

The information contained in this syllabus applies to all the following MLS didactic courses:

MDTC 300:	Principles of Medical Laboratory Science	MDTC 401:	Hematology II
MDTC 301:	Hematology I	MDTC 411:	Clinical Microbiology II
MDTC 311:	Clinical Microbiology I	MDTC 431:	Introduction to Transfusion Services
MDTC 331:	Diagnostic Immunology	MDTC 441:	Clinical Biochemistry II
MDTC 341:	Clinical Biochemistry I		

Course-specific handouts with the course description, objectives, professor information, meeting times, textbook and grading information, course overview, and a detailed schedule will be provided for each individual course.

Professor Communication

The best way to contact any of your professors (*and the official form of communication at SU*) for course related communication is via the University email address provided. Email correspondence will be read and replied to within 24 hours of delivery (excepting holidays and weekends).

Additionally, important announcements and other communications related to your courses may come through the SU learning management system, MyClasses. Students should ensure that they have their notifications turned on within MyClasses in order to receive these important course-related announcements. *See the next section.*

Computer and MyClasses

For all MLS Didactic Courses: Online quizzes, handouts, announcements, and other course materials and information will be available on the campus learning management system, MyClasses. This system will be used extensively throughout the didactic courses. Further, email is considered the official communication form at Salisbury University. Students must therefore ensure that they have adequate access to a computer with Internet capability and the capability of using campus programs for remote learning and remote exam delivery, should the need arise. Due dates for assignments will be extended for computer problems that originate on campus but not necessarily for problems that originate with the student.

Each didactic course is divided into learning units. Students will access MyClasses and can download and/or print the lecture outlines or PowerPoints. Laboratory handouts must be printed before the beginning of each laboratory session. Printing must be performed in the campus technology labs. Printers in student laboratories are associated with student print counts and therefore may not be used to print handouts without permission from the professor. Students have a quota of free printouts each week, so students are expected to come to class with all handout materials necessary for both lecture and laboratory. For all practical purposes, the MLS Program will be “all electronic” and will not provide paper copies of anything. The professor reserves the right to give a grade of “zero” for a lab to students who arrive unprepared and without the appropriate handout materials.

Technical support for the MyClasses/Canvas course management system can be obtained at:

<http://www.salisbury.edu/instructionaldesign/cms/>

Grading – General Policies

In general, all of the MDTC didactic courses are percentage-based (weighted grade), where individual grades are counted toward a certain part, or percent, of the overall grade. Each didactic course handout will have the specific breakdown regarding the grading policy. Typically, hourly examinations and the final exam will collectively count the most toward the final grade. Quizzes, homework, group work, and laboratory activities and reports, along with the affective evaluation, make up the remainder of the final grade.

Examinations will be conducted online, in DH 310 (Resource Room), unless otherwise indicated. If it becomes necessary to move an examination online in a remote setting, Respondus LockDown Browser + Webcam (Monitor) will be used, so students should have access, as indicated above, to a computer with internet capability and a web camera.

Examinations will typically include multiple choice, matching, occasional true/false and brief, short answer questions, calculations, and hotspot when appropriate.

Final Examination: In order to pass any of the MDTC didactic courses, a cumulative final examination will be given at the end of the course during final exam week. Students must earn the grade of 60% or better on this examination to demonstrate minimum competency (grade of C or better) as required by accreditation standards.

Laboratories: A portion of each didactic course grade will consist of demonstration of psychomotor competence which includes laboratory activities and the performance of technical procedures. Students must earn an average of 70% in the psychomotor laboratory activities to earn the minimum grade of "C".

The goal of student laboratories is to ensure minimal psychomotor competence prior to moving on to the next course or to clinical rotations. Terminal laboratory experiences ("lab practicals") will be employed to evaluate minimal competencies. Students who earned less than 70% on prior laboratories related to these competencies must score at least 70% on the terminal practical(s). Continued sub-standard performance by the end of the semester will be considered evidence of a pattern of psychomotor insufficiency and will be grounds for the student to earn less than a C in the course.

Quizzes and Other Assignments: A percent of the grade will consist of quizzes, which will be conducted online through MyClasses, homework/written assignments, case studies, etc.

Affective Evaluation: Five percent of each didactic course grade will consist of an evaluation which assesses attendance, tardiness, class preparation and participation, and other objectives outlined in the *Affective Objectives* section below.

A student who earns **below** the minimum specifications above (70% average in the laboratory and/or 60% on the final exam) will automatically earn the grade of "D" unless the overall course average is lower. If the overall course average is below a 60%, the student will earn the grade of "F". The final grade will be calculated at the end of the semester. Failure to hand in reports, etc. by the due date will result in a "0" for that session, even if the student attended the laboratory.

