DEPARTMENT OF MEDICAL AND RESEARCH TECHNOLOGY

http://www.medschool.umaryland.edu/dmrt/

2019-2020
STUDENT MANUAL

POLICIES AND PROCEDURES

THE DEPARTMENT OF MEDICAL & RESEARCH TECHNOLOGY (DMRT)
IS ACCREDITED BY:

NATIONAL ACCREDITING AGENCY FOR CLINICAL LABORATORY SCIENCES (NAACLS)

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UNIVERSITY OF MARYLAND
SCHOOL OF MEDICINE

DEPARTMENT OF MEDICAL AND RESEARCH TECHNOLOGY

2019 - 2020 POLICIES FOR STUDENTS

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APPENDICES

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE
DEPARTMENT OF MEDICAL & RESEARCH TECHNOLOGY

This manual contains the policies and procedure that are currently in effect for the undergraduate program at the Department of Medical and Research Technology. The Program reserves the right to change, update or modify policies as needed. ALL DMRT students must agree to abide by all policies and procedures established in this document.

PROFESSIONAL POLICIES - University of Maryland

The University authorities reserve the right to make changes in the curriculum, in the requirements for advancement and graduation, in fees, and in rules and regulations whenever appropriate.

The provisions of this publication are not to be regarded as an irrevocable contract between the student and the University of Maryland. The University reserves the right to change a provision or requirement at any time within the student's term of residence. The University further reserves the right, at any time, to ask a student to withdraw when it considers such action to be in the best interests of the University.

The University of Maryland in Baltimore is an equal opportunity institution with respect to both education and employment. The University's policies, programs and activities are in conformance with pertinent federal and state laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, sex, and disability.

If you require special accommodations to attend or participate in the program or an activity, please provide information about your requirements to the DMRT Interim Program Director at 410 706-7664 or the office of Educational Support and Disability Services at 410-706-5889.

PHILOSOPHY AND GOALS

Mission Statement

To provide a program of instruction at the baccalaureate level which develops competence in ethical, principled laboratory scientists who possess the knowledge as well as the technical, interpersonal and attitudinal skills and attributes which create quality service.

In accordance with the philosophy and purposes of the University of Maryland School of Medicine, the Department of Medical and Research Technology (DMRT) is committed to the following goals:

- to encourage professional and academic advancement, a commitment to life-long learning, and active participation in professional societies;
- to encourage the practice of moral and ethical values relating to patient-centered care;
- to assist students in developing competency in analytical decision-making, thus preparing them to make appropriate judgments in their professional life;
- to assist students to develop enhanced skills in critical thinking, problem solving, and skills in oral and written expression;

- to provide the opportunity for student participation in a laboratory setting designed to offer experiences required of an entry-level Medical Laboratory Scientist or Biotechnology Research Scientist;
- to provide and foster student professional development, high standards of achievement, and interactions among other health care practitioners;
- to provide a level of instruction which maintains a progressive and positive educational environment;
- to support a graduate curricula which serves as a natural extension of professional development for those who desire to serve in leadership roles in management, practice, education, and research in the field of medical laboratory science/biotechnology science research.

Core Values and Classroom Behavioral Norms

As part of our mission to develop laboratory scientists, the DMRT faculty and staff work collaboratively to cultivate adherence to the following Behavioral Norms for the DMRT Classroom.

Core Values:

- Academic Excellence
- Effective Teamwork
- Good Citizenship
- Fairness
- Civility and Respect
- Accountability
- Reliability
- Honesty and Integrity
- Responsibility for Patient Care and Confidentiality
- Commitment to Life-long Learning

Classroom Behavioral Norms

DO:

1. Arrive on time and be prepared by reviewing objectives, notes and protocols prior to lecture and laboratory sessions.
2. Read the procedure and related materials before going to lab.
3. Follow the dress code for lecture and laboratory as published in the DMRT Student Manual of Policies and Procedures.
4. Turn off electronic devices. Cell phones may be programmed on silence mode if needed.
5. Accept accountability in all that you do by taking ownership of your academic experience.
6. Be respectful, attentive and engaged during lecture and laboratory sessions.
7. Focus on teamwork by:
    a. Actively participating in lecture and laboratory activities
    b. Contributing responsibly and equitably to assigned group activities

8. Take initiative by asking timely and relevant questions.
9. Participate without dominating the discussion.
10. Be respectful in your communications with professors, staff and classmates.
11. Make pre-contact with professors to set-up a meeting in their office if needed. Discussions in the hallway are not productive or private. Visit professors at a mutually convenient time.
12. Practice good citizenship by keeping classrooms, teaching laboratories, the resource room, and facilities clean and litter free.
13. Identify and communicate your learning needs to course coordinators.

