

**AUSTIN COMMUNITY COLLEGE  
 MEDICAL LABORATORY TECHNOLOGY  
 MLAB 2263 Molecular Diagnostics Clinical  
 Master Course Syllabus  
 Semester/Year**

Course Web Site: <http://www.austincc.edu/mlt/mdclinical/mdclinical>

Course Outline and Schedule: [http://www.austincc.edu/mlt/mdclinical/mdclinical\\_schedule.html](http://www.austincc.edu/mlt/mdclinical/mdclinical_schedule.html)

Course Number and Name	Campus	Section	Synonym
MLAB 2362 Molecular Diagnostics Clinical	EVC		

FACULTY INFORMATION	
Campus	
Instructor	
Office	
Office Hours	
Phone	
Email	
Campus	
Instructor	
Office	
Office Hours	
Phone	
Email	
Campus	
Instructor	
Office	
Office Hours	
Phone	
Email	

COURSE INFORMATION			
Campus	Eastview	Round Rock Campus	Distance Learning
Lecture Room	9101	3121.00	
Lecture Time			
Length of Course	16 Weeks		
Dates			

**Hours:** Schedule subject to change. Computer assignments may be completed in the computer lab instead of the classroom. Some clinical assignments will be completed outside of class hours and are included in the total number of hours. **Visit the course web site each week as the schedule is a work in progress:**

## **INTRODUCTION/RATIONALE**

The clinical course work allows students to apply the knowledge and skills obtained in the didactic component of the curriculum to real life experience in a clinical laboratory. *The external clinical rotation experience is a privilege.* Training at the bench is a time consuming experience for the clinical faculty. Training students slows down the work process in the department during the initial few hours or days that a student is on-site. Students will be held to the highest level of work ethics including attendance, reviewing notes and procedures prior to the start of the rotation, and interacting with an eagerness and willingness to apply their knowledge to the tasks at hand. The ultimate goal of each rotation is that the student is able to accurately and competently perform basic to moderately complex procedures at the bench with minimum supervision.

The clinical rotations provide students with clinical experience in local area hospital and clinic laboratories.

The student must demonstrate minimum competency in each area as determined by the established list of competencies which will be provided to you.

At least two days prior to the start of a new rotation the student is expected to make a courtesy call to the clinical site. The student will verify the hours and dates of the rotation, who to report to, location of the laboratory, where to park and dress code.

There are very few ways to adequately express our appreciation for the efforts of the clinical faculty, but upon completion of the rotation students are encouraged to do something to express their appreciation for the training they have received. The clinical instructors do not receive compensation for training a student but a genuine 'thank-you' from a student would be valued and appreciated. On the last day of the rotation, a thank you card, home-baked or store-bought treats, flowers, etc. would be an extra treat, but a heart-felt thank you is at least deserved and encouraged.

## **COURSE DESCRIPTION**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## **PREREQUISITES**

The student must have completed MLAB 2378 and MLAB 2479. Special exemptions to this may be made by Program officials. The student must also have completed all health data requirements and immunizations (including updated TB test), HIPAA, Safe Environment of Care and Workplace Violence requirements, as needed, prior to attending clinical rotations. Due to unforeseen circumstances, additional requirements may be implemented as needed. Program officials will efficiently provide information as this information becomes available.

## **COURSE GOALS**

Successful completion of this course requires that the student be able to do the following:

- Develop proficiency in the clinical competencies of the rotation by reviewing basic principles and procedures and demonstrating organizational and technical skills.
- Demonstrate initiative by reviewing course materials prior to and during the rotation, asking questions to advance understanding, research areas of weakness, and asking for additional work as needed.
- Demonstrate the importance of punctuality and attendance at each day of clinical by maintaining an excellent attendance record and promptly notifying the MLT faculty and the clinical facility of any absences or tardiness.
- Demonstrate professional behavior by maintaining a strong positive attitude, exhibiting a proactive attitude in developing the competencies required, developing and using good professional judgment in all matters concerning laboratory safety and interaction with patients, specimens, clinical staff, faculty and fellow students.

- Demonstrate understanding of the needs and requirements of the clinical laboratory through awareness of the departmental workloads, maintaining accurate records, restocking supplies as necessary and cleaning up work area periodically throughout the day and at the completion of clinical activities.
- Maintain a safe laboratory environment by adhering to all applicable safety regulations which include, but not limited to, appropriate disinfection of work area, maintaining a neat, uncluttered, work area, wearing of appropriate personal protective equipment, and reporting hazards observed.
- Demonstrate communication skills by posting a weekly overview of your clinical experience to BlackBoard and being responsive to questions asked by the professor and your fellow students.
- Demonstrate application of knowledge to the field of Molecular Diagnostics by preparing a report about a selected molecular diagnostic test, creating a PowerPoint presentation and presenting the information to the class.