The final grade will be determined as follows, assuming that a minimum of 70% average in the laboratory and a 60% on the final exam:

A = 90 – 100

B = 80 – 89

C = 70 – 79

D = 60 – 69

F = Under 60%

Learning Accommodations

To receive approved learning accommodation(s) for any MDTC course, students must register with the Office of Access & Accommodations (formerly Disability Resource Center) and present the required documentation to the faculty member. Students who would like to utilize approved accommodation(s) in the didactic MLS courses should contact the faculty member as soon as possible to arrange a meeting to coordinate any and all accommodations, following Office of Access & Accommodations procedures. The Office of Access & Accommodations can be reached by calling 410-543-6087 (voice) or 410-543-6083 (TTY); emailing accommodations@salisbury.edu; online (<https://www.salisbury.edu/OAA>); or visiting the Guerrieri Student Union, Room 229.

Failure to request appropriate accommodation(s) prior to any class activity means that the applicant will be obligated to accept the consequences of any sub-standard performance, regardless of whether or not accommodations might have helped. That is, according to the Americans with Disabilities Act, you cannot ask for accommodations retroactively, so please do what you can to optimize your own education. Please note: Accommodation requests will be evaluated and implemented so long as they don't interfere with the [Essential Functions](#) of the Medical Laboratory Profession.

Attendance Policy

The development of professional responsibility is an important goal for all students within the Medical Laboratory Science Program. Once you are out in the workforce, you will be expected to be at work on time and on the days you are scheduled. Students are expected to attend **all** lectures and laboratories as scheduled and be present in class and ready to participate on time. Please realize that if you are late or if you do not attend class, you can get behind very quickly. Information presented in your absence will not be repeated and you are responsible for information you miss. Attendance will be taken daily.

Keep in mind that make-up laboratories may not be an option as laboratory materials have limited shelf-life or might be in short supply. The physical laboratory area may have limited availability due to other labs being taught there. Make-up

laboratories will be conducted at the discretion of the professor, and the professor retains the right to give students a “zero” for missed labs. See ‘Absence’ under Laboratory Protocols section below.

Salisbury University provides many electronic tools to faculty for conducting classes (Zoom/Teams, Respondus, prerecorded lectures, etc.). Faculty may use these tools at their discretion, but they are not required to do so. Students cannot automatically assume that if they need to miss a class or an exam that faculty will be willing to allow them to make it up using electronic tools. While Zoom/Teams has its conveniences, it is more difficult to teach to two audiences, and most faculty believe that synchronous virtual attendance is a sub-optimal experience for the learner. With respect to exams, faculty more than double their work to accommodate online exams. There is extra setup required at the beginning, and when the exam is over, it is a long process to review exam recordings for academic dishonesty. **If you know that you need to miss a class or exam, it is always best to give the faculty member as much notice as possible to see what accommodations can be made.** The faculty member has the freedom to decide if and how the work can be made up and, again, is not required to use electronic means.

If students must miss an examination, it is their responsibility to contact the professor *prior* to the exam to gain approval for a make-up. If no contact is made before the examination, the professor will assume the student is “skipping” the exam and therefore will receive a grade of “0” for that examination. All make-up exams will be scheduled at the discretion of the professor. Examinations begin at the time scheduled. Should a student appear late to take the exam, no additional time will be allowed for completion of the examination than scheduled for the remainder of the class. In order to prepare students for computerized ASCP registry examinations, all exams will be given in MyClasses via Respondus LockDown Browser unless otherwise noted. *If the course must be moved fully online, we will use Respondus LockDown Browser + Webcam (Monitor) for all exams.*

In the event that a student misses over 10% of didactic lectures and/or labs without an acceptable excuse, the professor reserves the right to lower the final grade by one letter grade for each unacceptable absence. A student will be considered late if he/she/they miss less than 50% of the class and will be considered to be absent if he/she/they have missed 50% or more of the class. For example, if the maximum number of lectures a student can miss is three, the student who misses four lectures will have 10 percentage points deducted from the final grade. A student who misses five lectures will have 20 points deducted from the final grade, etc. Absences will only be considered “excused” if written documentation is provided. It is common for students who are sick not to need to go to the doctor, so documentation for illness is not always practical, and it is for this reason that there is a maximum number of absences allowed that do not require an excuse. Since illness is not predictable, it is not wise to have unexcused absences for any other reason.

Students are expected to be prompt and ready to participate (including having handouts) whether for the lecture or laboratory. The majority of information concerning exams, labs, and course conduct will be discussed in class. Information presented in your absence will not be repeated, and students are not permitted to share written materials in lecture or lab.

Should inclement weather result in classes being canceled, information is given to all local radio and television stations and should be available via the SU website (<http://www.salisbury.edu>). The institutional policy with regard to closing is that, unless there are the most dire circumstances, the institution remains open for business. Different conditions prevail for each individual under inclement weather situations so the decision should be essentially an independent one. Students must exercise their best judgment about whether they attend class or report to work. Faculty have the discretion to transition to a virtual option for presenting the lecture. If you do not hear or see an announcement about cancellation of classes, then classes and events will be held as scheduled. Please do not call the Public Safety Office about cancellation notices so that office can assist with emergency needs.