DO NOT:

1. Show up late for class.
2. Leave the classroom when taking a quiz, exam or assessment.
3. Leave lecture or lab early without clearing it in advance.
4. Send text messages, answer the phone, surf the Web or play games during lecture or lab.
5. Carry on side conversations during class.
6. Display disruptive behavior or create unnecessary background noise during lecture, lab and especially quizzes, exams or assessments. Examples include, but are not limited to, leaving and re-entering the room, tapping feet or pencils, paging through books, newspapers and magazines, fidgeting, reading other class materials, doing work from other classes. Be mindful of crinkling wrappers and closing doors quietly.
7. Send professors, staff or administrators e-mails that are written too casually or lack proper grammar.
8. Contact instructors or staff through Facebook or other social networks while you are enrolled as a student in the DMRT program.

NON-ACADEMIC STANDARDS*

Non-Academic & Technical Standards

Non-Academic & Technical Standards represent the essential requirements of the Department of Medical and Research Technology (DMRT) that each student must master to successfully participate in the program and become employable. Each student must be able to carry out the following in a **distraction-filled environment**:

1. Identify visually cellular components, microorganisms and their structure using a clinical grade binocular microscope independently.

2. Interpret visually and differentiate colors, shading and intensity on slides, plates, test tubes, printouts, instrument control panels and computer screens.

3. Demonstrate sufficient manual dexterity and fine motor coordination to perform manual manipulation of lab equipment, process specimens, operate, maintain, and calibrate laboratory equipment, and carry out all aspects of laboratory testing procedures accurately and efficiently.

4. Demonstrate sufficient and adequate strength and mobility to perform basic laboratory functions in an established time-frame according to approved policies and procedures. Includes lifting and carrying 30 lbs. and reaching lab benchtops.

5. Demonstrate accurate written, electronic and verbal communication in English to interpret laboratory data, obtain and document relevant information, and comprehend and carry out oral and written instructions and requests.

6. Communicate clearly, accurately, effectively and tactfully when transmitting test results and/or information to diverse colleagues, faculty, classmates, physicians and other health care personnel.

7. Hear sufficiently to answer phones and beepers, recognize alarms, and respond to questions and receive directions. Use assistive devices (e.g., hearing aids, phone receivers, etc.) if needed.

8. Demonstrate professional behaviors including, but not limited to, arriving on-time, teamwork, honesty, accountability and reliability in work, maintaining confidentiality, and adhering to dress code.

A **distraction-filled environment** refers to each student working efficiently and accurately at school and on rotation placement under the following anticipated conditions:

- Fast paced environment
- Noise filled environment
- Strong chemical or biologic odors
- Repetitive motions
- Standing or sitting for long periods of time
- Interruptions to workflow
- Heavy work-load demands
- Variations in temperatures and humidity

Other Fundamental School and/or Employment Expectations

- Working with bio-hazardous material
- Working with blood and biologic specimens
- Organizing work to perform tasks on time
- Complying with background check & immunization policies
- Adhering to all applicable laboratory policies, procedures and safety standards
- Participating in ongoing training, continuing education and competency checks
- Being flexible and adapting to changes in policy, workflow and schedule
- Adhering to the institution's policies that do not allow unauthorized operation of personal electronic devices.

- Working in a customer and patient-oriented service environment
- Maintaining composure and focus even during stressful situations
- Reading and understanding relevant professional and technical publications and documents.

*** Note: It is the responsibility of the student to notify the Department of any change in status in the stated abilities.**

CAREER ENTRY COMPETENCIES

One of the goals of the rotation placements/externship is to ensure that each student leaves the Department with an understanding of the behavioral standards of the profession and that each student demonstrates a willingness to adhere to these standards. Following the completion of Department of Medical and Research Technology didactic coursework and rotation placements/externships, the student will demonstrate the ability to:

1. produce high-quality and timely work to support value-added laboratory services;
2. develop technical skills to organize time, materials, and equipment to perform procedures efficiently;
3. apply knowledge of testing principles and limitations to basic troubleshooting;
4. apply adequate knowledge of technology involved in the clinical laboratory;
5. evaluate published literature as applies to the profession;
6. analyze procedures using sound judgment before attempting to undertake them, requesting assistance when necessary;
7. actively participate in performing assigned duties with attention to accuracy and cost efficiency;
8. be self-directed and responsible for his/her work;
9. communicate effectively, professionally and civilly at all times to enable consultative interactions with members of the health care/research team, external relations, customer service and patient/subject education;
10. comply with institutional policies regarding:
    - work practices and processes,
    - work schedules and proper "in-time" attendance such as arriving on time and limiting unscheduled absences,
    - issues of confidentiality,
    - dress code and appearance,
    - biomedical and chemical safety practices,
    1. total quality management and/or good laboratory practices
    - management of discrepancies;

After the completion of Department of Medical and Research Technology didactic coursework, clinical rotation placements and professional development program, the student will demonstrate the ability to achieve the following Career entry competencies:

1. produce high-quality and timely work to support value-added laboratory services;
2. develop technical skills to organize time, materials, and equipment to perform procedures efficiently;
3. apply knowledge of testing principles and limitations to basic troubleshooting;

4. apply adequate knowledge of technology involved in the clinical laboratory;
5. evaluate published literature as applies to the profession;
6. analyze procedures using sound judgment before attempting to undertake them, requesting assistance when necessary;
7. actively participate in performing assigned duties with attention to accuracy and cost efficiency;
8. be self-directed and responsible for his/her work;
9. communicate effectively, professionally and civilly at all times to enable consultative interactions with members of the health care/research team, external relations, customer service and patient/subject education;
10. comply with institutional policies regarding:
    - work practices and processes
    - work schedules and proper "in-time" attendance such as arriving on time and limiting unscheduled absences
    - issues of confidentiality
    - dress code and appearance
    - biomedical and chemical safety practices
    - total quality management
    - managing discrepancies
11. adjust his/her schedule to accommodate completion of tasks/projects and institutional objectives;
12. work effectively with supervisory personnel by accepting constructive feedback;
13. maintain composure, work quality, and professional relations with others, even under stressful conditions;
14. contribute to a positive environment in the workplace.

ACADEMIC PROGRESS

Each student is solely responsible for his/her academic progress. To advance, each student must meet both the quantitative and qualitative requirements of each course in the Department of Medical and Research Technology. A description and listing of requirements for each course is provided at the beginning of the semester in the course syllabus. A student will **not graduate** if a grade of **D** or **F** has been received in any course and/or has an outstanding "Incomplete" in **any** course in the Department. A student receiving a grade of **D** or **F** in any course is required to repeat the course and obtain a passing grade of C or higher. In addition, a student will not be eligible for graduation if any prerequisite coursework remains outstanding.

Students should be familiar with the current University of Maryland Academic Regulations. Questions may be directed to the Office of Records and Registration, 601 Lombard Street, Suite 201 at (410) 706-7480, www.umaryland.edu/orr.

Continuous evaluation of DMRT student progress will occur throughout the academic year according to the following grading system:

DMRT Grading System

Final grades for **didactic courses** are recorded as follows:

A - 90 -100%	D - 60 - 69%
B - 80 - 89%	F - below 60%
C - 70 - 79%	I - Incomplete

PASS/FAIL

Clinical rotation/externship courses are graded on a passing with excellence, pass, or fail basis. Students must pass each laboratory rotation in order to be eligible for advancement to subsequent rotations. A student will not graduate without passing all clinical rotations/externships.

Final grades for **rotation placement and externships** are recorded as follows:

P – pass
F – fail

I (INCOMPLETE)

An incomplete (I) is to be used **only** when mitigating circumstances (i.e., illness, unavoidable absence) have prevented the student from completing the course on time. It is to be viewed as a non-prejudicial entry on the student's record. It must be noted that the grade of "I" remains on the official student transcript. The final grade earned is recorded on the permanent record upon successful completion of the course and is indicated on the transcript as "I/final grade. The grade of "I" is given only to a student whose work in a course has been qualitatively satisfactory, "C" or above, but who has been unable to complete some small portion because of illness or circumstances beyond the control of the student. In **no** case will the mark of "I" be recorded for a student who has not completed the major portion of the course or is in jeopardy of not passing. The Incomplete may be removed upon completion of work assigned by Department faculty. All work must be completed before the student is eligible for graduation; otherwise, the "I" becomes terminal and equivalent to an "F."

