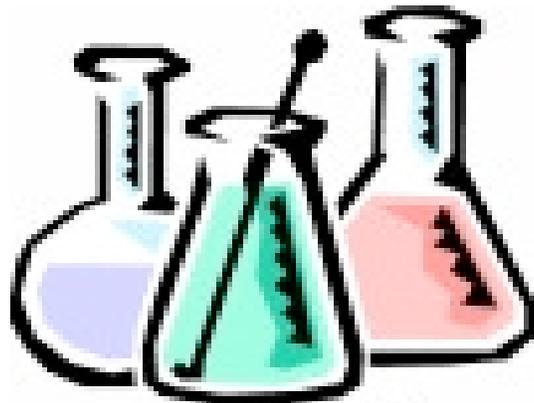


# **MEDICAL LABORATORY TECHNOLOGY**



nvtech.com

## **Clinical Rotation Policy & Procedure Manual Eastern Florida State College**

# **GENERAL INFORMATION**

**Manual written by: Gretchen L. Miller, MS, MT (ASCP)**  
**Former Medical Laboratory Technology Program Director**  
**Revised April 2011**  
**2nd Revision May 2013**  
**3rd Revision January 2014**  
**Phaedra S. Williams, MBA, BS, MT**  
**Current Medical Laboratory Technology Program Director**  
**4th Revision March 2018**  
**5th Revision January 2019**

## **Clinical Rotation Course Descriptions**

### **MLTL 2806: Core Laboratory Clinical Rotation Clinical Practicum I 5 credits; 250 contact hours**

Prerequisite requires completion of relevant didactic coursework. A course designed to give the MLT student actual experience within the core laboratory in the clinical facility. This includes testing in each of the following areas: clinical and special chemistry, hematology, coagulation, urinalysis and specimen processing. Individual assignments will build competency to job entry level.

### **MLTL 2807: Transfusion Medicine Clinical Rotation Clinical Practicum II 1 credit; 90 contact hours**

Prerequisite requires completion of relevant didactic coursework. A course designed to give the MLT student actual transfusion medicine experience within the clinical facility. Individual assignments will build competency to job entry level.

### **MLTL 2811: Microbiology, Immunology and Molecular Medicine Clinical Rotation Clinical Practicum III 3 credits; 120 contact hours**

Prerequisite requires completion of relevant didactic coursework. A course designed to give the MLT student actual hospital experience with the microbiology, immunology and molecular medicine testing areas within the clinical facility. Individual assignments will build competency to job entry level.

## Essential Functions

Essential functions are the essential non-academic requirements of the program that a student must be able to master in order to successfully participate in the MLT program and become employable. Examples of the program's technical standards are provided below. If you are not sure that you will be able to meet these essential functions, please consult with the MLT Program Director for further information and to discuss your individual situation.

### Visual Skills

A student in the MLT program must possess sufficient visual skills to perform and interpret laboratory assays, including the ability to:

- Read calibration lines on pipettes and laboratory instruments that are one millimeter apart.
- Distinguish between solutions that are clear, opaque or particulate in the test tubes and on glass slides.
- Identify stained and unstained cellular components in the range of one micrometer using a binocular brightfield microscope.
- Differentiate color reactions. An applicant who is colorblind cannot meet this standard.

### Manipulative Skills

A student in the MLT program must possess adequate manipulative skills to perform a variety of laboratory assays, including the ability to:

- Turn dials, press keypads and move switches on laboratory instruments.
- Use a rubber bulb to draw liquid into a marked pipette and then use a gloved finger to control the release of that liquid to within one millimeter of a fixed point on the pipette.
- Isolate bacteria in microbiology by smoothly moving a loop (a 12-inch wire with a looped end) over the surface of an agar (gel) culture plate without tearing the surface of the agar.

### Computational Skills

A student in the MLT program must possess computational skills needed for laboratory math calculations such as the conversion of milliliters to microliters.

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The National Accrediting Agency for Clinical Laboratory Science requires us to define and publish, "specific...essential functions required for admission to the program" and to determine "that the applicants' or students' health will permit them to meet the ...essential functions...". Please sign this form to indicate that you have read and understood the program's functions and believe that you can meet them.

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**APPLICANT'S SIGNATURE**

**DATE**

## State Trainee License Application Information

A state trainee license (STL) is required by the Board of Clinical Laboratory Personnel (Board) to practice as a student in the MLT program. This application is submitted after the student is admitted to the MLT program. In order to obtain the STL there are several character questions that must be answered. The answers will be reviewed by the Board and they will determine if a STL will be granted. The complete STL application can be found at <https://floridasclinicallabs.gov/applications/app-trainee-clp.pdf>. If you have any questions about eligibility for a state trainee license, you must consult with the Board of Clinical Laboratory Personnel. EFSC is not involved in the granting of a state trainee license.

The following questions are from the state trainee license application:

- In the last five years, have you been enrolled in, required to enter into, or participate in any drug and/or alcohol recovery program or impaired practitioner program for treatment of drug or alcohol abuse that occurred within the past five years?
- In the last five years, have you been admitted or referred to a hospital, facility or impaired practitioner program for treatment of a diagnosed mental disorder or impairment?
- During the last five years, have you been treated for or had a recurrence of a diagnosed mental disorder that has impaired your ability to practice within the past five years?
- During the last five years, have you been treated for or had a recurrence of a diagnosed physical disorder that has impaired your ability to practice?
- In the last five years, were you admitted or directed into a program for the treatment of a diagnosed substance-related (alcohol/drug) disorder or, if you were previously in such a program, did you suffer a relapse within the last five years?
- During the last five years, have you been treated for or had a recurrence of a diagnosed substance-related (alcohol/drug) disorder that has impaired your ability to practice within the last five years?
- Have you ever had a license disciplined for sexual misconduct or committed any act in any other state that would constitute sexual misconduct?
- Have you ever had any professional license or license to practice revoked, suspended, or any other disciplinary action taken in any state or other jurisdiction?
- Have you been refused a license to practice, or the renewal thereof in any state?
- Have you ever been convicted of, or entered a plea of guilty, nolo contendere, or no contest to any crime in any jurisdiction other than a minor traffic offense?
- Have you been convicted of, or entered a plea of guilty or nolo contendere, regardless of adjudication, a felony under Chapter 409, F.S. (relating to social and economic assistance), Chapter 817, F.S. (relating to fraudulent practices), Chapter 893, F.S. (relating to drug abuse prevention and control) or a similar felony offense(s) in another state or jurisdiction?
- Have you been convicted of, or entered a plea of guilty or nolo contendere to, regardless of adjudication, to a felony under 21 U.S.C. ss. 801-970 (relating to controlled substances) or 42 U.S.C. ss. 1395-1396 (relating to public health, welfare, Medicare and Medicaid issues)?
- Have you ever been terminated for cause from the Florida Medicaid Program pursuant to Section 409.913, Florida Statutes?
- Have you ever been terminated for cause, pursuant to the appeals procedures established by the state, from any other state Medicaid program?
- Are you currently listed on the United States Department of Health and Human Services Office of Inspector General's List of Excluded Individuals and Entities?

I have read and understand the above information.

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**APPLICANT'S SIGNATURE**

**DATE**

## **Goals, Objectives and Competencies**

It is the primary goal of the program to provide excellent undergraduate professional education in clinical laboratory science.

### **Program Goals**

1. Provide students with a broad educational background by using a variety of educational resources and experiences.
2. Provide a strong undergraduate curriculum based on current needs.
3. Maintain the level and quality of instruction in the clinical laboratory science courses by including the latest in technological advances.
4. Emphasize the importance of maintaining a professional attitude and ethical practices required for clinical laboratory scientists.
5. Educate students in the merits of continuing professional development.
6. Provide the region served by the program with graduate clinical laboratory scientists who can function at career entry levels and who can assume leadership roles as health professionals.