Professional Behavior Policy

All information outlined in the Affective Behavioral Objectives for Medical Laboratory Science Students document (see *section below*) applies to all courses, clinical rotations, and related activities in the Medical Laboratory Science Program.

SU Course-Related Policies/Resources

Salisbury University expects that all students have read and understand all of the Course-Related University Policies and Resources and thereby agree to honor these standards. Important course-related policies and resources are posted in MyClasses for your convenience. The Salisbury University Student Code of Community Standards can be found at:

<https://www.salisbury.edu/studentconduct>

Artificial Intelligence (AI) Policy

All assignment submissions should be a reflection of the student's own work and understanding. Students may use Artificial Intelligence (AI) tools to help with finding information and exploring topics. Students are expected to acknowledge AI usage if used in completing an assignment. It is the student's responsibility to critically evaluate whether the information is correct/accurate and relevant. If using AI, students must be able to comprehend and critically reflect on AI-generated information. Simply using AI to generate answers to questions compromises the student's own learning and ability to demonstrate mastery of subject material (i.e. pass a test). Failure to properly cite where the information was found will be deemed plagiarism and cheating and referred to the Academic Affairs office.

Dishonorable Conduct

Salisbury University expects its students to conduct themselves in accordance with the highest standards of personal integrity and academic honesty. The University policy on academic integrity can be found at:

<http://www.salisbury.edu/provost/AcademicMisconductPolicy.html>

The University policies regarding academic and personal misconduct are strictly enforced. Additional policies outlined in the Salisbury University Medical Laboratory Science Student Handbook are also strictly enforced. In the absence of an honor code, it is each faculty member's responsibility to maintain the standards of *Academic Dishonesty* in all matters related to the faculty member's course work. The term "Academic Dishonesty" shall mean a deliberate and deceptive misrepresentation of one's own work. Such misrepresentation shall include, but not be limited to (excerpt modified from SU Academic Misconduct Policy):

Lying/Fabrication: the falsification or invention of any information or citation in any academic course or exercise.

Cheating: fraud, deceit or dishonesty in any academic course or exercise or using unauthorized materials, information, studies, including the ideas or work of another. Examples of Cheating include, but are not limited to:

giving unauthorized aid to another student or receiving unauthorized aid from another person on tests, quizzes, assignments or projects;

using or consulting unauthorized materials or using unauthorized equipment or devices on tests, quizzes, assignments or projects;

submitting as one's own work material written by someone else or generative AI;

falsifying any information on tests, quizzes, assignments or projects;

working on any project, test, quiz or assignment outside of the time constraints imposed;

submitting an assignment or using any material portion of a paper or project to fulfill the requirements of more than one course without the permission of the current professor(s);

failing to adhere to a professor's specific directions with respect to the terms of academic integrity or academic honesty;

using fraudulent methods in laboratory, studio, performance, field, computer work or professional placement.

Plagiarism: intentionally or unintentionally presenting thoughts or ideas from another source as one's own or without appropriate attribution; intentionally or unintentionally disregarding proper scholarly procedures; and other acts generally recognized as plagiaristic.

Misappropriation of Course-Based Intellectual Property: the term "Course-Based Intellectual Property" shall include lectures delivered by professors, as well as course materials professors create and distribute. Course-Based Intellectual Property is protected by federal copyright law. Misappropriation of intellectual property is the act of

intentionally taking the intellectual property of any professor or the sale or distribution of class notes, tests, assignments or class projects for commercial purposes, either directly or through a third party, without the express consent or permission of the professor.

Facilitating Academic Misconduct: intentionally or knowingly helping or attempting to help another to violate any provision of this policy.

Attempts to capture secured digital content: Evaluative measures such as quizzes, exam questions, discussion responses, etc. are not intended to be given to others with the goal of improving performance on these evaluative measures and/or sharing the content. Students found in possession of “screen shots” or other unauthorized copies of digital content will also be charged with academic misconduct.

Other acts generally recognized as *Dishonorable* and *Dishonest* which bear upon academic endeavors.

Cell Phones / Electronic Devices

Cell phones / mobile devices are to be turned off or set on “vibrate” during class times, AND are to be put away, out of sight. Cell phones / mobile devices (including text messaging) and earbuds are not to be used during class time. If a cell phone rings, or if texting occurs during class time, the student will be dismissed from class for the remainder of that class period. Exceptions for emergency situations can be accommodated.

Laptop computers or tablets are acceptable if used for notetaking, but if they become too much of a distraction during class the student will be asked to put them away.

In order to access Respondus LockDown Browser during exams, students will be required to use their mobile devices for the DUO security confirmation but are expected to put the device out of sight immediately after accepting the security notification.

“Smart” watches, earbuds, and other “smart” devices should NOT be worn during exams. Non-programmable calculators and scrap paper will be provided to students, when needed, for exams.

