

2025 - 2026 Student Handbook

Department of Clinical and Diagnostic Sciences
MS in Medical Laboratory Sciences



UAB//SHP

UAB SCHOOL OF HEALTH PROFESSIONS DEPARTMENT OF CLINICAL AND DIAGNOSTIC SCIENCES MASTER OF SCIENCE IN MEDICAL LABORATORY SCIENCES 2025-2026 ACADEMIC HANDBOOK

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INTRODUCTION

DEAN'S WELCOME MESSAGE

Welcome to the University of Alabama at Birmingham School of Health Professions!

We are one of the six schools comprising the renowned UAB Academic Health Center. We offer more than 30 programs and 40 offerings at the certificate, baccalaureate, master's, and doctoral levels. And we are home to nearly 3,000 undergraduate and graduate students.

I encourage you to take advantage of all our vast resources, state-of-the-art facilities and research opportunities during your academic and clinical education. Also, please make the most of your access to the world-class faculty who are here to teach and support your journey.

Our degrees and programs are fully accredited by their respective professional organizations. This means you will be eligible for licensure, national certification or registrations upon graduation.

Graduating from the School of Health Professions means you will be well prepared to make a difference in your community.

I look forward to seeing you grow in your respective fields and watching you become the leader we know you can be.

Andrew J. Butler, PhD, FAPTA

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OVERVIEW OF THE SCHOOL OF HEALTH PROFESSIONS

The UAB School of Health Professions (SHP) is one of the largest academic institutions of its type in the United States. What began in the 1950s as a collection of training programs in various para-professional disciplines has grown into an internationally recognized center of academic and research excellence.

Today, we have five academic departments – Clinical and Diagnostic Sciences, Health Services Administration, Nutrition Sciences, Occupational Therapy, and Physical Therapy – that are housed in four buildings: Susan Mott Webb Nutrition Sciences (WEBB), Learning Resource Center (LRC), the School of Health Professions (SHPB), and the Center for Biophysical Sciences and Engineering (CBSE).

We are proud of many accomplishments including:

- U.S. News & World Report ranks all eligible SHP programs in the nation's top 25.
- Research funding is at an all-time high of \$26+ million and growing.
- Nearly 10 of our programs you will only find in Alabama at UAB.
- Our school has never been stronger or better positioned as a national leader in health professions education. And this status will only grow stronger as we continue to welcome students like you.

DISCLAIMER

This Handbook is an overview of general academic regulations specific to SOHP programs at UAB. Although UAB will make its best efforts to abide by this handbook, UAB reserves the right to interpret and apply its procedures and policies, and to deviate from these guidelines, as appropriate in the particular circumstances and in accordance with the mission and goals of the program. UAB also reserves the right to address issues not covered in this handbook and to make changes to the policy without advance notice. Changes become effective at the time the proper authorities determine so and the changes apply to both prospective students and those already enrolled. Please refer to our website for the most up-to-date version.

All students are responsible for knowing and abiding by the general University rules and regulations pertaining to graduate study at UAB and the specific academic requirements of their particular degree program. This Handbook is not intended to nor does it contain all policies or regulations applicable to students. Each student is responsible for familiarizing him/herself with the contents of this Handbook. Although the policies contained herein are intended to reflect current rules and policies of the University, users are cautioned that changes or additions may have become effective since the publication of this material. In the event of a conflict, current statements of Board policy contained in the Bylaws, Rules, official minutes, and other pronouncements of the Board or Chancellor, or superseding law, shall prevail.

This Handbook does not constitute a contract and may not be deemed or construed as part of any contract between UAB and any student or student representative.

SECTION 1 – SCHOOL AND UNIVERSITY INFORMATION

ACADEMIC CALENDAR

All dates related to registration, payments of tuition and fees, drop/add dates, other administrative requirements, and official school holidays are recorded on the <u>UAB Academic Calendar</u>.

ACADEMIC INTEGRITY CODE

The University established a new Academic Integrity Code effective August 23, 2021. This Code, which applies to undergraduate, graduate, and professional students as well as all academic activities, defines academic misconduct and outlines procedures for breaches of the code. Policies are established for resolution of charges of academic misconduct, and these processes are managed by the Academic Integrity Coordinator (AIC). In the School of Health Profession, the AIC is the Associate Dean for Academic and Faculty Affairs, the office is located in SHPB 660. The full text of the Academic Integrity Code is available at: Academic Integrity Code.

ADVISING

Undergraduate student advising is provided through advisors assigned to each program as well as through the Office of Student Services. Advisor and recruiter contact information can be found on the Office of Student Services Website. Graduate student advising is provided through the SHP graduate programs.

AMBASSADORS

Ambassadors help to spread awareness of the School of Health Professions and its multifaceted undergraduate and graduate programs, serve as liaisons between the department and university-wide student organizations, and serve as a student voice in school and university committees. The SHP Ambassadors help to support the programs within the school that will impact recruitment and retention initiatives. Learn more about the SHP Ambassadors HERE.

AskIT

AskIT is the technology help desk for faculty, staff, and students. They provide free support via telephone, email, or in-person. You will be asked to supply your BlazerID when you request assistance.

Phone: (205) 996-5555 Email: <u>askit@uab.edu</u> Website: <u>https://uabprod.service-now.com/service_portal</u>

ATTENDANCE

Class attendance is expected in all SHP programs. Specific class, laboratory, or clinical site attendance requirements may be more stringent than university guidelines. Refer to the program requirements in this handbook and in course syllabi for policies. The UAB attendance policy is as follows:

The University of Alabama at Birmingham recognizes that the academic success of individual students is related to their class attendance and participation. Each course instructor is responsible for establishing policies concerning class attendance and make-up opportunities. Any such policies, including points for

attendance and/or participation, penalties for absences, limits on excused absences, total allowable absences, etc., must be specified in the course syllabus provided to students at the beginning of the course term. Such policies are subject to departmental oversight and may not, by their specific prescriptions, negate or circumvent the accommodations provided below for excused absences.

The University regards certain absences as excused and in those instances requires that instructors provide a reasonable accommodation for the student who misses assignments, presentations, examinations, or other academic work of a substantive nature by virtue of these excused absences. Examples include the following:

- Absences due to jury or military duty, provided that official documentation has been provided to the instructor in a timely manner in advance.
- Absences of students registered with Disabilities Services for disabilities eligible for "a
 reasonable number of disability-related absences" provided students give their instructors
 notice of a disability-related absence in advance or as soon as possible.
- Absences due to participation in university-sponsored activities when the student is representing the university in an official capacity and as a critical participant, provided that the procedures below have been followed:
 - Before the end of the add/drop period, students must provide their instructor a schedule of anticipated excused absences in or with a letter explaining the nature of the expected absences from the director of the unit or department sponsoring the activity.
 - If a change in the schedule occurs, students are responsible for providing their instructors with advance written notification from the sponsoring unit or department.
- Absences due to other extenuating circumstances that instructors deem excused. Such
 classification is at the discretion of the instructor and is predicated upon consistent treatment of
 all students.
- Absences due to religious observances provided that students give faculty written notice prior to the drop/add deadline of the term.

In these instances, instructors must give students the opportunity to complete assignments in a way that corresponds as much as possible to the nature, scope, and format of the original. Options may include making up exams or other assignments, rescheduling student classroom presentations, or arranging for early or late submission of written assignments. The course make-up policy should be included in the syllabus.

BLAZERID / BLAZERNET / EMAIL

BlazerID: All students receive a unique identifier, the BlazerID, established at: www.uab.edu/blazerid. Your BlazerID is required for accessing BlazerNET and other campus resources. To activate one's BlazerID, select "Activate Accounts."

BlazerNET is the official portal of the UAB information network and is accessible from any Internet-accessible computer, on- or off-campus. Access BlazerNET from UAB home page www.uab.edu then choose UAB Quicklinks.

Email: uab.edu UAB student email is provided through Microsoft Office 365, a cloud-based system. Students have 50 GB of email space and 25 GB of free file 1 TB storage. The UAB email is the official communication medium for courses, news, information, and announcements. Students should not forward their UAB account to a personal email account. UAB is not responsible for information not received by the student due to the 'redirecting' of a UAB account to another email server.

BLAZER EXPRESS

The UAB Blazer Express Transit System provides transportation throughout the UAB campus. With a valid UAB ID badge, students can enjoy fare-free bus transportation. All buses are ADA-accessible and can seat approximately 35 riders. For an updated schedule, route maps, and hours of operation please go to www.uab.edu/blazerexpress/.

BOOKSTORE

There is one bookstore located on the UAB campus, offering a wide variety of products and services to students, including online purchasing and shipping. The bookstore stocks UAB memorabilia and college wear in addition to all required textbooks and course material.

UAB Barnes and Noble Bookstore

Location: 1400 University Blvd, Hill Student Center, Birmingham, AL. 35233

Hours: M – F 8:00am – 5:00pm | Sat 10:00am – 2:00pm | Sun Closed

Telephone: (205) 996-2665 Website: https://uab.bncollege.com/shop/uab/home

CAMPUS ONECARD

The UAB OneCard is the official university identification card. It is used for personal identification, for entry to campus events and the recreation center, for library checkout, and for other UAB services. It also serves as a declining balance card for the UAB meal plans and for Blazer Bucks accounts. Additional information is available at www.uab.edu/onecard.

CAMPUS MAP

UAB's campus map can be found at the following: www.uab.edu/map/

CAMPUS SAFETY

Campus safety procedures and resources can be accessed at https://www.uab.edu/students/home/safety.

CANVAS LEARNING MANAGEMENT SYSTEM

The Canvas Learning Management System is the platform used for managing instructional materials online. Canvas course sites are accessed through BlazerNET or at www.uab.edu/elearning/canvas. Students should monitor their course sites routinely for communication from faculty and to manage course assignments.

CATALOG

The UAB Catalog is published annually and includes UAB's courses, policies, and curricula. Students can link to the Undergraduate or Graduate catalog at www.uab.edu/catalog.

COMMUNITY STANDARDS AND ACCOUNTABILITY

<u>Community Standards and Accountability</u> is responsible for upholding the integrity and purpose of the university through the fair and consistent application of policies and procedures to students' behavior to

ensure a community that respects the dignity and right of all persons to reach their highest potential. SARC delivers programs and services in order to promote student safety and success, the pursuit of knowledge, respect for self and others, global citizenship, personal accountability and integrity, and ethical development. More information can be found here: UAB Student Advocacy, Rights & Conduct. The UAB student conduct code may be accessed online: UAB Student Conduct Code.

COUNSELING SERVICES

Student Counseling Services offers no cost, confidential counseling for UAB students related to physical, emotional, social, intellectual, or spiritual concerns. Student Counseling Services is located in the Student Health and Wellness Center at 1714 9th Avenue South (3rd Floor), Birmingham, AL. 35233. For more information, call (205) 934-5816 or https://www.uab.edu/students/counseling/.

DISABILITY SUPPORT SERVICES (DSS)

Accessible Learning: UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration, and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty, and staff. If you have a disability but have not contacted Disability Support Services, please call (205) 934-4205 or visit Disability Support Services.

