

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: MLT 2191L

COURSE TITLE: Histotechniques I 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 will introduce students to fundamental laboratory skills and safety concepts in histologic technology. Students will learn how to process, embed, cut and stain various types of tissue specimens. 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	CONTACT HOURS <u>PER TOPIC</u>
I. Laboratory Safety	4
A. Chemical Safety	
B. Biohazard Safety	
C. Emergency Procedures	
D. Safety Equipment	
II. Histological Specimens	4
A. Grossing Observation	
B. Autopsy Observation	
C. Accessioning Procedures	
III. Reagent Preparation	2
A. Processing Reagents	
B. Staining Reagents	
IV. Tissue Processing	2
A. Routine Techniques	
B. Evaluation	
C. Instrument Maintenance	
V. Tissue Embedding	4
A. Routine Techniques	
B. Evaluation	
C. Instrument Maintenance	
VI. Tissue Sectioning	8
A. Microtome Operation	
B. Ergonomics of Microtoming	
C. Routine Techniques	
D. Evaluation	
E. Instrument Maintenance	
VIII. Routine Staining	6
A. Progressive H&E Stain	
B. Regressive H&E Stain	
C. Evaluation	
D. Coverslipping Techniques	

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

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY

-- The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.04 Respond to verbal and non-verbal cues.
- 02.06 Use appropriate medical terminology and abbreviations.
- 02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
- 02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
- 02.10 Demonstrate telephone usage including taking messages.
- 02.11 Demonstrate ability to give and follow directions.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patient.
- 05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.04 Demonstrate basic understanding of first aid and emergency care.
- 06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

- 07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
- 07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
- 07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

- 11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:
- 11.01 Draw, read, and report on graphs, charts and tables.
 - 11.02 Measure time, temperature, distance, capacity, and mass/weight.
 - 11.03 Make and use measurements in both traditional and metric units.
 - 11.04 Make estimates and approximations and judge the reasonableness of the result.
 - 11.05 Convert from regular to 24 hour time.
 - 11.06 Demonstrate ability to evaluate and draw conclusions.
 - 11.07 Organize and communicate the results obtained by observation and experimentation.
 - 11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
 - 11.09 Calculate ratios.
- 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.



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>1</u> CONTACT HOURS (NCC): <u>2</u>
COURSE PREFIX AND NUMBER: <u>MLT 2191L</u>	
COURSE TITLE: _____	

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

	Section 5 LEARNING OUTCOMES	METHOD OF ASSESSMENT
•	Demonstrate safe use of laboratory equipment as demonstrated by instructor	Observation; verbal feedback to students
•	Follow stated safety guidelines with respect to physical, chemical and biological hazards in the histology student lab	Observation; verbal feedback to students; written quiz
•	Working in small groups, practice techniques in embedding, microtomy, staining, and coverslipping	Observation; verbal feedback to students
•	With guidance from instructor, troubleshoot problem areas in embedding, microtomy, staining, and coverslipping	Discussion; verbal feedback to students; written quiz

Section 6
Name of Person Completing This Form: Merry A. Carter Date: March 11, 2008_____