

AUSTIN COMMUNITY COLLEGE
 MEDICAL LABORATORY TECHNOLOGY
 MLAB-1101 – Introduction to Clinical Laboratory Science
 Course Syllabus
 Spring 2015 – First and second 8 week sections

Course Web Site: www.austincc.edu/mlt/intro/intro

Course Outline and Schedule: http://www.austincc.edu/mlt/intro/intro_schedule.html

Course Number and Name	Campus	Section	Synonym
MLAB 1101 Introduction to Clinical Laboratory Science	DIL	001 & 002	22099 & 22267

FACULTY INFORMATION	
Campus	Distance Learning
Instructor	Cecile M. Sanders, M.Ed., CLS(ASCP) ^{cm}
Office Hours	By appointment
Text/Cell Phone	512-393-1307
Email	csanders@austincc.edu

COURSE INFORMATION	
Campus	Distance Learning
Length of Course	8 Weeks for each section
Dates	First 8 week section: January 20 – March 15 Second 8 week section: March 23 – May 17

Schedule: There are NO scheduled classes; all instruction will be on-line using Blackboard and other websites. The schedule for submitting assignments and taking exams is listed in the course Blackboard under “Course Materials / Schedule” button located on the left side of the screen.

Distance Learning Orientation: All students MUST complete the Distance Learning On-Line Orientation found in Blackboard under the On-Line Orientation button. Directions for completing the Orientation are provided in Blackboard.

Blackboard On-Line System: This course will be conducted via the computer on-line Blackboard learning system. All students will be **required** to use the email address issued by ACC and to access course materials, learning activities, and exams on-line. (Students may forward their ACC email to their personal email accounts, if desired. Directions on forwarding gmail accounts can be found at <http://mail.google.com/support/bin/answer.py?hl=en&answer=10957>.) 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. The schedule (including open lab hours) for ACC Computer labs can be found at <http://irt.austincc.edu/ict/computer/>.

ACC Student ID Card: All students MUST obtain an ACC Student ID card. This card is needed for use of the ACC libraries, ACC Testing Centers and other ACC support services. ID cards may be obtained, after registration, at an ACC Admissions and Records Office at ANY ACC campus. Bring a photo ID, such as driver’s license, government-issued ID, etc.

LAB 1101 – Introduction to Clinical Laboratory Science

Introduction

An Introduction to Clinical Laboratory Science, including quality control, laboratory math, laboratory safety, care and use of basic laboratory equipment, laboratory settings, accreditation and certification.

Upon successful completion of this course the student will: demonstrate laboratory safety; perform laboratory math; and describe quality control. The student will demonstrate the use of basic laboratory equipment; and explain accreditation and certification.

Prerequisites

None

Course Student Learning Outcomes

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

- A. List important milestones in the history of the clinical laboratory and describe the type of professionalism desired in clinical laboratory personnel.
- B. Describe behavior consistent with the ethical practice of clinical laboratory medicine.
- C. Apply principles of confidentiality for all patients and test results.
- D. State the special knowledge and talent of other members of the health care team needed for quality patient care.
- E. Explain the impact of federal and state regulatory agencies on the clinical laboratory.
- F. Detail the transmission of the AIDS (HIV) virus and state how the virus affects the immune system.
- G. Name other pathogens, in addition to the HIV virus, that could be transmitted by blood or body fluids.
- H. List and describe safety hazards in the laboratory and discuss the proper techniques to avoid accidents.
- I. Use basic metric systems for laboratory procedures and use formulas to calculate strengths of dilutions and solutions.
- J. Discuss processing clinical specimens according to established procedures.
- K. List and explain the basic laboratory procedures in clinical chemistry, hematology, coagulation, urinalysis, and immunology/serology.
- L. Evaluate quality control values.

Program Learning Outcomes

1. To provide students both academic instruction and professional training in the field of laboratory medicine to meet employment needs of Austin and surrounding communities.
2. Provide a climate conducive to stimulating interest in MLT education and participating in professional organizations, and encouraging awareness in changing trends in medical laboratory technology.
3. Produce graduates who meet entry level competency in the profession.
4. To produce skilled clinical laboratory workers who:
 - a. through general and technical education, are qualified to perform with minimal supervision, the tests routinely performed in clinical laboratories,
 - b. are able to collect, label, identify, and log in specimens accurately,
 - c. have a working knowledge of the principles of the tests they are performing,
 - d. keep accurate and legible records and are able to communicate reports clearly to fellow medical personnel,
 - e. are able to correlate test results in order to confirm them,
 - f. will strive for accuracy in the performance of tests and will make every effort to eliminate error through their ability to recognize irregularities in test results and procedures and make corrections according to preset strategies and criteria and refer them to more qualified personnel when appropriate,
 - g. are skillful in the operation of laboratory instruments,

