

**AUSTIN COMMUNITY COLLEGE
MEDICAL LABORATORY TECHNOLOGY
MLAB 2401 Clinical Chemistry
Master Course Syllabus
Spring/2012**

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

Course Outline and Schedule: http://www.austincc.edu/mlt/chem/chem_schedule.html

Course Number and Name	Campus	Section	Synonym
MLAB 2401 Clinical Chemistry	EVC	001	46975
MLAB 2401 Clinical Chemistry	RRC	002	46976
MLAB 2401 Clinical Chemistry	DL	003	47681

FACULTY INFORMATION	
Campus	Eastview/ Distance Learning
Instructor	Keri Brophy-Martinez
Office	EVC, room 9336
Office Hours	Mondays 2:00 pm- 5:00 pm, Wednesdays 2:00- 4:00 pm. Others by appointment
Phone	512-223-5877
Email	kbrophym@austincc.edu
Campus	Round Rock
Instructor	Joanna Ellis
Office	RRC, room 3117.14
Office Hours	Mondays 1:30 pm- 4:00 pm, Tuesdays 1:00 pm- 3:30 pm. Others by appointment
Phone	512-223-0250
Email	jellis@austincc.edu

COURSE INFORMATION		
Campus	Eastview	Round Rock
Lecture Room	9213	3121.01
Laboratory	9101	3121.00
Lecture Time	Mondays 8:30-9:30 am	Mondays 4:00- 5:00 pm
Laboratory Time	Mondays 9:45am- 1:45 pm	Mondays 5:15 pm- 9:15 pm
Length of Course	16 Weeks: Classroom hours (48) Laboratory (64)	
Dates	January 17, 2012- May 13, 2012	

Students will access and print out course materials from the course web. Assessment activities are provided as a means of assisting students in determining their level of competence in given areas as well as to assist in reviewing for examinations. Assignments will be posted to enhance the student's learning experience.

ACC EMAIL

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>

COURSE DESCRIPTION

An introduction to the principles and procedures of various tests performed in Clinical Chemistry. Presents the physiological basis, principle and procedure, and clinical significance of test results, including quality control and reference values. Includes basic chemical laboratory technique and safety,

electrolytes, acid-base balance, proteins, carbohydrates, lipids, enzymes, endocrine function, and toxicology.

PREREQUISITES

Students must be accepted into the MLT Program. Special status students must have basic knowledge of chemistry.

INTRODUCTION/RATIONALE

This course is designed to provide basic understanding of medical laboratory clinical chemistry for the sophomore level MLT. Students are reintroduced to safety and quality control procedures covered in previous MLAB and PLAB courses.

Instruction in chemical laboratory instrumentation and routine chemical analytical procedures is provided. Emphasis is placed on basic chemical calculations, reagent preparations/functions, and the analytical methodologies that monitor body acid/base balance: kidney, liver, and heart functions; as well as carbohydrate, heme protein and lipid metabolism. Brief sections on measurements of endocrine function, DNA analysis, TDM, toxicology, and tumor markers are also included.

COURSE GOALS

By the end of this course the student should be able to:

- Exhibit knowledge of body chemistry levels under healthy or abnormal conditions.
- Properly evaluate the suitability of clinical chemistry specimens.
- Properly prepare chemistry specimens for analysis.
- Accurately record and report results, indicating normal and abnormal values.
- Evaluate quality control results and note trends, shifts and invalid results.
- Discuss recent trends in clinical chemistry.
- Demonstrate speed and accuracy in the analysis of chemistry specimens for the following types of procedures utilizing only necessary supplies and within a predetermined/reasonable amount of time.
 - Weights and measures
 - Reagent preparation and use
 - Color spectrophotometric
 - Coulometric titration
 - Enzymatic
 - Electrophoretic
 - Other test procedures as available
- Explain the principles of the above procedures and describe the clinical importance of abnormalities.

