

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: MLT 2192L

COURSE TITLE: Histotechniques II Lab

PREREQUISITE(S): None

COREQUISITE(S): None

CREDIT HOURS: 1

CONTACT HOURS/WEEK: 2

CONTACT HOUR BREAKDOWN:

Lecture/Discussion:

Laboratory: 2

Other _____:

FACULTY WORKLOAD POINTS: 1.6

STANDARDIZED CLASS SIZE ALLOCATION: 20

CATALOG COURSE DESCRIPTION:

This course is a continuation of Histotechniques I Lab and will introduce students to the more complex laboratory skills in histologic technology. Students will focus on special stains, special techniques, troubleshooting routine and special stains, and will be introduced to immunohistochemistry techniques. Issues of safety and quality assurance will be stressed.

SUGGESTED TEXT(S): Sheehan, D.C. and Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd ed., Battelle Press: 1987

Carson, Histotechnology. ASCP 1990

IMPLEMENTATION DATE: Fall Term 1997 (981)

REVIEW OR MODIFICATION DATE: Fall Term, 2002 (20031)
Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Overview	2
A. Review of Lab Safety	
B. Review of Quality Assurance	
C. Review of Instrument Maintenance	
II. Routine Procedures	6
A. Review	
B. Troubleshooting	
C. Evaluation	
III. Frozen Sectioning	4
A. Special Considerations	
B. Procedure	
C. Instrument Operation	
D. Troubleshooting	
IV. Special Stains	10
A. Nuclear and Cytoplasmic	
B. Carbohydrates	
C. Amyloid	
D. Connective and Muscle Tissues	
E. Lipids	
F. Pigments and Minerals	
G. Microorganisms	
H. Nerve Tissue	
I. Microwave Staining	
V. Immunohistochemistry	8
A. Antibody Dilutions	
B. Immunoperoxidase Technique	
C. Immunofluorescent Technique	

PROGRAM TITLE: Histologic Technology
COURSE TITLE: Histotechniques II Lab
CIP NUMBER: 0317.030800

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

- 12.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DISEASE STATES AND SERVICES PERFORMED BY THE HISTOTECHNICIAN-- The student will be able to:
- 12.03 Demonstrate knowledge of various methods of obtaining histological specimens from patients.
 - 12.05 Demonstrate knowledge of types of histological specimens usually submitted for gross and microscopic examination.
 - 12.06 Demonstrate knowledge of the processing of histologic specimens especially as related to disease processes.
 - 12.07 Demonstrate knowledge of tissue processing methods, especially variety of fixatives used, as each relates to a specific entity or disease process to be diagnosed.
- 13.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS -- The student will be able to:
- 13.01 Practice quality control in the histology laboratory as required by the accrediting agency.
 - 13.02 Follow institutional policies and procedures related to safety.
 - 13.03 Practice acceptable laboratory safety.
 - 13.06 Recognize errors and their sources, and take corrective action.
 - 13.07 Demonstrate knowledge of chemical hazards within the histopathology laboratory.
 - 13.08 Demonstrate knowledge of proper disposal methods for all chemical and biological waste within the histopathology laboratory.
- 15.0 RECEIVE TISSUE SPECIMENS AND PERFORM PREPARATION TECHNIQUES AS INDICATED -- The student will be able to:
- 15.01 Evaluate, accept, identify and label histologic specimens.
 - 15.02 Perform the most advantageous preparation and staining techniques.
 - 15.03 Solve problems in staining and preparation procedures.
 - 15.05 Distinguish between well-prepared and stained and poorly-prepared and stained histologic specimens.
 - 15.06 Identify tissue structures and their staining characteristics.
- 16.0 ASSIST WITH FROZEN SECTION PROCEDURES -- The student will be able to:
- 16.01 Demonstrate cryostat cutting.
 - 16.02 Demonstrate rapid hematoxylin and eosin staining.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

17.0 MAINTAIN EQUIPMENT -- The student will be able to:

17.01 Perform preventive and corrective maintenance of equipment and instruments within specified limits.



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	
COURSE PREFIX AND NUMBER: <u>MLT 2192L</u>	SEMESTER CREDIT HOURS (CC): <u>1</u> CONTACT HOURS (NCC): <u>2</u>
COURSE TITLE: Histotechniques II Lab	

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 checked="" 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 type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

Section 5		
LEARNING OUTCOMES		METHOD OF ASSESSMENT
•	Working in small groups, apply principles of selected special stain procedures to slides provided	Observation, lab quiz
•	Working in small groups, evaluate the quality of the selected special staining outcomes and apply principles of troubleshooting any problems as explained by the instructor	Observation, group discussion, lab quiz
•	Demonstrate safe and correct handling of the cryostat for frozen sectioning	Observation, lab quiz
•	Following a review of immunohistochemical theory, perform selected manual immunohistochemical techniques on slides supplied	Observation, lab quiz
•	Evaluate the quality of the IHC reaction with guidance from the instructor	Observation, group discussion, lab quiz

Section 6

Name of Person Completing This Form: Merry A. Carter Date: 4/11/2008