### **Affective Objectives**

1. Comply with biosafety regulations by practicing proper disposal of biohazardous material, as evidenced by complying with established safety regulations.
2. Exhibit interest in the laboratory assignments and lecture discussions by participating.
3. Help maintain a neat, clean and orderly work area in all the laboratories without being asked.
4. Demonstrate proper care and use of laboratory equipment, as evidenced by lack of breakage.
5. Attend classes regularly and be punctual.
6. Demonstrate preparedness for the laboratory by following directions and completing the tasks assigned with little need for additional instructions.
7. Cooperate by communicating with and helping other students.
8. Exhibit assurance and confidence in performing laboratory tasks.
9. Demonstrate integrity by recognizing and repeating questionable tests.
10. Act responsibly.
11. Accept instruction and constructive criticism maturely.
12. Show respect for other students, instructors and patients.
13. Comply with the stated dress codes.

## **Career Entry Competencies**

The ultimate goal of the program is to prepare students for career entry positions as clinical laboratory scientists. Therefore, specific professional competencies are the goal of graduates. The program strives, through its educational methods, to incorporate all facets of quality laboratory practice into the professional development of students. The curriculum is designed to prepare graduates in the various testing and analysis skills.

1. Collect and safely handle biological specimens for analysis
2. Perform accurate laboratory testing
3. Evaluate and interpret laboratory test data
4. Identify problems and take corrective action
5. Use quality assurance to monitor procedures, equipment and technical competency
6. Operate equipment properly and perform preventive and corrective maintenance
7. Comply with established laboratory safety regulations
8. Use computers and laboratory software effectively
9. Evaluate the efficacy of new procedures and instrumentation for a given setting
10. Demonstrate ethical behavior and maintain confidentiality in terms of patient results
11. Interact professionally with patients and other health care personnel
12. Apply principles of educational methodology
13. Apply principles of management

### Clinical Affiliates for EFSC MLT Program

FACILITY	LOCATION	ROTATIONS AVAILABLE
<b>Central Brevard County</b>		
Cape Canaveral Hospital	Cocoa Beach	Core Lab
Patrick Air Force Base Clinic	PAFB	Core Lab
Rockledge Regional Med Ctr	Rockledge	Core Lab, Transfusion
<b>Southern Brevard County</b>		
Holmes Regional Med Ctr	Melbourne	Core Lab, Micro, Trans
Melbourne Regional Med Ctr	Melbourne	Core Lab, Transfusion
<b>Outside Brevard County</b>		
Halifax Medical Center	Daytona Beach	Core Lab, Micro, Trans
FL Hospital New Smyrna	New Smyrna Beach	Core Lab, Micro, Trans
FL Hospital Zephyrhills	Zephyrhills	Core Lab, Micro, Trans

## Dress Code

**The following standards for professional dress code should be adhered to at all MLT Clinical Rotations:**

- Clean, wrinkle-free scrub uniforms of appropriate MLT color (Hunter Green)
- EFSC Health Science Student Badge plus individual clinical site badge (if required)
- No more than one set of pierced earrings in earlobe 1 in. max; please remove any other piercings for clinicals
- No artificial nails
- Closed-toe white or black (no extraneous color) athletic or duty shoes clean and in good condition; be prepared to be on your feet for periods at a time
- No tattoos may be showing
- Restrain long hair
- Socks or hose must be worn; please choose neutral or transparent colors that coordinate with our uniform
- Men with facial hair; please trim neatly
- No wearing of fragrance of any kind (perfume, after-shave, hair products, etc.)
- **Strive for an overall professional appearance!**

## Selection and Arrangement of Clinical Rotations

**Under no circumstances may the student request and/or arrange for their own clinical rotations! This may only be done by the Program Director.**

This process will begin near the midpoint of the major semester prior to clinicals.

1. Student training license applications are to be completed. Students will need to provide appropriate documentation, transcripts and/or high school diplomas in order to establish academic identity. A money order for \$45 is needed. A meeting will be scheduled in order to conduct this process.
2. “Match Day”: Student clinical selection will be prioritized based on articulation and academic status (Fast Track select first; those who have opted for a longer articulation select second and academic probationary students are last). If no students going to clinical are on academic probation, then the selections may be conducted publicly and the student with the highest GPA upon program entry selects first. Students will choose their three rotations. If a private matching is required, students will document their preferences by first, second and third choice on the appropriate form. The MLT Program Director and one other Program Manager will then conduct a private drawing. Results will be made official ASAP.
3. The prospective schedule will be emailed to each affiliate to determine acceptance. The coordinated semester schedule of 16 weeks must be available within 2 or 3 weeks.

**Clinical Rotation Schedule:** All rotations will be scheduled Tuesday through Friday dayshift (7:00am-3:30pm or 8:00am-4:30pm) unless specified otherwise. In rare cases, the clinical manager may request a non-traditional schedule. This will be coordinated with you by the MLT Program Director. All arrangements for scheduling a day off or leaving early (unless an emergency) must be granted by the Program Director. Observed holidays where no clinical hours may be scheduled are: Labor Day, Veterans Day (PAFB only), Thanksgiving and Black Friday. Spring Break is not observed during the clinical schedule.

**Service Work Policy:** The service work policy for MLT students is an internship program in which unpaid work-based learning experience brings practical application to learning beyond the classroom, which includes both soft and professional skill. Service work policies are executed through the affiliate agreement contract for the MLT program. Students are not compensated nor act as full-time employees for the facility while interning.

**Clinical Assignment Policy:** Clinical assignment is managed on a case-by-case basis. Scheduling issues may ensue due to various reasons such as personnel conflict, Laboratory Information System (LIS) training, etc. Students are made aware of the possibility of non-immediate placement during new student orientation. To mitigate this concern, the Program Director is working on acquiring additional affiliates to adequately accommodate students if the need arises. An additional solution to this potential problem will involve reaching out to fellow affiliates to accommodate the MLT student.

## **Orientation Procedures**

**Students are responsible for timely completion of forms and attendance if required which is necessary for individual facility orientation requirements; if you do not do so, you are at risk of having your rotation reservation cancelled!**

Unless the MLT Program Director or the Educational Coordinator indicates otherwise, you will receive paperwork that is to be completed and sent to me once I request your rotation dates and contact the Educational Coordinator. You will then return the paperwork to me unless I indicate otherwise. Your Castle Branch account must be kept active and satisfy all requirements, including CPR and accident/liability insurance throughout your clinical semester.

Some locations simply require confirmation that you have completed all immunizations and CPR. Other sites require immunization and CPR documentation be submitted prior to starting your rotation. Please remember, Influenza and TB must be current for the year.

Please do not show up to your clinical site unannounced.

**Cape Canaveral Hospital & HRMC:** Educational Coordinator is Ginger Kreigh; no on-site orientation required prior to clinical start date.

**Patrick Air Force Base Clinic:** Educational Coordinator is MSgt Vincent Bisignano. Please allow extra time for these procedures. Titers for verification of immunizations are required and gate pass must be issued.

**Rockledge & Melbourne Regional Medical Centers:** Educational Coordinator is Gabrielle Diskin; orientation is required prior to clinical start date.

**Halifax Medical Center:** Educational Coordinator is Jessica Harper; orientation is required prior to clinical start date.

**Florida Hospital New Smyrna:** Lab Manager is Jo-Ann Crimi; no on-site orientation required prior to clinical start date.

**Florida Hospital Zephyrhills:** Lab Manager is Robert Berkoff; orientation is required prior to clinical start date

Please make sure you are registered for MLTL 2806, 2807, 2811, MLTL 2527 (Adv. Immunohematology) and MLT 2930 (Pathology Seminar).

Keep attentive to possible clinical rotation instructional meetings announced via Titan email or posted in Canvas.

Core Laboratory  
Rotation  
MLTL 2806

## MLTL – 2806 – Core Lab Clinical Rotation

### Course Syllabus

Instructor	Ms. Phaedra Williams
Title	MLT Program Director/Instructor
Office Phone	321-433-7289
Office Fax	321-433-7599
Office Address	1519 Clearlake Rd, Cocoa, FL 32922; Bldg. 17/Rm. 219
Office Hours	By appointment or as posted
E-mail	<a href="mailto:williamsp@easternflorida.edu">williamsp@easternflorida.edu</a>
Location	Clinical Laboratory as assigned
Times	T, W, R, F, Dayshift unless otherwise stated
Start Date	Refer to Clinical Rotation Schedule
Course Credit	5 Credits; 250 contact hours

**Required Text** EFSC Clinical Rotation Manual

**Suggested Text** Various review manuals as listed in course content for MLT 2930

### Course Description

A course designed to give the student actual hospital experience to gain proficiency in laboratory testing in various departments within the laboratory. Individual assignments to a laboratory department will build competency to job entry-level.