If you are a student registered with Disability Support Services, it is your responsibility to contact the course instructor to discuss the accommodations that may be necessary in each course. Students with disabilities must be registered with DSS and provide an accommodation request letter before receiving academic adjustments. Reasonable and timely notification of accommodations for the course is encouraged and provided to the course instructor so that the accommodations can be arranged.

EMERGENCIES

Report suspicious or threatening activity to the UAB Police Department immediately. Law officers are available 24 hours, seven days a week. Also, more than 300 emergency blue light telephones connected directly to the police dispatch are located throughout campus.

UAB Police: Dial 911 from a campus phone

or call: (205) 934-3535 | (205) 934-HELP (4357) | (205) 934-4434

Emergencies affecting campus are communicated via the following:

- UAB Severe Weather & Emergency Hotline: (205) 934-2165
- University home web page: <u>www.uab.edu</u>
- Webpage: www.uab.edu/emergency
- Announcements on BlazerNET
- Cell phone messages and SMS text register for B-ALERT notices via https://idm.uab.edu/ens/b-alert

UAB EQUAL EMPLOYMENT/EQUAL EDUCATIONAL OPPORTUNITY STATEMENT:

UAB is an Equal Employment/Equal Educational Opportunity Institution dedicated to providing equal opportunities and equal access to all individuals regardless of race, color, religion, ethnicity, national origin, sex (including pregnancy), genetic information, age, disability, and veteran's status. As required by Title IX, UAB prohibits sex discrimination in any education program or activity that it operates. Individuals may report concerns or questions to UAB's Assistant Vice President and Senior Title IX Coordinator. The Title IX notice of nondiscrimination is located at uab.edu/titleix

FERPA TRAINING

The Family Educational Rights and Privacy Act (FERPA) of 1974 provides protection for all educational records related to students enrolled in an educational program. Information about your rights and protection of your records is available at the following site: FERPA. If you have questions or concerns about FERPA issues, you may email FERPA@uab.edu. All SHP students are required to complete FERPA Training.

FINANCIAL AID

Financial Aid Counselors are available each day in the One Stop Student Services Office located in the Hill Student Center, 1400 University Blvd. Suite 103, Birmingham, AL 35233. If you have general questions, you can call the Office of Student Financial Aid at (205) 934-8223 or send an email to finaid@uab.edu. For additional financial aid information: Cost & Aid.

FOOD SERVICES

Dining facilities available on campus closest to the SHP buildings include the Commons on the Green – located on the Campus Green, south of 9th Avenue and the Campus Recreation Center. For additional information about meal plans and campus dining facilities: Student Dining.

GRADUATE SCHOOL

The UAB Graduate School offers doctoral programs, post-master's specialist programs, and master's level programs. Graduate programs in SHP are coordinated through the Graduate School and students must adhere to the Graduate School policies and procedures. Graduate School information for current students is available at <u>Graduate School</u>. Policies and Procedures for the Graduate School can be located in the <u>Graduate School Catalog</u>.

GRADUATION

All students must complete an application for degree six months prior to graduating and no later than the deadline in the academic calendar. The University holds commencement every semester. Check the commencement website for the most current information: <u>UAB Commencement</u>.

HEALTH INSURANCE

To ensure that all students have adequate health care coverage, including ongoing primary and specialty care, the University of Alabama at Birmingham (UAB) requires all students to have major medical health insurance. Students can provide proof of their own private coverage or be enrolled in the Student

Health Insurance Plan. The plan is a 1-year commercial policy provided by United HealthCare and is renegotiated annually. This policy is a comprehensive health insurance policy at an affordable cost that is specifically designed to meet the needs of UAB Students. If you are required to have insurance but have sufficient coverage on another plan and wish to opt out of the Student Health Insurance Plan, you are required to submit a waiver to Student Health Services at the beginning of every semester. More information including submitting a waiver can be found at this website: Student Health Insurance Waivers.

HIPAA TRAINING

The Health Insurance Portability and Accountability Act (HIPAA) includes significant requirements for protecting individual privacy of health information. All students in the School of Health Professions must complete an online tutorial and be tested on HIPAA regulations at the time of program admission. A BlazerID is required to access the training site, located at online learning. Compliance with the training requirement is monitored monthly.

HONOR SOCIETIES

All students in the School of Health Professions are eligible for consideration for the Alpha Eta Honor Society.

• The UAB Chapter of this Society recognizes students registered in the final term of a baccalaureate or graduate health professions program. Inductees must have a cumulative grade point average of 3.0 (4.0 = A) and be in the upper 10% of their program. Nominations are made by program directors in spring and summer terms.

IMMUNIZATION POLICY

To provide a safe and healthy environment for all students, faculty, and staff at the University of Alabama at Birmingham (UAB), first-time entering students, international students and scholars, and students in clinical & non-clinical programs, must provide proof of immunization against certain diseases: Student Immunizations unless they have an approved medical or religious exemption.

INSTITUTIONAL REVIEW BOARD FOR HUMAN USE (IRB)

Student researchers must comply with all requirements for protection of human subjects. Detailed information is available on the IRB website.

INTELLECTUAL PROPERTY

Intellectual property refers to an asset that originated conceptually, such as literary and artistic works, inventions, or other creative works. These assets should be protected and used only as the creator intends. Training materials defining inventor status, patent criteria, and other intellectual property issues are available at: University Policies on Patents, Copyright, and Intellectual Property.

LACTATION CENTERS

The University has provided several lactation centers for students, faculty, and staff across the campus. <u>Center locations</u>. The School of Health Professions' lactation room is in the Susan Mott Webb Nutrition Sciences Building at 1675 University Blvd, Room 219A, Birmingham, AL 35233. Lactating students enrolled in the School of Health Professions have access to the room via their student ID/OneCard. If you cannot access the room, contact the building administrator, Julia Tolbert-Jackson at (205) 934-4133.

LIBRARIES AND LEARNING RESOURCE CENTER

UAB's libraries house excellent collections of books, periodicals, microforms, and other media. Students have online remote access to catalogs and online collections. Computers are available for student use during regular hours of operation. UAB Libraries.

SHP Learning Resource Center (LRC)

The School of Health Professions Learning Resource Center (LRC) provides a unique set of enterprise solutions that promote an exciting, intriguing, and innovative learning environment. It provides a state-of-the-art media studio; audio/visual support; and information technology management of public, classroom, and testing labs.

Location: 1714 9th Avenue South (2nd Floor), Birmingham, AL. 35233.

Phone: (205) 934-5146 Email: shplrc@uab.edu

Lister Hill Library of the Health Sciences

This is the largest biomedical library in Alabama, and one of the largest in the south. Located across the crosswalk from the School, the LHL has extension libraries in University Hospital and The Kirklin Clinic. Dedicated librarians hold "office hours" in the Learning Resource Center weekly.

Location: 1700 University Blvd. Birmingham, AL. 35233 Website: https://library.uab.edu/locations/lister-hill

Phone: (205) 975-4821

Mervyn H. Sterne Library

A collection of more than one million items supporting teaching and research in the arts and humanities, business, education, engineering, natural sciences and mathematics, and social and behavioral sciences.

Location: 917 13th Street South, Birmingham, AL. 35233 Website: https://library.uab.edu/locations/sterne

Phone: (205) 934-6364 (Reference) | (205) 934-4338 (User Services)

UAB STUDENT CONDUCT CODE

The Student Conduct Code promotes honesty, integrity, accountability, rights, and responsibilities expected of students consistent with the core missions of the University of Alabama at Birmingham. This Code describes the standards of behavior for all students, and it outlines students' rights, responsibilities, and the campus processes for adjudicating alleged violations. Behavior that violates UAB standards of conduct listed within the Student Conduct Code and elsewhere will be subject to disciplinary action through the appropriate conduct process. Whether it is determined that an

individual or group is responsible for the violation(s), either by direct involvement or by condoning, encouraging, or covering up the violation, appropriate response will occur with respect to the individual(s) and/or group involved.

Undergraduate Non-Academic Policies

Graduate Non-Academic Policies

ONE STOP STUDENT SERVICES

The mission of the One Stop is to provide a single point of professional integrated service to students. The One Stop serves students who need assistance with academic records, financial aid, registration, student accounting, ONE card, and other related topics. One Stop is located in the Hill Student Center, 1400 University Blvd. Suite 103, Birmingham, AL 35233. You may contact the One Stop office by phone or email at (205) 934-4300; (855) UAB-1STP [(855) 822-1787]; onestop@uab.edu.

PARKING

Student vehicles must be registered with UAB Parking and Transportation Services, located at 608 8th Street South, Birmingham AL. 35294. The office is open Monday – Friday from 7:30am – 5:00pm. Parking is allocated on a first-come, first-served basis. Parking fees are established by location, payable by semester or year, and are billed to the student's account. For additional information: UAB Student Parking.

PLAGIARISM AND TURNITIN

Plagiarism is academic misconduct that will result in a grade of zero and may result in dismissal from the School of Health Professions and UAB (see Academic Integrity Policy). All papers submitted for grading in any SHP program may be reviewed using the online plagiarism monitoring software. Please note that all documents submitted to <u>Turnitin.com</u> are added to their database of papers that is used to screen future assignments for plagiarism.

RECREATION CENTER

The <u>Campus Recreation Center</u>, located at 1501 University Blvd, Birmingham, AL 35233, is open to faculty, staff, students, and their families. A valid student identification card or membership card is required for access. Facilities include basketball courts, racquetball courts, weight rooms, swimming pools, exercise rooms, and indoor track.

SCHOOL OF HEALTH PROFESSIONS AWARDS

All students in the School of Health Professions are eligible for consideration for the following awards.

- Alfred W. Sangster Award for Outstanding International Student This award is presented annually to an international student in recognition of their academic and non-academic achievements.
- Cecile Clardy Satterfield Award for Humanism in Health Care This award is made annually to recognize one outstanding student for humanitarianism, professionalism, and commitment to health care.

- Charles Brooks Award for Creativity This award is made annually in recognition of creative accomplishments such as written publications or artistic contributions which complemented the student's academic activities.
- Dean's Leadership and Service Award Presented to a maximum of three outstanding SHP students annually, this award recognizes leadership to the School, UAB, and the community.

A call for nominations will be sent to program directors each year. Please refer to the program section of this handbook for awards available to students in individual programs.

SCHOOL OF HEALTH PROFESSIONS SCHOLARSHIPS

SHP has several scholarship opportunities for students enrolled in SHP programs. The Scholarship Committee, comprised of faculty from each department, reviews and selects awardees. Please go to this website for a list of scholarships and instructions for application.

Application announcements are made by the Office of Academic and Faculty Affairs. Many programs in SHP also have scholarships available to currently enrolled students in those programs. Please refer to the program section of this handbook for more information.

SCHOOL OF HEALTH PROFESSIONS SHARED VALUES

Collaboration | Compassion & Caring | Excellence & Achievement | Integrity | Respect | Service | Social Responsibility | Stewardship

The School of Health Professions is a tight-knit community that is connected from students to staff to faculty to alumni. We are dedicated to serving all from campus to community and beyond. And we are a knowledge-driven mass that is committed to classrooms, laboratories, clinics and more.

