checkbox"/> AA Elective	<input checked="" type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep
<input type="checkbox"/> AS Professional Elective	<input checked="" type="checkbox"/> AAS Required Professional Course	<input type="checkbox"/> Technical Certificate
<input type="checkbox"/> Other _____	<input type="checkbox"/> PSAV	<input type="checkbox"/> Apprenticeship
<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

Section 3 (If applicable)
INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

<input type="checkbox"/> Communications	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

Section 4
INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> Reading	<input type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input checked="" type="checkbox"/> Quantitative Skills	<input checked="" type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input type="checkbox"/> Information Literacy	<input checked="" type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

Section 5	METHOD OF ASSESSMENT
LEARNING OUTCOMES	METHOD OF ASSESSMENT
• Demonstrate laboratory safety for use of bio-hazardous material and chemicals	Safe participation in all laboratory activities; written exams; safety worksheets
• Perform specified hemostasis lab assessments necessary for entry into practicum	Lab reports; lab practical; collaborative laboratory problem solving
• Demonstrate ability to apply mathematical formulas to laboratory testing	Lab reports; lab practical; written exams; assignments
• Discuss quality assurance principles and apply them in the hemostasis lab setting	Lab reports; written exams
• Explain selected coagulation and platelet disorders and apply appropriate lab data	Written exams
• Evaluate lab data for precision, accuracy, and relationship to reference ranges	Lab reports; lab practical; written exams
• Discuss professional credentialing, medical information privacy, and professional conduct as they apply to medical laboratory practice	Classroom discussion participation; written exams

Name of Person Completing This Form: <u>Merry A. Carter</u>	Date: <u>11/20/2007</u>
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