Center for Programs in Allied Health

Medical Laboratory Science Program

Program Handbook

2019-2020

Updated: May 13, 2019
INTRODUCTION TO Program HANDBOOK

The purpose of the Program Handbook is to serve as a reference and resource for the students in each of the programs in the VUMC Center for Programs in Allied Health (CPiAH). The Program Handbook is one of the important documents that provide operational guidance to students, to assist them in their successful progression through their programs. Key documents with policy and procedure information important to students include:

- **Catalog of the VUMC Center for Programs in Allied Health** – Source of important policies and other information related to VUMC, the CPiAH, and each program. The catalog is available on the VUMC CPiAH website.
- **Program Handbook** – Each CPiAH program provides students its own Program Handbook. The policies and procedures in the Program Handbook are aligned with VUMC, CPiAH, and program policies that appear in the Catalog, as well as other locations. The purpose of the Program Handbook is to provide more specific details about each program, with a particular focus on operational information and procedures.
- **VUMC CPiAH website and Program Website** – The Center for Programs in Allied Health has its own website, and that website houses a website for each program within the CPiAH. Students will find important information regarding both the institution and the programs on these sites.

IMPORTANT NOTICE TO STUDENTS:

All students enrolled in VUMC Center for Programs in Allied Health (CPiAH) programs are bound by all VUMC, CPiAH and Program policies. By enrolling in a CPiAH program, every student acknowledges his or her responsibility to abide by and adhere to all institutional and programmatic policies and procedures. Students therefore have the responsibility of being familiar with the policies and procedures described in the Program Handbook, in the Catalog of the Center for Programs in Allied Health, and on the CPiAH and respective program’s websites.
INTRODUCTION TO PROGRAM HANDBOOK………………………………………………………………………2
PROGRAM INFORMATION PROVIDED IN THE CPIAH CATALOG………………………………………………………4

- Program Description
- Certification/Credentialing Information
- Mission, Credo and Goals
- Accreditation and Approvals
- Staff and Faculty
- Program Advisory Committee
- Admission Information
- Academic Program
- Course List & Descriptions
- Student Assessment & Grading
- Satisfactory Academic Progress Requirements
- Graduation Requirements
- Professional Code of Ethics

INTRODUCTION TO THE DIAGNOSTIC LABORATORIES, VUMC DEPARTMENT OF PATHOLOGY, MICROBIOLOGY, AND IMMUNOLOGY ………………………………………………………………………………………………6

- Mission, Values, and Vision…………………………………………………………………………………………7

APPLICATION, INTERVIEW, AND SELECTION PROCESS……………………………………………………………8

- Prerequisite Coursework
- AP, CLEP, and Survey Coursework
- ESL Students

PROGRAM PHILOSOPHY, MISSION STATEMENT, and OBJECTIVES………………………………………………9
HONOR CODE………………………………………………………………………………………………………………10
ACADEMIC PROBATION AND DISMISSAL POLICY……………………………………………………………………11

- Academic Probation……………………………………………………………………………………………………12
- Clinical/Behavioral Probation…………………………………………………………………………………………12
- Academic Probation Notice Sample……………………………………………………………………………………13
- Clinical/Behavioral Probation Sample……………………………………………………………………………………14

PROGRAM FACILITIES……………………………………………………………………………………………………15

ACADEMIC PROGRAM …………………………………………………………………………………………………15

- Sample Lecture/Student Laboratory Schedule………………………………………………………………………15
- Sample Clinical Practicum Schedule……………………………………………………………………………………16
- Minimum Competencies …………………………………………………………………………………………………16
- Comprehensive Final……………………………………………………………………………………………………17

STUDENT ASSESSMENT …………………………………………………………………………………………………17

- Evaluation of the Student ………………………………………………………………………………………………17
- Behavioral Evaluation Sample…………………………………………………………………………………………18

STATEMENT OF ESSENTIAL FUNCTIONS……………………………………………………………………………22
EVALUATION OF THE PROGRAM.................................................................................................22
ATTENDANCE POLICY..............................................................................................................22
  • Absence and Tardiness Policy ............................................................................................23
  • Excessive Absence and Tardiness ....................................................................................24
STUDENT ADVISING AND CONFERENCES ............................................................................25
COMMITMENT TO SAFETY, HEALTH AND ENVIRONMENTAL PROTECTION .......................25
STUDENT CONDUCT ...............................................................................................................27
STUDENT EMPLOYMENT WHILE ENROLLED AT VUMC ..........................................................27
  • Student Work Policy ..........................................................................................................27
DRESS CODE ..........................................................................................................................27
PROGRESSION IN THE PROGRAM .........................................................................................28
  • Grading Policy ....................................................................................................................28
PROGRAM INFORMATION PROVIDED IN THE CPIAH CATALOG

The Catalog of the Center for Programs in Allied Health (CPIAH) contains important information about Vanderbilt University Medical Center, the Center for Programs in Allied Health and this program specifically.

Students are advised to refer to the CPIAH Catalog to obtain the following information about this program:

- Program Description
- Certification/Credentialing Information
- Mission, Credo and Goals
- Accreditation and Approvals
- Staff and Faculty
- Program Advisory Committee
- Admission Information
- Academic Program
- Course List & Descriptions
- Student Assessment & Grading
- Satisfactory Academic Progress Requirements
- Graduation Requirements
- Professional Code of Ethics
# INTRODUCTION TO THE DIAGNOSTIC LABORATORIES, VUMC DEPARTMENT OF PATHOLOGY, MICROBIOLOGY, AND IMMUNOLOGY

The primary goal of the Diagnostic Laboratories is to provide excellence in patient care services. To accomplish this goal, laboratory testing is provided through the Diagnostic Laboratories located in The Vanderbilt Clinic; Anatomic pathology located in Medical Center North and the Vanderbilt University Hospital (VUH); and point of care testing (POCT) located throughout VUMC. The Department offers a full range of Anatomic and Clinical Pathology services to meet the needs of VUH and the surrounding community.