### Course Objectives

Course Objective: Upon completion of this course, the student will be prepared to work in the Core Laboratory department of the clinical laboratory, performing routine applicable procedures and respecting the privacy practices necessary to patient care. Students should draw upon previous skills introduced in college laboratories to practice manipulative skills in a laboratory with strict quality control and to build self-confidence in preparation for employment. In addition student behavior, attitude and appearance must reflect the professionalism necessary to work in a clinical laboratory. Specific Performance Objectives:

- Observe and Perform Testing, Quality Control Practices, Maintenance, Reagent Loading, Troubleshooting and Specimen Requirements/Handling for each of the following areas of the Core Laboratory:
  - Clinical Chemistry
  - Special Chemistry
  - Reference Laboratory/Send Outs
  - Specimen Processing/Phlebotomy
  - Urinalysis
  - Hematology
  - Coagulation

- Read Standard Operating Procedures, SDS, Safety and Policy Manuals for each area.
- Locate safety features of the laboratory: spill kit, shower, eyewash, hood, fire blanket, fire extinguishers and exit plan.
- Understand Laboratory Information System (LIS) functions, operations, specimen flow and resolution of specimen issues.
- Understand distribution and aliquotting of specimens including proper collection, handling, disposal and storage requirements for each area.
- Recognize testing profiles including correlation of individual test orders with respect to compliance procedures (diagnosis & medical necessity) and duplication thereof.
- Follow applicable safety procedures while at this clinical rotation facility.
- Implement correct prioritization of workload.

**Tentative Schedule** Refer to Current Clinical Rotation Schedule

### **Course Requirements**

A current AHA CPR certification and continuing education in (or transcript of) HIV and Medical Errors Training is required. Completion of all required orientation procedures designated by clinical facility prior to the first day of rotation unless otherwise specified.

### **Course Prerequisites**

Permission by MLT Program Director and completion of all support coursework required for MLT Curriculum. Applicable coursework: \*\*MLT 1300, 1330, 2760, 1040, 1610, MLTL 1046, 2760 and 1230\*\*. All coursework must be completed prior to attending clinical rotations with the exception of Pathology Seminar (MLT 2930) and Advanced Immunohematology (MLTL 2527). These courses are concurrently taken during the final term.

### **Grading Policy**

Grades will be based as follows: Clinical Rotation Competency Score 50% and Clinical Rotation Professional Score 50%. The following scale will be adhered to: A (93-100), B (84-92), C (75-83), D (65-74) and F (<65). **A grade of C or better** is required in order to progress within the MLT Program. Numeric scores received from competency evaluation and professional evaluation will be converted from the 1-5.0 scale to a %, and the letter grade applied. **A 3.75 is the numeric score equivalent to passing the course. Clinical courses may not be repeated for grade forgiveness.**

### **Attendance Policy**

Zero absence policy unless excused. Excused absence consists of emergency illness, hospitalization or death in the immediate family (father, mother, grandparent, grandchild, son, daughter, sibling). A physician excuse or obituary must be provided in order to be excused. All absences must be accompanied by a phone call to the training facility PRIOR to the expected time. In addition, the Program Director must be notified ASAP via email or by phone message.

Total attendance hours must total 250 per contact hour requirement of this course. Student is not permitted to “make-up” missed days without prior permission of Program Director and Clinical Site Coordinator. Refer to the Clinical Rotation Handbook for recognized holidays, scheduling and more extensive policy requirements. Clinicals may not be scheduled on holidays since clinical lab staffing is minimal during these days: Memorial Day, Fourth of July, Labor Day, Thanksgiving & the Friday that follows. In addition, students should not expect to attend clinical rotation on AAB Certification Exam Day and the day just prior and/or following if needed for travel to the exam.

### **Exam Policy**

Students will be required to pass a preliminary assessment online (75% to pass) prior to being permitted to attend clinical. There will be two attempts possible. These should be completed no later than the first week of the semester.

Practice exams via Lab CE are available for the student to test his/her ability in the specific subject content. Review of prerequisite course material is strongly recommended prior to commencing rotation.

### **Academic Integrity**

Cheating/academic dishonesty in any form will not be tolerated and may be cause for dismissal from the MLT Program.

### **Disability Policy**

Eastern Florida State College assists students with disabilities by providing reasonable accommodations on a case-by-case basis. This assistance is available through the Office for Students with Disabilities once the student self-identifies. In order to receive the most appropriate assistance, students are encouraged to register with the Office for Students with Disabilities on their campus. Adaptive furniture, equipment and devices are available, as well as sign language interpreters, specialized computer software, academic advisement, placement and classroom test administration, the services of a learning disabilities specialist, advocacy and other services to help students attain their educational goals. All services are free and information is kept confidential. Reasonable substitutions for and/or modifications of requirements for admission to programs, graduation and CLAST or TABE waivers for students with documented disabilities will be considered on an individual basis in accordance with Sections 1007.263, 1007.264 and 1007.265 F. S. and State Board of Education Rules 6A-10.040 and 6A-10.041. For information regarding procedures for waivers and/or substitutions, students should contact the Office for Students with Disabilities on their respective campuses: Titusville (321) 433-5017, Cocoa (321) 433-7295, Melbourne (321) 433-5650 or Palm Bay (321) 433-5172.

**CORE LABORATORY CLINICAL ROTATION**

**MLTL 2806**

**COMPETENCY CHECKLIST FOR COMPLETED TASKS**

NAME: \_\_\_\_\_

<b>Competencies (Tasks)</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
<b>Specimen Processing Area:</b>					
Read procedure manual					
Locate safety manual & apparatus with spill kit					
Locate emergency exit plan					
Read SDS manual					
LIS and phlebotomy functions:					
- Ordering of tests by floor					
- Specimen collection (process for phleb. assign.)					
- Go along on a phlebotomy; identification of patient					
- Isolation procedure: gowning & collection					
- Timed specimens					
- Peak and trough					
- Cold agglutinins/cryoglobulin specimen handling					
- Receipt of specimen in LIS					
Specimen handling and distribution: LIS/processor					
Pneumatic tube: send & receive					
Location of specimen in storage for further testing					
Stored specimens procedure & discard					
Biohazard/sharps box: open, close, removal					
Send outs to reference lab: orders & specimen handling					
Other:					
Other:					
<b>Clinical Chemistry Area:</b>					
Read procedure manual					
Specimen handling & distribution					
24 hr urine handling					

<b>Core Lab Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
Body fluid handling & distribution					
Analyzer (name): _____					
- Reagent preparation, handling & loading					
- Quality Control					
- Daily Maintenance					
- Operation					
- Reporting of results					
- Reportable range/ dilution of specimens					
- Critical values & reporting protocol					
- Troubleshooting/technical assistance					
Analyzer (name): _____					
- Reagent preparation, handling & loading					
- Quality Control					
- Daily Maintenance					
- Operation					
- Reporting of results					
- Reportable range/dilution of specimens					
- Critical values & reporting protocol					
- Troubleshooting/technical assistance					
Analyzer (name): _____					
- Reagent preparation, handling & loading					
- Quality Control					
- Daily Maintenance					
- Operation					
- Reporting of results					
- Reportable range/dilution of specimens					
- Critical values & reporting protocol					
- Troubleshooting/technical assistance					
Other:					

<b>Core Lab Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
<b>Hematology Area:</b>					
Read procedure manual					
Specimen handling & distribution					
Preparation of smears					
Slide stainer operation: reagents & cleaning					
Body fluids handling & distribution					
Criteria for rejection of specimens					
Analyzer (name): _____					
- Reagent preparation, handling & loading					
- Quality Control					
- Daily Maintenance					
- Operation					
- Reporting of results					
- Reportable range/dilution of specimens					
- Critical values & reporting protocol					
- Troubleshooting/technical assistance					
Analyzer (name): _____					
- Reagent preparation, handling & loading					
- Quality Control					
- Daily Maintenance					
- Operation					
- Reporting of results					
- Reportable range/dilution of specimens					
- Critical values & reporting protocol					
- Troubleshooting/technical assistance					
Criteria for performance of manual differential					
Perform 25 normal differentials					
Perform 30 abnormal differentials					
Body fluid cell count performed					
CSF cell count performed					
Erythrocyte Sedimentation Rate (ESR)					
Reticulocyte count					