Preparing for Class

The MLS Program made the decision to go electronic and “green,” so you will not be getting paper handouts. You are responsible for printing all relevant documents, particularly laboratory handouts, and bringing them to class on the correct day. The handout for the specific didactic course will be a good guideline, but since some lectures run longer and some lectures run shorter, if printing, you should be printing documents at least one week prior to the time you think you’ll need them. **YOU CAN PRINT FOR FREE AT THE UNIVERSITY.** You will need to manage your time and your paper ration in the computer labs by knowing what you need to print and when.

Bringing documents to lecture is not required, but it will be easier to have them during class. ***Bringing documents to lab is absolutely required.*** If you do not have the relevant documents for lab, you will be considered unprepared and the professor reserves the right to give you a “zero” for that lab session and not allow make up labs.

You must prepare for lab by reading the lab handouts ahead of time, if applicable. You should be familiar with what you are to do in lab so that you can begin the procedure(s) immediately. The lab time is short and, in some cases, equipment must be shared, so there is simply no time for figuring out what you need to do during class time. If it is evident that you did not prepare for lab, the professor reserves the right to dismiss you from the room and give you a “zero” for that lab session and not allow make-up labs. See *Laboratory Preparation and Safety* section below for more details.

Writing Across the Curriculum

The Medical Laboratory Science Program wholeheartedly affirms the “Writing Across the Curriculum” policy at Salisbury University. The Department seeks to have graduates that can express themselves clearly and professionally within the discipline, and uses written reports of laboratory exercises as one of the vehicles with which to achieve that goal. **Lab reports that are not neat or legible will not be graded and will earn a grade of zero.** Reports should include the original worksheets with the original data along with the report or any required writing. Ninety-five percent of the grade will consist of an evaluation of the criteria listed in the laboratory outline. A well-thought-out presentation of technical and clinical information with complete analysis of the material is expected.

Five percent of the grade will be based on the style, mechanics, grammar, content, and organization. Medical dictionaries

should be consulted for correct spelling, and are available in the Medical Laboratory Science faculty offices and online. Students are also encouraged to make use of the Writing Center. There is, therefore, no excuse for mistakes in this component of the written report.

At the University Writing Center (Room 260 in the Academic Commons), trained consultants are ready to help students at any stage of the writing process. It is often helpful for writers to share their work with an attentive reader, and consultations allow writers to test and refine their ideas before having to hand papers in or to release documents to the public. In addition to the important writing instruction that occurs in the classroom and during teachers' office hours, the Center offers another site for learning about writing. All undergraduates are encouraged to make use of this important student service. For more information about the Writing Center's hours and policies, visit the Writing Center or its website at www.salisbury.edu/uwc.

Center for Student Achievement

The Center for Student Achievement (CSA; Room 270 in the Academic Commons) offers students opportunities to make the most of their out of class study time. Students are encouraged to participate in structured study such as Supplemental Instruction and Tutoring, if available. Students looking for additional assistance with study strategies and time management should make an appointment for an academic coaching session. The CSA offers a comfortable space to study and engage in study groups with peers. For more information and hours of operation visit www.salisbury.edu/achievement.

Title IX Statement

It is the policy of Salisbury University (SU) to comply with Title IX of the Education Amendments of 1972 (Title IX), which protects individuals from discrimination based on sex in any SU educational program or activity. Any form of sex discrimination (which includes acts of sexual harassment, sexual assault and sexual violence) is prohibited by Title IX. Retaliation for asserting claims of sex discrimination is also prohibited under SU policies and Title IX.

If you experience discrimination, you are encouraged to report the incident to the Salisbury University Office of Institutional Equity (OIE). Learn more about your rights and options at the [Office of Institutional Equity website](#) or call 410-543-6426.

Students may also contact the Counseling Center, a confidential resource, for support related to sexual assault or power-based personal violence at 410-543-6070, or visit [Counseling Center website](#). Also, you can contact the Life Crisis Center (an off-campus resource) at 410-749-4357, 24 hours/day.

In situations where the OIE becomes involved in the resolution of complaints, assistance to students who need help with academics, housing, or other issues is available.

Diversity and Inclusion Statement

Diversity and inclusion are core values of Salisbury University. A diverse and inclusive campus community brings irreplaceable value to our educational experience and work environment, and strengthens us all. Diversity encompasses more dimensions than just the legally protected categories. All people have talent and potential that is spread across communities and groups, locally and globally. Inclusion means creating an environment of respect, connection and involvement among people with different experiences and perspectives. We strive to create a truly diverse and inclusive environment where the richness of ideas, backgrounds, and perspectives of our community is harnessed to create value for our institution, today and in the future.

Satisfactory Advancement in the Laboratory

LABORATORY PREPARATION AND SAFETY / MISIDENTIFICATION OF SAMPLES

The faculty of the Medical Laboratory Science Program at Salisbury University are charged with the operation of a medically safe laboratory within the constraints evident when handling biohazardous or other potentially hazardous material. All students are expected to follow appropriate safe practice when in the laboratory to ensure the safety of the student as well as other students and the faculty themselves.

Time for Activities: Laboratory experiences are designed to be completed in the allotted time. Please come prepared and on time so that you can work at a pace that will allow completion of the lab.