## **COURSE OBJECTIVES**

### **Affective**

1. Demonstrate professionalism by:
  - a. Complying with the attendance policy.
  - b. Complying with the dress code.
  - c. Submitting assignments by the stated deadline.
2. Demonstrate enthusiasm and interest in the profession of clinical laboratory sciences by asking questions, participating in class discussions and meeting with professor during office hours as needed.
3. Demonstrate initiative by reviewing objectives and completion of reading assignments prior to class.
4. Demonstrate progression in laboratory skills by effective organization, coordination of multiple tasks and insightful evaluation of results obtained.
5. Utilize criticism to correct deficiencies and improve performance.
6. Work cooperatively with clinical staff to achieve the goals of each activity assigned.

### **Psychomotor**

1. Perform quality control activities and take corrective action when results are not within acceptable limits.
2. Perform preventive maintenance on equipment as required.
3. Perform calibration of instruments as required.
4. Properly prepare and evaluate samples for analysis.
5. Perform DNA extraction, amplification and detection on appropriate samples.

### **Cognitive**

1. State potential causes for quality control results which are outside of acceptable limits.
2. States reasons for rejection of samples for molecular analysis.
3. For extraction, amplification and detection methods used state the:
  - a. principle involved
  - b. sources of error
  - c. limitations of the procedure.
4. Analyze results and provide an accurate interpretation.

### PROGRAM STUDENT LEARNING OUTCOMES:

Upon completion of the **Enhanced Skills Certificate in Molecular Diagnostics**, the student will be able to:

1. Apply knowledge of cellular structure and function, especially DNA and RNA, to molecular diagnostic procedures.
2. Demonstrate a thorough working knowledge of nucleic acid extraction, resolution and detection.
3. Perform the most frequently utilized molecular diagnostic testing protocols.
4. Apply the knowledge of molecular testing to the most commonly performed applications in the clinical laboratory such as: nucleic acid extraction, resolution and detection, analysis and characterization of nucleic acids and proteins, nucleic acid amplification and DNA sequencing.
5. Develop proficiency in the clinical competencies of the rotation by applying basic principles and procedures, demonstrating organizational skills and accurate performance of technical skills.

### SCANS COMPETENCIES

Recently the U.S. Department of Labor established the Secretary's Commission on Achieving Necessary Skills (SCANS) to examine the demands of the workplace and whether the nation's students are capable of meeting those demands. The Commission determined that today's jobs generally require competencies in the following areas.

- A. Resources: Identifies, organizes, plans, and allocates resources
- B. Interpersonal: Works with others
- C. Information: Acquires and uses information
- D. Systems: Understands complex interrelationships
- E. Technology: Works with a variety of technologies

The Texas Higher Education Coordinating Board is now requiring all degree plans in institutions of higher education incorporate these competencies and identify to the student how these competencies are achieved in course objectives.

Examples of SCANS competencies being incorporated are as follows:

SCANS COMPETENCY	Clinical Competencies
Resources	Identify reagents and supplies needed for each lab, organize work so that the reagents, supplies, and equipment are utilized appropriately and work is completed within a reasonable time frame.
Interpersonal	Recognize limitations of expertise during the performance of procedures and communicate with professor when problems arise. Maintain confidentiality of patient samples utilized. Demonstrate respect clinical staff. Utilize the Internet to interact with fellow students through the Blackboard communication system and regular email programs.
Information	Apply knowledge gained from lecture, laboratory and the textbook to trouble shoot and problem solve laboratory results obtained during the rotation. Utilize the Internet and other library resources to acquire information about specific topics as they relate to the field of Molecular Diagnostic testing.
Systems	Apply critical thinking skills to molecular diagnostic laboratory problems encountered, specifically, utilizing laboratory principles and theories and applying these to results obtained.
Technology	Achieve competency in routine molecular laboratory procedures utilizing a variety of reagents, supplies and techniques. Utilize provided procedures to obtain appropriate information for performing and trouble-shooting molecular laboratory procedures, and determining clinical significance and normal values. Use computers, the Internet, and the Blackboard system

	to access course materials and other relevant course information.
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### REQUIRED MATERIALS:

- Journal- either spiral bound or hardback
- Scrubs - appropriately fitting and professional in appearance.
- 3 inch binder with dividers for research report,
- Sharpie permanent marker, fine point, black or blue

### TEXTBOOK AND COURSE MATERIALS

*Molecular Diagnostics: Fundamentals, Methods and Clinical Applications*, Lela Buckingham and Maribeth Flaws, Copyright 2007, ISBN-13: 978-0-8036-1659-2, ISBN-10: 0-8036-1659-7

### METHODS OF PRESENTATION

Students will be assigned to a clinical facility where, under the direct supervision of a clinical preceptor, they will perform molecular diagnostic testing. Students will acquire entry level knowledge and skills by:

- Review appropriate sections of previous coursework.
- Reviewing Standard Operating Procedure manuals related to procedures to be performed.
- Observing clinical staff performing procedures.
- Perform procedures under direct observation.

### COURSE REQUIREMENTS AND REGULATIONS

#### Clinical Rotation Schedule Information

Tentative Clinical Rotation Schedules will be distributed to the students. It is the student's responsibility to be prepared for the scheduled days activities by bringing the correct course materials.

Many factors are considered when developing a rotation schedule for a student. They include, but are not limited to:

- the student's strengths and weaknesses;
- the student's transportation and/or child care arrangements;
- the site's availability, strengths and limitations; and
- when appropriate, providing the opportunity for the student to experience laboratory operations on evening and night shifts.

Due to the difficulty of creating a balanced clinical experience for each individual student, **requests for changes to the clinical schedule are strongly discouraged.**

Due to circumstances beyond our control, it may be necessary for Program faculty to change a student's rotation schedule. We will provide you as much advance notification as possible if it is necessary to change your clinical schedule.

#### ATTENDANCE POLICY

Regular and punctual attendance on all clinical days **is required**. The attendance policy for clinical is much stricter than for regular college classes. Clinical sites are intolerant of tardies and absences. It is the student's responsibility to have a clinical faculty sign the attendance log sheet *each clinical day immediately upon arrival and departure*.

#### ABSENCES/TARDIES

Absences from or tardiness to clinical for reason other than health or emergencies **will not be tolerated and the student will be subject to actions of the Progressive Discipline Policy which may result in withdrawal from the Program**. All absences, regardless of excuse, must be made up by the student; **the student must coordinate the make-up time with the ACC faculty and the clinical site. Failure to coordinate the make-up time with ACC faculty and the clinical site will result in a drop of 10 points**

**(one letter grade) to the rotation grade.** Make-up exercises or alternative learning experiences will be planned according to the limits set by the instructor.

This syllabus serves as the *verbal warning* for any absence or tardy. A second absence and/or tardy will result in a formal conference. A third absence and/or tardy will result in probation. Illnesses of several days of duration or emergency situations resulting in several consecutive days of absence will be considered one absence event.

The student must notify the clinical faculty **and** the MLT faculty any absence or tardy. Unless there are extenuating circumstances, such as involvement in a car accident, the clinical site **must** be notified as quickly as possible of a tardy and of any absence **within the first hour** that the student is scheduled.

Students who arrive in the clinical area unprepared for the clinical assignment may be sent from the laboratory and required to make up the clinical day.

#### **PENALTIES FOR NO CALL/NO SHOW**

**Failure to notify clinical faculty and MLT faculty of an absence one hour prior to the scheduled arrival time (no call/no show) will result in immediate probation and a 10 point deduction from the rotation grade for EACH INFRACTION.** A second “no call no show” will result in an **additional** 20 point reduction from the rotation grade and withdrawal from the course. If the deadline for withdrawal has passed the student will receive a grade of “D”.

#### **VISITS TO CLINICAL SITE OUTSIDE OF SCHEDULED TIME**

Students are **not allowed** to visit a clinical facility at times outside scheduled clinical representing themselves as an Austin Community College Health Science student.

#### **INCLEMENT WEATHER**

Classes may be canceled due to inclement weather. If classes are not in session, notification is made ACC may cancel classes due to inclement weather. If classes are in session, the campus manager or a designee will notify instructors and students of canceled classes. If classes are not in session, ACC will notify the public through local radio and television stations as well as ACC’s Channel 19. Students, instructors, and staff should consult local media regarding resumption of classes. To comply with the Texas Education Code, make-up classes may be scheduled.

If you are in an off-site clinical assignment when the official notice is released, you must leave the clinical area and *use your best judgment* as to whether it is safer to remain at the site in the cafeteria or public waiting area until conditions are safe or to leave immediately. All clinical time missed must be made-up, regardless of reason.