No opportunities to improve a grade will be offered after the end of the course which is the final examination, unless an extended date for assignments has been indicated by the Course Coordinator. Additionally, no opportunities to improve a grade will be offered besides those specified in the syllabus and offered to ALL students.

CHANGE IN REGISTRATION (ADD/DROP)

The last day a student can **ADD** a course is one (1) week after instruction begins. After this date, no course can be added without a signed "Change in Registration" form and written permission of the Dean. The last day a student can **DROP** a course is before the midpoint of the semester or the mid-term examination after instruction begins. Refer to policy on "Dropping a Course."

DROPPING A COURSE

Dropping a course may only be done under special circumstances with input from the Course Coordinator and approval of the Interim Program Director, or the DMRT Program Committee. A course dropped **before** the mid-point of the semester or the mid-term examination, whichever occurs last, will not appear on the official transcript. A course dropped **after** the mid-point of the semester or the mid-term examination, whichever occurs last, will appear as a "**W**" on the official transcript. Students will not be able to drop a course solely for poor academic performance. Dropped courses will be documented and explained in the student's official record at DMRT.

REFUND SCHEDULE FOR DROPPED COURSE(S)

An 80% refund on dropped courses will be issued for all students who are charged on a per credit hour basis, if courses are dropped before the end of the first week of instruction. No refunds are issued for dropped courses after the first week. **THERE IS NO REFUND** for full-time undergraduate students who drop courses thereby changing their status from full-time to part-time.

WITHDRAWAL FOR THE SEMESTER

A student may find it necessary to withdraw from the Department due to extenuating circumstances. Reinstatement may be possible upon the recommendation of the Admissions Committee if the student has withdrawn in good standing. Students must submit in writing to the Department Chair a request for reinstatement.

Students officially withdrawn from the school will be credited for all academic fees charged to them less the matriculation fee, in accordance with the following schedule from the date instruction begins:

Two weeks or less	80 per cent
Two to three weeks	60 per cent
Three to four weeks	40 per cent
Four to five weeks	20 per cent
After five weeks	0 per cent

DATE OF WITHDRAWAL (WD) MARK
ON or AFTER first day of instruction WD
ON or AFTER last day of instruction WD or F

A student who stops attending classes during the semester and does not officially withdraw with the DMRT Office of Student Affairs will receive marks of failure in all courses and will forfeit the right to any refund to which he/she would otherwise be entitled.

CANCELLATION

Students who are advance registered and subsequently decide not to attend the University must notify the Interim Program Director in writing, prior to the first day of instruction. If this office has not received notification of cancellation by 4:30 p.m. on the last business day before instruction begins, the University will assume the student plans to attend and accepts his/her financial obligation.

After instruction begins, students who wish to terminate their registration must submit a NOTIFICATION of WITHDRAWAL to the Interim Program Director. Students are liable for all charges applicable at the time of withdrawal.

DMRT LEAVE OF ABSENCE (LOA) POLICY

An undergraduate DMRT student may apply for a leave of absence (LOA) for appropriate personal or professional reasons by writing a formal letter of request to the Dean of the School of Medicine. A student wishing to request a leave of absence (LOA) must meet with the DMRT Interim Program Director who will discuss the implications of taking leave, refer the student to the appropriate campus resources, as needed, and assist the student in preparing a letter to the Dean.
Appropriate reasons for LOA include: medical reasons, financial issues, military service and personal considerations, such as illness within the family or family care.

Accommodations for missed work will be made by the related course coordinator/s. Missed laboratory practical exams will be made-up with an alternative format at the discretion of the course coordinator.

Students missing more than two cumulative weeks of classes will be withdrawn from classes. The normal procedures for withdrawal from classes will be followed. The student must satisfy the authorities that he/she has no outstanding obligations to the school, return his/her student identification card, microscope key and clear any personal items and remove the lock from their locker.

If the leave of absence takes place during a semester, the normal procedures for withdrawal from classes will be followed. The student must satisfy the authorities that he/she has no outstanding obligations to the school, return his/her student identification card, microscope key and clear any personal items and remove the lock from their locker.

Students considering a leave of absence are advised that LOA may affect financial aid and health insurance. University health insurance is only good through the last semester for which the student has been registered.

LOAs are intended to cover a significant temporary interruption of the student's academic program of study. Students who do not re-enroll within one calendar year must apply for re-instatement to determine if they are eligible for re-entry in the program as they may be required to repeat all or selected courses. (Refer to DMRT Reinstatement procedure).