Preparedness: An extremely dangerous practice occurs when students do not prepare for laboratory by reading their

procedures prior to the lab. Any special hazards are outlined in the written laboratory which is available to students prior to the lab. Also, unprepared students do not know what they are doing and are not prepared to perform the lab correctly. A student who requires consistent, supplementary assistance concerning information which is written in procedures will be asked to leave the lab and return when prepared. Also, students are to work independently, and not depend on the assistance of other students. This can disrupt other students' progression.

Make-Up Laboratories: In the event that work is missed or is not completed, permission for make-up labs can be granted **solely at the discretion of the professor** and must be scheduled. Working alone in the laboratory is not recommended as a safe procedure, but occasionally some lab work is only minimally hazardous (reading slides, for example) or nonhazardous (using the computers) and permission can be granted for the student to work alone in the laboratory. However, **if students choose to work alone in the laboratory, they do so at their own risk.** Some procedures are sufficiently hazardous, that the professor may forbid the student to perform the procedure without supervision. In such cases, **extra laboratory time must be scheduled solely at the discretion of the professor. The professor always has the option to disallow make-up work and give the student a "zero" for that session.**

Laboratory Safety: The professor reserves the right to dismiss any student from the laboratory for failure to follow instructed safe practices. In the event that this should occur, the student will not be allowed to reenter the laboratory in this or other courses of the Medical Laboratory Science Program until the behavior is evaluated and it is judged appropriate that the student would not further jeopardize the safety of other individuals. This is tantamount to suspension from the major and will either result in dismissal from the major or reinstatement at a later date, if justified, when the courses begin in their next cycle.

Misidentification/Medically Dangerous Clerical Errors: One of the most dangerous and potentially life-threatening errors that can occur when performing laboratory tests is inaccurate recording of data including the misidentification, inadequate identification of a specimen, or incorrect data/interpretations. Although additional training may help students who have difficulty in academic theory, principles, and technical performance, it is virtually impossible to remediate a careless student who does not perform laboratory tests with accuracy and care. **Thus, if it is evident that a student mishandles data documentation or interpretation (inadequately identifies a specimen, fails to write in pen, "switches" specimens or data during the generation of test results, makes dangerous misinterpretations, mishandles the recording/clerical aspects of data, writes illegibly or otherwise reports incorrect results, etc.), the student will receive a "0" for that laboratory.** Students earning more than 1 zero may have difficulty earning the 70% minimum required in lab. Furthermore, the student should be aware that this type of laboratory error will result in failure and potential dismissal from the major if it occurs during clinical rotations. Serious errors of this nature in the clinical rotations can ultimately result in failure and potential dismissal from the Program.

Personal Protective Equipment and Safety Protocols: Students shall wear lab coats and gloves and have on close-toed shoes when performing any lab where any potentially biohazardous material is used. As needed, face shields and other safety equipment should be used during each lab. Each student is expected to purchase a lab coat which must be worn during lab. Specific hazards are outlined in each written lab. It is the student's responsibility to read this material prior to coming to any lab session, as ignorance may endanger the student's well-being as well as the safety of other students. In addition, students with long hair must have it tied back. Dangling jewelry or other ornamentation that interferes with safe practice is also not permitted. Other protocols include no eating, drinking, chewing gum, smoking or vaping, applying cosmetics, using medication or using cell phones or other personal electronic devices.

In order to ensure that students have read and understood laboratory procedures, they will be posted at least one week in advance and there may also be an online quiz to complete prior to the day of the laboratory. See the individual didactic course handouts for details.

LABORATORY AFFECTIVE BEHAVIOR

Just as in the lecture portion of the courses, you will be evaluated in lab based on cognitive abilities (what you know and how you can think), affective abilities (how you conduct yourself), as well as psychomotor abilities (correct physical manipulation of testing materials at the right time for the right reason). In general, the affective portion of the grade in each didactic course is 5%. In lab, you are presumed to have appropriate behavior unless otherwise observed. **If infractions are observed, you will lose 5% for lab that day for each infraction.** The following are examples of infractions that will cause a 5% reduction in your grade:

Tardiness: You must be in your seat ready to work at the time that lab starts. This means that you must have all the materials you need, you have cleaned your bench top, donned your lab coat and gloves. It is not sufficient to just be in the room when lab starts; you must be ready to work. Since instructions are typically given at the beginning of lab, your absence or inattention is problematic. Further, procedures that are lengthy may need to be started as soon as possible.

Safety violations: Examples include but not limited to: not having a lab coat or closed toed shoes on, not wearing a lab coat correctly (not closed), chewing gum, putting gloves or needles into regular trash, unsafe techniques, failing to clean the counter after work is complete.

Instrument misuse: Examples include but not limited to: leaving instruments on when work is complete, tubes/ trays left inside instruments, microscope objectives (especially oil) not cleaned when work is complete, pipettes forced past stated capacity, damaging instruments through negligence, trying to cover up damage to instruments. Note that in some cases, you will be assigned devices for your use and your use only. This allows us to track the source of any damage. You must not use devices assigned to others. If your device is not working, consult the professor.