**Anatomic Pathology Services**
- Neuropathology
- Electron Microscopy
- Histopathology
- Renal Pathology
- Surgical Pathology
- Autopsy Service
- Cytopathology

**Clinical Pathology Services**
- Blood
- Bank/Transfusion Medicine Point-of-Care Testing
- Special Chemistry (Esoteric Chemistry and Toxicology)
- Rapid Response Laboratory/Cytogenetics
- Hematopathology and Flow Cytometry
- Microbiology, including Mycology and Mycobacteriology
- Virology/Immunopathology
- Molecular Infectious Disease
- Core Laboratory (including Chemistry, Urinalysis, Body Fluids, Hematology, and Hemostasis/Coagulation)
- Hematopathology
- Molecular Diagnostics
Mission:
We support excellence in patient care and safety by providing accurate, timely laboratory information and services to improve the health of individuals and communities we serve. As a leading academic medical center laboratory, we advance knowledge and the development of medical professionals through communication, innovation, research, and education.

Our Values:
Patient-focused service: We demonstrate care and compassion for our patients.
Professionalism: We act with respect, commitment, and integrity, and value each of our colleagues.
Safety: We promote a culture of patient and employee safety.
Quality: We are committed to accuracy, reliability, and continuous process improvement.
Growth and advancement: We advance healthcare through education, discovery, and innovation.

Our Vision:
To be the leader in improving healthcare through innovative laboratory information and services.

The VUMC Diagnostic Laboratories operate 24-hours-a-day, 7-days-a-week to provide accurate, timely test results to support physicians and other providers in the assessment of our patients. The extensive laboratory test repertoire reflects the specialized services/programs at Vanderbilt and the Department’s commitment to meeting the clinical needs of our patients and physicians. In addition, each discipline (Clinical and Anatomic) has a medical director with expertise in that specialty. Residents and attending pathologists are available 24-hours-a-day, 7-days-a-week for consultation and/or interpretation of test results for laboratory testing performed on-site or referenced to an outside laboratory.

The Diagnostic Laboratories are accredited by the College of American Pathologists (CAP) and licensed by the State of Tennessee. The laboratories meet all State and federal CLIA guidelines and are included in Vanderbilt Hospital’s The Joint Commission accreditation.

PROGRAM OF MEDICAL LABORATORY SCIENCE
The VUMC Program of Medical Laboratory Science was originally sponsored by the Veterans Administration Hospital and graduated its first class in 1954. Sponsorship was transferred to Vanderbilt University Hospital in 1968. The program remained with Vanderbilt University Medical Center when the university and medical center split into separate organizations in 2016, and the Program has been in continuous operation since transferring to Vanderbilt. The Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and is licensed to operate by the State of Tennessee, Department of Health and Environment as required by the Tennessee Laboratory Act. (Contact information for NAACLS: 5600 N. River Road, Suite 720, Rosemont, IL 60018, www.naacls.org 733.714.8880. Contact information for the State Medical Lab Board: http://health.state.tn.us/Boards/MedLab/)
Admissions procedure

Application Process

Applications are accepted beginning July 1 of each year. There is an application priority deadline of November 1 with an absolute deadline for all materials by the Friday of the second week in January.

Completed applications and official transcripts are reviewed to ensure the applicant meets the minimum requirements for courses and grade point average (GPA). These requirements are as follows:

1. Possession of a baccalaureate degree or higher or eligible to receive a baccalaureate degree from an academic affiliate school upon completion of the program.
2. Successful completion of at least 90 semester hours (136 quarter hours).
3. A minimum overall GPA of 2.5 or higher and a science (biology and chemistry) GPA of 2.5 or higher.
4. Successful completion of at least 16 semester hours (24 quarter hours) in biological courses, including:
   a. Microbiology
   b. Immunology
5. Successful completion of at least 16 semester hours (24 quarter hours) in chemistry courses, including:
   a. College/General Chemistry I
   b. College/General Chemistry II
   c. At least one course in Organic Chemistry or Biochemistry
6. Successful completion of at least 3 semester hours (4.5 quarter hours) of a mathematics course at the College Algebra level or higher

Applicants are encouraged to update science coursework that is greater than seven years old at the time of applying to the program.

All applicants who do not meet the requirements will be contacted in writing. All applicants who meet or will meet the minimum requirements before the program begins in June will be invited for an interview.

AP, CLEP, and survey courses are not recognized or accepted by the program, in accordance with the Tennessee Medical Laboratory Act.

All courses within the Medical Laboratory Science program are taught in English. Students who have completed postsecondary coursework outside of the United States must either have also completed postsecondary coursework in English, whether in the United States or another English-speaking country, or must submit documentation of English competency in reading and writing through a TOEFL evaluation.

Interview Process

All applicants will meet with the program director to interview. Applicants will also interview with one or two additional individuals who are affiliated with the program and diagnostic laboratory. All interviewers will complete an evaluation form that relates to the applicant’s educational experience, work experience,
interest and knowledge of the Medical Laboratory Science profession, and career goals and personal attributes.

The program director will take applicants on a tour of the laboratories and classroom, as available. The program director will discuss the program’s schedule, outline, requirements, and outcomes with each applicant. The program director will also explain the student selection process to applicants. Applicants are encouraged to ask questions during the interviews.

Selection Process

The following are used to determine an applicant’s rank for consideration in the program:

1. Overall GPA: The total coursework GPA, excluding physical education courses
2. Science GPA: GPA of all Biology and Chemistry courses
3. Average GPA: Mean of Overall GPA and Science GPA
4. Reference Average: Mean of total reference scores
5. Interview Average: Mean of total interview scores

Applicants are ranked based on the following weights for each calculation:

1. Reference Average has a weight of 1.
2. Interview Average has a weight of 2.
3. Average GPA has a weight of 2.

The program director prepares a synopsis of each applicant based on information from the application and interview materials to assist in class selection. The Program Advisory Committee (PAC) meets in February to select twelve students for admission and additional ranked alternates. Alternates are selected based on the applicant pool and are contacted as a position in the program becomes available.

Advanced Placement

In accordance with the Tennessee Medical Laboratory Act, the Medical Laboratory Science program does not grant credit for advanced standing, nor does it decrease the length of training based on a student’s previous experience or coursework.

PROGRAM PHILOSOPHY/MISSION STATEMENT

The Program of Medical Laboratory Science strives to maintain a quality education program to accomplish the following outcomes:

To provide well trained competent employees for the laboratories.
Since the students have been trained in our facilities, they are oriented to the procedures and are ready to begin employment upon graduation. This saves the institution money in terms of recruitment and employee selection.

To provide a stimulating atmosphere for the laboratory staff.
Being involved in laboratory education guarantees an up-to-date atmosphere. Employees are challenged to investigate new trends in the field. This also improves the level of patient care provided.
To maintain a source of professionals who can constantly bring new knowledge into the laboratory system. In this way stagnation and job dissatisfaction are reduced in the laboratory.