SOCIAL MEDIA

Social media can serve as useful communication tools. However, health professions students should use the forums judiciously. For more information: <u>UAB Social Media Guidelines</u>. The school's official sites are the following:

• X: https://x.com/uab shp

• Facebook: https://facebook.com/uabshp

• YouTube: https://youtube.com/uabshp http://instagram.com/uab_shp • Vimeo: http://vimeo.com/uabshp

• LinkedIn: <u>UAB SHP LinkedIn</u>

• Instagram: https://instagram.com/uab_shp

STUDENT HEALTH SERVICES

The University provides prevention, counseling, and treatment services to students through Student Health Services (SHS) located at 1714 9th Avenue South (3rd Floor), Birmingham, AL. 35233. The clinic is open from 8:00am – 5:00pm Monday – Thursday; 9:00am – 5:00pm Friday. They are closed for lunch

between 12:00pm – 1:00 pm weekdays. For more information: <u>Student Health Services</u>. Appointments may be scheduled by calling (205) 934-3580.

TITLE IX

In accordance with Title IX, the University of Alabama at Birmingham does not discriminate on the basis of gender in any of its programs or services. The University is committed to providing an environment free from discrimination based on gender and expects individuals who live, work, teach, and study within this community to contribute positively to the environment and to refrain from behaviors that threaten the freedom or respect that every member of our community deserves. For more information about Title IX, policy, reporting, protections, resources, and supports, please visit the UAB Title IX webpage: https://www.uab.edu/titleix/.

TUITION AND FEES

Tuition and fees for the University are published annually under the "Students" tab of the UAB website. They may be paid through BlazerNET. SHP programs have specific fees attached to programs, courses, and/ or laboratories. For more information: Tuition & Fees.

Payment deadlines for each semester are published on the official academic calendar. Please note that failure to meet payment deadlines can result in being administratively withdrawn from courses.

WEATHER

Severe weather situations that may affect the safety of students, faculty, and staff are communicated through the same channels as other emergencies. For more information: Emergency Management. Other information sources include:

- B-ALERT System (contact information must be setup and current)
- UAB Severe Weather & Emergency Hotline: (205) 934-2165

WITHDRAWAL FROM COURSE / PROGRAM

Withdrawal from a course or from your program is an official process and should be discussed with your academic advisor and / or program director. Most programs in the School of Health Professions are full-time and the curricula specifically sequenced. Withdrawal from a course may risk you having to wait to register for the class again. Withdrawals are made through the UAB registration system via the Student Resources tab in BlazerNET. Notice of program withdrawal should be given in writing to the program director. For more information: UAB Add/Drop and Withdrawal Policy including a medical withdrawal policy.

SECTION 2 – SHP AND UAB POLICIES

SCHOOL OF HEALTH PROFESSIONS POLICIES

DISMISSAL OF STUDENT FOR FAILURE TO MAKE SATISFACTORY ACADEMIC PROGRESS

<u>Dismissal of Student and Appeal Process</u>

EMERGENCY PLAN - SHPB/LRC/WEBB

SHPB/LRC/WEBB Emergency Plan

BACKGROUND CHECK AND DRUG SCREEN POLICY

Students in SHP programs are required to undergo a background check and drug screen using the school's approved vendor, <u>CastleBranch</u>, at the time of program admission, and again, prior to placement in a fieldwork placement (clinical, internship, practicum, residency, etc.). Additional checks/screens may be required by the individual sites therefore, students should work with the program to ensure compliance requirements are met. Instructions for requesting the background check and drug screens are provided to students by their programs. Students enrolled in SHP undergraduate programs will complete a learning module in the campus learning management system by the first semester of enrollment.

The Office of Academic and Faculty Affairs is responsible for ensuring student compliance throughout the program. Students found to be non-compliant will not be allowed to matriculate in the program (orientation, attend class, fieldwork placement, etc.) until all requirements are met. Program Directors, Fieldwork Coordinators, and students will be notified of non-compliance and a hold will be placed on the students' account.

- Fees for these screenings will be the responsibility of the student.
- The rules and regulations governing individual fieldwork placement sites may include additional provisions and/or more stringent guidelines which supersede this policy. Fees for these screenings are the responsibility of the student.
- Should your criminal background check contain issues, or if you fail a drug screen that may prevent
 you from receiving or sitting for board certification/licensure, a representative from the Office of
 Academic and Faculty Affairs will contact you. Depending upon the outcome, students will have
 a registration hold placed on their account until in compliance and this may result in being
 dismissed from the program. See program's guidelines regarding specific consequences.

Programs requiring a criminal background check and drug screening by the end of the first semester of enrollment and again, prior to fieldwork placement (if applicable in the program requirements), are the following:

Administration Health Services, PhD

Biomedical Sciences to Biotechnology Fast Track

Biomedical Sciences to Clinical Laboratory Science Fast Track

Biomedical Sciences to Health Physics Fast Track

Biomedical Sciences to Nuclear Medicine & Molecular Imaging Sciences Fast Track

Biomedical and Health Sciences, MS

Biotechnology, MS

Biotechnology, PhD

Dietitian Education Program, Graduate Certificate

Genetic Counseling, MS

Health Administration (Residential), MSHA

Health Care Management to Healthcare Quality and Safety Fast Track

Health Care Management to Health Informatics Fast Track

Health Care Management to Occupational Therapy Doctorate Fast Track

Health Physics, MS

Medical Laboratory Science, MS

Nuclear Medicine & Molecular Imaging Sciences, MS

Nutrition Sciences, MS

- Dietetic Internship Clinical Track
- Dietitian Education Program
- Research Track

Nutrition Sciences, PhD

Occupational Therapy, OTD – (entry level)

Physical Therapy, DPT

Physician Associate Studies, MSPAS

Rehabilitation Science, PhD

The following students enrolled in SHP undergraduate programs will complete a learning module in the campus learning management system by the first semester of enrollment. If a fieldwork placement (clinical, internship, practicum, residency, etc.) is required, students must complete criminal background checks and drug screens prior to the first day of the semester of a fieldwork placement.

Health Care Management, BS

Biomedical Sciences, BS

Biobehavioral Nutrition and Wellness, BS

Disability Studies and Rehabilitation Science, BS

Programs waived from the Criminal Background Check and Drug Screening requirements are the following: *

Applied Mixed Methods Research, Graduate Certificate

Biotechnology Regulatory Affairs, Graduate Certificate

Clinical Informatics, Graduate Certificate

Health Administration (International and Executive tracks), MSHA

Health Informatics, MSHI

Healthcare Finance Management, Graduate Certificate

Healthcare Leadership, DSc

Healthcare Leadership, Graduate Certificate

Healthcare Quality and Safety, MS

Healthcare Quality and Safety, Graduate Certificate

Health Services Research, MS

Healthcare Simulation, MS

Healthcare Simulation, Graduate Certificate Nutrition for Community Health, Graduate Certificate Nutrition Sciences, MS

- Clinical Track-Prior Learning
- Lifestyle Management and Disease Prevention Track

Low Vision Rehabilitation, Graduate Certificate

Multi-Tiered Approach to Trauma, Graduate Certificate

Occupational Therapy Doctorate (Post Professional)

Physical Therapy Residencies (Neurologic, Orthopedic)

Primary Care Physical Therapy for Underserved Populations, Graduate Certificate

^{*}Students enrolled in exempt programs who participate in a course(s) incorporating community, corporate or other high impact, out-of-classroom activities such as service learning, capstone projects or other hands-on learning experiences, may be required by placement sites to submit background check and drug screening results. Students are responsible for the fees associated with such screening.



STUDENT INSTRUCTIONS FOR UNIVERSITY OF ALABAMA AT BIRMINGHAM SCHOOL OF HEALTH PROFESSIONS

About CastleBranch.com

CastleBranch is a secure platform that allows you to order your background check & drug test online. Once you have placed your order, you may use your login to access additional features of CastleBranch, including document storage, portfolio builders and reference tools. CastleBranch also allows you to upload any additional documents required by your school.

Order Summary

Required Personal Information

o In addition to entering your full name and date of birth, you will be asked for your Social Security Number, current address, phone number, and e-mail address.

Drug Test (LabCorp or Quest Diagnostics)

o Within 24-48 hours after you place your order, the electronic chain of custody form e-chain will be placed directly into your CastleBranch account. This e-chain will explain where you need to go to complete your drug test.

Payment Information

o At the end of the online order process, you will be prompted to enter your Visa or MasterCard information. Money orders are also accepted, but will result in a \$10 fee and additional turn-around-time.

Place Your Order

Go to: www.castlebranch.com and enter package code:

AH01 - Background Check and Drug Test

You will be required to enter your program under "Student Information" classification

You will then be directed to set up your CastleBranch profile account.

View Your Results

Your results will be posted directly to your CastleBranch profile account. You will be notified if there is any missing information needed in order to process your order. Although 95% of background check results are completed within 3-5 business days, some results may take longer. Your order will show as "In Process" until it has been completed in its entirety. Your school's administrator can also securely view your results online with their unique username and password. If you have any additional questions, please contact the Service Desk at 888,723,4263 x 7196 or visit the website to submit your question at: https://www.castlebranch.com/contact-us.

UAB POLICIES

ACADEMIC PROGRESS

GRADUATE

UNDERGRADUATE

HEALTH

IMMUNIZATIONS

NEEDLE **S**TICKS AND **E**XPOSURES

EQUAL OPPORTUNITY

EQUAL OPPORTUNITY AND DISCRIMINATORY HARASSMENT

POLICE AND PUBLIC SAFETY

CAMPUS SAFETY

FIREARMS, AMMUNITION, AND OTHER DANGEROUS WEAPONS

RESEARCH AND SCHOLARLY ACTIVITIES

ACADEMIC INTEGRITY CODE

ETHICAL STANDARDS IN RESEARCH AND OTHER SCHOLARLY ACTIVITIES

PATENT

SUBSTANCE USE/ABUSE

ALCOHOLIC BEVERAGES, USE AND CONSUMPTION

DRUG FREE CAMPUS

Non-Smoking

TECHNOLOGY

TECHNOLOGY RESOURCES

STUDENT COMPLAINTS

UAB COMPLAINT POLICY

Section 3 – Program Information

WELCOME

Welcome to the Medical Laboratory Sciences program. This handbook has been compiled to provide you with information to help you as you progress through your program. Where appropriate, the contact for more detailed information on various subjects has been included. If, however, you desire or need further explanation of any matter, or other types of information, please contact your faculty advisor or program director. The UAB web pages, or links, are included for some of the sections of this handbook, and you are encouraged to review the links for information you may need. The UAB and School of Health Professions (SHP) pages have search engines to allow you to input keywords and find information. In addition, the campus directory and calendars are located on the main UAB page: www.uab.edu. Students should regularly refer to the web site for their specific program for updates.

M.S. in Medical Laboratory Sciences (MLS) http://www.uab.edu/shp/cds/clinical-laboratory-sciences

PROGRAM MISSION STATEMENT

The Faculty of the Medical Laboratory Sciences program is committed to providing service to the community, as well as providing high quality education to prepare students with a solid educational background and a set of skills translatable to a variety of laboratory settings, including hospital laboratories, industry, research laboratories, and many more. The faculty, in its concern for the health and safety of the general public, is committed to ensuring that each student develops knowledge, skills and values essential to the appropriate role providing the basis for continuing intellectual and professional growth.