#### **SMOKING**

Students are expected to abide by the clinical facility’s smoking policy during clinical rotations. Both Seton Family of Hospitals and St. David’s Healthcare Partnership are non-smoking facilities. Smoking is prohibited on the property. Students who are reported to be in violation of a clinical facility’s smoking policy will be placed on immediate probation

#### **SERVICE WORK POLICY**

Molecular Diagnostics students are not expected to perform service work and are not allowed to be scheduled in place of qualified staff during any clinical rotation. At some clinical sites, students are allowed to perform some patient work, but only after demonstrating competence and under supervision of the Program or clinical site faculty. **NOTE:** Some employers are encouraging employees practicing in the molecular diagnostic lab to take the Molecular Diagnostic Certificate program to gain knowledge about the principles and theories of the work they are performing. The Department Chair will work with these students on a case-by-case basis to ensure the actual clinical component has been met.

## SETON IDENTIFICATION BADGE

Students are required to obtain a Seton identification badge. The instructions and a form will be given to the student to obtain the badge. The cost is a \$10.00 refundable deposit. The badge must be worn at all times a student is in a Seton facility. At the conclusion of the program the badge should be returned for a refund of the \$10.00 deposit.

## DRESS CODE

1. **Clothing:** Scrubs must be worn during all clinical activities. Avoid wearing scrubs which are overly revealing, which may represent a safety hazard or which may be offensive to patients or laboratory personnel.
2. **Hair:** Hair must be clean, neat and of a normal hair color. If the hair's length is at or below the shoulder, or if it has tendency to hang in the face, it must be drawn back; such as in a clip or band.
3. **Head coverings:** Nothing shall be worn on the head (baseball caps, scarves, hats, etc.) unless it is of a required religious nature. If the head covering falls below the shoulders it must be tucked securely inside the lab coat to prevent contamination by blood and/or body fluids.
4. **Beards:** Male students must either shave regularly or if they choose to wear a mustache and/or beard, must keep them clean and well groomed.
5. **Hygiene:** Before attending clinical rotation, students must bathe regularly (i.e. daily) to avoid offensive odor. Students shall not use perfume, cologne or aftershave lotion. Conservatively applied makeup is permitted.
6. **Body Piercing/Tattoos:** No visible body piercings are allowed. Tattoos will be covered at all times in the clinical setting.
7. **Fingernails:** Fingernails must be kept clean and at a reasonable length. Reasonable length is defined as 1/8" above the fingertips. Artificial nails and nail jewelry are not to be worn. Clear or light pink nail polish may be worn. Chipped nail polish is not permitted.
8. **Jewelry:** Jewelry should be limited to wedding rings and a wrist watch. A conservative necklace that is kept close to the skin (not dangling) and conservative earlobe earrings (no more than one pair) that do not extend more than 1/2 inch below the earlobe are acceptable.
9. **Identification:** During clinical assignments students must wear their ACC photo ID badge identifying them as Austin Community College student. The badge must be visible at all times. Wearing the badge clipped to a lanyard is acceptable as long as it does not create a safety hazard or dangle into the workspace.
10. **Lab Coat:** The lab coat must be worn, buttoned from top to bottom, at all times when working with biological samples.

*Students not conforming to the dress code may be sent home from class or clinical at the instructor's discretion. Any and all class or clinical time missed will need to be made-up, regardless of reason.*

## BEHAVIORAL CONDUCT

While a student is representing Austin Community College as a student, they will be expected to conduct themselves in such a manner as to reflect favorably on themselves and on the Program. If a student acts in such a manner as to reflect immature judgment or disrespect for others, the student will be called before the MLT Department Chair for determination of their status in the Program. Inappropriate conduct is grounds for activation of the Progressive Discipline Policy (Warning, Conference, Probation, Withdrawal) and may be cause for immediate probation or dismissal from the Program.

Students must remember at all times that the information in a clinical laboratory is **confidential**. This means that all lab results are to be directed **only** to appropriate healthcare personnel for diagnosis and treatment. Students shall not discuss with patients, parents, friends, relatives or non-laboratory hospital employees the results of tests or the nature of any illness. This information is given to the patient only by the physician. **A breach of patient confidentiality opens the individual, the clinical institution, and the College to possible legal repercussions according to HIPAA legislation. Failure to comply with patient confidentiality is cause for immediate dismissal from the program.**

## **STATEMENT ON SCHOLASTIC DISHONESTY**

A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an "F" in the course and/or expulsion from the college. See the Student Standards of Conduct and Disciplinary Process and other policies at <http://www.austincc.edu/current/needtoknow>

Falsification of clinical records such as, but not limited to, the following may result in IMMEDIATE dismissal from the MLT program and withdrawal from all MLT courses. If the withdrawal date has passed the student will be given a "D" for each course.