<b>Core Lab Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
Urine for Eosinophils (optional if TNP)					
Sperm count (optional if TNP)					
Synovial fluid crystal search (optional if TNP)					
Criteria for rejection of specimens					
Other:					
<b>Coagulation/Hemostasis Area:</b>					
Protime					
PTT					
D-Dimer					
Fibrinogen					
Fibrinogen Degradation Products (FDP)					
Factor Assays					
Mixing studies					
Platelet function testing					
Bleeding time					
Criteria for rejection of specimens					
Other:					
<b>Urinalysis Area:</b>					
Read procedure manual					
Specimen receipt, handling & storage					
Urinalysis: (perform minimum of 30 urinalysis)					
- Color & appearance					
- Chemical testing					
- Reflex testing (indications & performance)					
- Ictotest					
- Acetest					
- Clinitest					
- Culture & sensitivity set up					

<b>Core Lab Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
Microscopic analysis & quantification					
- Cells					
- Casts					
- Crystals					
- Sperm					
- Trichomonas					
- Artifacts					
Other:					
Other:					
Other:					
Urinalysis Analyzer (name): ____					
- Operation					
- Maintenance					
- Quality Control					
- Troubleshooting/technical assistance					
Pregnancy testing urine					
Other:					
Other:					
Other:					

## EFSC MLT Student Differential Record

#	ID	Trainee/Trainer	Seg	Band	Lymph	Mono	Eos	Baso	Meta	Myelo	Pro	Blast	Atyp	NRBC	Plt Est	OK?
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																



## **MLTL 2806 Laboratory Clinical Practicum Objectives**

1. Observe and Perform Testing, Quality Control Practices, Maintenance, Reagent Loading, Troubleshooting and Specimen Requirements/Handling for each of the following areas of the Core Laboratory.
  - Clinical Chemistry
  - Special Chemistry
  - Reference Laboratory/Send Outs
  - Specimen Processing/Phlebotomy
  - Urinalysis
  - Hematology
  - Coagulation
2. Read Standard Operating Procedures, SDS, Safety and Policy Manuals for each area.
3. Locate safety features of the laboratory: spill kit, shower, eyewash, hood, fire blanket, fire extinguishers and exit plan.
4. Understand Laboratory Information System (LIS) functions, operations, specimen flow and resolution of specimen issues.
5. Understand distribution and aliquotting of specimens including proper collection, handling, disposal and storage requirements for each area.
6. Recognize testing profiles including correlation of individual test orders with respect to compliance procedures (diagnosis & medical necessity) and duplication thereof.
7. Follow applicable safety procedures while at this clinical rotation facility.
8. Implement correct prioritization of workload.

## EVALUATION OF STUDENT'S PROFESSIONAL CAPABILITIES

### Clinical Instructors

Please rate student according to observed, terminal behaviors. Mark an X in one box (1-5) for each task in the list.

1. F – Student has difficulty grasping important functions and tasks in the laboratory. Consistently makes errors, displays an unacceptable attitude, or both.
2. D – Student functions inconsistently in the laboratory. Requires constant and detailed instruction to achieve acceptable performance.
3. C – Student demonstrates acceptable performance with supervision. Requires assistance with evaluation of situations and solutions.
4. B – Student demonstrates good performance, is careful and shows adequate attention to detail. Requires minimal supervision.
5. A – Student demonstrates superior performance with an above-average level of skill. Rarely requires assistance with evaluation of situations and solutions.

Comments on the student's strengths:

Comments on the student's weaknesses or areas needing improvement:

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Student Name: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Instructor Signature: \_\_\_\_\_

Affiliate: \_\_\_\_\_ Department: \_\_\_\_\_

Student Comments:

Education Coordinator Signature: \_\_\_\_\_

## EVALUATION OF PROFESSIONAL CAPABILITIES

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

	(F)	(D)	(C)	(B)	(A)
	1	2	3	4	5
<b>Initiative</b>					
- Performs routine assigned tasks					
- Seeks unsolicited tasks					
<b>Interest</b>					
- Asks relevant questions					
- Is alert and attentive					
<b>Responsibility</b>					
- Completes required assignments					
- Informs instructor when leaving area					
<b>Reaction to criticism</b>					
- Accepts constructive criticism					
- Uses constructive criticism as positive information					
<b>Interpersonal relationships</b>					
- Works as a team member					
- Functions well with others in a teacher/student setting					
- Helps others willingly					
<b>Professional performance</b>					
- Maintains work quality and quantity under stress					
- Maintains professional composure					
<b>Integrity</b>					
- Admits to errors or mistakes					
- Follows procedures without shortcuts					
- Shows consistent attention to detail					
<b>Cleanliness and orderliness</b>					
- Leaves working area clean and neat					
- Replenishes supplies and reagents					
<b>Promptness</b>					
- Arrives on time					
- Begins work promptly					
<b>Confidence</b>					
- Displays confidence after instruction					
- Recognizes limitations					
<b>Totals</b>					

Affiliate: \_\_\_\_\_ Department: \_\_\_\_\_  
 Clinical Instructor: \_\_\_\_\_

**Clinical Rotation Student Evaluation**

**Student:** This evaluation will be confidential. Mark an X in one box on each line. Fill out an evaluation form for each instructor. Write N/A if the item is not applicable. Complete both pages.

	Never	Rarely	Sometimes	Often	Always
<b>I. The Clinical Instructor:</b>					
Was well prepared and organized					
Encouraged student questions and comments					
Answered questions					
Was available to discuss issues related to the rotation					
Presented material relevant to the rotation					
Presented topics clearly					
Communicated effectively (speech, manner, delivery)					
Provided useful feedback on performance					
Was competent in area of practice					
Showed respect for students					
<b>II. Instruction Manual</b>					
Assignment of tasks was appropriate					
Department policies and procedures were stated at the beginning of the rotation and clarified throughout the rotation					
Additional aids were provided to support the rotation (unknowns, slides, Kodachrome, case studies, lectures)					
Reference lists helped in preparing for exams					
Feedback from examinations was timely					
This rotation increased my interest in further study of this area					
The personnel in this department hold a positive attitude toward students and teaching					

**Clinical Rotation Student Evaluation (Continued)**

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**III. Comment on the strengths of this rotation.**

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**IV. Comment on the weaknesses of this rotation.**

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**V. Comment on the strengths of your academic preparedness for this rotation.**

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**VI. Comment on the weaknesses of your academic preparedness for this rotation.**

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**VII. Additional Comments.**

Would you recommend this rotation for fellow students? \_\_\_\_\_ Yes \_\_\_\_\_ No



Transfusion Medicine  
Rotation  
MLTL 2807

## MLTL – 2807 – Transfusion Medicine Clinical Rotation

### Course Syllabus

Instructor	Ms. Phaedra Williams
Title	MLT Program Director/Instructor
Office Phone	321-433-7289
Office Fax	321-433-7599
Office Address	1519 Clearlake Rd, Cocoa, FL 32922; Bldg. 17/Rm. 219
Office Hours	By appointment or as posted
E-mail	<a href="mailto:williamsp@easternflorida.edu">williamsp@easternflorida.edu</a>
Location	Clinical Laboratory as assigned
Times	T, W, R, F, Dayshift unless otherwise stated
Start Date	Refer to Clinical Rotation Schedule
Course Credit	1 Credit; 90 contact hours

**Required Text** EFSC MLT Clinical Rotation Manual

**Suggested Text** Various review manuals as listed in course content for MLT 2930

### Course Description

A course designed to give the student actual hospital experience to gain proficiency in transfusion laboratory testing. Individual assignments to a laboratory will build competency to job entry-level.