COURSE OBJECTIVES

When you go to the course website each unit will have a set of objectives. Print these out and use them to study the course materials. Exam questions are created from the course objectives. Each laboratory exercise will have objectives. One helpful way to study is write the objective on an index card and write the information pertaining to that objective on the back.

The following affective objectives pertain to the classroom and clinical components:

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 coagulation by asking questions, participating in class discussions and meeting with professors 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 constructive criticism to correct deficiencies and improve performance.
6. Work cooperatively with professors and fellow students to achieve the goals of each activity assigned.
7. Participate in activities designed to advance the profession of CLS and build professional pride.
8. Participate in activities to encourage an ongoing involvement in professional development.

COURSE MATERIALS

Required

- Gloves
- Scrubs-appropriately fitting and professional in appearance
- Pocket calculator
- Padlock, either combination or keyed (**for Round Rock Campus only**)
- Sharpie permanent marking pen
- Timer
- Notebook
 - ✓ **All laboratory exercises and study questions must be organized, preferably in a 2 or 3-inch binder or notebook, for validation by the instructor.**
- Sunheimer, Robert L., and Graves, Linda, *Clinical Laboratory Chemistry*, Pearson, ISBN 978-0-13-172171-5 (Available in EVC/RRC Bookstores)
- Sunheimer student website: myhealthprofessionskit.com
- MLAB 2401 Course Outline/Objectives and Laboratory Procedures (Available on course webpage)
- MLAB 2401 Power Point Presentations (Available on course webpage)

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 Chemistry 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 instructor when problems arise. Maintain confidentiality of patient samples utilized. Demonstrate respect for fellow students during class and lab time. Utilize the

	Internet to interact with laboratory science 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 student laboratory. Utilize the Internet and other library resources to acquire information about specific topics as they relate to the field of Clinical Laboratory Science.
Systems	Apply critical thinking skills to clinical laboratory problems encountered, specifically, utilizing clinical laboratory principles and theories and applying these to results obtained.
Technology	Achieve competency in routine clinical laboratory procedures utilizing a variety of reagents, supplies and techniques. Utilize provided procedures to obtain appropriate information for performing and trouble- shooting clinical 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.

PROGRAM STUDENT LEARNING OUTCOMES

Upon completion of the **Associate of Applied Science degree in Medical Laboratory Technology**, the student will be able to:

1. Collect and process biological specimens for analysis.
2. Perform analytical tests on body fluids, cells, and products.
3. Recognize factors that affect procedures and results, and take appropriate actions within predetermined limits when corrections are indicated.
4. Monitor quality control within predetermined limits.
5. Perform preventive and corrective maintenance of equipment and instruments or refer to appropriate source for repairs.
6. Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and with the public.
7. Recognize the responsibilities of other laboratory and health care personnel and interact with them with respect for their jobs and patient care.
8. Apply basic scientific principles in learning new techniques and procedures.
9. Relate laboratory findings to common disease processes.

INSTRUCTIONAL METHODOLOGY

- Lecture and Power Point Presentations
- Blackboard On-line Course System (<http://acconline.austincc.edu/>)
- Laboratory Practice
- Audio-Visual Materials
- Internet Resources
- Case study/shared learning events
- Supplemental Training Software
<http://www.medtraining.org/corporate/default.aspx>

You are already entered as a user for this software. If you have forgotten your log-in and/or password information, contact your instructor.

BLACKBOARD ON-LINE SYSTEM

A considerable portion of this course will be conducted via the computer on-line Blackboard learning system. All students will be required to have an email address and to access course materials, learning activities, and exams on-line. Students may use their home computers OR may access all materials and take exams at any public computer, including those in Learning Labs and libraries at all ACC campuses.

How to Log Into Blackboard

1. To access Blackboard, go to <http://aconline.austincc.edu/>
2. Enter your ACCeID and ACCeID Password in the provided boxes, and then click on the "Login" button.
3. Access your course(s) by clicking the course title located in the My Courses module.
4. ACC Blackboard support website is <http://irt.austincc.edu/blackboard/>.