To supply the region with medical laboratory scientists who possess advanced skills. The Medical Center encompasses a variety of services with a wide range of testing. As former students move out into the community, they carry with them skills and knowledge, which will enhance less diverse institutions.

To advance the profession of Medical Laboratory Science by training enterprising and adaptable individuals who will take the forefront in the changing environment of health care. The field of Medical Laboratory Science is at a significant point in its evolution due to the impact of federal legislation and accelerated technological advances. This will require laboratory professionals with vision who are willing to influence the direction that their chosen career will be taking.

PROGRAM OBJECTIVES

The Program of Medical Laboratory Science at Vanderbilt University Medical Center bases its educational program on those principles essential to the preparation of students to achieve the ideals of the Profession.

The Program strives to instill in each student:

- The knowledge, skills and professional attitude necessary to accurately and proficiently perform and evaluate clinical laboratory analyses.
- The concern for others which carries with it the responsibility of good patient care and cooperation with fellow employees.
- The desire to strive for new knowledge and progress and to accept changing trends in the profession.
- The capacity to accept leadership roles whether in management or education.
- Interest in the growth and development of Medical Laboratory Science as a profession.

HONOR CODE

The Vanderbilt system holds that there is an agreement of mutual trust between students and faculty. Each student promises integrity in work submitted and the faculty members, in turn, presume the honesty of the student. The honor system is important because it provides an atmosphere of trust essential to the fulfillment of the program's purpose of educating individuals of professional character. The members of the Vanderbilt community regard a breach of honor as a serious breach of their principles, their purpose, and the academic enterprise. As such, any breach in the Honor Code is cause for immediate dismissal from the program.

All work submitted as part of course requirements is assumed and expected to be the product of the student submitting it unless credit is given by the student using proper footnoting and bibliographic techniques or as prescribed by the course instructor. Cheating, plagiarizing, falsifying results of study, or any action designed to deceive any member of the faculty are prohibited. The system applies not only to examinations but also to all work handed in or reported, such as papers, lab reports, solutions to problems, practical exams, etc. Each instructor has the prerogative to include or exclude what will be covered by the honor code in the course. However, all assignments are to be the work of each individual student unless it is specifically designated in writing as a group assignment.

Without written designation otherwise, the Honor Code applies to the following:
• Student assignments are prepared solely by the student and have not been previously submitted for a grade in any other course or otherwise published. Similarly, students are not allowed to provide assistance or answers to assignments.
• Assignments are not to be discussed with others.
• Take-home assignments are not to be completed with input from others or with the use of class or outside materials unless otherwise stated.
• Saving, copying, or using examinations or other assessment materials from previous sections of the class is prohibited. This includes posting assessment questions to online sites, such as Quizlet or Chegg.
• Electronic, paper, or internet resources are not to be used unless specifically allowed. If allowed, the student must be prepared to show or notate sources to instructor.
• Falsification of documents, including checklists, preventative maintenance or quality control sheets, results, attendance and time sheets, and other materials, is prohibited.
• Students are required to report a known or suspected violation of the Honor Code to the program director.
• Plagiarism of any student assignment or portion of the assignment without proper citation is prohibited.

It is the duty of all students to show their appreciation of the trust placed in them not only by their own conduct but also by their insistence on the absolute integrity of their fellow students. It is, therefore, the duty of every student to behave in a manner that will discourage his or her fellow students from violating the honor code.

**Academic Probation and Dismissal**

A violation of the program Rules and Regulations will result in the following:

1. 1st offense: Written warning issued
2. 2nd offense: Clinical/Behavioral Probation
3. 3rd offense: Dismissal from the program, based on the severity of the violation

The following are causes for immediate dismissal, superseding the above protocol:

1. Unauthorized removal, destruction, or theft of any property of the program, hospital, employees, or patients. This includes physical property, including, but not limited to, instruments, reagents, and exams. This also includes all course and assessment materials, e.g. presentations, study questions, quizzes, and exams, found in the Spark Learn learning management system, unless given specific approval for removing these materials is provided in writing by the instructor of the course.
2. Copying, pasting, printing, or sharing assessments, graded or ungraded, with current students or others, including quizzes, study questions, or exams from Spark or in hard-copy form.
3. The use or unauthorized possession of any intoxicants, illegal drugs, or narcotics on hospital grounds.
4. The use, possession, or distribution of firearms, explosives, fireworks, or knives on hospital grounds.
5. Willful submission of false information or alteration of any records or reports.
6. Academic dishonesty, including, but not limited to sharing or receiving answers to study questions or other assessments, cheating, forgery, and plagiarism.
7. Disclosure of confidential information or discussion of any patient information with unauthorized personnel.
8. Negligence or misconduct in the performance of duty.
9. Disobedience or insubordination (any complaint concerning an employee or instructor should be brought to the attention of the Program Director or the Medical Director immediately.)
10. Drawing blood, performing procedures, or providing medication to a patient without the order of a physician.
11. Abusing a patient, employee, or fellow student. This includes physical, verbal, and emotional abuse.
12. Submission for publication of any material relating to the clinical education experience at Vanderbilt without prior written approval of the affiliate school and Vanderbilt.
**Academic Probation Policy**

Any student that does not achieve a minimum grade of 75% in any Student Didactic course will be placed on academic probation until completion of the corresponding clinical rotation results in a transcript grade of 75% or greater. If a student does not achieve a minimum grade of 75% in a second didactic course, a clinical rotation, or a behavioral evaluation, s/he is dismissed from the program.

**Clinical/Behavioral Probation Policy**

If a student receives a Clinical Rotation grade less than 75% and has not previously failed a course, s/he will be placed on Clinical Probation until graduating from the Medical Laboratory Science program. If a student receives a Clinical Rotation grade less than 75% in two Clinical Rotations, s/he will be dismissed from the program.

A student will be placed on Clinical Probation if s/he earns less than 75% on a behavioral evaluation. If s/he earns less than 75% on a second behavioral evaluation or is already on academic or clinical probation, s/he is dismissed from the program.
Academic Probation Notice

NOTIFICATION OF PROBATION

Date: 
To: 

This is to inform you that, due to your final grade of ______ in the _____________________ Student Didactic course/Clinical Rotation, you are officially on academic probation.

The details of this standing are outlined in your Program Handbook. In summary it means that should you make below the passing grade of 75% in any course/rotation from now until graduation, it will be cause for review and possible dismissal from the program. It also affects your ability to receive financial aid.

