FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	MLT 2801L
COURSE TITLE:	Clinical Practicum II
PREREQUISITE(S):	MLT 2800L
COREQUISITE(S):	None
CREDIT HOURS:	8
CONTACT HOURS/WEEK:	27.5
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	
Laboratory:	27.5
Other _____:	
FACULTY WORKLOAD POINTS:	Calculated on the # of students in the internship
STANDARDIZED CLASS SIZE ALLOCATION:	12:1 ratio

CATALOG COURSE DESCRIPTION: This course is a continuation of Clinical Practicum I. Students continue in their assigned clinical affiliate under the coordination and responsibility of the program. Contact department if there are any problems regarding prerequisite.

SUGGESTED TEXT(S):	Clinical Diagnosis and Management by Laboratory Methods, Latest Edition, Saunders. Castleberry. Board of Registry Study Guide, Latest Edition, ASCP:
IMPLEMENTATION DATE:	January, 1989
REVIEW OR MODIFICATION DATE:	Fall Term, 1996 (971) Fall Term, 2000 Fall Term, 2002 (20031) Fall Term, 2008 (20091) – Outline Review 2007

COURSE TOPICS			CONTACT HOURS PER TOPIC
I.	Routine Clinical Chemistry		110
A.	Manual Chemistry Techniques	(5)	
B.	Routine Instrument Maintenance	(10)	
C.	Quality Control Parameters	(20)	
D.	Automated Instrumentation	(35)	
E.	Routine Chemistry Profiles and Correlations	(40)	
II.	Special Chemistry		55
A.	Therapeutic Drug Monitoring	(15)	
B.	Immunichemistry Instrumentation	(15)	
C.	Endocrine Profiles	(10)	
D.	Electrophoresis	(10)	
E.	Quality Control Parameters	(5)	
III.	Clinical Microbiology		192.5
A.	Specimen Collection and Processing	(10)	
B.	Primary Cultures	(17.5)	
C.	Biochemical Identification of Pathogens	(30)	
D.	Rapid Identification Procedures	(30)	
E.	Panel Identification	(25)	
F.	Susceptibility Testing	(30)	
G.	Routine Microbiology Instrumentation and Quality Control	(12.5)	
H.	Routine Mycology Techniques	(10)	
I.	Routine Parasitology Techniques	(10)	
J.	Routine Virology Techniques	(7.5)	
K.	Special Microbiology Procedures	(10)	
IV.	Serology/Immunology		55
A.	Quality Control Parameters	(5)	
B.	Routine Serology Procedures	(25)	
C.	Immunochemistry Assays	(10)	
D.	Special Serology Procedures	(10)	
E.	Clinical Correlations of Serology Results	(5)	

PROGRAM TITLE: Medical Laboratory Technology

COURSE TITLE: Clinical Practicum II

CIP NUMBER: 0317.030900

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

24.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING -- The student will be able to:

24.02 Complete clinical rotations, performing the following waived tests: dipstick or tablet urinalysis (nonautomated); fecal occult blood; ovulation tests; urine pregnancy tests; sedimentation rate (nonautomated); hemoglobin by copper sulfate method and by single analyte instrument (Hemocue); blood glucose performed on an FDA approved device; and spun hematocrit.

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 observation and experimentation.
26.03 Demonstrate ability to evaluate and draw conclusions.
26.04 Demonstrate knowledge of anatomy and physiology of body systems.
26.05 Demonstrate ability to report observations in written or oral form.
26.06 Discuss the licensers and certification requirements of the major classifications of clinical laboratory personnel.

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.
27.04 Demonstrate all required calibration procedures.
27.05 Demonstrate and record all quality control procedures 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.

28.0 DEMONSTRATE KNOWLEDGE OF URINALYSIS PRINCIPLES AND PROCEDURES -- The student will be able to:

28.01 Discuss the renal system as it related to urinalysis.
28.02 Describe renal function tests.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

28.03 Describe principles of and perform routine physical and clinical analyses and urine.
28.04 Prepare, identify and quantitate urine microscopies.
28.05 Correlate abnormal physical, chemical and microscopic urine results with associated pathological conditions.

29.0 DEMONSTRATE KNOWLEDGE OF HEMATOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

29.02 Discuss the principles of and perform routine hematology procedures.
29.03 Differentiate normal from abnormal blood cell morphology and relate the abnormal findings to the commonly referenced hematological disorders.

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

30.02 Describe the principles of and perform routine testing used in the evaluation of the vascular, platelet, coagulation factor and fibrinolytic systems.

31.0 DEMONSTRATE KNOWLEDGE OF MICROBIOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

31.06 Demonstrate bacteriologic culture techniques necessary for isolation and identification of organisms.
31.07 Demonstrate and interpret antibiotic susceptibility tests.
31.09 Identify commonly encountered aerobic bacteria through morphological, physical and biochemical properties.
31.10 Discuss the principles of, prepare, and interpret Gram stains.