ATTENDANCE POLICY: LECTURE AND LAB

It is the student's decision to take this class. Therefore, once the student makes this decision, he/she has responsibilities to everyone else in the community of learners. Excellent attendance and punctuality are key behaviors which demonstrate responsibility and commitment to a successful learning experience. It is this commitment to learning that will enable the student to progress satisfactorily towards completion of course goals and objectives. Additionally, we want the student to set a pattern of professional behavior which mirrors the attendance expectations in the true clinical environment.

Regular and punctual attendance is required at all lecture and lab sessions. Class roll will be taken during each class period.

Tardiness to class is strongly discouraged. Important announcements are made at the beginning of class which may not be repeated.

Notification of your absence, by phone or email must be provided to your instructor in a timely manner, preferably 30 minutes prior to class but within 2 hours of the class start time. Attendance demonstrates professionalism and regular and punctual attendance is the expectation in the professional workplace setting. Due to the nature of our courses, each class serves as a building block of knowledge for the next class session. Each student is responsible for making up all assignments, materials, examinations etc. when absent from class. All missed lab exercises must be completed to verify completion of the course objectives. Make-up exercises or alternative learning experiences will be planned according to the limits set by the instructor. However, the amount of credit awarded for the exercise, will be no greater than 80%. Once a student has incurred 2 absences, for whatever reason, the progressive discipline policy will be initiated:

- 2 absences- verbal conference with instructor that will define what policy is not being met, as well as set up an action plan with a follow up conference date
- 4 absences- conference report with instructor stating what actions will be necessary to avoid probation
- 5 absences- probation
- Withdrawal- terms of probation were not met

Withdrawal is based on absences equal to or greater than 25% of the material.

The attendance policy is subject to review and modification by department officials.

COURSE REQUIREMENTS, EXAMINATION AND GRADING

Time Commitment

According to "*Hints on How to Succeed in College Classes*" <http://tinyurl.com/3dqegz> you should budget your time per week for this four hour credit course as follows:

- Reading assigned text 2 to3 hours
- Homework assignments 3 to 6 hours
- Time for review and test preparation 3 hours
- Total study time per week 9 to 13 hours **PER WEEK**

Admission Ticket

MLAB 2401 Clinical Chemistry is a “hybrid” course. A portion of the lecture component is taught on campus and the remaining portion is self-directed learning. To insure that students are committing the necessary time to prepare for the classroom lecture component an Admission Ticket must be completed prior to coming to class. The questions will address the objectives, reading material and power points.

The student will also be able to develop a list of questions to ask during the lecture presentation on topics they are having difficulty with.

The admission ticket must be submitted prior to the beginning of each class period in order to be allowed entry into the classroom. If the admission ticket is not completed the student will not be allowed into class until it is completed. The student will be required to go to some other location and complete the assignment.

DRESS CODE

1. **Clothing:** Students are to purchase one or more sets of scrubs to wear during attendance in class and laboratory courses. Scrubs must be worn during all classroom and laboratory 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 a 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. **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 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 ½ inch below the earlobe are acceptable.
9. **Lab Coat:** ON SITE – At the beginning of the semester students will be provided one disposable lab coat. The lab coat must be worn, buttoned from top to bottom, at all times when working with biological samples. With normal wear, the lab coat should last throughout one semester. If a spill occurs or there is other major damage to the coat, another coat will be provided. Students may purchase additional disposable lab coats from an outside vendor.

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

Behavioral Conduct

While a student is representing Austin Community College as a Medical Laboratory Technology 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.