PROGRAM HISTORY

CLS

Prior to 1992, the medical technology master's degree program was with the Department of Pathology as an advanced post-professional program. The students were certified medical technologists who completed courses and projects that specialized in one of the disciplines such as clinical microbiology, chemistry, hematology, immunohematology and immunology. The program courses were offered through Pathology and taught by the Pathology/Laboratory Medicine faculty. In 1992, the program was administratively transferred to the School of Health-Related Professions and affiliated with the existing undergraduate Medical Technology Program. The Medical Technology faculty offered advanced courses to certified medical technologists. The program was a joint program with the Department of Pathology collaborating for graduate student projects. By 1995, the Graduate Program expanded to offer categorical tracks in management, microbiology, immunology, hematology, and immunohematology in addition to the ongoing advanced post-professional offerings. These graduates were eligible for certification categorical exams but not for the generalist medical technologist certification exam. By 2000, the program discontinued the offering of the categorical tracks due to market decisions by

employers and implemented the current CLS track for students who had baccalaureate degrees in biology and chemistry who preferred to have a master's degree rather than a second baccalaureate degree. This CLS program was developed to have students complete all requirements for a certificate in medical technology and to complete course related projects at the graduate level as well as to complete either a thesis or a non-thesis project. The curriculum included the specialty disciplines in medical technology at an advanced level, as well as graduate level information management and emerging diagnostic technology courses. By 2003, the degree program was administratively managed as a graduate program in the School of Health-Related Professions and no longer identified as a joint program offering with the Department of Pathology. This decision was based on identified goals and objectives of each of the academic units as to the role of faculty and future directions for working with graduate students.

The advanced post professional track courses offered during 1995 through 2007 were primarily laboratory operations management courses. With changes of direction by the CLS program it was determined that the post professional track would be discontinued by 2008. The future focus was placed on expanding the CLS track as to numbers of students and to support the tracks of medical technology and medical technology articulation for MLT students seeking a baccalaureate degree. Since 2008, the CLS program's medical technology and CLS tracks have offered concurrent courses at the 500 level for graduate students, with graduate students completing graduate level requirements in each of the medical technology courses. Additionally, the CLS students have completed 600 level courses in biostatistics, scientific publication analyses, advanced technology assessment, and a four-credit non-thesis project. In 2012, the CLS students' study plan was modified related to the non-thesis project to include activities across the curriculum time period that would culminate in a student presentation on a defined topic and the development of a portfolio for evaluation by the faculty including selected products from identified courses that meet defined objectives. The CLS faculty continue to revise and strengthen the curriculum to prepare graduates for the current and emerging workforce.

FACULTY & STAFF

Faculty and staff for the MLS program can be found at this WEBSITE

The Department of Clinical & Diagnostic Sciences has a centralized support staff team that supports all CDS programs. For student questions, please contact the CDS front desk at: (205) 975-4CDS (4237) or ASKCDS@uab.edu

CURRICULUM

Medical Laboratory Sciences Curriculum Courses

FALL: 16 Semester Hours		
CLS 502	Phlebotomy and BF Collection	1
CLS 501	Introduction to Clinical Lab	3
CLS 503	Body Fluids	1

CLS 504	Body Fluids Laboratory	1
CLS 518	Immunology	3
CLS 528	Hematology I	3
CLS 529	Hematology I Lab	1
CDS 610	Research Design and Statistics	
SPRING: 14 Se	emester Hours	
CLS 523	Clinical Microbiology	3
CLS 524	Clinical Microbiology Laboratory	1
CLS 526	Instrumentation & Automation	2
CLS 527	Instrumentation & Automation Laboratory	1
CLS 532	Hematology II	3
CLS 533	Hematology II Lab	1
CDS 625	Scientific Publications Analysis	3
SUMMER: 13 S	Semester Hours	
CLS 530	Immunohematology	4
CLS 531	Immunohematology Laboratory	1
CLS 538	Infectious Diseases	3
CLS 539	Infectious Diseases Laboratory	1
CLS 542	Molecular Diagnostics	3
CLS 543	Molecular Diagnostics Lab	1
FALL: 12 Seme	ster Hours	
CDS 505	Professional Development	1
CLS 505	Laboratory Management	3
CLS 551	Clinical Chemistry	4
CLS 552	Clinical Chemistry Laboratory	1
CLS 560	Clinical Correlations	3
SPRING: 13 Se	mester Hours	
CLS 570	MLS Certification Review	1
CLS 595	Clinical Practice	12
RESEARCH: *Distribut	4 Semester sed as needed throughout the curriculum	Hours*

CLS 698	Non-Thesis Research	4
	TOTAL	72

ACCREDITATION

The University of Alabama at Birmingham is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS). The Master of Science in Medical Laboratory Sciences is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The contact information for both agencies is found below.

SACS

1866 Southern Lane Decatur, GA 30033-4097

TEL: 404.679.4500 FAX: 404.679.4556 http://www.sacs.org/

NAACLS

5600 N. River Road, Suite 720 Rosemont, IL 60018-5119

TEL: 773.714.8880 FAX: 773.714.8886 info@naacls.org

http://www.naacls.org/

CERTIFICATION

Graduates of the MLS program are eligible to take an examination for certification. Certification examinations are administered by the Board of Certification (BOC) of the American Society for Clinical Pathology (ASCP), which offers certification in the category designated Medical Laboratory Scientist (MLS) for MLS students.

ASCP

Board of Certification 33 Monroe Street, Suite 1600 Chicago, Illinois 60603

TEL: 312.541.4999

http://www.ascp.org/default.aspx

CODE OF ETHICS

The American Society for Clinical Laboratory Sciences

The Code of Ethics of the American Society for Clinical Laboratory Science (ASCLS) sets forth the principles and standards by which clinical laboratory professionals practice their profession.

1. Duty to the Patient

- a. Clinical laboratory professionals *are accountable* for the quality and integrity of the laboratory services they provide. This obligation includes maintaining individual competence in judgment and performance and striving to safeguard the patient from incompetent or illegal practice by others.
- b. Clinical laboratory professionals *maintain high standards* of practice. They exercise sound judgment in establishing, performing, and evaluating laboratory tests.
- c. Clinical laboratory professionals *maintain strict confidentiality* of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to other health care professionals about the services they provide.

2. Duty to Colleagues and the Profession

- a. Clinical laboratory professionals uphold and maintain the dignity and respect of our profession, and strive to maintain a reputation of honesty, integrity, and reliability. They contribute to the advancement of the profession by improving the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession.
- b. Clinical laboratory professionals *actively strive to establish* cooperative and respectful working relationships with other health professionals with the primary objective of ensuring a high standard of care for the patients they serve.

3. Duty to Society

- As practitioners of an autonomous profession, clinical laboratory professionals have the responsibility to contribute from their sphere of professional competence to the general well-being of the community.
- b. Clinical laboratory professionals *comply with relevant laws and regulations* pertaining to the practice of clinical laboratory science and actively seek, within the dictates of their consciences, to change those that do not meet the high standards of care and practice to which the profession is committed.

Pledge to the Profession

As a clinical laboratory professional, I strive to:

- Maintain and promote standards of excellence in performing and advancing the art and science of my profession
- Preserve the dignity and privacy of others
- Uphold and maintain the dignity and respect of our profession
- Seek to establish cooperative and respectful working relationships with other health professionals
- Contribute to the general well-being of the community

I will actively demonstrate my commitment to these responsibilities throughout my professional life.

GOALS AND OBJECTIVES

CLS (Adopted 1993; Revised 2012, 2023)

The goals of the program are to prepare a student to assume the role of a health care professional in the field of clinical laboratory sciences, to accept responsibilities as a health care team member and to continue professional development as a clinical laboratory scientist. Graduates of this program are expected to:

1. Demonstrate attributes desirable of clinical laboratory scientists.

a. **Dependability**

- i. Demonstrate integrity, honesty and conscientiousness in work
- ii. Accept responsibility for own actions
- iii. Organize and complete work on schedule without sacrificing accuracy and reliability
- iv. Follows established policies and procedures
- v. Be punctual and in classroom or clinical workstation when required or assigned

b. Stability

- i. Work effectively under conditions of stress and/or change
- ii. Maintain professional demeanor under adverse conditions

c. Ability to interact effectively with others

- i. Influence and contribute to a pleasant work environment
- ii. Accept leadership of supervisory personnel and provide appropriate feedback
- iii. Offer assistance and support to co-workers
- iv. Communicate with other health workers in a professional and courteous manner
- v. Interrelate with patients in an empathetic manner, appropriate to a health care team member
- vi. Contribute willingly to the accomplishment of group endeavor

d. Professionalism

- Maintain a neat, clean, personal appearance complying with existing dress codes
- ii. Participate in professional societies, continuing education, and self-study programs
- iii. Show initiative and interest to improve technical skills and expand knowledge.
- iv. Investigate appropriate sources (literature and personnel) for technical and professional information
- v. Maintain confidentiality of patient and laboratory data
- vi. Demonstrate ethical conduct in professional endeavors

Note: Students are evaluated based on the criteria listed above during the didactic courses and during the clinical practice courses using the following Affective Evaluation Form. This form is

completed twice (Spring and Fall semesters) prior to clinical practice, and students are advised of the observations of the faculty so that changes in student behavior can occur prior to clinical practice courses. The marked criteria are identified as essential behaviors that are expected of all students in the classroom and in clinical practice settings.

AFFECTIVE **E**VALUATION

S = Satisfactory; I = Improvement Needed; U = Unsatisfactory; **E** = Essential Function

	S	I/U	E
A. Dependable in performance of classroom and laboratory responsibilities which may be demonstrated by:			
 Demonstrating integrity, honesty and conscientiousness in work. 			Х
2. Accepting responsibility for own actions. (i.e., admits and			^
corrects mistakes).			
3. Organizing and completing assignments or work on schedule			
without sacrificing accuracy and reliability. (i.e., requires no			
prodding or reminder of completion of responsibility leaves work			
area clean and restocked without reminding, appropriately			
prepares for class, lab or clinical setting, and completes			
assignments/work within established deadlines).			
4. Following established policies and procedures of program. (i.e.,			
uses references, laboratory procedure manuals, adheres to			
policies, and adheres to safety regulations).			
5. Being punctual and in class when required or assigned. (i.e.,			Х
follows attendance policy, is in class laboratory area and ready to			
begin activities prior to time expected and has all materials			
supplies needed for the activities of the session/day, does not			
take lengthy breaks, does not plan work or other activities during			
time assigned for class/clinical practice.			
B. Stable in response to work environment which may be demonstrated			
by:			
1. Working effectively under conditions of stress and/or change.			
(i.e., continues to perform at an appropriate rate without making			
mistakes when the workload is heavy and plans and budgets			
time).			
2. Maintaining professional demeanor under adverse conditions.			
(i.e., continues to perform with a calm, logical, respectful and			
positive manner and provides competent or accurate service			
even when conditions are less than ideal).			
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C.		e to interact effectively with others, which may demonstrated by			
		Influencing and contributing to a pleasant work environment.			
	2.	Accepting leadership of supervisory personnel and providing			
		appropriate feedback.			
		Offering assistance and support to co-workers.			
	4.	Communicating with other healthcare workers in a professional			
		and courteous manner.			
	5.	Interrelating with patients in an empathetic manner, appropriate			
		to a healthcare team member.			
	6.	Contributing willingly to the accomplishment of group			
		endeavors.			
D.	De	emonstrates Professionalism which may be demonstrated by:			
	1.	Maintaining a neat, clean, personal appearance complying with			
		existing dress codes (i.e., follows program dress code).			
	2.	Showing initiative and interest to improve technical skills and			
		expand knowledge (i.e., asks to learn more than minimally			
		required, offers to start an activity without being told, reads			
		information prior to laboratory sessions, participates in			
		professional societies, continuing education, and self-study			
		programs. Attends district and state ASSCLS meetings, attends			
		hospital in- service education programs).			
	3.	Investigating appropriate sources (literature and personnel) for			
		technical and professional information. (i.e., looks up			
		information in writing before inquiring from others, utilizes			
		faculty, teachers, rather than other students for information,			
		uses student laboratory and clinical procedure manual)			
	4. Maintaining confidentiality of patient and laboratory data. (i.e.,				
		does not talk about laboratory work outside of the laboratory)			
	5.	Demonstrating ethical conduct in professional endeavors. (i.e.,			
	-	does not release inappropriate information to patient, fellow			Х
		student or other individual, does not offer advice to health care			
		workers beyond scope of practice, repeats any work in which			
		problems are suspected).			
		problems are suspected).			
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Note: The following program objectives are integrated into the curriculum courses, and students are expected to achieve competencies at the entry-level for each of the following objectives before the end of the program curriculum.