You will be on Academic Probation until that time when you have completed the _____________________ Clinical Practicum course. Should you achieve an overall transcript grade above 75%, you will no longer be on probation and will again be eligible to receive financial aid.

Should you fail to achieve an overall grade of 75%, you will be dismissed from the program. You remain responsible for all fees owed to the Program Medical Laboratory Science.

_______________________________________________________
Student Signature Date

Your signature indicates that you have been informed and understand the responsibilities associated with this standing of academic probation.

_______________________________________________________
Program Director Date

_______________________________________________________
Center Representative Date
Clinical/Behavioral Probation Notice

NOTIFICATION OF PROBATION

Date:
To: ______________________________________________

This is to inform you that, due to

______________________________________________________________________________
in the

______________________ Clinical Rotation, you are officially on clinical or behavioral probation.

The details of this standing are outlined in your Program Handbook. In summary it means that should you make below the passing grade of 75% in any additional clinical rotation from now until graduation or if a behavioral evaluation is below 75%, you will be dismissed from the program. This also affects your ability to receive financial aid.

______________________________________________________________________
Student Signature Date

Your signature indicates that you have been informed and understand the responsibilities associated with this standing of clinical/behavioral probation.

______________________________________________________________________
Program Director Date

______________________________________________________________________
Center Representative Date
PROGRAM FACILITIES

Facilities for the program include office space in The Vanderbilt Clinic (TVC), a student classroom and laboratory in Light Hall (LH), and assigned spaces in The Vanderbilt Clinic lab and One Hundred Oaks (OHO) lab where student practical learning activities take place. The program also uses various departmental conference rooms as needed. Books and other reference materials are available in the program director’s office and classroom.

ACADEMIC PROGRAM

The Program of Medical Laboratory Science accepts one class per year that begins in June and continues until the end of June the following year. The course of study includes lectures, laboratory exercises, and clinical rotations.

The first week of class consists of orientation and is followed by seven months of lectures in diagnostic laboratory-related courses, including topics such as management, education, and professional development, and experiential laboratory sessions. The second “half”, or six months, of the program consists of the laboratory practicum, during which time students work alongside medical laboratory professionals to learn instrumentation, the application of testing methods, handling of patient samples, and reporting results. In addition to other assessments throughout the year, students must pass a final comprehensive exam before graduating.

Sample Student Didactic Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>8:30-noon AM</th>
<th>1-4:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 5-9</td>
<td>Orientation</td>
<td>Orientation</td>
</tr>
<tr>
<td>June 12-16</td>
<td>Immunology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>June 19-23</td>
<td>Immunology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>June 26-30</td>
<td>Seminar</td>
<td>Chemistry</td>
</tr>
<tr>
<td>July 3-7</td>
<td>Seminar</td>
<td>Chemistry</td>
</tr>
<tr>
<td>July 10-14</td>
<td>Parasitology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>July 17-21</td>
<td>Parasitology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>July 24-28</td>
<td>Molecular</td>
<td>Chemistry</td>
</tr>
<tr>
<td>July 31-Aug 4</td>
<td>Molecular</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Aug 7-11</td>
<td>Blood Bank</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Aug 14-18</td>
<td>Blood Bank</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Aug 21-25</td>
<td>Blood Bank</td>
<td>Toxicology</td>
</tr>
<tr>
<td>Aug 28-Sept 1</td>
<td>Blood Bank</td>
<td>Toxicology</td>
</tr>
<tr>
<td>Sept 4-8</td>
<td>Blood Bank</td>
<td>Body Fluids</td>
</tr>
<tr>
<td>Sept 11-15</td>
<td>Blood Bank</td>
<td>Eso Chem</td>
</tr>
<tr>
<td>Sept 18-22</td>
<td>Fall Break</td>
<td></td>
</tr>
<tr>
<td>Sept 25-29</td>
<td>Urinalysis</td>
<td>Eso Chem</td>
</tr>
<tr>
<td>Oct 2-6</td>
<td>Urinalysis</td>
<td>Eso Chem</td>
</tr>
<tr>
<td>Oct 9-13</td>
<td>Coag</td>
<td>Virology</td>
</tr>
<tr>
<td>Oct 16-20</td>
<td>Coag</td>
<td>Mycology</td>
</tr>
<tr>
<td>Oct 23-27</td>
<td>Hematology</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Oct 30-Nov 3</td>
<td>Hematology</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Nov 6-10</td>
<td>Hematology</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Nov 13-17</td>
<td>Hematology</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Nov 20-24</td>
<td>Hematology</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Nov 27-Dec 1</td>
<td>Hematology</td>
<td>Microbiology</td>
</tr>
</tbody>
</table>

Off 07/04

Off 09/04

Off 11/24
### Sample Clinical Rotation Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Microbiology</th>
<th>Hematology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 4-8</td>
<td>Micro</td>
<td>Hematology</td>
</tr>
<tr>
<td>Dec 11-15</td>
<td>Micro</td>
<td>Hematology</td>
</tr>
<tr>
<td>Dec 18-22</td>
<td>Micro</td>
<td>Hematology</td>
</tr>
</tbody>
</table>

#### Minimum Competencies

Upon completion of the program, the student will be able to demonstrate the following entry-level competencies:

- Develop and establish procedures for collecting, processing, and analyzing biological specimens
- Perform analytical tests on blood, body fluids, cells, and related substances
- Integrate and relate data generated by the various clinical laboratory departments while making decisions regarding possible diagnostic information and discrepancies
- Confirm abnormal results, verify and execute quality control procedures, and develop solutions to problems concerning the generation of laboratory data
- Make decisions concerning the results of quality control and quality assurance measures and instituting proper procedures to maintain accuracy and precision
- Establish and perform preventive and corrective maintenance of equipment and instruments as well as identify appropriate sources for service
- Develop, evaluate and select new techniques, instruments and methods in terms of their usefulness and practicality within the context of a given laboratory’s personnel, equipment, space and budgetary resources
- Demonstrate professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals, and the public
• Establish and maintain continuing education as a function of growth and maintenance of professional competence
• Provide leadership in the education of other health care professionals and the community
• Exercise basic principles of management, safety, and supervision
• Apply principles of educational methodologies and current information systems
• Demonstrate and promote patient care

Comprehensive Final
Each student must pass a comprehensive final exam as a requirement for graduation. This exam is a multiple-choice, computer-based exam with content and question weights similar to the Board of Certification (BOC) exam. The purpose of this comprehensive final exam is to ensure that students have the knowledge needed for certification and to prepare students for national certification exams. Students must earn at least a 75% to pass the exam and will have three attempts in which to do so. The first attempt for the comprehensive final exam will be scheduled by the program director and administered to the class as a whole. Any students who do not pass on the first attempt will individually schedule their second and third, if needed, attempt(s) with the program director. Once the student has received a score of 75% or greater, s/he will not need to complete any additional attempts.