### Course Objectives

Course Objective: Upon completion of this course, the student will be prepared to work in the Transfusion Medicine department of the clinical laboratory, performing routine applicable procedures and respecting the privacy practices necessary to patient care. Students should draw upon previous skills introduced in college laboratories to practice manipulative skills in a laboratory with strict quality control and to build self-confidence in preparation for employment. In addition student behavior, attitude and appearance must reflect the professionalism necessary to work in a clinical laboratory. Specific Performance Objectives:

- Observe and Perform Testing, Quality Control Practices, Maintenance, Reagent Loading, Troubleshooting and Specimen Requirements/Handling for each of the following areas of the Transfusion Medicine Laboratory:
  - Compatibility Testing
  - Problem Resolution
  - Donor Selection/Receipt/Handling
  - Maternal/Infant Testing
  - Identification & Transfusion Practices regarding Donors and Patients

- Component Preparation, Storage, Disposal and Handling
- Read Standard Operating Procedures, SDS, Safety and Policy Manuals for each area.
- Locate safety features of the laboratory: spill kit, shower, eyewash, hood, fire blanket, fire extinguishers and exit plan.
- Understand Laboratory Information System (LIS) functions, operations, specimen flow and resolution of specimen issues.
- Understand distribution and aliquotting of specimens including proper collection, handling and disposal and storage requirements for each area.
- Recognize testing profiles including correlation of individual test orders with respect to compliance procedures (diagnosis & medical necessity) and duplication thereof.
- Follow applicable safety procedures while at this clinical rotation facility.
- Implement correct prioritization of workload.

**Tentative Schedule** Refer to Current Clinical Rotation Schedule

### **Course Requirements**

A current AHA CPR Certification and continuing education in (or transcript of) HIV and Medical Errors Training is required. Completion of all required orientation procedures designated by clinical facility prior to the first day of rotation unless otherwise specified.

### **Course Prerequisites**

Permission by MLT Program Director and completion of all support coursework required for MLT Curriculum. Applicable coursework: \*\*MLT 1525 and MLTL 1525\*\*. All coursework must be completed prior to attending clinical rotations with the exception of Pathology Seminar (MLT 2930) and Advanced Immunohematology (MLTL 2527). These courses are concurrently taken during the final term.

### **Grading Policy**

Grades will be based as follows: Clinical Rotation Competency Score 50% and Clinical Rotation Professional Score 50%. The following scale will be adhered to: A (93-100), B (84-92), C (75-83), D (65-74) and F (<65). A **grade of C or better** is required in order to progress within the MLT Program. Numeric scores received from competency evaluation and professional evaluation will be converted from the 1-5.0 scale to a %, and the letter grade applied. **A 3.75 is the numeric score equivalent to passing the course. Clinical courses may not be repeated for grade forgiveness.**

## **Attendance Policy**

Zero absence policy unless excused. Excused absence consists of emergency illness, hospitalization or death in the immediate family (father, mother, grandparent, grandchild, son, daughter, sibling). A physician excuse or obituary must be provided in order to be excused. All absences must be accompanied by a phone call to the training facility PRIOR to the expected time. In addition, the Program Director must be notified ASAP via email or by phone message. Total attendance hours must total 90 per contact hour requirement of this course. Student is not permitted to “make-up” missed days without prior permission of Program Director and Clinical Site Coordinator. Refer to the Clinical Rotation Handbook for recognized holidays, scheduling and more extensive policy requirements. Clinicals may not be scheduled on holidays since clinical lab staffing is minimal during these days: Memorial Day, Fourth of July, Labor Day, Thanksgiving & the Friday that follows. In addition, students should not expect to attend clinical rotation on AAB Certification Exam Day and the day just prior and/or following if needed for travel to the exam.

## **Exam Policy**

Students will be required to pass a preliminary assessment online (75% to pass) prior to being permitted to attend clinical. There will be two attempts possible. These should be completed no later than the first week of the semester.

Practice exams via Lab CE are available for the student to test his/her ability in the specific subject content. Review of prerequisite course material is strongly recommended prior to commencing rotation.

## **Academic Integrity**

Cheating/academic dishonesty in any form will not be tolerated and may be cause for dismissal from the MLT Program.

## **Disability Policy**

Eastern Florida State College assists students with disabilities by providing reasonable accommodations on a case-by-case basis. This assistance is available through the Office for Students with Disabilities once the student self-identifies. In order to receive the most appropriate assistance, students are encouraged to register with the Office for Students with Disabilities on their campus. Adaptive furniture, equipment and devices are available, as well as sign language interpreters, specialized computer software, academic advisement, placement and classroom test administration, the services of a learning disabilities specialist, advocacy and other services to help students attain their educational goals. All services are free and information is kept confidential. Reasonable substitutions for and/or modifications of requirements for admission to programs, graduation and CLAST or TABE waivers for students with documented disabilities will be considered on an individual basis in accordance with Sections 1007.263, 1007.264 and 1007.265 F. S. and State Board of Education Rules 6A-10.040 and 6A-10.041. For information regarding procedures for waivers and/or substitutions, students should contact the Office for Students with Disabilities on their respective campuses: Titusville

(321) 433-5017, Cocoa (321) 433-7295, Melbourne (321) 433-5650 or Palm Bay (321) 433-5172.

**TRANSFUSION MEDICINE CLINICAL ROTATION**

**MLTL 2807**

**COMPETENCY CHECKLIST FOR COMPLETED TASKS**

**NAME:** \_\_\_\_\_

<b>Competencies (Tasks)</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
Read procedural manual					
LIS and Phlebotomy Function:					
- Ordering of tests by floor					
- Collection & labeling of specimens					
- Criteria for rejection of specimens					
Location of specimen in storage for further testing					
Stored specimens procedure & discard					
Read & record temperatures					
Daily reagent quality control					
Daily appearance of stored blood/products					
<b>Deposition of Blood Products:</b>					
- Sign out units					
- Return of units					
- Observe transfusion process from start to finish					
<b>Emergency Release of Units</b>					
Inventory/ordering of blood & products					
ABO/Du confirmation red cell products					
FFP storage, prep and dispense					
Platelet products storage, prep & dispense					
Irradiation procedure					
Indications & process for leukopoor products					
Cryoprecipitate storage, prep & dispense					
<b>Gel Testing:</b>					
- Procedure					
- Read/record reactions					
- Type & screen (perform 6-10)					

<b>Transfusion Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
- Compatibility Testing (perform 6-10)					
Computer crossmatch					
LIS results entry					
Selection of donor units					
Patient and donor phenotyping & QC					
Antibody Identification: gel/tube (perform 2-5)					
Direct Antiglobulin Testing & resolution					
Prenatal testing					
Cord blood work-up					
Rhogam: work-up & dispensation					
Send outs to reference lab: order & specimen handling					
Analyzer (name):					
Reagent preparation, handling & loading					
Quality Control					
Daily Maintenance					
Operation					
Reporting of results					
Critical Values & reporting protocol					
Troubleshooting/technical assistance					
Analyzer (name):					
Reagent preparation, handling & loading					
Quality Control					
Daily Maintenance					
Operation					
Reporting of results					
Critical values & reporting protocol					
Troubleshooting/technical assistance					
Other:					
Other:					
Other:					

## **MLTL 2807 Transfusion Clinical Practicum Objectives**

1. Observe and Perform Testing, Quality Control Practices, Maintenance, Reagent Loading, Troubleshooting and Specimen Requirements/Handling for each of the following areas of the Transfusion Medicine Laboratory:
  - Compatibility Testing
  - Problem Resolution
  - Donor Selection/Receipt/Handling
  - Maternal/Infant Testing
  - Identification & Transfusion Practices regarding Donors and Patients
  - Component Preparation, Storage, Disposal and Handling
2. Read Standard Operating Procedures, SDS, Safety and Policy Manuals for each area.
3. Locate safety features of the laboratory: spill kit, shower, eyewash, hood, fire blanket, fire extinguishers and exit plan.
4. Understand Laboratory Information System (LIS) functions, operations, specimen flow and resolution of specimen issues.
5. Understand distribution and aliquotting of specimens including proper collection, handling and disposal and storage requirements for each area.
6. Recognize testing profiles including correlation of individual test orders with respect to compliance procedures (diagnosis & medical necessity) and duplication thereof.
7. Follow applicable safety procedures while at this clinical rotation facility.
8. Implement correct prioritization of workload.