- 2. Analyze, quantitatively and/or qualitatively, body fluids and materials to aid in the diagnosis monitoring, treatment and/or prevention of disease.
 - a. Obtain and process specimens using appropriate techniques and established safety measures.
 - b. Evaluate the suitability of specimens for the analysis requested.
 - c. Determine the priority of laboratory requests to arrange the workload to provide for optimal patient care and efficiency.

- d. Apply principles of assays and use the appropriate equipment and techniques to perform high volume, less difficult analytical tests in chemistry, hematology, immunology, immunohematology, and microbiology.
- e. Apply physical, chemical, instrumental, and physiological theories pertinent to tests to recognize and solve problems.
- 3. Interpret and correlate laboratory test data.
 - a. Accurately determine the results of tests using the appropriate controls, standards and/or references.
 - b. Calculate results of tests performed if necessary.
 - c. Evaluate the validity of test results in terms of reference intervals, quality control data, and analytical system performance.
 - d. Correlate results of tests with other test data and pertinent patient information to identify potential errors/sources of variation.
 - e. Report all abnormal testing results to the instructor/supervisor and repeat abnormal tests or perform confirmatory or additional procedures as indicated.
 - f. Follow institutional procedures for reporting critical values.
 - g. Record and report results in writing, orally or by computer conforming to established procedures and institutional policies.
 - h. Follow institutional procedures for use of referral services.
- 4. Monitor statistical quality control (SQC) protocols to optimize precision and accuracy of testing results and contribute to patient safety.
- 5. Perform quality control procedures on analytical tests, equipment, reagents, media, and products according to protocol.
 - a. Acknowledge unacceptable control results and take corrective action if indicated.
 - b. Perform instrument maintenance procedures and instrument checks on basic equipment and instruments according to laboratory protocol.
 - c. Recognize instrument malfunction and communicate with instructor or supervisors.
 - d. Following standard laboratory procedures, document all information such as quality control, maintenance, and corrective actions.
 - e. Use the appropriate safety precautions and barriers in the performance of various tasks in order to prevent the transmission of infectious agents or other laboratory accidents and document any incidents.
- 6. Apply principles of management and leadership applicable to clinical laboratory operations.
 - a. Practice effective written and verbal communication skills.
 - b. Practice interpersonal skills and conflict resolution skills related to individual team and group processes.
 - c. Practice awareness of principles of fiscal management and regulations to assure compliance with need to work in environment with limited resources to assure cost effectiveness operations and to deliver efficiency and effectiveness with IOM aims of quality.
 - d. Apply principles of quality management to the processes and outcomes of clinical laboratory operations.

- e. Recognize managerial/supervisory roles/demands for cost effective clinical laboratory operations in the daily operations of service delivery.
- f. Apply principles of individual involvement-oriented management to enhance learning, teamwork, and the quality of products produced by clinical laboratory personnel.
- g. Apply personal managerial skills to improving the quality of individual, group and organization outcomes.
- 7. Develop life-long learning competencies.
 - Participate in activities needed to support maintenance of certification and professional development such as reading, seminars, committee activities, professional organizations, formal courses, and other continuing education programs.
 - b. Learn from and share knowledge with coworkers, supervisors, employees, and peers.
 - c. Gain information about workplace expectations to improve affective behaviors for contribution to expected service behaviors in the work setting.
- 8. Apply principles of learning and methods of instruction to assist in the education of self and others.
 - a. Deliver oral presentations using logically developed outlines.
 - b. Identify components of behavioral objectives to write measurable objectives.
 - c. Recognize the need for use of multiple learning styles to master different principles and practices across multiple types of courses, content, and work environments.
 - d. Utilize appropriate delivery tools to assure appropriate message given to audience.
 - e. Utilize appropriate resources in development of presentation materials.
- 9. Participate in the development of skills and knowledge needed for technology assessment (statistics, scientific literature analysis, study design, presentations, and evaluation skills).
 - a. Evaluate data for sensitivity, specificity, predictive value, and cost effectiveness.
 - b. Evaluate tests, methods, instruments, and new technology as to medical usefulness and t on patient health status.
 - c. Evaluate systems processing for total testing for inpatient, outpatient, and point of care and referral specimens.
 - d. Apply principles of Quality Management Systems (QMS), which includes quality control (QC), quality assessment (QA), and quality improvement (QI) for operations management in customer-oriented production of information for patient management.
 - e. Monitor the healthcare industry to be aware of resources needed for technology assessment and internal policy compliance/external regulatory compliance (voluntary/mandated).
 - f. Monitor current health care issues and recognize the implications for clinical laboratory services.
- 10. Practice use and applications of information management technologies including laboratory medicine informatics.
 - a. Use databases, word processing and spreadsheet programs for processing of data to generate appropriate statistical analyses.
 - b. Input data correctly and retrieve data accurately and efficiently.
 - c. Recognize issues of compatibility, privacy, and limitations with information systems.

- d. Utilize laboratory informatics principles and connectivity standards applicable to data management for point of care testing.
- e. Apply principles of utilization management of all testing services to achieve efficient and cost-effective operations of clinical laboratories.
- f. Apply principles and practices of evidence-based laboratory medicine including outcomes management by application of laboratory information systems to improve services and assure patient safety.
- g. Recognize the necessity of laboratory information systems with unidirectional and bidirectional communication capabilities for auto verification and expediting of release of accurate and timely laboratory reports.

ESSENTIAL FUNCTIONS

In order to successfully complete the degree requirements for the Master of Science in Medical Laboratory Sciences, students must complete the academic and clinical laboratory practice requirements. Students must meet the essential functions in addition to the academic requirements. "Essential functions" are those physical abilities, mental abilities, skills, attitudes, and behaviors the students must evidence or perform at each stage of their education." The absence of an essential requirement would fundamentally alter the program's goals. The essential functions include categories of observation, movement, communication, intellect, and behavior:

Observation

The student must be able to:

- 1. Observe laboratory demonstrations in which biological (i.e., body fluids, culture materials, tissue sections, and cellular specimens) are tested for their biochemical, hematological, immunological, microbiological, and histochemical components.
- 2. Characterize the color, odor, clarity, and viscosity of biologicals, reagents, or chemical reaction products.
- 3. Employ a clinical grade binocular microscope to discriminate among fine structural and color (hue, shading, and intensity) differences of microscopic specimens.
- 4. Read and comprehend text, numbers, illustrations, and graphs displayed in print, on a projection screen, and on a video monitor.

Movement

The student must be able to:

- 1. Move freely and safely about a laboratory.
- 2. Reach laboratory bench tops and shelves, patients lying in hospital beds or patients seated in specimen collection furniture.
- 3. Travel to numerous clinical laboratory sites for practical experience.
- 4. Perform moderately taxing continuous physical work, often requiring prolonged sitting, in confined spaces over several hours.

- 5. Maneuver phlebotomy and culture acquisition equipment to safely collect valid laboratory specimens from patients.
- 6. Control laboratory equipment (i.e., pipettes, inoculating loops, test tubes) and adjust instruments to perform laboratory procedures.
- 7. Use an electronic keyboard (i.e., 101-key IBM computer keyboard) to operate laboratory instruments and to calculate, record, evaluate, and transmit laboratory information.

Communication

The student must be able to:

- 1. Read and comprehend technical and professional materials (e.g., textbooks, magazine and journal articles, handbooks, and instruction manuals).
- 2. Follow verbal and written instructions in order to correctly perform laboratory test procedures.
- 3. Clearly instruct patients prior to specimen collection (if applicable).
- 4. Effectively, confidentially, and sensitively converse with patients regarding laboratory tests (if applicable).
- 5. Communicate with faculty members, fellow students, staff, and other health care professionals verbally and in a recorded format (writing, typing, graphics, or telecommunication).
- 6. Prepare papers, prepare laboratory reports, and take examinations within specified times.

Intellect

The student must:

- 1. Possess these intellectual skills: comprehension, measurement, mathematical calculation, reasoning, integration, analysis, comparison, self-expression, and criticism.
- 2. Be able to exercise sufficient judgment to recognize and correct performance deviations.

Behavior

The student must:

- 1. Be able to manage the use of time and be able to systematize actions in order to complete professional and technical tasks within faculty-defined time limits.
- 2. Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment.
- 3. Be able to provide professional and technical services while experiencing the stresses of task-related uncertainty (i.e., ambiguous test ordering, ambivalent test interpretation), emergent demands (i.e., "stat" test orders), and a distracting environment (i.e., high noise levels, crowding, complex visual stimuli).
- 4. Be flexible and creative and adapt to professional and technical change.
- 5. Recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to patients, self, and nearby individuals.
- 6. Adapt to working with unpleasant biologicals.

- 7. Support and promote the activities of fellow students and of health care professionals. Promotion of peers helps furnish a team approach to learning, task completion, problem solving, and patient care.
- 8. Be honest, compassionate, ethical, and responsible. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate her or his own performance, accept constructive criticism, and look for ways to improve (i.e., participate in enriched educational activities). The student must be able to evaluate the performance of fellow students and tactfully offer constructive comments.

CLASSROOM & LABORATORY SUPPLIES

Students are expected to supply their own notepaper, pens, pencils, and calculators. All students are required to purchase a laboratory coat (program approved) which is fluid resistant, long sleeved, cuffed, and long long-length.

The Program will supply gloves and face shields as needed. Students are expected to have access to a computer (either personal, or in the LRC or Lister Library.) Computer applications are essential for completion of course requirements and the projects in courses and the end of program project.

CLASS SCHEDULE

At the beginning of each term, class schedules will be posted on course websites on Canvas indicating dates, times, location, lecture topics, laboratory sessions, examinations, assignments, etc. The class schedules are subject to change, as circumstances require. The students will be informed of any necessary schedule changes as soon as possible.