1. Falsifying the time in or out on the clinical attendance form.
2. Forging the initials of clinical staff on the clinical attendance form.
3. Forging the initials of clinical staff on Clinical Competencies
4. Falsifying attendance records by writing in attendance for a day they were not in clinical.
5. Recording testing not performed in their journal and/or BlackBoard Posting

## **SUBSTANCE ABUSE POLICY**

The well-being of patients and clients cared for by our students is of primary concern in all Health Sciences programs and a carefully designed and administered drug and alcohol misuse procedure can reduce accidents. Therefore, the Health Sciences Department has adopted a substance abuse testing program wherein a student who is participating in clinical classes will be tested for drugs when there is reasonable suspicion that the student is under the influence of alcohol and/or illegal drugs, i.e., drugs which are controlled substances under federal law which are not being used under the supervision of a licensed health care professional, or otherwise in accordance with the law.

Students will be asked to submit to drug screening by their ACC clinical instructor at the expense of the college in the following circumstances:

1. Observable indication of actual use or impairment such as slurred speech, lack of coordination, incoherency, marijuana or alcohol odors
2. Possession of drugs, apparent paraphernalia or alcoholic beverages
3. Detailed, factual and persistent reports of misuse by multiple colleagues
4. Abnormal or erratic behaviors such as sudden outbursts, mood swings, hostility or unusual anxiety that suggests possible drug use or alcohol misuse
5. Involvement in suspicious accidents
6. Apparent lapses in judgment or memory
7. Unusual lethargy

**Note:** Some clinical affiliates may require a preliminary drug screening prior to actual clinical practice in their facility. Students who do not pass a drug screen may be unable to continue in the program as alternative clinical arrangements may not be available.

## **STATEMENT ON STUDENTS WITH DISABILITIES**

Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request them through the Office for Students with Disabilities (OSD). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise the provision of accommodations may be delayed.

Students who have received approval for accommodations from OSD for this course must provide the instructor with the 'Notice of Approved Accommodations' from OSD before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the

'Notice of Approved Accommodations' from the student. Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations.

Additional information about the Office for Students with Disabilities is available at <http://www.austincc.edu/support/osd/>

### **USE OF ACC E-MAIL**

All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Instructions for activating an ACCmail account can be found at <http://www.austincc.edu/accmail/index.php>.

### **FREEDOM OF EXPRESSION/STUDENT RIGHTS AND RESPONSIBILITIES**

Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry with them the responsibility to accord the same rights to others in the college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

### **AUSTIN COMMUNITY COLLEGE SAFETY**

Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at <http://www.austincc.edu/ehs>.

Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom when on campus and at the clinical site when you are at clinical. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at <http://www.austincc.edu/emergency/>.

You are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be immediately dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

### **STUDENT EVALUATION**

#### **Measurement, Skills and Cognitive**

For all off site rotations the student will be required to demonstrate proficiency in each of the established clinical competencies. Clinical competency forms must be filled out by the clinical faculty to document progression and achievement of competency in all required skills. ACC faculty will review the competency forms at each visit and determine an action plan if progression to competency is not occurring. Failure to achieve competency by the end of the rotation will result in withdrawal of the student from the course. If the withdrawal deadline has passed the student will be give a grade of "D" for the course

Reading and review assignments will be made during the rotations and final written exams will be given at the end of each section. Homework assignments and quizzes may be given throughout the rotation.

## Measurement, Affective

The student will be evaluated by the clinical faculty with the official Student Evaluation form at the end of the rotation. The evaluation may also be completed any other time during any rotation (a formative evaluation) if the clinical faculty determines the need to provide the student written explanation of their performance. The final (summative) evaluation is used in the grading process, unless otherwise told.

The Student Clinical Evaluation form completed at the end of each off site clinical rotation is worth 45% of the rotation's grade. Failure to obtain at least 75% in 12 of the 15 skill areas constitutes an *unsuccessful clinical rotation*. The student will be withdrawn from the course. If the withdrawal date has passed the student will receive a grade of "D".