## EVALUATION OF STUDENT'S PROFESSIONAL CAPABILITIES

### Clinical Instructors

Please rate student according to observed, terminal behaviors. Mark an X in one box (1-5) for each task in the list.

1. F – Student has difficulty grasping important functions and tasks in the laboratory. Consistently makes errors, displays an unacceptable attitude, or both.
2. D – Student functions inconsistently in the laboratory. Requires constant and detailed instruction to achieve acceptable performance.
3. C – Student demonstrates acceptable performance with supervision. Requires assistance with evaluation of situations and solutions.
4. B – Student demonstrates good performance, is careful and shows adequate attention to detail. Requires minimal supervision.
5. A – Student demonstrates superior performance with an above-average level of skill. Rarely requires assistance with evaluation of situations and solutions.

Comments on the student's strengths:

Comments on the student's weaknesses or areas needing improvement:

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Student Name: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Instructor Signature: \_\_\_\_\_

Affiliate: \_\_\_\_\_ Department: \_\_\_\_\_

Student Comments:

Education Coordinator Signature: \_\_\_\_\_

## EVALUATION OF PROFESSIONAL CAPABILITIES

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

	(F)	(D)	(C)	(B)	(A)
	1	2	3	4	5
<b>Initiative</b>					
- Performs routine assigned tasks					
- Seeks unsolicited tasks					
<b>Interest</b>					
- Asks relevant questions					
- Is alert and attentive					
<b>Responsibility</b>					
- Completes required assignments					
- Informs instructor when leaving area					
<b>Reaction to criticism</b>					
- Accepts constructive criticism					
- Uses constructive criticism as positive information					
<b>Interpersonal relationships</b>					
- Works as a team member					
- Functions well with others in a teacher/student setting					
- Helps others willingly					
<b>Professional performance</b>					
- Maintains work quality and quantity under stress					
- Maintains professional composure					
<b>Integrity</b>					
- Admits to errors or mistakes					
- Follows procedures without shortcuts					
- Shows consistent attention to detail					
<b>Cleanliness and orderliness</b>					
- Leaves working area clean and neat					
- Replenishes supplies and reagents					
<b>Promptness</b>					
- Arrives on time					
- Begins work promptly					
<b>Confidence</b>					
- Displays confidence after instruction					
- Recognizes limitations					
<b>Totals</b>					

Affiliate: \_\_\_\_\_ Department: \_\_\_\_\_  
 Clinical Instructor: \_\_\_\_\_

**Clinical Rotation Student Evaluation**

**Student:** This evaluation will be confidential. Mark an X in one box on each line. Fill out an evaluation form for each instructor. Write N/A if the item is not applicable. Complete both pages.

	Never	Rarely	Sometimes	Often	Always
<b>I. The Clinical Instructor:</b>					
Was well prepared and organized					
Encouraged student questions and comments					
Answered questions					
Was available to discuss issues related to the rotation					
Presented material relevant to the rotation					
Presented topics clearly					
Communicated effectively (speech, manner, delivery)					
Provided useful feedback on performance					
Was competent in area of practice					
Showed respect for students					
<b>II. Instruction Manual</b>					
Assignment of tasks was appropriate					
Department policies and procedures were stated at the beginning of the rotation and clarified throughout the rotation					
Additional aids were provided to support the rotation (unknowns, slides, Kodachrome, case studies, lectures)					
Reference lists helped in preparing for exams					
Feedback from examinations was timely					
This rotation increased my interest in further study of this area					
The personnel in this department hold a positive attitude toward students and teaching					

**Clinical Rotation Student Evaluation (Continued)**

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**III. Comment on the strengths of this rotation.**

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**IV. Comment on the weaknesses of this rotation.**

---

**V. Comment on the strengths of your academic preparedness for this rotation.**

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**VI. Comment on the weaknesses of your academic preparedness for this rotation.**

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**VII. Additional Comments.**

Would you recommend this rotation for fellow students? \_\_\_\_\_ Yes \_\_\_\_\_ No



Microbiology  
Molecular/Immunology  
Rotation  
MLTL 2811

**MLTL – 2811 – Microbiology/Molecular Clinical Rotation**  
**Course Syllabus**

Instructor	Ms. Phaedra Williams
Title	MLT Program Director/Instructor
Office Phone	321-433-7289
Office Fax	321-433-7599
Office Address	1519 Clearlake Rd, Cocoa, FL 32922; Bldg. 17/Rm. 219
Office Hours	By appointment or as posted
E-mail	<a href="mailto:williamsp@easternflorida.edu">williamsp@easternflorida.edu</a>
Location	Clinical Laboratory as assigned
Times	T, W, R, F, Dayshift unless otherwise stated
Start Date	Refer to Clinical Rotation Schedule
Course Credit	3 Credits; 120 contact hours

**Required Text**            EFSC MLT Clinical Rotation Manual

**Suggested Text**        Various review manuals as listed in course content for MLT 2930

**Course Description**

A course designed to give the student actual hospital experience to gain proficiency in laboratory testing in various departments within the laboratory. Individual assignments to a laboratory department will build competency to job entry-level.

**Course Objectives**

Course Objective: Upon completion of this course, the student will be prepared to work in the Microbiology department of the clinical laboratory, performing routine applicable procedures and respecting the privacy practices necessary to patient care. Students should draw upon previous skills introduced in college laboratories to practice manipulative skills in a laboratory with strict quality control and to build self-confidence in preparation for employment. In addition student behavior, attitude and appearance must reflect the professionalism necessary to work in a clinical laboratory. Specific Performance Objectives:

- Observe and Perform Testing, Quality Control Practices, Maintenance, Reagent Loading, Troubleshooting and Specimen Requirements/Handling for each of the following areas of the Microbiology Laboratory:
  - Microbiology
  - Immunology/Serology
  - Molecular Testing

- Read Standard Operating Procedures, SDS, Safety and Policy Manuals for each area.
- Locate safety features of the laboratory: spill kit, shower, eyewash, hood, fire blanket, fire extinguishers and exit plan.
- Understand Laboratory Information System (LIS) functions, operations, specimen flow and resolution of specimen issues.
- Understand distribution and aliquotting of specimens including proper collection, handling and disposal and storage requirements for each area.
- Recognize testing profiles including correlation of individual test orders with respect to compliance procedures (diagnosis & medical necessity) and duplication thereof.
- Follow applicable safety procedures while at this clinical rotation facility.
- Implement correct prioritization of workload.

**Tentative Schedule** Refer to Current Clinical Rotation Schedule

### **Course Requirements**

A current AHA CPR certification and continuing education in (or transcript of) HIV and Medical Errors Training is required. Completion of all required orientation procedures designated by clinical facility prior to the first day of rotation unless otherwise specified.

### **Course Prerequisites**

Permission by MLT Program Director and completion of all support coursework required for MLT Curriculum. Applicable coursework: **\*\*MLT 2401, 1440, 1500, MLTL 2401 & 1500\*\***. All coursework must be completed prior to attending clinical rotations with the exception of Pathology Seminar (MLT 2930) and Advanced Immunohematology (MLTL 2527). These courses are concurrently taken during the final term.

### **Grading Policy**

Grades will be based as follows: Clinical Rotation Competency Score 50% and Clinical Rotation Professional Score 50%. The following scale will be adhered to: A (93-100), B (84-92), C (75-83), D (65-74) and F (<65). **A grade of C or better** is required in order to progress within the MLT Program. Numeric scores received from competency evaluation and professional evaluation will be converted from the 1-5.0 scale to a %, and the letter grade applied. **A 3.75 is the numeric score equivalent to passing the course. Clinical courses may not be repeated for grade forgiveness.**

### **Attendance Policy**

Zero absence policy unless excused. Excused absence consists of emergency illness, hospitalization or death in the immediate family (father, mother, grandparent, grandchild, son, daughter, sibling). A physician excuse or obituary must be provided in order to be excused. All absences must be accompanied by a phone call to the training facility **PRIOR** to the expected time. In addition, the Program Director must be notified **ASAP** via email or by phone message.