- The program requires 5 terms of full-time enrollment to complete.
- Students will typically have class Monday through Friday each week; however, the exact days and times of class sessions will vary from day to day and term to term.
- During spring term, of the second year, students will be assigned to clinical practice and will be expected to be in the laboratories 35 hours/week. The exact times in which they will be present at each site will vary depending on the site.
- Work schedules and other personal commitments must be planned around class/clinical practice schedules. Students may not leave early or arrive at class, lab sessions, or clinical practice late because of work.
- Attendance is mandatory at all assigned classes (lectures, labs, clinical practicum, etc., refer to Attendance Policy).

DOCUMENTATION OF COURSE COMPLETION

CLS Course Completion Checklist

COURSE TITLE CR HRS GRADE COMMENT

CLS 502	Fundamentals of Phlebotomy BFC	1	
CDS 505	Professional Development	1	
CLS 501	Introduction to Clinical Lab	3	
CLS 503	Body Fluids	1	
CLS 504	Body Fluids Laboratory	1	
CLS 505	Laboratory Management	3	
CLS 518	Immunology	3	
CDS 610	Research Design and Statistics	3	
CLS 523	Clinical Microbiology	3	
CLS 524	Clinical Microbiology Laboratory	1	
CLS 526	Instrumentation and Automation	2	
CLS 527	Instrumentation and Automation Lab	1	
CLS 542	Molecular Diagnostics	3	
CLS 543	Molecular Diagnostics Laboratory	1	
CDS 625	Scientific Publications	3	
CLS 528	Hematology I	3	
CLS 529	Hematology I Lab	1	
CLS 530	Immunohematology	4	
CLS 531	Immunohematology Laboratory	1	
CLS 538	Infectious Diseases	3	
CLS 539	Infectious Diseases Laboratory	1	
CLS 532	Hematology II	3	
CLS 533	Hematology II Lab	1	
CLS 551	Clinical Chemistry	4	
CLS 552	Clinical Chemistry Laboratory	1	
CLS 560	Clinical Correlations	3	
CLS 570	Professional Development	1	
CLS 595	Clinical Practice	12	
CLS 698	Non-Thesis Research	4	

APPLICATION FOR DEGREE & CERTIFICATE

Application for Degree

Upon successful completion of all MLS program requirements students will be awarded an M.S. degree. BMD students that are in the MLS certificate program will be awarded an undergraduate certificate in Medical Laboratory Science. All students must apply for their degree or certificate at least 6 months

prior to their anticipated graduation date. The application for degree forms is in the online format and may be accessed from the following websites:

Application for undergraduate degree:

https://www.uab.edu/commencement/ceremony/apply-to-graduate-walk

Application for an M.S. degree is on BlazerNET

NOTE: The issuing of an MS degree is not contingent upon the student passing any type of external certification or licensure examination. Students having successfully completed the program are eligible to sit for certifying and licensing examinations.

CLINICAL AFFILIATES

The MLS program has approved clinical affiliate sites where MLS students are placed for their clinical practice experience. Graduate students must obtain a 3.00 GPA prior to going into their clinical practice. BMD students who are in the undergraduate certificate program must obtain a 2.75 GPA prior to going into their clinical practice. The approved facilities are found below.

FACILITY	CITY/STATE
Brookwood Medical Center	Birmingham, AL
Children's of Alabama	Birmingham, AL
Coosa Valley	Sylacauga, AL
DCH Regional Medical Center	Tuscaloosa, AL
Gadsden Regional Medical Center	Gadsden, AL
Huntsville Hospital	Huntsville, AL
Lab Corp of America (Brookwood, Coosa Valley)	Birmingham, AL
Madison Hospital	Madison, AL
Memorial Hospital	Chattanooga, TN
Piedmont	Atlanta, GA
St Vincent's Medical Center	Birmingham, AL
St Vincent's East	Birmingham, AL
Shelby Baptist Medical Center	Alabaster, AL
UAB Hospital	Birmingham, AL
UAB Highlands	Birmingham, AL
UAB Medical West	Bessemer, AL
UF Health Shands Hospital	Gainsville, FL
University of South Alabama Medical Center	Mobile, AL
Veteran's Administration Medical Center	Birmingham, AL
WellStar Health System	Atlanta, GA

The above institutions work with the Medical Laboratory Sciences program as major clinical affiliates. The number and location of sites may vary depending on clinical training needs of the Program.

The MLS program clinical coordinator, in conjunction with the program director, assigns students to a clinical site. Students are not permitted to select the site for their clinical rotation experience nor are they allowed to alter an already approved schedule. Requests for adjustments to a clinical practice schedule must be made to the program clinical coordinator. Adjustments made to clinical practice schedule not approved and organized by the program clinical coordinator may lead to grade of "F" for that rotation. MLS students with dependent children under the age of 16 years will be given priority placement in a clinical site within 20 miles of UAB. It is the student's responsibility to make appropriate accommodations when a clinical site is located off of the UAB campus. The clinical practice schedule for each student is prepared on an individual basis and will be given to the student the first spring of the semester where students will be notified as to whether or not they will rotate within or outside 60 miles of Birmingham. Please note the schedule is usually not complete and ready for distribution until near the end of the semester. Courses and clinical practice schedules are subject to change, as circumstances require. The student will be informed of schedule changes as soon as possible.

Students are expected to spend a minimum of 35 hours per week (Monday through Friday) in clinical practice courses. The time to report will vary according to location of the assignment (hospital or section of hospital laboratory), but students are expected to spend 7 hours each day at the clinical site. If students work, their work hours must not conflict with the clinical courses.

MEDICAL LABORATORY HEALTH & SAFETY RULES AND PROCEDURES

The administrators and faculty of the School of Health Professions are committed to the health and welfare of students enrolled in health care professions. Various immunizations and medical requirements must be satisfied prior to enrollment in SHP. In addition, the UAB Medical Center Student Health Service provides specific medical care to enrolled students. Every attempt is made to provide appropriate instruction in the utilization of universal precautions and exposure control procedures. Specific requirements vary according to the curricula of each academic program. Students are expected to comply with the standards set by the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) (29.CFR Part 1910.1030) and the MLS program policies and procedures. The policies and procedures apply to all students, faculty, and staff.

The rules and procedures described below have been developed for the protection and health of students, faculty, and staff. Noncompliance will be considered as misconduct and handled as such. These rules and procedures comply with the OSHA Standards for Occupational Exposure to Bloodborne Pathogens, CDC Recommendations for Prevention of HIV Transmission in Health-Care Settings, CDC Recommendations for Airborne Pathogens, UAB Biosafety Manual, and UAB Chemical Safety and Waste Management Manual.

General Regulations for Student Laboratory Courses

- 1. Eating, drinking, smoking, chewing gum or tobacco, applying cosmetics or lip balm, or handling contact lens is PROHIBITED in the labs (even if the lab space is being used for class or an examination, and not a lab session). No items should be placed in the mouth or near the face.
- 2. Use of cell phones, personal computers, personal digital assistants, text pagers or other forms of technology for personal use in the student laboratory is prohibited without the approval of the instructor (refer to the policy for Technology Use in the Classroom). Cell phones and other devices should be stored with other personal items.
- 3. Students have access to lockers on a first-come, first-served basis. These lockers are located on the 4th floor of the School of Health Professions Building. Students interested in a locker should contact a department support staff, via email (askCDS@uab.edu) or may visit any staff member located on the 4th floor of the School of Health Professions Building. Personal items MUST be stored in day lockers or in the designated space in the laboratory, not around or on the laboratory workspace. Students must have a lock for use with the day lockers.
- 4. Dress must be professional at all times and in compliance with the department dress code.
- 5. Standard precautions (which combine universal precautions and body substance isolation) must be observed in the laboratory to prevent contact with blood, body fluids, and all secretions and excretions.
- 6. All procedures involving blood or other potentially infectious materials are performed to minimize splashing, spraying, spattering, and generating droplets.
- 7. Personal Protective Equipment
 - a. Long-sleeved fluid resistant (fluid barrier) lab coats (not jackets) and shoes, which completely cover the feet (not open toe, not open heel, not cloth), must be worn during all lab sessions. Lab coats must be buttoned or secured completely for protection. Students will not be admitted to lab sessions without lab coats or the appropriate clothes and shoes. Disposable laboratory coats will not be available for student use and shoe covers will not be available.
 - b. Gloves must be worn in ALL lab sessions. Non-latex gloves are used in the student laboratory sessions. Students must not use oil-based lotions, which decrease the integrity of gloves.
 - c. An eye and face protection unit must be worn when performing procedures that may generate droplets of blood, body fluids, secretions or excretions, or other infectious/harmful materials.
 - d. Protective goggles or safety glasses must be worn in any labs when performing procedures that may result in possible splashing of harmful chemicals or aerosols.
 - e. Additional requirements for personal protective equipment and/or environmental controls required for certain procedures will be designated in individual course lab manuals.
- 8. Gloves are removed inside out aseptically (without producing aerosols) and are discarded in the biohazard container with red bag at the end of each laboratory session, or when necessary, due to gross contamination, tearing or puncturing.

- 9. "Finger bowls" may be made by pouring disinfectant on gauze sponges in a petri dish. "Finger bowls" may be used to clean gloves when contaminated slightly (e.g., finger stuck in plate of bacteria) before touching microscopes or other equipment. Soaked gauze can also be used to cover minor spills. In the case of excessive contamination, change gloves.
- 10. The plastic face shield should be cleaned with disinfectant spray at the end of each lab in which it is used (or when gross contamination occurs). Goggles or safety glasses should be cleaned in the same manner. If a woven nose and mouth facemask is worn, it should be discarded (in biohazard container with red bag) at the end of each lab session in which it is used (or if gross contamination occurs).
- 11. Lab coats should be hung on the designated coat rack after each lab session. The MLS program washes laboratory coats on a regular basis for the students. Soiled lab coats must be removed immediately.
- 12. Lab coats and other protective equipment must be removed before leaving lab for any reason.
- 13. Hands must be washed (upon removing gloves) with an antimicrobial solution before leaving a lab session for any reason or when gross contamination occurs. After washing and drying hands, turn off faucet using a paper towel.
- 14. Skin (other than hands) which has come in contact with blood or other potentially infectious material, must be washed immediately with antimicrobial solution and water. If eye contamination occurs, the eyewash must be used immediately.
- 15. All operations with flammable, combustible, or toxic chemicals must be carried out under a fume hood. Material safety data sheets are located in the laboratory.
- 16. A pipetting aid or semi-automatic pipette must be used to pipette all fluids. Mouth pipetting is prohibited.
- 17. Food and drink must not be stored in lab refrigerators or anywhere in lab area.
- 18. The workstation must be cleaned with disinfectant before and after each lab period and after spills of potentially contaminated material. Lamps and all objects left on the desktop must be wiped with disinfectant-soaked towels.
- 19. The workspace should be covered with a large, white, plastic-coated absorbent towel at the beginning of each lab session. All contaminated materials should be kept on the towel. Books and papers needed for lab should be kept off the towel. The towel should be discarded (in the biohazard container with red bag) at the end of each lab session (or when grossly contaminated).
- 20. Small spills of contaminated material may be wiped up with a disinfectant soaked gauze or towel. Wash the surface a second time with another disinfectant soaked towel. Discard towels in a biohazard (red bag) container. Never pick up broken glass with hands but use a mechanical device such as tongs, forceps, or a brush and dustpan. Broken glass must be discarded in the designated container. Large spills must be reported to the instructor or lab staff. Staff (faculty or teacher) must oversee cleanup of any spills.
- 21. Used needles and other sharps are not bent, broken, recapped, or re-sheathed by hand. Used needles are not removed from disposable syringes. Needles and sharps are disposed of in impervious disposable containers.