Should the student not pass the comprehensive final after the third attempt, the Program Advisory Committee will meet to review the student’s academic performance throughout the year. This review will result in either the student being dismissed from the program or in an extension of training in the area(s) of concern. The decision made by the Advisory Committee may be appealed according to the Center for Programs in Allied Health’s Appeals Policy. Please refer to the CPIAH Catalog for more information regarding the Appeals Policy.

STUDENT ASSESSMENT

Evaluation of the Student
The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) requires that approved schools maintain detailed records of the students’ progress throughout the year. These records are based on the following parameters: Theory, Technical Performance, and Behavior. These areas are assessed by the following methods:

Performance in the Lecture/Student Laboratory
• Lecture: The lecture portion of the class will focus on physiology, pathophysiology, and related theory. The student is responsible for completing and understanding all lecture objectives, information presented in lecture and/or through handouts, and all assigned reading. Assessment will be made by exams, quizzes, study questions, case studies, and homework. Unless stated otherwise, all assignments, including open-book assignments, are individual assignments and not to be discussed among students. Refer to the Honor Code for more information.
• Student Laboratory: The laboratory portion of the classroom experience will focus on learning proper laboratory techniques, identification of formed elements and reactions that are useful in clinical diagnosis, and the correlation of theoretical knowledge with application. The student is expected to answer all student laboratory objectives as well as perform and demonstrate an understanding of all procedures and results. Assessment will be performed through the testing of unknown samples, practical examinations, written examinations, and performance.

Performance in the Clinical Practicum
This portion of the program is designed for the application of the theory and practical, or technical, aspects of each course. The student is responsible for all objectives and procedures covered in the lecture/student lab and the clinical practicum. The student is evaluated at the end of each practicum/rotation. The student is expected to answer all objectives, perform and demonstrate an understanding of all procedures presented, and complete all
reading assignments. The student is expected to assimilate into the work environment, though supervision by a licensed medical laboratory scientist is required when performing and reporting patient testing. The student will be assessed in:

- Theory and Technical Performance: This includes study questions, quizzes, exams, and checklists.
- Performance Evaluation: This evaluation is customized for each laboratory and is used to assess the student’s ability to perform entry level procedures and routine operations in the laboratory.
- Behavioral Evaluation: This is used to assess skills in the professionalism domains. The student must score a minimum of 75%. A score of less than 75% will result in the student being placed on clinical probation. The areas assessed in the Behavioral Evaluation are as follows:

## Program of Medical Laboratory Science

### Clinical Rotations

#### Behavioral Evaluations

<table>
<thead>
<tr>
<th>Initiative and Judgment</th>
<th>&lt;7.5 Below Expectations</th>
<th>7.5–7.9 Meets Minimum Expectations</th>
<th>8.0–8.9 Above Average</th>
<th>9.0–10 Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Initiative</td>
<td>Performs delegated responsibilities but requires constant prompting and guidance. Unmotivated or disinterested.</td>
<td>Usually accepts and performs delegated responsibilities with occasional prompting.</td>
<td>Performs responsibilities independently. Is willing and able to assume additional responsibilities when asked.</td>
<td>Consistently a self starter who completes tasks and takes initiative to help others without being asked.</td>
</tr>
<tr>
<td>B. Judgment to assemble information and reach logical conclusions</td>
<td>Often makes inaccurate conclusions. Requires a great deal of assistance from instructor to analyze situations to reach logical conclusions.</td>
<td>Usually logical in approach to problem solving. Makes an occasional inaccurate decision.</td>
<td>Can discriminate between relevant and irrelevant details to arrive at sound conclusions. Uses critical thinking skills with minimum instructor guidance.</td>
<td>Consistently makes correct conclusions, even for the most difficult problems. Applies critical thinking skills to all patient situations.</td>
</tr>
</tbody>
</table>

Objectives: Initiative, Judgment and Concern for the Patient

A. Demonstrate initiative in studies and laboratory performance by preparing for assignments, asking relevant questions, assisting with approved tasks and making constructive use of time.
B. Demonstrate ability to assemble information to reach logical conclusions and use that information to make sound decisions.
C. Displays a concern for the patient in handling of specimens, performance of tasks and communication with coworkers.
Objectives: Dependability
A. Demonstrate ability to accomplish required tasks and assignments accurately and within the allotted time frame.
B. Complies with program attendance policies by consistently arriving on time, returning from breaks on time and notifying appropriate personnel when leaving the work area or in the event of a necessary absence.
C. Remains on the job until assigned task is completed. Does not let breaks, lunch, people or extraneous factors interfere with completion of tasks.

<table>
<thead>
<tr>
<th>Dependability</th>
<th>&lt;7.5 Below Expectations</th>
<th>7.5-7.9 Meets Minimum Expectations</th>
<th>8.0-8.9 Above Average</th>
<th>9.0 – 10 Exceeds Expectations</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Accomplishment of required tasks and assignments</td>
<td>Rarely accomplishes assignments in allotted time frame.</td>
<td>Usually dependable and prepared for assignments</td>
<td>Consistently accomplishes the required assignments in the allotted time.</td>
<td>Always accomplishes the required assignments in the allotted time. Frequently accomplishes more than required.</td>
<td></td>
</tr>
<tr>
<td>B. Attendance and Punctuality</td>
<td>Rarely complies with school/lab policies. Frequently tardy and or absent. Frequently takes excessive lunches and breaks.</td>
<td>Complies with policies only after counseling. Occasionally tardy and or absent. Rarely takes long lunches or breaks.</td>
<td>Complies with policies. Punctual with good attendance record. Rare absence or tardy. Does not take unapproved long lunches or breaks.</td>
<td>Complies with policy. Outstanding record of attendance and punctuality. No absences. Does not take unapproved long lunches or breaks. Complies with policy.</td>
<td></td>
</tr>
<tr>
<td>C. Productive use of clinical rotation time</td>
<td>Frequently away from assigned area.</td>
<td>Usually present in assigned area.</td>
<td>Consistently present in assigned area. Rarely not available.</td>
<td>Superior. Spends no unauthorized time away from assigned area.</td>
<td></td>
</tr>
</tbody>
</table>

Objectives: Attitude
A. Accepts criticism as constructive, positive and follows up with prompt consistent improvement. Works and communicates effectively with others. Shows ability to handle difficult situations in a reasonable manner. Contributes and cooperates to realize group goals.
B. Demonstrates professional integrity by complying with all hospital and program regulations; admits to errors and limitations and practices professional ethics by demonstrating an understanding of confidentiality and legalities concerning patient information and HIPAA regulations.