Students on LOA are not authorized to participate in clinical activities, serve as an elected UM representative or represent the school/program/university at another organization. **Please note that all degree requirements must be completed within five (5) years of original enrollment.**

PROGRAM COMPLETION

The time limit to complete the undergraduate program is **five (5) years**.

TUITION AND FEES

Policies regarding tuition and fees are as follows:

A. Tuition and fees are due and payable **on** or **before** the due date stipulated on the billing invoice. Please refer to the DMRT Website for current tuition and fees at http://medschool.umaryland.edu/DMRT.

B. Tuition and fees are to be paid in full. There will be no postponement of payment **except** for the following:

1. financial aid awarded by the University that has not been completely processed, or
2. bank loans (i.e., GSL) have not yet been disbursed.

In both (1) and (2) above, written documentation will be required from Student Financial Aid or the bank.

Any inquiries regarding tuition should be directed to the UMB Office of Student Accounts at 410-706-2930.

C. A student with outstanding financial obligations to the University, or to the Department, **will not** be permitted to graduate or advance to the next academic semester.

D. New Junior Students: **$756.00** Teaching Lab fee and $100 seat deposit

New Categorical Students: **$400.00** Teaching Lab fee and $100 seat deposit

**** All Departmental fees are non-refundable**

***** Tuition and Departmental fees are subject to change without prior notice.**

ACADEMIC POLICIES

Blackboard Online Syllabus Quiz

This course is supported with a Blackboard on-line component which contains additional course content. Please read this syllabus and take the 10-question on-line syllabus quiz within Blackboard. This a course requirement. You must pass it with a score of 80% or higher to open the on-line content of the course. You may take the quiz as often as necessary, but you must pass it with a score of 80% or higher.

SafeAssign Requirement

Faculty may require students to upload designated written assignments via Blackboard's SafeAssign in order to receive a grade for that assignment. SafeAssign is a Blackboard feature that assists students in ensuring that the work they are submitting is original work and, if

outside resources have been utilized, that these resources are properly attributed and referenced. Students must check submission requirements to determine when SafeAssign must be utilized.

70/70 RULE

For all junior level laboratory based courses, the assessment of student performance will be based on two components, 1) didactic competence and 2) laboratory skills. **To successfully complete the laboratory-based courses, students must attain a minimum average of 70% in both the lecture portion of the course and a minimum of 70% in the laboratory portion of the course.** Failure to do so, will result in a final grade no higher than "D".

75/75 RULE

For senior level medical technology and biotechnology students the policy of the 75/75 rule applies to laboratory based courses as follows: **"For successful completion of any senior level course students must earn a minimum of 75% on the lecture portion of the course and a minimum of 75% on the laboratory section of the course" for courses with a laboratory component. Failure to do so will result in the assignment of a final grade no higher than "D".**

Examinations and Examination Questions:

Most final exams will be <u>comprehensive of all lectures and laboratories</u>.

Any concerns regarding examination questions, tests and assessments must be communicated to the course coordinator within 3 working days of when the results are reviewed. After that, the examination or assessment is considered closed.

All examination questions and graded assessments are based on published course learning objectives. Objectives may be modified during the course at the discretion of the course coordinator, but prior notice to students will be provided.

Examination questions will not be returned for students to keep. Exams may be reviewed by appointment with the course coordinator. Students are NOT permitted to write down or copy questions verbatim from examinations and assessments.

SENIOR FINAL EXAMS

For all senior level courses the 75% minimum on cumulative final exams rule is: **"Senior medical laboratory science and biotechnology students must earn a minimum of 75% on cumulative final exams for all senior level courses before progressing to the related clinical rotation or externship**. Any senior student who fails to obtain 75% must re-take the exam before the semester break and achieve a score of 75% to demonstrate competency in the content area. Failure to achieve a 75% on the re-take exam will result in the assignment of a final grade no higher than "D". The student will not be released for rotation/externship and will be required to repeat the course.

*Please note that the grade achieved on the initial exam will be factored into the final grade for the course. Additionally, students will only be permitted retakes on a maximum of two final exams and retakes will only be administered after all scheduled final exams are taken.

Academic Program Requirements for Baccalaureate Degree Seeking Students

Students earning a Bachelor of Science degree must maintain a GPA of 2.0 or better at all times. If, upon completion of any semester, the student's GPA is less than 2.0, he/she will be placed on academic probation. "Academic Probation" is noted on the student's permanent record. Once the student's GPA is 2.0 or better the student will be removed from academic probation and his/her transcript will state "removed from academic probation." A student on academic probation for any two semesters will be recommended to the Dean for dismissal. If a student receives a grade of "D" in any course the student will automatically be placed on academic probation regardless of their overall GPA.