- 22. Do not remove pencils, pens, or other materials used during lab sessions because they may be contaminated. Use the materials supplied or leave your personal pencils, etc., as donations for the lab.
- 23. Unauthorized visitors are not permitted to enter the lab. If an emergency situation requires that someone speak with a student during a laboratory session, the visitor must obtain permission from the teacher or course master to speak with student; student must remove lab coat, wash hands, and leave the laboratory. If a student is expecting someone at a designated time, the student must obtain permission from teacher or course master before leaving the laboratory area.
- 24. A student may not leave the laboratory area during an exam unless he/she obtains permission from the teacher or instructor. Multiple students are not permitted to exit the area at the same time during an exam.
- 25. Incidents and Injury Reporting
 - a. Cuts or other skin abrasions must be covered by Band-Aid(s) (available in First Aid Box) prior to putting on gloves.
 - b. All incidents/injuries occurring in lab regardless of severity must be reported promptly to the instructor or lab staff who will take appropriate action (i.e., send student to Student Health or Emergency Department).
 - c. An incident report will be completed by the student, signed by the instructor, and kept on file in the Program Office. Forms are available from MLS faculty and teachers.
 - d. Refer to UAB Body Fluid Exposure Policy.

General Regulations for Clinical Practice Courses

Students are expected to follow the General Regulations for Student Laboratory Courses while in clinical practice sites. The clinical practice sites will have established protocols for safety to which all students must adhere.

Protocol for Disposal of Contaminated Materials

- 1. Materials to be discarded in biohazard containers with red bags at students' workstations (not exclusive).
 - a. Cotton alcohol prep pads/Band-Aids
 - b. Gauze
 - c. Kimwipes
 - d. Gloves and face masks
 - e. Bibulous paper
 - f. Sedimentation rate tubes
 - g. Uni-Flex safety caps
 - h. Wooden applicator sticks, cotton tipped swabs, disposable glass slides, Pasteur pipettes (glass or plastic) and stained smears
 - i. Disposable serologic pipettes -- tip down to avoid aerosol
 - j. Plastic pipette tips for pipettors
 - k. Contaminated or used-up pencils, pens, and china or permanent ink markers

- I. Disposable slides used for serological testing
- m. Empty urine cups (urinalysis) (urine is discarded as indicated)
- n. Disposable glass or plastic tubes (empty or containing small amounts, 5 mL or less, of liquid). If tubes contain more than 5 mL of liquid, the liquid should be discarded in designated containers prior to disposal.
- 2. Materials to be placed in rigid plastic sharp keeps located on side counters during lab sessions.
 - a. Needles/Syringes used in venipuncture and lancets used in capillary/skin puncture.
 - b. Microhematocrit capillary tubes containing blood.
 - c. Broken glass products contaminated with blood or body fluid.
- 3. Place all glass reusable pipettes in the 7 x 18" pipette jars.
- 4. Materials to be placed in metal containers lined with autoclave bags.

Blood and/or serum samples if greater than 1mL or in an evacuated tube:

- a. Contaminated media (tubes and plates)
- b. Tubes or ampules containing suspensions of bacteria
- c. Multi-unit I.D. Systems for bacteria (e.g., API)
- d. Blood culture bottles (vented with subculture unit)
- 5. Materials to be placed in trash cans labeled "Broken Glass" box located in each of the labs.
 - a. Clean broken glassware
 - b. Clean broken tubes
 - c. Clean broken pipettes

Glassware contaminated by patient specimens must be placed in biohazard broken glass box or sharp container. When the biohazard box or sharp container is full, it is placed in a biohazard red can.

- 6. Miscellaneous Material
 - a. Guidelines for materials, which must have special handling prior to disposal, will be designated in specific course lab manuals. Always check with instructor or lab staff if unsure about how to dispose of contaminated items.

Protocol for Disposal of Non-Contaminated Trash

Place all non-contaminated trash paper, packing materials, and small packing boxes in waste baskets lined with clear bags that are located at the front and back of the lab area. These are discarded by housekeeping. No contaminated materials are permitted.

Chemical Hazards

- 1. Material Data Safety Sheets with information about the chemical, safety precautions, hazard, and treatment for exposure are located on the door of the reagent room in the prep area.
- 2. Eyewash and shower are available in the lab.
- 3. The hood in the lab must be used for flammables and reagents with noxious and toxic fumes.
- 4. For emergencies, call: 4-2487 or check the web site http://www.uab.edu/ohs/

FACULTY ADVISING

Each student will be assigned and notified of their assigned advisor at the mandatory Program Orientation session. Students are expected to interact with their advisor on a regular basis, via email or in person.

If a student desires a new advisor for any reason, the student should contact the program director and request a new advisor be assigned. All requests for a change of advisor must have program director approval before the change is made.

GRADES

Final grades and credits for each student are recorded and preserved as a permanent record at UAB. The final grades for academic courses are compiled and proportioned to develop a final course grade. The course instructor will inform the students at the beginning of each term in each course syllabus of the system of proportioning of scores used to develop the course grade. Minimum performance criteria designated by the course instructor must be achieved by the student. These criteria indicate the level of competency of the individual student.

Grades are awarded according to the level of the student's achievement in each course. The grades for academic courses are indicated by letters:

A = Excellent

B = Above Average

C = Average

F = Failure

P = Pass

- W = Withdrawal, a notation (Not a Grade) assigned by the Registrar and reflects an administrative action initiated by the student in accordance with UAB regulations.
- I* = Incomplete, a temporary notation assigned a student who has not completed course requirements.
- N = No Grade Submitted, a temporary notation made by the Registrar if the course instructor does not assign a grade prior to issuing of grade reports or when the course is designated to extend beyond a single term.

* An "I" will be given only when an emergency or unexpected event prohibits the student from meeting course objectives in a timely manner and if there is reasonable expectation that the course requirements can be satisfactorily completed by the end of the following term. The notation of "I" will convert to an "F" unless an extension is requested; specifying the date the student will complete the course requirements. Refer to the department policy for awarding a grade of Incomplete.

The student's grade point average is calculated by dividing the total quality points earned by the semester hours attempted. Semester hours attempted is defined as the total semester hours for any

course in which the student was registered on a regular basis and receives an A, B, C, or F. Quality points are awarded as following:

Quality Points	<u>Letter Grade</u>
4	Α
3	В
2	С
None	P, NP, or F

Graduate School Requirements - Good Academic Standing

A student must maintain a grade point average of at least 3.0 (B average) and earn at least as many hours of P grades as the total of NP grades combined to be in good academic standing as defined by the Graduate School. BMD students in the undergraduate certificate program must also maintain good academic standing as define by the undergraduate school.

GRADUATE STUDENT REQUIREMENTS

Introduction

All UAB graduate students in the MLS program are required to complete Plan II (Non-thesis) project prior to completion of the MLS program. Students in the MLS/BMD undergraduate certificate program are not required to complete a non-thesis project. During orientation to the program in August, and during fall term, the students will meet with the faculty to discuss the requirements for the CLS 698 Non-Thesis Research course [4 credits.]

In addition to meeting the MLS discipline specific goals and objectives as listed in the MLS Handbook, graduates of the MLS program track are expected to gain insight into techniques of problem posing and problem solving and to use these insights to prepare written and oral reports. In graduate courses, students are expected to write technical papers based on scientific literature research and to develop effective presentation competencies as specified in the UAB Graduate School Catalog and Student Handbook.

http://catalog.uab.edu/graduate/

The attainment of objectives addressing these competencies will be demonstrated by the preparation of a portfolio containing materials developed during affiliated courses in the MLS curriculum and an end of program oral presentation focusing on a topic relevant to medical laboratory sciences, which has been researched throughout the curriculum and documented in the portfolio.

Plan II Non-Thesis Research Project Process

All MLS students are required to work in groups (no more than 5) to complete a Plan II project prior to completing the MLS program. Plan II projects may or may not require research and may or may not

require a formal thesis, but students are expected to gain insight into the techniques of problem posing and problem solving and to use these insights to prepare a final plan II project.

Selecting A Plan II Non-Thesis Project Topic

Students will be randomly assigned to groups of no more than 5 students each group will be assigned an advisor no later than the end of the first fall semester. The student groups and assigned advisor discuss possible topics and activities that are appropriate for non-thesis research. In most cases, the MLS program faculty already has a topic that will be shared in the group. Plan II projects are flexible in nature and are designed on an individual basis between students and their assigned advisors. Plan II projects, although flexible in nature, are still rigorous regarding structure, formatting, and depth of analysis. Possible projects may include:

- State of the art/narrative review of the literature on a current topic.
- Development of a publication ready article for a MLS-related journal.
- Development of a publication ready case history.
- Literature review and comparison study proposal for error assessment of a new diagnostic assay.
- Operations management project to include performance improvement interventions/analyses.
- Instructional design and assessment of a technology-based product for training laboratory practitioners.
- Literature review to include chronology of diagnostic methods including performance. Characteristics and application characteristics with evaluation of current usage in diagnostic testing service centers.
- Preparation of a narrative review paper that analyzes the implications of major public and reimbursement policies on the delivery of diagnostic services for the past decade.

<u>All non-thesis projects that require data collection must be approved by the IRB.</u> Any project proposal that requires funding requires that the student prepare a budget and submit the budget to their chair and the program director. Any funding required, must be approved prior to proceeding beyond the topic selection process for a non-thesis project.

<u>Plan II Project Completion</u>

The students and their assigned advisor will determine the format of the project and requirements for successful completion of the project.

Submission of Final Project to MLS

The student submits a completed version of the project to his/her advisor. One copy of the project is entered into the MLS graduate student papers database and maintained in the MLS library. The project is not submitted to the Graduate School. If original data was collected, the student will be encouraged to prepare a manuscript for submission to a journal. If the student decides not to do so, then the student will be asked to complete a data release form so that the chair may use the paper for preparing a

manuscript/presentation. A second copy of the paper is given to the Program Director and the Chair of the Study Committee should retain an electronic copy of the paper.

PERFORMING SERVICE WORK POLICY

Students in the program are not required to perform service work as part of the curriculum, nor do they receive any academic credit for work outside of assigned classes. The students are not permitted to work in place of professional or staff personnel at the clinical site during scheduled clinical practice times. Student activities are to be exclusively directed to learning and they must not be diverted to assisting in completing the laboratory workload at any time. Students may never work completely unsupervised, and therefore, are never to be placed in a position of independence in carrying out laboratory responsibilities.

PREGNANCY POLICY

The University of Alabama at Birmingham seeks to treat all students equally, regardless of their actual or potential parental, family or marital status. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex — including pregnancy, parenting and all related conditions — in education and in programs and activities that receive federal funding. Title IX specifically prohibits discrimination based on pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery from any of these conditions.