<table>
<thead>
<tr>
<th>Attitude</th>
<th>&lt;7.5 Below Expectations</th>
<th>7.5-7.9 Meets Expectations</th>
<th>8.0-8.9 Above Average</th>
<th>9.0 – 10 Exceeds Expectations</th>
<th>Score</th>
</tr>
</thead>
</table>

Medical Laboratory Science Program Handbook – 2019-2020
A. Toward supervisors, school policies and safety issues

| Barnett | Reluctantly considers suggestions and constructive criticism. Frequently must be reminded of hospital and program policies. | Usually accepts and incorporates constructive criticism and suggestions. Is receptive to supervision. | Follows hospital and program policies with occasional reminder. Accepts and incorporates suggestions and constructive criticism. Complies with hospital and program policies. | Eagerly accepts and incorporates suggestions. Appreciates assistance by the instructor. Always complies with hospital and program policies. |

B. Toward faculty/employees, other students and visitors.

| Barnett | Rarely tactful or a team player. Does not display a professional attitude. | Usually tactful and considerate of others. Usually a team player and displays a professional attitude. Sensitive and considerate to the needs of others. | Functions as a team player. Displays a professional attitude most of the time. | Is a team player and displays a professional attitude. Skillful in adapting to working with others. Inspires others. An outstanding team player and projects a professional image. |

Objectives: Quality of Work

A. Demonstrates competency in performing tests accurately, with few errors and with minimal supervision.
B. Demonstrates an ability to provide complete and legible documentation of activities on worksheets and logs.

<table>
<thead>
<tr>
<th>Quality of Work</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Competency</td>
<td></td>
</tr>
<tr>
<td>&lt;7.5 Below Expectations</td>
<td>Frequent errors. Requires constant supervision.</td>
</tr>
<tr>
<td>7.5-7.9 Meets Expectations</td>
<td>Few Errors. Requires occasional supervision.</td>
</tr>
<tr>
<td>8.0-8.9 Above Average</td>
<td>Commendable work. Rare Errors. Requires minimal supervision.</td>
</tr>
<tr>
<td>9.0 – 10 Exceeds Expectations</td>
<td>No errors. Always performs with 100% accuracy. Requires minimal supervision for approved tasks.</td>
</tr>
<tr>
<td>B. Documentation</td>
<td></td>
</tr>
<tr>
<td>Documentation is incomplete and hard to read.</td>
<td>Documentation is usually complete and legible.</td>
</tr>
<tr>
<td>Documentation is complete and legible.</td>
<td>Documentation is complete and legible. Includes additional details to assist in future problem solving.</td>
</tr>
</tbody>
</table>

Medical Laboratory Science Program Handbook – 2019-2020
Would you feel comfortable working with this student as a fellow employee? If not, or if you have reservations, please leave comments.
* Yes, with no reservations
* Yes, with more experience
* Yes, with reservation(s)
* It would be a risk
* No, absolutely not
STATEMENT OF ESSENTIAL FUNCTIONS

Students must possess, and maintain throughout their time in the program, the ability to perform and interpret routine laboratory procedures. The actions required to do so include, but are not limited to:

- Physical capability and manual dexterity required to perform laboratory procedures, including repetitive hand motions, such as pipetting and typing, and lifting of materials up to 25 pounds
- Differentiation of colors and images for interpretation of colorimetric reactions and cellular morphology
- Effective communication through written and verbal language with instructors, classmates, medical laboratory personnel, patients, physicians, and other health care professionals
- Utilize critical thinking and deductive reasoning through application of previously-learned information and assimilation of new information
- Perform tasks without outside guidance or assistance within given time constraints and within changing environments

If a student is unable to perform any function during the program without assistance or accommodations, s/he must self-identify the issue to the program director in writing. Once the student has identified the issue, the program director will work with the student, the Center for Programs in Allied Health, and other necessary parties to provide reasonable accommodations for the student.

EVALUATION OF THE PROGRAM

A vital part of the VUMC Medical Laboratory Science Program is a continual review and evaluation of the curriculum and techniques used in teaching. These evaluations are used to identify areas that need improvement. Evaluation of the program is accomplished in the following manner:

- The program participates in the peer review and accreditation process sponsored by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). This organization requires a periodic self-study to assess program compliance with established guidelines for the operation of a training program. This also involves peer review of the self-study and an on-site visit for continued accreditation.
- The program also maintains compliance with the regulations mandated by the Tennessee Laboratory Act. This includes periodic site inspections as well.
- Students play a large role in the evaluation process by completing formal evaluations of each course as it is completed in both the lecture and the practicum components of the program. These evaluations are administered through the REDCap online tool and are anonymous. These evaluations are collected by the program director and shared with the clinical instructors, their managers, and the program officials. Information from these evaluations provides information about the effectiveness of our faculty and insights into course revisions that may be needed.
- Students are also asked to complete an evaluation at the end of the training program to provide input on the overall organization and operations of the program as well as provide information on their first post-graduation job experience.
- Surveys are distributed to the employers of recent graduates between 6 months and one year following graduation, to assess the effectiveness of the program’s curriculum. Once again, this information is used to evaluate the effectiveness of the program.

ATTENDANCE POLICY

Students are expected to be present on a full-time basis throughout the Medical Laboratory Science (MLS) program. Students must be present in the assigned site (classroom or laboratory section), at the scheduled
start time. Students must arrive on time and remain in the area for the entire time scheduled, except when taking appropriate breaks.

For the first half of the MLS program year, attendance is taken daily by the lecture instructor. During the clinical practicum portion of the program (second half of the year), students are required to maintain a daily time sheet. Time sheets are used to accurately document all arrival, departure and break times, including absences and episodes of tardiness. Time sheets must be signed by both the clinical instructor and the student. In signing the timesheets, both the clinical instructor and the student attest to the fact that the information on the timesheet is correct and reflects actual time the student was present. Time sheets must be submitted to the program director at the completion of each rotation.