## Competencies

Competencies are "pass/fail" and **must be completed successfully to pass the course regardless of whether the other components of the grade are passing**. College faculty will apprise students of weaknesses in performance on a weekly basis. If a student is not meeting competency an action plan will be developed to allow the student to strengthen their skills. Failure to successfully complete the clinical competencies after completing the action plan will result in the student being withdrawn from the course. If the withdrawal deadline has passed the student will receive a grade of "D" for the course.

Students are expected to have these immediately available at ALL times during the rotation so that the skills can be checked off as they proceed through the rotation. Be certain to discuss these with the clinical staff at the beginning and throughout the rotation. Some clinical staff will prefer to check the skills off as the student proceeds through the rotation, others may want to complete the forms at end of the rotation. Certain skills require a certain number of procedures to be performed.

It is the *student's responsibility* to monitor and document these procedures. Students are strongly encouraged to review the competencies prior to the rotation and review them daily after that to ensure being able to meet the objectives in a timely fashion.

Competencies not meeting the stated requirement are reviewed by ACC faculty for further action and may require an action plan for successful completion by the end of the stated rotation.

## Unsuccessful Clinical Rotation

To summarize briefly, any of the following may cause a student to be unsuccessful in a rotation resulting in withdrawal or, if the deadline has passed, a "D" for the course:

1. Failing to achieve the minimum competency level.
2. Failure to obtain at least 75% in 12 of the 15 skill areas on the affective evaluation.
3. Second failure to notify clinical and program instructors of tardies and/or absences from clinical

## Instrumentation Report

You will be required to fill in a chart for **EACH INSTRUMENT USED** for molecular testing. Some sites have separate extraction, amplification and detection instruments while other sites may have a closed, high throughput system which performs extraction, amplification and detection within the system. You may also be performing one analysis using a high throughput instrument and a different analysis using two or more instruments.

## BlackBoard

Students will be required to post an overview of their clinical experience to BlackBoard each week. These posts are graded by specific criteria and are worth 10% of the rotation grade. The primary value of this posting is to share with your fellow students the variety of work performed, interesting (de-identified) results obtained and the relationship of the results to a patient's condition, and any other uniquely interesting situations. These postings allow students to illustrate problem solving skills in unusual situations and should be of such a nature as to add value to the course and be objective in nature. The post must be a minimum of **150 words** and include interesting results with clinical significance, number and types of procedures performed and names of the instruments you used. Your post should "tie it all

together" relating results/principles/theories with critical thinking skills, i.e., application of knowledge. The quality of your post is just as important as the post itself. An example post and grading is found in BlackBoard. **You MUST reply to one or more of your fellow students.** Check the Discussion Board frequently and respond to any classmate or instructor who has asked a question about your posting.

The Discussion Board will be monitored for inappropriate postings such as posting of patient information as to be in non-compliance with HIPAA, subjective postings of a negative nature that may be viewed as unfavorable bias or judgments about specific staff members. Failure to complete this exercise in a timely fashion or repeated inappropriate postings will constitute an unsuccessful rotation and the Progressive Discipline Policy will be implemented.

### Research Paper and Presentation

Each student must prepare a research paper, PowerPoint presentation and 5 question quiz.

1. Select a molecular diagnostic procedure performed at the clinical site and obtain the package insert. **MAKE A COPY TO SUBMIT WITH YOUR REPORT.**
2. Research the literature for additional information about the test. A minimum of **five different full text professional references** must be used. You are **strongly** encouraged to meet with a librarian as the college subscribes to many databases with access to full text articles. **SUBMIT A COPY OF EACH FULL TEXT ARTICLE WITH YOUR REPORT.**
3. Submit a 5 page report (minimum) using 1 inch margins and spacing. The cover page and reference page **DO NOT** count as pages for the report. Detailed instructions of specific content guidelines will be provided by the instructor.
4. Submit your report and references in a one inch **three-ring notebook** with the sections divided using tabbed dividers and labeled as follows:
  - a. Cover page
  - b. Report - 5 pages in length - cover page and list of references **DO NO COUNT.**
  - c. Package Insert
  - d. Five references (or more) - full text articles **MUST** be printed out. Highlight or underline pertinent information in the article used in your report.
5. The presentations will be given during a time to be scheduled utilizing a PowerPoint presentation format. During the presentation of the case study information, each student will have a 10-20 minute time period to present their findings. Each member of the class will evaluate the presentation using a clearly defined evaluation form.
6. Test your classmates' comprehension of the material by giving a five question quiz.