The University must treat pregnant students in the same way it treats similarly situated students. Thus, any accommodation provided to students who have temporary medical conditions will also be provided to pregnant students. Students seeking a reasonable modification due to pregnancy or a condition related to pregnancy must register with the Title IX Office.

A reasonable modification under Title IX is an adjustment to a task, environment, curriculum, or process that allows an individual to participate in an activity equitably and meaningfully. Reasonable modifications must not fundamentally alter the program or activity or unduly burden the recipient. Reasonable modifications are provided as appropriate, as reasonably available, or deemed medically necessary by the treating healthcare provider.

The Title IX Office provides reasonable modifications to students who are pregnant, recovering from pregnancy, and/or a condition related to pregnancy. Additionally, the Title IX Office works with students, University administration, departments, faculty, staff, campus police, and other support services to ensure that University policies and programs foster a campus community free of sex discrimination.

To seek reasonable modifications, please contact the Title IX Office by calling 205-996-1340 or emailing titleixoffice@uab.edu. See the https://www.uab.edu/titleix/ for more information.

PROCEDURES WHEN APPLIED EXPERIENCES CANNOT BE GUARANTEED

If, due to some unforeseen event, we cannot place all students in a clinical practice site for a given discipline during a given term, we will assign students to the available clinical sites for that discipline based on program GPA (from highest placed first on down). If a student is not placed in a clinical practice environment for a specific discipline, they will receive priority for placement in that discipline the next time clinical placements are scheduled.

MEDICAL LABORATORY SCIENCE PROGRAM TEACH OUT PLAN

If a catastrophic event occurs that results in an interruption of the university's ability to operate the CLS program or an event where the program can no longer operate, the program will continue to provide instruction on-line via UAB's online course management system (Canvas). This system is backed up on an off-site location. Laboratory sessions will be accommodated at affiliate campuses or clinical affiliate sites. Students completing their clinical rotations in UAB's CLS program will be relocated to other existing affiliated sites within Alabama.

If a catastrophic event halts the operation of one or more of the Program's clinical affiliates, steps will be taken to place students at other functioning clinical sites to finish the remainder of their training.

Note:

If the Teach-Out Plan ever goes into effect, the Program Director will submit the Teach- Out Plan to NAACLS within 30 days of the official announcement of the closure of the program.

SCHOLASTIC REQUIREMENTS

The MLS Program requires that students maintain an overall "B" average (GPA \geq 3.0) to continue in the program. MLS students who do not maintain an overall "B" average will be placed on probation by the Graduate School. Thereafter, the student will have two (2) semesters in which to restore the GPA to 3.0 or higher; otherwise, they will be dismissed by the Graduate School. MLS/BMD students that are in the undergraduate certificate program will have to maintain an overall (GPA \geq 2.75) to remain in the program.

A student who receives a grade of "F" in one program-specific course will be required to repeat that course the next time it is officially offered and will not be able to take any courses for which that course is a prerequisite (including clinical practice) until the course is successfully completed. Only one course in the student's curriculum may be repeated in this manner and only one repeat of the course will be allowed. If the student receives a grade of "F" when the course is repeated, they will be dismissed from the program.

A student who receives more than one "F" at any time in the curriculum will be dismissed* from the program, regardless of the student's overall GPA. An official letter notifying the student of their dismissal will be sent to the student from the program director. Students dismissed from the program will not have the opportunity to re-apply to the program.

*Exceptions may be granted to students who do not successfully complete the certification review/professional development course.

STUDENT ORGANIZATIONS & ACTIVITIES

MLS Student Association (MLSSA)

Purpose and Goals

- Promoting HIGH ACADEMIC ACHIEVEMENT among its members and peers.
- PROVIDING STUDENT INPUT and REPRESENTING STUDENT INTERESTS to faculty and administration regarding student needs or concerns related to the MLS program and/or the field of Medical Laboratory Sciences.
- Supporting a network for SHARING INFORMATION regarding professional organizations such as the American Society for Clinical Laboratory Sciences (ASCLS), American Society of Clinical Pathologists (ASCP), Certification class offerings, conferences, and other seminars on topics of interest.
- 4. Establishing a **FORUM FOR DISCUSSION** among students about current issues in the field of Medical Laboratory Sciences and the UAB MLS Program of study.
- 5. **RECRUITING** future students into the field of Medical Laboratory Sciences.
- 6. Promoting a supportive environment for **FRATERNIZATION** and **SOCIALIZATION** among its members.

Membership and Dues

- 1. The University of Alabama at Birmingham and the MLSSA administers its educational programs and activities, including admission, without regard to race, color, religion, sex, national origin, disability unrelated to the performance of essential job function or an essential eligibility requirement, veteran status, or Vietnam era veteran status. Membership is open to all students who satisfy membership criteria listed herein and join ASCLS. The UAB MLS Student Association will ensure that all meetings, programs, services, or other activities are accessible to individuals with disabilities and that reasonable accommodations are made as necessary.
- 2. Interested students should contact any association officer or the faculty sponsor to obtain an application for membership.
 - Requirements for membership, include submitting an application and joining ASCLS, are due no later than the second meeting of each semester (or at the time of application).
 Applications can be submitted to an officer or faculty advisor.
 - b. New members shall be inducted into the organization during the second meeting of the academic year or the semester in which he/she applies for membership.
 - c. Membership of the Association shall consist of active, associate, and emeritus members. Active Member: Any student who is classified as a MLS major, or any interested student attending The University of Alabama at Birmingham, shall be eligible for Active Membership in this Association.
 - i. Emeritus Associate Member: Any faculty member in the MLS program may become an Emeritus Associate member. Emeritus Associate members may not

vote, hold office, or chair a committee, but are encouraged to advise and assist with activities of the Association as requested.

- d. A new Active member may not vote until the application and dues have been received, and his/her name has been placed on the active membership roster.
- 3. Students are required to join ASCLS to be considered as active members on a yearly basis.
- 4. Membership confirmation should be submitted when the application is submitted or by the second meeting of the semester in which the person applies. Membership is applicable for one academic year and must be renewed to partake in organizational activities.

MLSSA Class Officers

1. President

Each program should elect a president (other officers if deemed appropriate) to help coordinate class projects and other activities. The duties of the President should include:

- Presiding at program student meetings. Meetings may be held as often as needed; however, it is suggested that at least one per term be held.
- Conducting elections for program representatives to MLSSA and other groups/organizations as necessary.
- Serving as program a representative for social events and other activities as appropriate.
- Coordinating or appointing individual(s) to assist with SHP or program projects.
- Serving on MLS Advisory Committee.
- Keeping program director/faculty posted on activities.

2. Other Officer(s)

Other officers (vice-president, secretary, etc.) may be elected if desired. Small committees or task groups may be appointed or elected for specific projects.

ASCLS - ASCLS-Alabama

The American Society for Clinical Laboratory Science (ASCLS) is a national professional society dedicated to:

- Establishing, developing, and maintaining the highest standards in clinical laboratory methods and research.
- Creating mutual understanding and co-operation between those in the laboratory and all health professionals working in the interest of individual and public health.
- Promoting programs of primary and continuing education, research, and development.
- Representing the profession of clinical laboratory science through improvement of the status of its members.
- Advancing the ideals and principles of the profession of clinical laboratory science.

Student membership in ASCLS includes:

- Subscriptions to the Journal of Clinical Laboratory Sciences and the newsletter "ASCLS Today".
- Opportunities to attend the Annual Meeting and participate in workshops and seminars at reduced prices.
- Voluntary participation in group insurance programs at reduced rates and special graduate degree programs.

• Opportunities for leadership development.

Student membership in the American Society for Clinical Laboratory Science-Alabama is automatically included in the ASCLS student membership fee. The state society holds scientific sessions and business meetings periodically, which include sessions of interest to students. Students are welcomed and encouraged to attend these meetings.

For more information or to join ASCLS, please refer to the website at: http://www.ascls.org/

The mission of the American Society for Clinical Pathology is to provide excellence in education, certification, and advocacy on behalf of patients, pathologists, and laboratory professionals. ASCP's primary objectives are:

- To promote the practice of scientific medicine by a wider application of clinical laboratory methods to the diagnosis of disease.
- To stimulate original research in all branches of clinical laboratory work.
- To establish from time-to-time uniform standards for the performance of various laboratory examinations.
- To elevate the scientific and professional status of those specializing in this branch of medicine.
- To encourage a closer cooperation between the practitioner and the clinical pathologist.

ASCP

ASCP Membership is complimentary for students who intend to meet the ASCP Board of Certification eligibility requirements for certification and have been accepted or are currently enrolled in a regionally accredited college/university science program or a laboratory science program approved by an appropriate accrediting agency. ASCP membership benefits include;

- Online subscription to Critical Values quarterly news magazine;
- Online access to LabMedicine and American Journal for Clinical Pathology (AJCP);
- ASCP email newsletters, Daily Diagnosis, eNewsBriefs, and ePolicyNews; and,
- Member-only discounts on books, online CE and educational products, and free domestic shipping on all online orders.

More information and an application form is available at: https://www.ascp.org/Students

TECHNOLOGY USE IN THE CLASSROOM

UAB's Policy

The use of any personal computational or communications devices in the classroom, not otherwise governed by UAB or course policies, is subject to the approval of the instructor. This includes (but is not limited to) the use of calculators, computers, and cell phones. Any use of such devices without instructor approval is not permitted The use of such devices to facilitate an act of academic misconduct (such as cheating or plagiarism) will be considered a violation of the UAB Academic Integrity Code and will be sanctioned as outlined in the Code.

The MLS programs prohibits the use of electronic devices during didactic, laboratory, and clinical practice without the approval of the instructor. Students are expected to use technology in the classroom according to and in compliance with directions included in each course syllabus. Cell phones must be turned off during all class related activities including class sessions, laboratory sessions, clinical practice, and any other program related activities. Text messaging (retrieving, responding) is prohibited. During graded activities, instructors will request students to leave the electronic devices in the front of the classroom. Students will be allowed to retrieve his/her electronic device once all students in the classroom have completed the graded activity or when the individual student has completed the test, etc. and is dismissed from the classroom.

A student must notify and get the approval of the instructor if there are circumstances that may require him/her to have access to a cell phone while in the classroom. In such cases, if permission is granted, the student must have the phone in silent mode (vibrate) and will need to exit the classroom to answer the call or respond to the text.

WITHDRAWING FROM THE PROGRAM

A student who wishes to voluntarily withdraw from the Medical Laboratory Sciences Program must have approval by the Program Director before the withdrawal is officially made. The student must submit a written statement, in the form of an official business letter, of their intent to withdraw from the program including the effective date of the withdrawal and must schedule a face-to-face, or phone meeting, with the Program Director to discuss the withdrawal. Once approved by the Program Director the official UAB withdrawal is made by the student through the UAB One Stop Student services.

Students should refer to the Institutional Refund Policy for refunds on tuition and fees.

Those who withdraw for medical reasons may appeal to the Provost to grant an exception to the refund policy. More details regarding the exceptions may be found in the <u>Tuition Refund Appeals Policy</u>.

NOTE: The failure to attend a class does not constitute a formal withdrawal.