32.0 DEMONSTRATE KNOWLEDGE OF CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES -- The student will be able to:

32.04 Discuss principles of and perform commonly ordered tests related to carbohydrate, protein and lipid metabolism.
32.06 Discuss principles of and perform commonly ordered liver functions tests.
32.08 Discuss principles of and perform commonly ordered enzyme procedures.
32.10 Discuss principles of and perform electrolyte analyses.
32.13 Discuss and perform general electrophoresis techniques.
32.14 Demonstrate knowledge of principles of instrumentation as related to the clinical chemistry laboratory.

33.0 DEMONSTRATE KNOWLEDGE OF IMMUNOHEMATOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

33.03 Perform antigen and antibody testing to establish ABO group and Rh.
33.04 Discuss and perform routine compatibility testing.
33.05 Discuss and perform antibody screening and identification of common single antibodies.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

34.0 DEMONSTRATE KNOWLEDGE OF IMMUNOLOGICAL/SEROLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

34.03 Discuss the principle of and perform the basic agglutination, flocculation and precipitation procedures in serology.

36.0 DEMONSTRATE KNOWLEDGE OF THE OPERATION OF COMPUTER SYSTEMS -- The student will be able to:

36.01 Discuss the role of the computer systems in laboratory data management.
36.02 Demonstrate knowledge of common computer terminology.
36.03 Demonstrate entry level computer operations for specimen accessioning, data reporting, and quality control recording.
36.04 Demonstrate entry level operational skills in the use of computer interfaced analytical instrumentation.

37.0 DEMONSTRATE KNOWLEDGE OF SELECTED LABORATORY OPERATIONS -- The student will be able to:

37.01 Apply principles of quality assurance to correct problems encountered in monitoring daily quality control.
37.02 Evaluate laboratory findings and take necessary action to confirm or clarify results according to standard operation procedures.
37.03 Demonstrate knowledge of operation and principles of laboratory instruments.

40.0 DEMONSTRATE KNOWLEDGE OF ADVANCED MICROBIOLOGICAL PRINCIPLES AND PROCEDURES -- The student will be able to:

40.03 Perform general techniques used in identifying fungi.

41.0 DEMONSTRATE KNOWLEDGE OF ADVANCED CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES -- The student will be able to:

41.02 Perform and calculate results of immunoassay procedures.
41.03 Perform, calculate, and recognize associated disease states for selected isoenzyme assays.
41.04 Perform, calculate, and recognize associated disease states for blood lipid profiles.
41.05 Perform and calculate selected procedures related to endocrine function.
41.06 Perform selected assays for therapeutic and toxic substances.
41.07 Discuss the principles and procedures of blood gas analysis, including arterial specimen collection and clinical significance.

42.0 DEMONSTRATE KNOWLEDGE OF ADVANCED IMMUNOLOGICAL PROCEDURES -- The student will be able to:

42.02 Discuss and interpret antinuclear antibody patterns and their relationship to disease states.

Florida State College At Jacksonville

Course Learning Outcomes & Assessment

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: **MLT 2801L**	SEMESTER CREDIT HOURS: **8**
COURSE TITLE: **Clinical Practicum II**	

Section 2

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

☐	**AA Elective**	X	**AS Required Professional Course**	☐	**College Prep**
☐	**AS Professional Elective**	X	**AAS Required Professional Course**	☐	**Technical Certificate**
☐	**Other**	☐	**PSAV**	☐	**Apprenticeship**
☐	**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:

☐	**Communications**	☐	**Social & Behavioral Sciences**	☐	**Mathematics**
☐	**Natural Sciences**	☐	**Humanities**		

Section 4

INTELLECTUAL COMPETENCIES:

x	**Reading**	☐	**Speaking**	x	**Critical Analysis**	x	**Quantitative Skills**	☐	**Scientific Method of Inquiry**
☐	**Writing**	x	**Listening**	☐	**Information Literacy**	x	**Ethical Judgment**	x	**Working Collaboratively**

Section 5 **LEARNING OUTCOMES**		**METHOD OF ASSESSMENT**
•	Apply concepts learned in campus classes to real world situations	Evaluations by clinical site
•	Demonstrate the ability to multitask	Evaluations by clinical site
•	Demonstrate knowledge of computer operations in specimen accessioning, data reporting, and quality control recording	Evaluations by clinical site
•	Apply principles and rules of quality assurance to the evaluation of QC results	Evaluations by clinical site
•	Apply problem solving methods in the clinical lab to troubleshoot instrument or technical problems	Evaluations by clinical site
•	Evaluate patient results to detect specimen problems	Evaluations by clinical site
•	Correlate patient results to disease states	Practicum exams
•	Demonstrate mastery of the MLT body of knowledge in all areas of the lab	Practicum exams, exit exam
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Section 6

Name of Person Completing This Form: Rhoda Jost Date: November 15, 2007