STUDENTS WITH A GPA OF 1.0 OR BELOW FOR ANY SEMESTER WILL BE ACADEMICALLY DISMISSED.

GPA 1.1 - 1.9 for any semester ..... Academic Probation
GPA below 2.0 for two semesters ..... Academic Dismissal

Students on Academic Probation will be required to have a modified plan of study. This plan will require one or more of the following: a reduction in credit hours to part-time enrollment, assignment of a tutor, repeating a failed course, participating in counseling at UMB Counseling Center and/or auditing a course in which student performance was weak or marginal. Modified plans of study are developed and finalized by the DMRT Interim Program Director.

Students must achieve a grade of "C" or better in all didactic courses. Students will be allowed to repeat a course only one time. Failure to achieve a grade of "C" or better in a repeated course will result in the student's dismissal from the program. A student must have a grade of "C" or better in all courses as well as a minimum of 75% on all cumulative senior final exams to advance to clinical rotations/externships.

The plan of study selection for baccalaureate degree seeking students becomes final after the completion of their first academic year. Degree seeking students interested in changing to a Categorical study plan must request to do so at least six (6) weeks prior to the end of the first academic year.

MLT Students Transferring under an Active Articulation Agreement

Many MLT students elect to enroll at the University of Maryland School of Medicine Medical Laboratory Science Program (DMRT) under an active articulation agreement with community college in Maryland. The provisions and benefits of transferring under such an agreement include:

1. MLT Transfer-Students must have GPA of 3.0 or higher at their original school and have passed the ASCP MLT Board of Certification (BOC) Examination.

2. Documentation of ASCP BOC certification shall be submitted to the DMRT Office of Student Affairs before the first semester of classes.

3. MLT Transfer-Students are required to pass DMRT Orientation Boot Camp pipetting and microscopy competencies in order for the MEDT 321 Introduction to Laboratory Techniques course to be waived.

4. MLT Transfer-Students who meet the articulation agreement requirements have the option of waiving MEDT 490 Pathogenic Microbiology (junior spring) and MEDT 421 Urinalysis/Body Fluids (senior fall). The decision and rationale to opt out of each course shall be submitted in writing to the DMRT Office of Student Affairs at least six (6) weeks before the start of the next semester of classes.

   MLT Transfer-Students who do not maintain a GPA of 3.0 or higher during the DMRT MLS program will no longer be eligible to waive courses or apply for shortened, accelerated rotations.

5. MLT Transfer-Students will be eligible for shortened, accelerated MLS rotation placements of 13-days (versus the typical 18-days) in Chemistry, Hematology, and Microbiology disciplines if they:*****

   a. maintain a GPA of 3.0 or higher

   b. earn a "B" or higher in the related discipline (both at DMRT and the articulating program) where the student is seeking an accelerated rotation. Includes passing the related final exam with 75% or higher.

   c. completed their MLT rotations within three (3) years OR can provide evidence of work experience within the past three (3) years in the specific discipline where the student is seeking an accelerated rotation.
      - a resumé detailing relevant work experience in the Medical Laboratory Sciences is also needed if applying by the work experience route.

   d. receive approval in writing from both the Discipline Instructor and Interim Program Director. The required request form will be submitted before rotation assignments are finalized. Refer to Appendix C.

   e. and meet the requirements of any earlier scheduled MLS DMRT rotation placement by meeting the following:
      - passing any previous rotation.
      - attending the previous rotation for the full number of assigned days and making up any missed days. Missed time on earlier

rotations could make MLT Transfer-Students ineligible for future shortened rotation placements.
- passing post-rotation day exams from previous rotations with a 75% or higher.
- attending all related review sessions.

***NOTE**: All rotation placements will be assigned for 18-days and converted to 13-days once the MLT transfer student meets all requirements listed above.

Academic Program Requirements for Post-Baccalaureate Categorical Students

Students in Post-Baccalaureate Categorical studies must maintain a 3.0 (B) average throughout their program of study. A student whose GPA for a semester falls below 3.0 will automatically be placed on departmental academic notice and will not be permitted to progress to the clinical practicum. Any student on departmental academic notice for two semesters will be dismissed from the Program.