Lectures and student laboratory sessions are scheduled from 8:30 am to 4:30pm, Monday through Friday, with 12:00-1:00pm set aside for lunch. Any changes the Program must make to this schedule are communicated to the students through email prior to the change.

Clinical practicum hours vary depending on the laboratory involved. Students will refer to the clinical rotation schedule for the practicum hours for each department. Typical laboratory hours are 7:00am to 3:30pm or 8:00am to 4:30pm, although some variation may occur, requiring students to complete clinical practicum hours outside of these hours. In particular, one week during the Blood Bank rotation requires students to attend the practicum from 1-9 pm. Students are made aware of this and other schedule irregularities during admission interviews and again during the program year.

Occasionally students are asked to arrive early or stay late to complete assignments. While not a common occurrence, it is sometimes necessary in cases where could not be completed during standard allotted time due to inclement weather, illness, etc. The schedule for these additional or remedial activities will be made at the instructor’s convenience and will be communicated with the program director and the student.

Absence Policy

Planned Absences
Students are strongly encouraged to plan personal and extracurricular activities around the program schedule to ensure that the student does not miss needed information. Any planned absences, such as for doctor appointments, should be discussed with the instructor and program director prior to making the plans so that the program director and instructor can help the student identify the best time(s) for the student to miss. All planned absences must be approved via email by the course/clinical instructor and MLS Program Director at least three days prior to the absence.

Students are responsible for completing – prior to the planned absence – all work/assignments that will be missed during the absence, unless the student is told by the instructor to complete the work after returning from the absence. In that case, the student is required to complete the assignment at the convenience of, or by the deadline set by, the instructor. Any missed activities, including laboratory assignments, will be completed at the discretion of the instructor.

Unplanned Absences
In the case of illness, emergency, or similar situation in which a student must be absent without prior notice, the student is required to report the situation immediately by taking the following steps:

- Step 1: Call the appropriate department contact (as provided on course syllabus) for the lecture or practicum instructor. If the instructor is not available, the student is required to leave a message with
the individual answering the call. The student should obtain the name of the individual taking the message, as the program may ask the student for this information to verify proper notice was provided.

- Step 2: Email the course or clinical instructor and the MLS Program Director, holly.covas@vumc.org, with pertinent information, including how long the student anticipates the absence to be and how the information was communicated to the instructor (i.e., phone call or message left with staff).

If the Unplanned Absence extends beyond one day, the student must keep the instructor and MLS Program Director updated daily regarding the anticipated duration of time away. Any absence greater than one day requires a doctor’s note for the absence to be excused and in order for the student to have the opportunity to make up work missed during the absence.

Students should not attend any program activities, including lectures/student laboratory and clinical rotations if any of the following apply during the previous 24 hour period:

- Vomiting
- Diarrhea
- Fever greater than 101 F degrees
- Diagnosis of a communicable illness

Upon returning from an unplanned absence, students are responsible for completing all work and/or assignments missed during the absence, at the convenience of, or by the deadline set by, the instructor. This may require the student to arrive early, stay late, or come in on a weekend to make up missed work. All make-up work must be scheduled with the instructor within one week of the student’s return. Failure to schedule make-up work or failure to complete make-up work as required will result in an automatic grade of zero (0) for the assignments/work required, which may result in academic remediation, up to and including SAP Warning, probation and dismissal from the program.

Tardiness
A student is considered to be tardy (late) when the student is more than ten (10) minutes late for any lecture, laboratory, or clinical practicum. If a student is more than thirty (30) minutes late for any lecture, laboratory, or clinical practicum, the student is marked as absent for the entire activity. Exceptions to this policy (e.g., for extreme circumstances that are out of the student’s control) may be made at the discretion of the program (course instructor, practicum supervisor or Program Director).

Students must notify the course instructor and Program Director as soon as the student is aware that he or she will arrive late, using the same steps as those appearing under the Unplanned Absences section above. Five (5) late arrivals during the program count as one absence. Any additional late arrivals during the program will result in disciplinary action, as described below.

If a student is tardy for a test or lab practical, the student is allowed to take the assessment, but the student will be given no additional time to take it; time will end at the same time as the students who began at the designated time.

**Excessive Absence / Tardiness Policy**

An excessive number of absences or tardies is defined as greater than five (5) absences or tardies throughout the program, excluding illness or medical needs, emergencies, or military obligations. If this occurs, the program director meets with the student to discuss the pattern of absenteeism or tardiness and issues a written warning. In the event that the student continues to have unplanned absences and/or tardiness after this warning, the student is subject to disciplinary action, up to and including probation and dismissal from the program.
STUDENT ADVISING AND CONFERENCES

The MLS program director and clinical instructors maintain an open door policy for students throughout the year. Students are encouraged to bring any and all concerns to the attention of program officials.

Individual academic advising sessions are held periodically to provide academic guidance, discuss career planning, address any personal or academic concerns, etc. Students may ask to schedule academic advising sessions with the program director or an instructor but must make an appointment when scheduling advising sessions. Any questions or concerns about the program or about hospital, laboratory, or program policies and/or procedures should be brought to the attention of the program director or medical director. Should those individuals fail to address the problem, the student should consult the VUMC Student Grievance Policy, provided in the Catalog of the VUMC Center for Programs in Allied Health.

COMMITMENT TO SAFETY, HEALTH AND ENVIRONMENTAL PROTECTION

VUMC supports and maintains a strong commitment to safety, health and environmental protection through:

- A. Promoting compliance with federal, state, and local safety, health, and environmental requirements;
- B. Minimizing hazards, reducing pollution, and continuously improving practices regarding safety, health, and environmental protection;
- C. Empowering faculty, house staff, staff, and students to demonstrate individual and institutional leadership in all matters pertaining to safety, health, and environmental protection while preserving academic freedom in research and education and evidence-based practices in patient care;
- D. Protecting and maintaining safe and secure facilities for teaching, patient care, research, living, and work;
- E. Emphasizing open communication with the VUMC community regarding safety, health, and environmental issues; and
- F. Instilling the values of environmental stewardship and conservation of resources in VUMC's future leaders.

This commitment is defined in the Vanderbilt University Environmental Health and Safety Policy found at https://safety.vanderbilt.edu/index.php

VUMC requires all staff and Medical Laboratory Science students to complete initial and annual safety training. All students are required to provide copies of their immunization records to ensure that all immunization requirements have been met.