- h. are able to demonstrate and explain routine procedures to others in the laboratory,
 - i. will take responsibility for their own work and are able to organize their work to make the most efficient use of time,
 - j. will adapt well to various work situations,
 - k. maintain the confidentiality of patient results,
 - l. are constantly aware of patient welfare,
 - m. will co-operate with their co-workers and all members of the health care team.
 - n. are able to perform efficiently under stress,
 - o. will strive to keep their competence and knowledge current in relation to the changing work environment,
 - p. will have the qualities of honesty and intellectual integrity beyond reproach,
 - q. are skillful in the operation of laboratory instruments and are able to recognize instrument failures and take appropriate actions, and
 - r. will actively participate in professional organizations in their specialty.
5. To carry out the education of each student in a manner this encourages further education, participation in community service, and maintenance of special interests in the field.
 6. To maintain accreditation of the program through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
 7. To produce graduates eligible to take and pass a nationally recognized certification examination upon completion of the program.
 8. To maintain high academic and professional standards both in the program and in its students.
 9. To serve as a resource for the clinical laboratories in the Austin area.

Methods of Presentation

- Blackboard On-line Course System (<http://acconline.austincc.edu/>)
- Internet Resources

SCANS

The U.S. Department of Labor has established the Secretary's Commission on Achieving Necessary Skills (SCANS) to ensure that student's are gaining competencies that are required in the work place. The following competencies will be acquired upon completion of this course.

SCANS COMPETENCY	Introduction to CLS Competencies
Resources	Identify resources used in clinical laboratories.
Interpersonal	Appreciate the need for confidentiality in all health care settings. Demonstrate respect for fellow students taking this course. Utilize the Internet to interact with laboratory science students through the Blackboard communication system and regular email programs.
Information	Utilize the Internet and other library resources to acquire information about specific topics as they relate to the field of Clinical Laboratory Science.
Systems	Appreciate the critical thinking skills to clinical laboratory problems.
Technology	Use computers, the Internet, and the Blackboard system to access course materials and other relevant course information.

Required Materials

NO TEXTBOOK NEEDED FOR THIS COURSE. Students must be able to access on-line material via a computer with Internet access, either from home or some other place, such as a library or learning resource center. High-speed Internet connection such as DSL or RoadRunner is preferable to more quickly download web sites and information. Visit this Blackboard website https://acconline.austincc.edu/webapps/portal/frameset.jsp?tab_group_id=11_1 to see the computer system requirements and for software downloads. The schedule (including open lab hours) for

ACC Computer labs can be found at <http://irt.austincc.edu/ict/computer/>.

Course Requirements, Examinations, and Grading

Student Evaluation

Two (2) regular examinations will be given in Blackboard over lecture material covering on-line instructional material and will comprehensively assess the student's knowledge of concepts and principles. **These exams will be taken in Blackboard within the allowed time period. Each student is on the honor system to not use unauthorized materials while taking these exams.** There will be **no routine retests given**. If a student misses one exam period, regardless of reason, 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 addition to the exams, assignments for each learning module are to be completed as a Blackboard assignment or a paper submitted via the Assignments page in Blackboard or e-mail attachments to the instructor (as directed in Blackboard). Also, the major course project will be a report of a planned tour of a clinical laboratory, either in the Austin area for near students or at a site to be determined for long-distance students. The deadline for submission of these assignments and project are listed under "Course Schedule". **Assignments MUST be submitted by midnight on the deadline listed; 5 points will be deducted for each day the assignment is late, up to 5 days. Assignments submitted 6 or more days late will be graded and returned to the student, but the grade awarded will be "0".**

A comprehensive Final Exam will be given at the end of the course and will be administered either on a computer **in an ACC Testing Center** or at another approved testing site for long-distance students. (Long-distance sites will be arranged individually with each student.)

Determination of Final Grade

1.	Average of two examinations =	35%
2.	Final Exam =	20%
3.	Clinical Laboratory Tour Project =	20%
4.	Assignments =	25%

A passing grade (70% or better) is **required** in order to receive a passing grade for this course.

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-70%

F = 59% and below

Incomplete - To receive an "I", a student must have a **passing average** (70% 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 - Before considering withdrawal, please contact the instructor. The college places no limits on the number of courses a student may drop. However, state law limits the number of course withdrawals, with some exemptions and exceptions. See <http://www.austincc.edu/newsroom/index.php/2007/08/16/state-caps-students%E2%80%99-course-withdrawals/> for further information.

Attendance

Although there are no on-site classes for this course, the student will be expected to communicate

regularly with the instructor via e-mail or phone (**at least once per week**), to post communications on the Blackboard Discussion Board at assigned intervals, and to complete all assignments and exams by the deadlines posted in the Course Schedule.

Promotion, Failure, and/or Dismissal from the Department

A minimum grade of “C” is required in all medical laboratory technology courses. Any student may be dropped from this course and/or the MLT Program due to consistently failing to meet class assignments, for disruptive conduct, or for displaying conduct detrimental to the ethics of medical laboratory technology.