Material waste: Examples include but not limited to: wasting reagents by not measuring carefully, failure to return temperature sensitive materials to proper storage, repeating procedures due to avoidable mistakes or from failure to follow clear instructions.

Lack of courtesy: Examples include but not limited to: not paying attention to instructions, monopolizing limited resources, relying on others for help rather than being independent, causing interruptions or distractions, using up supplies and not replacing them for the next person, rushing to try to leave early.

Lack of good housekeeping: Examples include but not limited to: returning supplies in an unorganized or haphazard manner such that other students cannot find supplies, failure to put away supplies assigned to you in their proper place, leaving out trash.

Lack of preparation: Examples include but not limited to: failure to bring procedure or other materials to lab, unfamiliarity with the procedure, relying on another student for instructions rather than reading the procedure, unfamiliarity with the lecture material related to the procedure, taking excessive time to perform a task, repeating procedures due to avoidable mistakes.

LABORATORY PROTOCOLS

Laboratories will be conducted weekly as outlined in the handout for each specific didactic course. There may be an online lab preparation quiz, which will be due before the laboratory session. A written report is generally due one (1) week after there is usable data unless otherwise specified. The required text, the lab procedure and class notes will generally be needed to successfully complete the report. As an example, a laboratory performed on one Monday will be written up and handed in no later than the following Monday laboratory session, or no credit will be given for the exercise.

Please note that any of the following can result in a grade of zero for the laboratory:

Unsafe Behavior in the Laboratory. If such occurs, the student will be dismissed from the laboratory and counseled prior to being allowed to return. Good laboratory safety will be insisted upon at all times for both the safety of self and of others. Students are responsible for following safety procedures outlined in the Safety Manual for the Medical Laboratory Sciences Program. *See the Laboratory Safety section above.*

Laboratory Report Turned in Late. Good communication is essential if there is a problem completing your lab report. Waiting until the last minute is never advisable, and faculty are more likely to assist you if you are proactive in communicating any concerns.

Plagiarism/Academic Misconduct. The report must be in the student's own words and copying information verbatim from any source will be considered academic dishonesty. The data must be the student's own work and no others. *See the Dishonorable Conduct section above.*

Misidentification/Medically Dangerous Clerical Errors. A potentially life-threatening error was made by the student when performing laboratory tests or recording data (misidentification, inadequate identification, incorrect recording of data/interpretations, "switching" specimens, recording data in pencil, writing illegibly, etc.) *See the Misidentification/Medically Dangerous Clerical Errors section above.*

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Unsafe Documentation Techniques. Laboratory data is to be recorded in ink only. Pencil is not acceptable. Writing in pencil first and then writing ink over it is likewise unacceptable. MLS labs are intended to mimic medical situations, and laboratory data is a medical record and must be recorded in a permanent and legible form. If you make an error in recording your data, cross it out so that the erroneous data can still be read, write in the new data with your initials, as shown in the figure. Students are not permitted to record data on “scrap” paper and then transfer it to the laboratory data sheet. This is a potential source of clerical errors and is not permitted in clinical practice. Further, anything handwritten must be neat and easily readable. If information cannot be accurately read, then it is as if it did not exist at all. *See also the Misidentification/Medically Dangerous Clerical Errors section above.*

Absence. If work is missed or is not completed, permission for make-up labs can be granted solely at the convenience of the professor. The professor always has the option to disallow make-up work and give the student a "zero" for that session. *See Make-Up Laboratories section above.*

Remember: The goal of student laboratories is to ensure minimal psychomotor competence prior to moving on to the next course or to clinical rotations. Isolated incidents are expected in the learning process but continued sub-standard performance by the end of the semester will be considered evidence of a pattern of psychomotor insufficiency and will be grounds for the student to earn less than a C in the course.

LABORATORY PROCEDURE AND REPORT

Students must review the laboratory procedure and complete the laboratory data collection form which should be printed out prior to the beginning of each lab. In general, laboratory forms will consist of the following:

Background – Brief discussion on the principle behind the activity to be performed during lab. Students should have read this section prior to coming to lab.

Cognitive, Affective and Psychomotor Objectives – An evaluation of the student’s technical skills and behavior during the lab will be included as part of the grade for each session. Cognitive objectives will be assessed using the follow-up assignment questions.