### Reflection

Think about the first day you started this program and the last day of your clinical. Write a one page paper (or more) reflecting on your level of knowledge coming and your level of knowledge upon completion of this program. Some examples of what I would like to see are:

- ❖ Overview of your thoughts and feelings as you progressed through the program.
- ❖ What did you find most challenging?
- ❖ What did you like best? What did you like least?
- ❖ What would be your advice for a student entering this program of study?

### SUMMARY OF GRADING FOR THE CLINICAL ROTATION

1. Affective Evaluation 30%
2. Instrumentation Reports 10%
3. BlackBoard 10%
4. Research Paper 30%
5. Presentation 10%
6. Reflection 10%
7. **Clinical Competencies are PASS/FAIL**

## Grading

The following scale is used to determine the letter grade. **Important:** Failure to achieve competency in the clinical objectives will result in a failing grade regardless of the score earned.

A	=	90 -100%
B	=	80 - 89%
C	=	70 - 79%
D	=	60 - 69%
F	=	59% or below

I = Incomplete – To receive an “I” the student must have demonstrated competency in at least 80% of the skills in the area(s) to which assigned. The “I” must be completed within the next semester, unless specifically approved by MLT Program officials.

W = Withdrawal – Please meet with the MLT Department Chair before making any decision on withdrawal.

## WITHDRAWAL POLICY

It is the responsibility of each student to ensure that his or her name is removed from the roll should he or she decides to withdraw from the class. The instructor does, however, reserve the right to drop a student should he or she feel it is necessary. If a student decides to withdraw, he or she should also verify that the withdrawal is submitted before the Final Withdrawal Date. The student is also strongly encouraged to retain their copy of the withdrawal form for their records.

Students who enroll for the third or subsequent time in a course taken since Fall, 2002, may be charged a higher tuition rate, for that course.

State law permits students to withdraw from no more than six courses during their entire undergraduate career at Texas public colleges or universities. With certain exceptions, all course withdrawals automatically count towards this limit. Details regarding this policy can be found in the ACC college catalog.

## Student Clinical Obligations

By Monday of the week following the last day of the rotation, it is **mandatory** that the following completed forms be turned in to the course instructor:

1. Clinical Rotation Competencies
2. Clinical Rotation Attendance Record
3. Clinical Rotation Student Evaluation Form
4. Clinical Site Evaluation Form
5. Instrumentation reports - download and complete the form for each MAJOR piece of equipment used.
6. Reflection

Clinical paperwork may be submitted as follows:

1. Mail to instructor.
2. Scan and email to instructor.
3. Fax to instructor at 512-223-5897
4. Make an appointment to hand deliver.

If a student encounters any problem preventing them from complying with this policy, they must notify the course faculty. Failure to submit paperwork by the stated deadline will result in a penalty of 1 point per day being deducted from the clinical rotation grade.

After all clinical paperwork has been submitted, and if the student has not reviewed their Clinical Rotation Student Evaluation Form, the student will make an appointment with the appropriate ACC faculty member and will be given an opportunity to review and sign the Clinical Student Evaluation form filled out by the clinical faculty. The student may make written comments on the evaluation if desired. The final grade for the rotation will be posted in the grade book of Blackboard.

### **PROMOTION, FAILURE AND/OR DISMISSAL FROM THE PROGRAM**

1. Any student may ultimately be withdrawn from the program for excessive absences (see Attendance Policy), consistently failing to meet assignments, or disruptive conduct.
2. Verbal or non-verbal language, actions, or voice inflections, or insubordination which compromise rapport or working relations with peers, faculty, patients and their family or healthcare team members.
3. Unsafe clinical practice shall be deemed to be behavior demonstrated by the student which threatens or violates the physical, biological, or emotional safety of the patients, care givers, students, faculty, staff or self.
4. Any behavior that may compromise contractual agreements and/or working relations with clinical affiliates, or constitute violations of legal or ethical standards.
5. Using or being under the influence of any drug (over the counter, prescription, and /or illegal) or alcohol that may alter judgment and /or interfere with safe performance.
6. The student may utilize the "Student Grievance/Complaint Procedures of Austin Community College" in the disposition of a grievance or complaint without fear of recrimination or retaliation. Additional information concerning student complaint procedures can be found at: <http://www.austincc.edu/current/needtoknow/policies.php>

### **SAFETY AND HEALTH INFORMATION**

#### **Health Insurance**

The College does not provide personal health insurance coverage for students. All Health Sciences students are encouraged to carry some type of personal health insurance. Information about health insurance is available at: <http://www.austincc.edu/ehs/insurance>

#### **Medical Professional Liability Insurance**

Medical professional liability insurance is required for each Health Science student enrolled in a clinical course with patient contact. This insurance is purchased automatically through Austin Community College registration fees collected each semester.