The Vanderbilt Diagnostic Laboratories continue the Vanderbilt Commitment by providing a safe working environment and keeping all faculty, staff and students informed of potential safety hazards and safe work practices associated with their work.

Employees and students are provided with policies and procedures related to safe work practices in the laboratory, response to internal and external emergencies, handling of potentially infectious agents, handling of hazardous chemicals and handling of radioactive materials.

In addition to VUMC training requirements, laboratory staff and program students receive training specific to the laboratory section and any time changes in practice occur within that laboratory.
Safety issues within the laboratory fall under the review responsibility of the Laboratory Safety Committee with representatives from each laboratory section. Responsibilities include development and review of laboratory specific safety policies and procedures, communication of current and changing safety issues, implementation of policies and procedures and monitoring of compliance through monthly internal inspections. The Laboratory Safety Committee has review and approval authority for laboratory safety policies and procedures.

Medical Directors, Managers and Supervisors throughout the Diagnostic Laboratories are responsible for working with the members of the Laboratory Safety Committee to fulfill these duties and to assure that all employees and students have access to current information, personal protective equipment, engineering controls, and appropriate medical treatment in the event of an exposure or accident. They also have the responsibility of corrective actions in the event of non-compliance with any VUMC or Laboratory safety policy or procedure.
Employees and students are responsible for being knowledgeable about the risks and safe work practices associated with their work. Staff and students are expected to bring safety questions, concerns or issues to their supervisors, safety officers and laboratory leadership.

**STUDENT CONDUCT**

All students are bound by several standards of conduct, as outlined in the CPIAH Catalog, including:

- VUMC Code of Conduct
- VUMC Center for Programs in Allied Health Honor Code
- American Society for Clinical Laboratory Science (ASCLS) Code of Ethics

Students should refer to these codes and their related policies to ensure clear understanding of expected standards of professionalism and conduct.

**STUDENT EMPLOYMENT WHILE ENROLLED AT VUMC**

Students may be employed during the year of training in the Medical Laboratory Science Program. However, jobs during the first six months of training are strongly discouraged due to the full-time nature of the MLS Program. If it is necessary for a student to hold a job during the program's first six months, the student must notify the MLS Program Director. Students are encouraged to actively communicate with the Program Director about employment while enrolled to best facilitate their success in the program. Under no circumstances may students miss, arrive late to or leave early from required program activities (class, laboratory, practicum) to fulfill a job obligation.

**Student Work Policy**

The state of Tennessee does not allow non-licensed personnel to perform laboratory testing. Medical Laboratory Science students practice under the limited scope of a State of TN Trainee Permit while enrolled in the program. The Trainee Permit allows students to perform patient testing under the direct supervision of a licensed medical laboratory professional.

- Students who have completed both the didactic and clinical components of a specific area of the laboratory are eligible to work in that area of the laboratory.
- Students who work must complete a VUMC application for employment prior to being hired and VUMC institutional orientation at the start of employment.
- Laboratory Supervisors/Managers must have a posted position in Taleo in order to hire an MLS student.
- VUMC employment is independent of the program and shall not interfere with program operations.
- Trainee Permits expire on the day of graduation from the Program.
- Work will be paid and supervised.

**DRESS CODE**

The following dress code must be followed at all times:

1. Vanderbilt University Medical Center picture identification tags must be worn at all times while working per VUMC policy
2. Per OSHA guidelines, shoes worn in a laboratory may not be perforated, cloth, canvas, or sandals. Toes must be enclosed.
3. Clothing must neat, clean and appropriate to the professional environment. Regular street clothes or scrubs are acceptable. Blue jeans or shorts may not be worn.

4. If clothing is not appropriate, instructors, at their discretion, will ask the student to not wear the clothing again, or will send the student home to change.

5. Nitrile gloves must be worn when handling blood or body fluid and be changed when visibly soiled or torn, per OSHA guidelines.

6. When performing a task that has a risk of exposure to blood borne pathogens, a disposable non-permeable lab coat must be worn. This must be buttoned and protect to below the knees. It must be changed when visibly soiled, contaminated, or torn.

7. When performing a task that could result in a splash or aerosol, a face shield or appropriate PPE must be worn if the work is not performed behind a protective barrier.

8. Nitrile gloves and disposable lab coats must be removed prior to leaving the laboratory and may not be worn in clean areas such as the lounge, rest rooms, offices, or administrative area.

9. Fingernails must be kept short enough so that they do not pierce through gloves. Chipped fingernail polish or acrylic nails are not acceptable.

10. Hair, ties, and jewelry must be secured so they do not fall forward into the face or touch work surfaces. Jewelry may not be worn over gloves.

**Progression in the program**

Students are expected to demonstrate knowledge, competency, and professionalism throughout the Medical Laboratory Science program. The minimum grade to ensure knowledge, psychomotor ability, and behavior is 75%. Students are assessed and graded based on this minimum throughout the program in graded activities, including didactic assessments, laboratory practicals, clinical rotation activities, and behavioral evaluations. The program is divided into two semesters, or halves, in which:

The first half of the program, June through December, is the Student Didactic portion, and
The second half of the program, January through June, is the Clinical Rotation portion.

**Grading Policy**

Grades are as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100%-90%</td>
</tr>
<tr>
<td>B</td>
<td>89%-80%</td>
</tr>
<tr>
<td>C</td>
<td>75%-79%</td>
</tr>
<tr>
<td>F</td>
<td>Below 75%</td>
</tr>
</tbody>
</table>

Some courses are graded as Pass or Fail.

Each didactic course and clinical rotation, or practicum, will issue a final grade to students. A course is any portion of the program that includes instruction, has its own syllabus with grading criteria, and is identified as a discrete unit of instruction on the program calendar.

Transcript grades include grades earned in the Student Didactic and Clinical Rotation portions of the program. Related courses may be combined for one transcript grade. However, students are evaluated on each course independently to ensure successful progression in the program. This means that students must earn a minimum of 75% in each Student Didactic and Clinical Rotation course.
The program and all related courses must be completed in their entirety for a transcript to be created and given. Incomplete transcript grades are not given. Students must successfully complete all components of the program within the 13 months of the program and in the order presented. The Program Advisory Committee reserves the right to extend a student’s training to make up for a deficit in a single course, but this remediation is not to extend training more than five (5) months from the end of the program year. Students may also receive additional time to complete the program due to military obligations or unforeseen circumstances. Specific details for completing the program will be determined on a case basis.