Activities/Procedure – This section will outline in detail the procedure to be used or will refer students to the appropriate portion of a product insert or the textbook for procedural detail. Students should also read this portion prior to coming to lab. Forms for recording data found during the lab are included in this section and all required data should be recorded by the end of the laboratory session(s). **STUDENTS ARE NOT PERMITTED TO WRITE IN PENCIL OR RECORD DATA ON “SCRAP” PAPER AND THEN TRANSFER IT TO THE LABORATORY DATA SHEET. THESE ARE POTENTIAL SOURCES OF CLERICAL ERRORS AND ARE NOT PERMITTED IN CLINICAL PRACTICE.** *See Unsafe Documentation Techniques section above.*

Follow-Up Assignment/Laboratory Report – Students typically have at least one week to complete this section, though it is best to refer to the specific course handout for details on each assignment. The report assignment may contain questions pertaining to the procedure or data found in the procedure, questions on the principle behind the test or interpretation of the test and/or questions on related tests or biological principles. Students should expect to have to use multiple sources to answer these questions including lab handouts, lecture notes, the textbook and other library resources. A substantial portion of the lab grade will be on how accurately and thoroughly the follow-up assignment is written. *See the next section for details.*

LABORATORY REPORTS AND GRADES

A laboratory report will be completed by the student after the laboratory session. The purpose of the laboratory report is to foster analysis and synthesis skills, inductive and deductive reasoning and problem-solving abilities concerning the laboratory. The student should consult required texts and supplementary reading materials for assistance. Laboratory reports are typically due one week after the completion of the laboratory session, unless otherwise noted, or a grade of "0" will be given, even if the student was present and performed the lab. All three domains of learning – cognitive, psychomotor and affective – will be assessed.

The format indicated for each laboratory should be followed and **complete** identification of specimens and other materials along with the laboratory data should be ensured. **YOU MUST READ AND IMMEDIATELY RECORD YOUR RESULTS USING PEN ON THE WORKSHEET SUPPLIED.** *Any data recorded in pencil, or recorded first in pencil and then written over in pen,*

will result in a deduction of points up to and including a 'zero' for the lab. Supply appropriate interpretations and indicate when testing is not applicable by writing "N/A" on the worksheet. Note any specimens which do not appear to give "normal" results. See Misidentification/Medically Dangerous Clerical Errors section above.

ANY RESULTS WRITTEN ON OTHER PAPERS WILL BE DISCARDED AND YOU WILL HAVE TO REPEAT THE PROCEDURES. *In the event that your handwriting is illegible, it will be graded as an error or misidentification and you will not receive credit for the laboratory.*

PLEASE IDENTIFY ALL PATIENT DATA ON YOUR WORKSHEET AS THEY APPEAR ON THE LABEL. Due to the nature of these courses, *no credit will be given for a laboratory when an error, whether technical or clerical is submitted.* Misidentification of a specimen or "switching" specimens at any time during the lab will result in a grade of "0" for the laboratory.

Laboratory reports should be written in your own words. Copying information from other students or from sources without giving proper credit is considered **Academic Misconduct** and will be dealt with in accordance with University policies. See the Dishonorable Conduct section above.

These objectives demonstrate the professional standards and expectations for students enrolled in the Medical Laboratory Science (MLS) Program. As future healthcare professionals, students must demonstrate conduct that reflects integrity, accountability, respect, and a commitment to excellence in both academic and clinical settings. A goal of Medical Laboratory Science education is that students understand and demonstrate standards of the profession.

Scope

Student affective performance will be evaluated in lecture, laboratory, and clinical course components. These objectives apply to all students enrolled in the MLS program, including during didactic coursework, laboratory sessions, clinical practicums, internships, and any affiliated professional activities.

As a student and a professional, the medical laboratory scientist:

1. Complies with all institutional (University and clinical affiliate), department, program, course and laboratory policies and procedures, including safety standards / policies and assumes responsibility for:
 - A safe laboratory environment and reporting concerns in a timely manner.
 - Maintaining health to not be a danger to self or others.
 - Maintaining current knowledge of all applicable policies and complying with them.
2. Follows all applicable attendance policies such that the individual:
 - Is punctual and reports to class or clinical internship on-time and ready to participate in the experience.
 - Reports to laboratory or clinical site dressed according to lab policy, including required personal protective equipment (PPE).
 - Is both present and engaged for the duration of all scheduled coursework; actively participates in performing assigned tasks in the classroom, laboratory, or clinical site; and works until excused.
3. Follows oral and written instructions with successful outcomes. The individual:
 - Gives attention and listens attentively to instruction.
 - Asks pertinent questions in the classroom, the laboratory, and at the clinical site
4. Produces quality work with precision, accuracy, and in accordance with established protocols (standard testing procedures, appropriate workplace courtesy/cleaning, etc.) such that the individual:
 - Demonstrates neatness in documentation technique so it is legible to others and so there is no contamination from reagents or samples on the forms.
 - Maintains a clean work area; leaves equipment and devices clean, in proper position, and ready for the next person at the end of the session.
 - Operates equipment carefully and skillfully.
 - Judiciously uses reagents and supplies in a way that ensures all students are able to attempt laboratory procedures and avoids undue waste in the laboratory and clinical setting.
 - Requests assistance when appropriate so as not to damage equipment, waste supplies or otherwise impede laboratory function.
5. Maintains consistent, positive work behaviors (e.g., initiative, preparedness, dependability, persistence, follow-through, etc.) such that the individual:
 - Prepares for lectures, laboratory experiences or clinical internships by reviewing notes, following objectives, and reading supplementary materials.
 - Analyzes a procedure before attempting to undertake it; reviews procedures prior to arriving in the laboratory or while at a clinical site.