Student complaints & Grade disputes: See “Policies and Procedures” in the current Austin Community College Student Handbook found at <http://www.austincc.edu/handbook>.

The MLT faculty and staff understand that learning in group situations can be beneficial. However, each student is expected to demonstrate his/her own competency by doing his/her own work. Any student caught cheating on examinations or other assignments will be subject to disciplinary action, including an academic penalty and possible withdrawal from this course and/or the MLT Program.

Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to, tests, quizzes, whether taken electronically or on paper, projects, either individual or group; classroom presentations, and homework.

Each student is strongly encouraged to participate in class. In any learning 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 learning discussions.

Application for Admission to the ACC MLT Program

Completion of this course does NOT guarantee admission to the MLT Program. Students wishing to apply for MLT Program admission must:

- complete the on-line MLT Information Session,
 - found at: <http://www.austincc.edu/health/mlt/infosession/introMLT.php>,
- successfully complete all prerequisite courses,
- meet all Program requirements, including ‘Essential Functions and Technical Standards’.
 - found at: <http://www.austincc.edu/health/mlt/requirements.php>
- meet with a Program faculty advisor,
- submit a completed MLT Program application that includes written verifiable documentation of completed required immunizations.
 - List of required immunizations and other information can be found at <http://www.austincc.edu/health/immunizations.php> , be sure to click: “All other Health Sciences programs”.
- Once admitted, students must undergo a Criminal History Background Check and Drug Screen.
- For additional information on the admissions process, see <http://www.austincc.edu/health/> or call 512-233-5700.

Students with Disabilities

Each ACC campus offers support services for students with documented disabilities. Students with disabilities should apply for services with the Office for Student Accessibility Services (SAS)

(<http://www.austincc.edu/support-and-services/services-for-students/disability-services-and-assistive-technology>) at the primary campus they expect to attend. Each semester students need to meet with the appropriate SAS coordinator at all campuses they are attending in order to discuss accommodation needs. Sample accommodations include, but are not limited to, interpreters, note takers, registration assistance, and testing with accommodations. Students with disabilities are urged to apply for accommodations well ahead of, but no less than three weeks before, the start of a term for the accommodations to be prepared for the first day of classes. ACC works with the Texas Department of Assistive and Rehabilitative Services and community service organizations to provide support services to students.

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.

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/>.

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.

Use of 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>.

ACC Testing Center Policy

Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam.

To request an exam, one must have:

- **ACC Photo ID**
- Course Abbreviation (MLAB)
- Course Number (1101)
- Course Synonym (22099 or 22267)
- Course Section (001)
- Instructor's Name (Sanders, Cecile)

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, **regardless of whether it is on or off**, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found at <http://www.austincc.edu/testctr/>

Medical Laboratory Technology
MLAB 1101 - Introduction to Clinical Laboratory Science Distance Learning
Course Schedule

Section 22099 - January 20 through March 15, 2015

Section 22267 - March 23 through May 17, 2015

NOTE: UNIT ASSIGNMENTS MAY BE SUBMITTED AND EXAMS MAY BE TAKEN BEFORE DUE DATES; HOWEVER, THEY MUST BE COMPLETED IN THE ORDER LISTED NO LATER THAN DATES LISTED.

Assignment	First 8 Week Course Date Due (by midnight)	Second 8 Week Course Date Due (by midnight)
1. On-line Orientation assignment 2. Read Syllabus, complete and submit Statement of Understanding	Sunday, January 25	Sunday, March 29
Clinical Laboratory Tour Project * (This is a major project and planning should be started during the first week of class)	Wednesday, March 11	Wednesday, May 13
Unit #1 (Introduction to Clinical Laboratory Sciences) Assignment	Sunday, February 1	Sunday, April 5
Unit #2 (Safety Manual) Assignment	Sunday, February 8	Sunday, April 12
Unit #3 (Lab Math) Assignment	Sunday, February 15	Sunday, April 19
Exam #1 (Taken on-line in Blackboard) Covers Units 1, 2 and 3	By Saturday, February 21	By Saturday, April 25
Unit #4 (Medical Ethics) Assignment	Sunday, February 22	Sunday, April 26
Unit #5 (Clinical Laboratory Testing) Assignment	Sunday, March 1	Sunday, May 3
Clinical Laboratory Tour Project * (Note: students are encouraged to start planning	Wednesday, March 11	Wednesday, May 13

Assignment	First 8 Week Course Date Due (by midnight)	Second 8 Week Course Date Due (by midnight)
this major project during the first week of class.)		
Unit #6 (Quality Control) Assignment	Sunday, March 8	Sunday, May 10
Exam #2 (Taken on-line in Blackboard) Covers Units 4, 5 and 6.	By Tuesday, March 10	By Tuesday, May 12
Final Exam (Taken at an ACC Testing Center) Comprehensive over ALL Units	By Thursday, March 12	By Thursday, May 14

*** A laboratory tour will be scheduled in early February, and will be arranged to try to accommodate all students' schedules. More information will follow.**