A student whose progress in a course is not satisfactory will be notified by the Course Coordinator. Notice will also be given to the Interim Program Director. In such cases, the student is responsible for scheduling an appointment with the Course Coordinator. During the appointment, the Course Coordinator, in consultation with the student, will develop a remedial plan for the student. The remedial plan may include recommendations that the student seek group or private tutoring, evaluation of study skills and time management skills, financial assistance, professional counseling or other measures. It is the responsibility of the student to implement the remedial plan and to correct unsatisfactory performance. The student may also contact the Interim Program Director for guidance and to discuss Program policies including policies governing dropping a course, academic probation, dismissal and withdrawal.

The plan of study selection for categorical students becomes final after the completion of the first semester. Categorical students interested in changing to a degree seeking study plan must request to do so at least six (6) weeks before the start of the second semester of classes.

NON-ACADEMIC PERFORMANCE CRITERIA

PROFESSIONALISM

All DMRT faculty and staff expect students to demonstrate the professional attitude and behaviors necessary for a career in clinical and biomedical laboratory science. Professional Qualities objectives that reflect professional attitude and behavior are distributed at the beginning of the semester and evaluated throughout the course by the Course Coordinator. In each course, students who exhibit unprofessional attitudes and behaviors in the classroom or laboratory setting may have up to 2-points deducted from their final cumulative course grade for lack of professionalism.

ATTENDANCE/TARDINESS/LEAVING EARLY

Laboratory professionals must be reliable and dependable. They must report to work as scheduled, be on time, and remain at their workstation until the conclusion of their shift. Since the development of professional responsibility is one goal of the Department of Medical and Research Technology, class attendance is **mandatory**. Chronic absenteeism and/or tardiness with a failure to improve may result in appropriate disciplinary action up to and including academic dismissal.

DMRT student attendance is documented with attendance sheets in each class. Each student is responsible for signing the attendance sheet to document his/her attendance in lecture and/or laboratory. Students are not permitted to sign in, leave the teaching area and not be present for the start of lecture or laboratory. Moreover, it is considered a violation of the ethical code of conduct if/when a student signs the attendance sheet for another student.

Attendance: Didactic Courses at DMRT

Reliable attendance is one important aspect of professionalism. All DMRT students are required to adhere to the lecture and laboratory schedule by attending every class. If a student is to be absent he/she must contact the Course Coordinator prior to the start of the class session. For each incidence (day) of unexcused absence, two (2) points may be deducted from the final cumulative grade for the course. It is the *responsibility of the student to report to the Instructor within two days of return to campus. At that time, the student will submit a doctor's excuse or other explanation.* If a student fails to report to the instructor, the absence will automatically be deemed unexcused. In general, documented absence from class due to illness, death of a family member, a personal emergency, state or federally mandated hearings, meetings or appointments, or observance of a religious holiday will constitute cause for an excused absence. Examples of unexcused absences include but are not limited to: scheduling routine medical and dental appointments, scheduling employment-related duties and activities, expanding spring break beyond its allotted time, or scheduling other travels for personal reasons.

Any planned absence, should be communicated to the Course Coordinator as soon as possible for approval and review by the Interim Program Director on a case-by-case basis to determine if excused or unexcused.

Any make-up work for excused absences may be arranged at the discretion of the instructor. If an examination is missed, the make-up examination may be objective and/or oral at the discretion of the instructor(s).

Unexcused absences will not be made up. The student will receive a grade of zero for that period. If an examination is missed and the absence is unexcused, the student will receive the grade of zero for the examination.

There is no make-up option for missed laboratory sessions for any reason. The student is responsible for the content of the missed laboratory.

Attendance: Clinical Rotation Placement/ Externship

Attendance in all areas of the clinical rotation placement/externship is **MANDATORY.** Students are expected to treat attendance at clinical rotations as they would employment. Students are required to arrive on time and remain at the rotation site until the completion of the day's assigned duties or as determined by the clinical preceptor.

Absence from clinical rotation placement/externship is not encouraged and any missed time due to absence, tardiness, or leaving early will be made up. Make-up time will be scheduled by the clinical preceptor at a time that does not interfere with the progress of the clinical rotation placement/externship. The policy for making up missed time to be determined by each clinical site. Please note that attendance, tardiness, and leaving early reflect student professional attributes and are documented on the Final Evaluation form for rotation/externship experiences.