- Consistently fulfills responsibilities in a timely manner; if this cannot be accomplished, communicates promptly to the professor or preceptor regarding barriers to completion.
 - Is persistent and expends a reasonable amount of effort to complete tasks and/or answer questions independently before asking for assistance
6. Works independently such that the individual:
- Shows self-direction, personal responsibility, and accountability.
 - Accomplishes laboratory, classroom, and clinical tasks with a minimum of supervision within the allocated time.
 - Demonstrates appropriate independence in performing assigned tasks.
 - Does not rely unduly on others to complete tasks.
7. Develops organizational, prioritization and multitasking skills throughout all program coursework such that the individual:
- Refrains from unnecessary or inappropriate distractions (socializing, recreational use of electronic devices, etc.)
 - Pays close attention to strategies discussed or modeled in order to improve efficiency in workflow and incorporates those strategies as technical proficiency progresses.
 - Becomes familiar with a procedure prior to performing it to improve performance efficiency; plans ahead for priorities and maximizes opportunities to perform the procedure simultaneously with other tasks.
 - Develops strategies to tolerate interruptions in a procedure in order to perform tasks of higher priority without losing the integrity of the initial procedure.
8. Demonstrates good time management skills with successful outcomes. The individual:
- Completes assigned tasks within scheduled timeframe.
 - Manages time appropriately by organizing schedule, materials, and equipment to perform multiple tasks, often concurrently, with accuracy.
 - Utilizes the time provided to perfect skills and does not rush.
9. Communicates effectively and respectfully such that the individual:
- Reads, comprehends, initiates and responds to English communications (including person-to-person, telephone, electronic, and written forms) in an effective, respectful and time sensitive manner.
 - Reports laboratory results truthfully and objectively.
 - Promptly reports written results legibly and accurately in the required format.
 - Promptly reports verbal results clearly, accurately and courteously.
 - Engages in information exchanges that promote appropriate and timely actions for self and others.
 - Communicates with other healthcare professionals, patients and others such that they understand the message clearly and feel valued and respected.
 - Uses appropriate communication techniques for the intended receiver, considering age, cultural background, English proficiency, education, etc.
10. Demonstrates appropriate interpersonal behaviors while interacting with others during program-related activities (classrooms, labs, clinical internships, etc.). The individual:
- Shows courtesy, cooperation, respect and empathy.
 - Demonstrates conduct that promotes confidence in the recipient and is non-threatening.
 - Is accepting and inclusive of everyone encountered.
 - Demonstrates cultural sensitivity, as appropriate.
 - Graciously receives and responds to constructive feedback, modifying subsequent behavior accordingly.
 - Assumes responsibility for maintaining amicable working relationships.
11. Demonstrates academic and professional integrity as outlined in departmental policies / procedures / standards and refrains from illegal or unethical behavior. The individual:
- Abstains from use of illegal, prescription, over-the-counter, experimental, recreational or other drugs that have a significant effect on individuals' judgment.
 - Never attends class, lab or clinical internship under the influence of alcohol or illicit/illegal drugs.

- Acts according to individual strengths and limitations; requests assistance from the professor or preceptor when the task is beyond the knowledge/skills possessed.
 - Maintains confidentiality regarding patient information according to HIPAA and other relevant policies.
 - Maintains honest practices in all academic and clinical endeavors.
 - Abstains from illegal or unethical behavior that would prohibit continuance
 - Adhere to the American Society for Clinical Laboratory Science (ASCLS) [Code of Ethics](#) and applicable institutional policies.
12. Projects professionalism such that the individual:
- Maintains appropriate appearance, dress, and hygiene.
 - Projects a positive attitude.
 - Values professional education and contributions to healthcare by the medical laboratory profession.
 - Maintains appropriate body language.
 - Volunteers for special tasks.
13. Demonstrates emotional stability. The individual:
- Functions effectively under stress.
 - Remains flexible and adapts to an environment that may change rapidly without warning and in unpredictable ways.
 - Maintains composure, work quality, and friendly relationships with others even under stressful conditions.
14. Correlates underlying scientific principles to practice such that the individual:
- Evaluates the acceptability of laboratory results and recognizes and corrects errors.
 - Identifies additional actions that must be taken (e.g., further testing, notifying the clinician, specimen recollection, etc.)
15. Demonstrates responsible and appropriate use of electronic resources and communication systems (e.g., cell phones, computers, tablets, email, instant messaging, social media, blogs, websites, etc.) that is not disruptive or harmful to the individual or others. The individual:
- Safeguards access to medical information systems and electronic medical records.
 - Does not share protected health information (in verbal, written, or electronic form) with anyone who should not have access.
 - Does not take pictures of patient information or samples that could reveal protected health information and/or violate HIPAA regulations.

Effective date: 12 July 2021; Updated 6 June 2025