STUDENT EVALUATION

Measurement, Written

Approximately eight (8) examinations will be given in Blackboard over lecture material covering lecture and the accompanying laboratory exercises, and will comprehensively assess the student's knowledge of concepts, principles, techniques and procedures as related to the instructional material. **These exams**

will be taken in Blackboard and will be timed. Exams will be closed book and timed. **You are not permitted to use information from the internet, notes, labs, or textbook.** You must complete the exam in one sitting. Each test will have a time limit. Blackboard will not close the exam automatically when the time limit has been reached; therefore, it is your responsibility to monitor the time. A timer should be displayed in the exam, but it is recommended that you start a separate timer or record the start time to effectively determine the time remaining. In the event that you do not submit the exam within the time limit, 1 point will be deducted from your raw score for every 5 minutes you went over. For example, if you made a 90 but took 1 1/2 hours for a 1 hour test, then you would receive a grade of 84. **There will be no routine retests given.** If a student misses one exam, the grade of the final exam will be averaged in the place of the missed exam grade. If any other exams are missed, grades of "0" will be given. In the event that a student scores less than 75% on a routine course exam, the student will be notified by the instructor and advised to make an appointment to discuss exam performance.

Measurement, Practical

Points are awarded for the successful completion of laboratory exercises, as detailed in the learning objectives for each laboratory.

All laboratory exercises **must** be read **before** attending the laboratory period. A pre-lab assignment may be given over the scheduled laboratory to ensure review of the laboratory material.

Student laboratory performance is evaluated using the following criteria:

1. Familiarity with the procedure.
2. Setting up and performing the procedure (organizational skills).
3. Appropriate specimens and reagents are obtained and utilized.
4. Proper use of equipment, reagents, supplies and specimens.
5. Proper labeling, handling and disposal of specimens, tubes, etc.
6. Organization and performance of individual tasks.
7. Completion of tests within a reasonable amount of time.
8. Clean up of work area.
9. Correct interpretation of results with recognition of discrepancies or abnormal results being brought to the instructor's attention.
10. Results are recorded and reported in proper format.
11. Results of laboratory pre-tests.
12. Proper response to study questions. **Laboratory study questions must be turned in on time.** Unless otherwise noted, lab study questions are due the week following the lab procedure. If you are absent for the lab you are still required to submit the completed study questions at the beginning of the next class period.

Determination of Final Grade

Lecture- 2/3 of final grade

Exams in Blackboard= 50%
Assignments, Quizzes, Admission Tickets =10%
Course project = 5%
Final in class= 35%

Laboratory – 1/3 of final grade

Laboratory Exercises = 35%
Study Questions = 50%
Pre-Lab Assignments=15%

Submission of Work and Late/Missed Work

- Assignments and laboratory exercises must be date-stamped and submitted in designated drop boxes on each campus. All incoming paperwork must be submitted to the drop box, unless otherwise directed by the instructor.
- Assignments/labs turned in within the first week from the laboratory session will only receive up to 80% of the credit for that assignment.
- Any assignment/lab turned in **after** the first week from the laboratory session will only receive 50% of the credit for that assignment
- Any assignment/lab turned in after two weeks will be given a grade a "0."
- **Laboratory classes will NOT be repeated.** The student will receive a grade of "0" for missed labs. However, the study questions can be turned in for half credit, not to include points missed on the activity.

Grading System

A passing grade (75% or better) is **required** in both the lecture and laboratory components in order to receive a passing grade for this course.

A = 90-100%

B = 80-89%

C = 75-79%

D = 60-74%

F = 59% and below

Incomplete: To receive an "I", a student must have a **passing average** (75% or better) and have completed at least 80% of the course work. An instructor may award a grade of "I" (Incomplete) if a student was unable to complete all of the objectives for the passing grade in a course. An incomplete grade cannot be carried beyond the established date in the following semester. The completion date is determined by the instructor but may not be later than the final deadline for withdrawal in the subsequent semester.

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.

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>

Academic dishonesty 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. Submitting homework assignments copied from others. Both the student and the student that the materials were borrowed from will receive a "0" for the assignment and may be subject to the Academic Dishonesty Process and dismissal from the program.
2. Falsifying laboratory results.
3. Printing out examinations.

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.

Each student is strongly encouraged to participate in class. In any classroom situation that includes discussion and critical thinking, there are bound to be many differing viewpoints. These differences enhance the learning experience and create an atmosphere where students and instructors alike will be encouraged to think and learn. On sensitive and volatile topics, students may sometimes disagree not only with each other but also with the instructor. It is expected that faculty and students will respect the views of others when expressed in classroom discussions.