Total attendance hours must total 120 per contact hour requirement of this course. Student is not permitted to “make-up” missed days without prior permission of Program Director and Clinical Site Coordinator. Refer to the Clinical Rotation Handbook for recognized holidays, scheduling and more extensive policy requirements. Clinicals may not be scheduled on holidays since clinical lab staffing is minimal during these days: Memorial Day, Fourth of July, Labor Day, Thanksgiving & the Friday that follows. In addition, students should not expect to attend clinical rotation on AAB Certification Exam Day and the day just prior and/or following if needed for travel to the exam.

### **Exam Policy**

Students will be required to pass a preliminary assessment online (75% to pass) prior to being permitted to attend clinical. There will be two attempts possible. These should be completed no later than the first week of the semester.

Practice exams via Lab CE are available for the student to test his/her ability in the specific subject content. Review of prerequisite course material is strongly recommended prior to commencing rotation.

### **Academic Integrity**

Cheating/academic dishonesty in any form will not be tolerated and may be cause for dismissal from the MLT Program.

### **Disability Policy**

Eastern Florida State College assists students with disabilities by providing reasonable accommodations on a case-by-case basis. This assistance is available through the Office for Students with Disabilities once the student self-identifies. In order to receive the most appropriate assistance, students are encouraged to register with the Office for Students with Disabilities on their campus. Adaptive furniture, equipment and devices are available, as well as sign language interpreters, specialized computer software, academic advisement, placement and classroom test administration, the services of a learning disabilities specialist, advocacy and other services to help students attain their educational goals. All services are free and information is kept confidential. Reasonable substitutions for and/or modifications of requirements for admission to programs, graduation and CLAST or TABE waivers for students with documented disabilities will be considered on an individual basis in accordance with Sections 1007.263, 1007.264 and 1007.265 F. S. and State Board of Education Rules 6A-10.040 and 6A-10.041. For information regarding procedures for waivers and/or substitutions, students should contact the Office for Students with Disabilities on their respective campuses: Titusville (321) 433-5017, Cocoa (321) 433-7295, Melbourne (321) 433-5650 or Palm Bay (321) 433-5172.

**MICROBIOLOGY CLINICAL ROTATION**

**MLTL 2811**

**COMPETENCY CHECKLIST FOR COMPLETED TASKS**

NAME: \_\_\_\_\_

<ul style="list-style-type: none"> <li align="center">• Read SOP and Policies Manual</li> <li align="center">• Recommend student develop flow charts for all benches</li> </ul>					
Competencies (Tasks)	Observed	Performed	Instructor	Date	Score
<b>Specimen Handling &amp; Setup</b>					
Received specimens					
Complete ordering/acquisitions					
Distribution/aliquotting of specimen					
Priority of distribution to urinalysis of CSF & body fluids with core lab to Pathology					
Send outs					
Read a gram stain					
AFB stain					
Plating					
- Urine					
- Sputum					
- Body fluids					
- Wounds					
- Stools					
- Blood					
- Throat/nasal					
- Genital					
- Fungal					
- Anaerobic					
- Misc.					
- Misc.					
- Misc.					
<b>Respiratory Bench</b>					
Read plates					
Differentiation of:					
- Staph					
- Strep					
- Normal Flora					
- MRSA					
Reflex testing					

<b>Microbiology Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
Report in computer (observation acceptable if necessary)					
<b>Stools</b>					
Read plates					
Differentiate pathogens from normal flora					
Sub speciate of Salmonella/Shigella					
Reflex testing/report in computer					
<b>Bloods</b>					
Collection process (policies/SOP)					
Resolution of positive blood					
Read plates					
<b>Wounds</b>					
Swab vs. tissue					
Read plates/differentiate pathogens from contaminate					
Reflex testing					
Differentiate aerobic/anaerobic					
Fluids and CSF					
Computer reporting					
<b>Urines</b>					
Colony count					
Read plate					
Differentiate pathogens from contaminate					
<b>Rapid Testing</b>					
- Flu					
- Strep					
- C. diff					
- Rotavirus					
- RSV					
- Misc.					
Reporting/resolution of critical values					
<b>Automation</b>					
<b>C &amp; S</b>					
- Familiarized with each chemical test which is part of criterion for ID of organism					
- Sensitivity to specific drugs					
<b>Blood cultures</b>					
- Know QC					

<b>Microbiology Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
- Maintenance					
- Troubleshooting					
<b>Recommended trip to pharmacy</b>					
- Discuss coordination					
- Antibiotic dosing					
- Which drugs are resistant to the organism					
- Make list of combo drugs prescribed at this pharmacy and what is the advantage					
<b>Infection control community</b>					
- Sit in on meeting if possible					
- Coordination with the state and state criteria					
<b>Fungal Specimens/Send out to State</b>					
- Specimen handling					
- Procedure: _____					
<b>Parasitology/Send outs</b>					
- Specimen handling					
- Procedure: _____					

**IMMUNOLOGY/MOLECULAR CLINICAL ROTATION**

**MLTL 2811**

**COMPETENCY CHECKLIST FOR COMPLETED TASKS**

NAME: \_\_\_\_\_

<b>Competencies (Tasks)</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
<b>Infectious Disease Testing</b>					
- Hepatitis					
- HIV					
- Rubella					
- Strep					
- Measles/mumps					
- Syphilis					
- CMV					
Procedure for reporting to State					
Automation instrument name: _____					
- Operation					
- Maintenance					
- QC					
- Reporting					
Automation instrument name: _____					
- Operation					
- Maintenance					
- QC					
- Reporting					
<b>Autoimmune Testing</b>					
- ANA					
- RA					
- Other: _____					
- Other: _____					
- Other: _____					
- Other: _____					
<b>Electrophoresis (if performed)</b>					
- Procedure					
- Specimen criteria					
- QC					
- Reporting					
<b>Immunofixation &amp; other Blot Testing</b>					

<b>Immunology/Molecular Competencies Cont.</b>	<b>Observed</b>	<b>Performed</b>	<b>Instructor</b>	<b>Date</b>	<b>Score</b>
- QC					
- Reporting					
Automation instrument name: _____					
- Operation					
- Maintenance					
- QC					
- Reporting					
<b>Agglutination Test Kits</b>					
- Mono					
- RA					
- CMV					
- Other: _____					
- Other: _____					
<b>Molecular Testing (if performed)</b>					
- PCR					
- DNA					
- RNA					
- Probe testing					
Automation instrument name:					
- Operation & performance					
- Prevention of contamination					

## **MLTL 2811 Microbiology Clinical Practicum Objectives**

1. Observe and Perform Testing, Quality Control Practices, Maintenance, Reagent Loading, Troubleshooting and Specimen Requirements/Handling for each of the following areas of the Microbiology Laboratory:
  - Microbiology
  - Immunology/Serology
  - Molecular Testing
2. Read Standard Operating Procedures, SDS, Safety and Policy Manuals for each area.
3. Locate safety features of the laboratory: spill kit, shower, eyewash, hood, fire blanket, fire extinguishers and exit plan.
4. Understand Laboratory Information System (LIS) functions, operations, specimen flow and resolution of specimen issues.
5. Understand distribution and aliquotting of specimens including proper collection, handling and disposal and storage requirements for each area.
6. Recognize testing profiles including correlation of individual test orders with respect to compliance procedures (diagnosis & medical necessity) and duplication thereof.
7. Follow applicable safety procedures while at this clinical rotation facility.
8. Implement correct prioritization of workload.

## EVALUATION OF STUDENT'S PROFESSIONAL CAPABILITIES

### Clinical Instructors

Please rate student according to observed, terminal behaviors. Mark an X in one box (1-5) for each task in the list.

1. F – Student has difficulty grasping important functions and tasks in the laboratory. Consistently makes errors, displays an unacceptable attitude or both.
2. D – Student functions inconsistently in the laboratory. Requires constant and detailed instruction to achieve acceptable performance.
3. C – Student demonstrates acceptable performance with supervision. Requires assistance with evaluation of situations and solutions.
4. B – Student demonstrates good performance, is careful and shows adequate attention to detail. Requires minimal supervision.
5. A – Student demonstrates superior performance with an above-average level of skill. Rarely requires assistance with evaluation of situations and solutions.