#### **Accident Insurance**

The student accident policy provides insurance coverage only while participating in specified laboratory/clinical classes. It does not extend to accidents involving automobiles and incidents outside the laboratory/clinical/classroom.

#### **Accident Procedures**

1. Provide first aid for the student sufficient to get the situation under control.
2. If the accident occurs on campus, campus police are notified.
3. The ACC faculty member responsible for the course in which the student is injured **must be notified immediately of the incident**. The faculty member or designee will immediately go to the clinical site or meet the student at the emergency room or physician office.
4. If it appears that a physician should see the student, they may choose to see their own physician, go to a minor emergency center, or be transported to a hospital. The student can pay the bill at the time of treatment or assign benefits and request reimbursement from ACC's insurance company.
5. The injured student will use the designated claim form. All components of the claim form must be completed. The completed form must contain the signatures of (1) the faculty/supervisor, and (2) the student/claimant and submission of an **itemized medical bill** before reimbursement will be made.
6. Students will be provided with a copy of the accident form prior to attending clinical.

### **Blood and Body Substance Exposure**

Students who experience an exposure to any potentially infectious materials (needle stick, mucous membrane, or non-intact skin) or airborne inhalation require specific follow-up. It is the responsibility of the individual to report the incident to the faculty and seek medical evaluation/care as soon as possible (preferable within one hour). Faculty will ensure that copies of the appropriate insurance forms will be made available to the students prior to their first clinical experience.

### **AUSTIN COMMUNITY COLLEGE SAFETY STATEMENT**

Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at <http://www.austincc.edu/ehs>. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at <http://www.austincc.edu/emergency/>.

Please note, you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities. You are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be immediately dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

### **ENVIRONMENT OF CARE**

Austin Community College Health Science Students and faculty will follow procedures outlined in the Seton Safe Environment of Care (EOC) and the St. David's Mandatory Education Module. These were designed by Seton and St. David's and adapted for use at ACC in order to educate students and faculty in procedures mandated by these health care facilities. Students are required to complete these modules (and documentation placed in the student's file) prior to receiving clinical assignments. These exams are available at <http://www.austincc.edu/health/dmt.php> Students are to print out proof of completion.

### **Health Insurance Portability Accountability Act (HIPAA)**

[http://www.austincc.edu/hipaa/training/hipaa\\_home.php](http://www.austincc.edu/hipaa/training/hipaa_home.php)

HIPAA requires that all protected health information be kept private and secure by all persons that handle, or have access to that information. Since health sciences students, faculty, instructors, and staff use protected health information as part of the educational process (i.e. access to client health data to provide care and use of de-identified health data for educational assignments such as case students and care plans), all health science students must complete an online **HIPAA Training Module** on an annual basis to remain in compliance with HIPAA regulations. Documentation must be placed in the student's file before they are allowed to enter the clinical settings. Any violations of HIPAA regulations will result in disciplinary actions up to and including withdrawal from the program.

**Statement of Understanding**  
**MLAB 2263 Molecular Diagnostics Clinical**

I have read the course syllabus and understand and agree to abide by the policies, procedures and requirements within. My initials next to each of the following statements indicate my complete understanding of the course requirements.

**Initials:**

- \_\_\_\_\_ Service Work Policy
- \_\_\_\_\_ Attendance Policy
- \_\_\_\_\_ Clinical Schedule Information
- \_\_\_\_\_ Dress Code
- \_\_\_\_\_ Behavioral Conduct
- \_\_\_\_\_ Substance Abuse Prevention Policy
- \_\_\_\_\_ Student Evaluation,
- \_\_\_\_\_ Research Paper requirement, including presentation and quiz
- \_\_\_\_\_ Determination of Final Grade
- \_\_\_\_\_ Clinical Competencies
- \_\_\_\_\_ Instrumentation Report
- \_\_\_\_\_ BlackBoard Discussion Board posting
- \_\_\_\_\_ Reflection paper
- \_\_\_\_\_ Clinical Site Evaluation
- \_\_\_\_\_ Result Sheet
- \_\_\_\_\_ Clinical Attendance Form
- \_\_\_\_\_ Student Obligations in submission of clinical paperwork
- \_\_\_\_\_ Health, Liability, and Accident Insurance Policies
- \_\_\_\_\_ Accident and Blood and Body Fluids Exposure Procedures
- \_\_\_\_\_ Health Insurance Portability Accountability Act (HIPAA)

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name**