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 ASSISTANCE POLICY

It is the sincere desire of the program faculty to aid each student in developing his/her professional potential. Academic, clinical, and those personal problems that interfere with the student's development are of concern to the faculty. The program faculty has adopted the following policy:

➤ Personal Problems

The MLT student should feel free to make an appointment to discuss problems of a personal nature with a faculty member of his/her choice. In addition, the Health Science counselors are available for the student for additional counseling, if necessary.

➤ Academic Problems

Problems encountered in the MLT lecture and/or laboratory sections should be brought to the attention of the course instructor. The instructor will work with the student to resolve the problem. If the student feels he/she cannot reach an agreement with the instructor, the student with the instructor should present the situation to the Program Director. All discussions with the faculty will remain confidential.\

PROMOTION, FAILURE, AND/OR DISMISSAL FROM THE DEPARTMENT

1. A minimum grade of "C" (75%) is required in **both the lecture and laboratory components** of all medical laboratory technology courses. Failure to meet the minimum passing score in each area will result in a grade of "D" for the course.
2. A student who withdraws from this course will be withdrawn from all co-requisite MLT courses.
3. Failing this course will result in the student being withdrawn from the MLT program and all co-requisite MLT courses. The student will have an Exit Interview and be offered one additional admission. All MLT course work must be repeated.
4. A student who withdraws from the program or fails to achieve the minimum course grade for the progression may be re-admitted one time only to the MLT program upon the recommendation of the MLT Program Admissions Committee and according to the criteria outlined in the *MLT Student Handbook*.
5. Any student may be dropped from the program due to excessive absences and/or consistently failing to meet class assignments, for disruptive conduct during lecture or lab or for displaying conduct detrimental to the ethics of medical laboratory technology.
6. A minimum grade of "C" (75%) is required in all Medical Laboratory Technology courses. Failure to meet the minimum passing score will result in termination from the program. Students must submit a written letter requesting readmission to the program. Re-admitted students are conditionally accepted and may be required to audit or repeat previous course work as determined by the Admissions Committee. Please refer to the *MLT Student Handbook* for specific policies.
7. The student may utilize the "Student Grievance Procedure of Austin Community College" in the disposition of a grievance or complaint without fear of recrimination or retaliation as outlined at <http://www.austincc.edu/current/needtoknow/policies.php#complaints>
8. The MLAB faculty understands that learning in group situations can be beneficial. However, each student is expected to demonstrate their own competency by doing their own work. **Any student caught plagiarizing (assigned abstract and laboratory study questions), cheating on examinations, during laboratory practicals, or sharing laboratory results will be subject to disciplinary action outlined.** See the Student Standards of Conduct and Disciplinary Process and other policies at <http://www.austincc.edu/current/needtoknow> **This includes, but is not limited to, academic penalty and possible withdrawal from the program.**

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/>

SPECIAL LABORATORY REQUIREMENTS

1. Students at the Round Rock Campus will be required to secure their belongings in lockers located outside of the student laboratory. Padlocks are to be furnished by the student(s). Students should not share the combination of his or her lock with other students. The student(s) is expected to remove the lock and the contents within the locker at the conclusion of the laboratory period.
2. It is the responsibility of the student to come prepared for each laboratory session by reading the procedure **prior** to the laboratory session. A pre-test may be given at the beginning of each lab exercise to ensure readiness to perform the procedure.
3. Each student is responsible for their own work. If you are having difficulty with a particular procedure **do not bother students around you**. Any questions you have about the procedure, reagents or supplies should be directed to the instructor.
4. **Talking is strongly discouraged during laboratory exercises.**
5. Most exercises will take 2 or 3 laboratory periods to complete (i.e., gathering data from previous inoculation). It will be necessary, therefore, to bring each laboratory exercise to every laboratory period
6. Each student is responsible for cleaning up their work area. This will be closely monitored by the instructor.
7. The use of electronic devices during lecture and laboratory is prohibited. This includes the use of cell phones and MP3 players.