Comments on the student's strengths:

Comments on the student's weaknesses or areas needing improvement:

Student Name: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Instructor Signature: \_\_\_\_\_

Affiliate: \_\_\_\_\_ Department: \_\_\_\_\_

Student Comments:

Education Coordinator Signature: \_\_\_\_\_

## EVALUATION OF PROFESSIONAL CAPABILITIES

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

	(F)	(D)	(C)	(B)	(A)
	1	2	3	4	5
<b>Initiative</b>					
- Performs routine assigned tasks					
- Seeks unsolicited tasks					
<b>Interest</b>					
- Asks relevant questions					
- Is alert and attentive					
<b>Responsibility</b>					
- Completes required assignments					
- Informs instructor when leaving area					
<b>Reaction to criticism</b>					
- Accepts constructive criticism					
- Uses constructive criticism as positive information					
<b>Interpersonal relationships</b>					
- Works as a team member					
- Functions well with others in a teacher/student setting					
- Helps others willingly					
<b>Professional performance</b>					
- Maintains work quality and quantity under stress					
- Maintains professional composure					
<b>Integrity</b>					
- Admits to errors or mistakes					
- Follows procedures without shortcuts					
- Shows consistent attention to detail					
<b>Cleanliness and orderliness</b>					
- Leaves working area clean and neat					
- Replenishes supplies and reagents					
<b>Promptness</b>					
- Arrives on time					
- Begins work promptly					
<b>Confidence</b>					
- Displays confidence after instruction					
- Recognizes limitations					
<b>Totals</b>					

Affiliate: \_\_\_\_\_ Department: \_\_\_\_\_  
 Clinical Instructor: \_\_\_\_\_

**Clinical Rotation Student Evaluation**

**Student:** This evaluation will be confidential. Mark an X in one box on each line. Fill out an evaluation form for each instructor. Write N/A if the item is not applicable. Complete both pages.

	Never	Rarely	Sometimes	Often	Always
<b>I. The Clinical Instructor:</b>					
Was well prepared and organized					
Encouraged student questions and comments					
Answered questions					
Was available to discuss issues related to the rotation					
Presented material relevant to the rotation					
Presented topics clearly					
Communicated effectively (speech, manner, delivery)					
Provided useful feedback on performance					
Was competent in area of practice					
Showed respect for students					
<b>II. Instruction Manual</b>					
Assignment of tasks was appropriate					
Department policies and procedures were stated at the beginning of the rotation and clarified throughout the rotation					
Additional aids were provided to support the rotation (unknowns, slides, Kodachrome, case studies, lectures)					
Reference lists helped in preparing for exams					
Feedback from examinations was timely					
This rotation increased my interest in further study of this area					
The personnel in this department hold a positive attitude toward students and teaching					

**Clinical Rotation Student Evaluation (Continued)**

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**III. Comment on the strengths of this rotation.**

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**IV. Comment on the weaknesses of this rotation.**

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**V. Comment on the strengths of your academic preparedness for this rotation.**

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**VI. Comment on the weaknesses of your academic preparedness for this rotation.**

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**VII. Additional Comments.**

Would you recommend this rotation for fellow students? \_\_\_\_\_ Yes \_\_\_\_\_ No



**GRADING  
&  
ATTENDANCE**

## Clinical Rotation Grading Criteria

The grading criteria for the clinical rotations consist of technical task completion, written and practical examinations and evaluation of the student's professional capabilities.

### Student Task List

The clinical instructor monitors the checklist for completion and performance of technical tasks. The task lists are a general outline of the tasks that a student should have the opportunity to perform or observe during the clinical rotations. Not all affiliates are able to offer each student the same experience; therefore, the task lists have additional blank spaces so that each affiliate can list unique tasks. If the affiliate does not perform the task listed on the checklist, the clinical instructor should mark NA (not applicable) in that space. The task evaluation should be based on observed terminal performance (not grading students the first time they perform the task). Technical tasks are evaluated according to the following criteria:

1. F – Error, unacceptable performance. The student performs the tasks with inconsistent technical skills and does not adhere to affiliate policies (e.g., safety) during task performance. The student has consistent performance errors, appears unwilling to improve performance or both.
2. D – Unacceptable performance. The student performs the task with inconsistent technical skills. The student needs direct supervision with constant and detailed instruction in order to perform the task.
3. C – Marginal performance. The student performs the task with the technical skill correctly, but with difficulty. The student requires supervision, but understands the basic principles of the task or procedure. A consistent marginal performance is **not** a passing grade\*.
4. B – Good performance. The student performs the task with good technical skill, needs minimal supervision and has a good working knowledge of the principle and its application.
5. A – Superior performance. The student performs the task with superior technical skill, needs minimal supervision and expresses a complete understanding of the principle and its application.

A "Comments" column is provided with each task to encourage the clinical instructor to make comments and recommendations to the student.

\*A passing grade must have an average score of 3.75 (1-5 scale). A consistent marginal performer (C) will have an average grade of 3.0.

## Grades

Each student's clinical grade for that rotation is based on two completed evaluations:

- Competency/Task Checklist: instructor, assign a grade of 1-5 (see scale) 50%
- Professional capabilities: instructor, assign a grade of 1-5 (see scale) 50%

It is not necessary to tally the grades; that will be done at the college; however, please keep in mind as you grade the student must attain an average score of 3.75 in order to pass this rotation and graduate.

Grade Scale:

- 4.65-5.00 A
- 4.25-4.60 B
- 3.75-4.20 C

Completion of attendance record with documentation of total number of specified contact hours are required before a grade will be assigned to the student. The instructor must verify the hours attended by initialing beside each date.

Instructors should plan to complete the two forms and allow time to review these forms with the **student prior to completion of their rotation**. There are four routes to receive task and evaluation forms, which are deemed confidential and must be sent directly to the Program Director.

1. Fax to the MLT Department at (321) 433-7599 attention Phaedra Williams
2. Mail to EFSC 1519 Clearlake Rd. Cocoa, FL 32922, Bldg. 17 Room 219
3. Send with student in a sealed envelope
4. Email documents to [williamsp@easternflorida.edu](mailto:williamsp@easternflorida.edu)

Please DO NOT give the grade forms to the student to transport.

The instructor should grade the student only on performed (not observed) competencies. The student should perform as many competencies as possible; however, if laboratory policy prohibits this or if time/staffing constraints occur, then observation is acceptable.

## Attendance

Attendance at clinicals unless otherwise instructed and approved by the Program Director is Tuesday – Friday from 7:30am – 3:30pm. The times may vary for each clinical site and may be unique to the preceptor's availability. Attendance hours must be recorded each day and initialed by your instructor. This must be turned in to me in order for you to receive a grade for this course.

Observed holidays include:

- MLK Day\*\*
- Spring Break\*\*
- Memorial Day
- July 4<sup>th</sup>
- Labor Day
- Thanksgiving Day & the Friday following\*\*
- AAB Exam Day
- Mock Board Exam Day
- Fieldtrip Day

\*\*These days may be scheduled for clinical hours if necessary in order to complete the required contact hours. Program Director and clinical instructor approval **are required beforehand**.

### Contact Hour Requirements

Required number of contact hours and weeks for each rotation are listed below:

<u>Clinical Rotation</u>	<u>Course #</u>	<u>Length</u>	<u>Contact Hours</u>
Core Lab	MLTL 2806	8 weeks	250
Transfusion Medicine	MLTL 2807	3 weeks	90
Microbiology/Molecular/Immunology	MLTL 2811	4 weeks	120

**There will be no allowance for unexcused absence. You are expected to show up on time every day as professional working individuals are required to do.**

### Excused Absence

The only allowance for excused absence will be the following:

- Death in the immediate family; you may be asked to provide a notice by the end of the semester.
- Emergency illness or hospitalization for you or an immediate family member for which you are the only caregiver; you will be asked to provide a doctor's note.
- Infectious illnesses with flu-like symptoms especially fever; please stay home until 24 hours after your fever has subsided. We do not want you to go to a doctor's office where you may infect others in order to get a note, so this is not required under these circumstances.

Regardless of the absence, please leave a voice message at (321) 433-7289 or send an email notifying me of your absence prior to your expected arrival time. You must also notify your clinical instructor as well. Absence without notification will deem this an unexcused absence.

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