LABORATORY SAFETY REGULATIONS

Standard Precautions

Since medical history and examination cannot reliably identify the infectivity of all patients' blood and body fluids, universal precautions should be followed for all patients. The concept of universal precautions was first introduced in 1987 by the Centers for Disease Control (CDC) to decrease the occupational risks of blood-borne diseases such as AIDS and hepatitis B to healthcare workers. The application of universal precautions is continually evolving; all body fluids may soon be handled with the same precautions as blood. This further application is already occurring in some labs, and is known as Body Substance Isolation. Precautions specific for clinical laboratories:

Use barrier protection routinely to prevent skin and mucous membrane contamination with blood or other body fluids.

1. Wear gloves:
 - a) When cuts, scratches, or other breaks in skin are present.
 - b) When performing phlebotomy.
 - c) When collecting capillary blood specimens.
 - d) Anytime it appears that contamination of the hands may occur.
 - e) Change gloves after each patient contact or when visibly contaminated with blood.
2. Wear a mask, eye glasses or goggles, or face shield during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of the mucous membranes of the mouth, nose, and eyes.
3. Wear a fluid-resistant gown, apron, or other covering when there is a potential for splashing or

- spraying of blood or body fluids onto the body.
4. Wash hands or other skin surfaces thoroughly and immediately if contaminated with blood or other body fluids.
 5. Wash hands immediately after gloves have been removed even when no external contamination has occurred. Organisms on the hands multiply rapidly in the warm moist environment within the glove.
 6. Handle laboratory instruments, especially needles and scalpel blades, with extreme caution.
 7. Place used needles, disposable syringes, and other sharp items into a puncture-resistant biohazard container for disposal. The container should be located as close as possible to the work area.
 8. Needles should not be recapped, purposely bent, cut, broken, removed from disposable syringes, or otherwise manipulated by hand. If recapping is unavoidable (blood gas syringes, etc.), do it with one hand and use great caution.
 9. Use mouth pieces, resuscitation bags, or other ventilation devices during emergency resuscitation procedures.
 10. Exudative lesions or weeping dermatitis should be covered with an occlusive dressing to prevent contamination.
 11. All specimens of blood and body fluids should be put in well-constructed containers with secure lids to prevent leaking during transport. Care should be taken when collecting each specimen to avoid contaminating the outside of the container and the laboratory form accompanying the specimen.
 12. Use mechanical pipettes for manipulating *all* liquids (including body fluids, chemicals, or reagents) in the laboratory.
 13. Decontaminate all laboratory work areas with an appropriate chemical germicide after a spill of blood or other body fluids and when work activities are completed. Laboratory countertops should be disinfected at least once per shift.
 14. Clean and decontaminate scientific equipment that has been contaminated with blood or other body fluids before being repaired in the laboratory or transported to the manufacturer. Always follow manufacturer's recommendations.
 15. Pregnant laboratory workers are not thought to be at greater risk of infection than others in the laboratory. However, if an infection does develop during pregnancy or the mother is a carrier prior to the pregnancy, the infant is at risk of infection by perinatal transmission. Therefore, pregnant laboratory workers should be especially aware of universal precautions.

WEATHER DELAYS AND CANCELLATIONS

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.***

Clinical Chemistry (MLAB 2401)
Statement of Understanding

Please write your first name and last initials on EACH LINE which confirms that you have read and understand the MLAB 2401 Course Syllabus including:

- _____ Course Goals
- _____ Course Requirements and Regulations
- _____ Time Commitment
- _____ Admission Ticket requirements
- _____ Pre-Lab requirements
- _____ Dress Code
- _____ Evaluation Criteria for Lecture and Lab
- _____ Late work policy
- _____ Attendance Requirements
- _____ Requirements for Promotion, Failure and Dismissal from the Program
- _____ Policies, procedures and requirements for clinical practice, with special emphasis to those referring to safety

I agree to abide by all of the policies, procedures and requirements stated within.

Signature

Date

Printed Name