In the case of student illness, such as the flu, upper respiratory infection or other illness that could be transmitted to patients, the student is advised to remain at home, seek medical care and alert the clinical preceptor of his/her status.

Absence, tardiness or leaving early during the clinical rotation/externship must be documented by either a phone call or e-mail from the student with one communication to the respective clinical preceptor and one to the Interim Program Director (410-706-7664). If the clinical preceptor has concerns about UM student tardiness, absenteeism or leaving early, please contact a DMRT faculty liaison or the Interim Program Director (410-706-7664).

Attendance at Post-Rotation/Externship Days is **MANDATORY**. Students with an unexcused absence on Post-Rotation Day will not be permitted to advance to their next rotation.

Tardiness/Leaving Early

Timeliness is another important aspect of professionalism. All DMRT students are expected to be "on-time". This is accomplished by adhering strictly to the lecture and laboratory schedule. The term "on-time" refers to being in your seat and ready at the published start time that a class, laboratory, or assessment is scheduled to begin. On-time also means returning from breaks and being in your seat and ready in the time allotted by the instructor. Being timely for class, lab and rotation is good practice for your future success in the workplace to plan ahead by allowing adequate time to be ready and travel to school on-time.

If a student is delayed or must leave before the conclusion of the class, he/she must contact the Course Coordinator in advance of the related class/lab session and explain the lateness or need to leave early.

Tardiness will be considered excessive if there are three episodes of unexcused tardiness within a month, or a total of five (5) or more within three consecutive months. The first 3 occurrences of unexcused tardiness will result in a reduction of two (2) points from the final course grade. If the pattern of unexcused tardiness continues to a total of five (5) or more within three consecutive months, the deduction will increase to a total of five (5) points and a referral will be made for a meeting with the DMRT Program Committee.

Any student who arrives late for class is responsible for initialing the attendance sheet (so as not to be marked absent). Tardiness of 30 minutes or more will be considered an absence (refer to DMRT absence policy). Lateness may be deemed excused due to extensive extenuating circumstances as determined by the Department.

Please note that calling to notify the Department of lateness on a chronic basis (defined as ≥ 3 incidences) will not excuse the incidence of tardiness.

Non-Academic Performance Criteria for Disciplinary Action

Students should be aware that habitual tardiness or absenteeism will adversely affect their academic standing.

Chronic or patterned tardiness or absenteeism is not acceptable during the didactic portion and/or clinical rotation placement/externship and may prevent completion of the program or the ability to sustain employment after graduation.

Grounds for disciplinary action related to non-academic performance include, but are not limited to:

- Excessive tardiness for lecture, laboratory or clinical placement
- Excessive absenteeism for lecture, laboratory, or clinical placement
- Excessive absence/tardiness by not returning to lecture or lab activities after any authorized break
- Excessive incidence of leaving early from lecture, laboratory or clinical placement before the conclusion of day's activities
- Chronic signing of the attendance sheet and not being present at the start of lecture or laboratory
- Signing the attendance sheet for others who are or are not present at the start of lecture or laboratory

The Chair and Interim Program Director reserve the right to evaluate patterns of unsatisfactory non-academic performance and take the appropriate disciplinary action in accordance with the progressive disciplinary process to address non-academic performance issues as follows:

1. **Verbal Warning and Counseling Session** documented by the Course Coordinator. After three (3) unexcused incidences of tardiness or any (1) unexcused absence, the student will be given a verbal warning which may result in a result in a written warning from the Interim Program Director if immediate and sustainable correction is not observed. The verbal warning will be documented forwarded to the Interim Program Director and placed in the student file.
2. **Written Warning** will be documented by the Interim Program Director if the pattern of unsatisfactory non-academic performance continues to a total of five (5) unexcused incidences of tardiness or a second (2) unexcused absence. This action will involve a meeting with the student, Interim Program Director and course coordinator that will be documented in the student file. A written description of the unsatisfactory behavior will be provided to the student with the resulting consequence such as points deducted from final

course grades. If immediate and sustainable correction is not observed a meeting with the DMRT Program Committee (including the Chair) will be scheduled as described below.

3. **Meeting with the DMRT Program Committee** will be scheduled to address any student who exceeds five (5) unexcused incidences of tardiness or a third (3) unexcused absence. Minutes will be generated from this meeting and a decision will be made to determine student progression to clinical rotation placement and/or recommendation to the SOM Dean for dismissal.

Student Grievance Policy

The Department of Medical & Research Technology is committed to providing a learning environment in which student complaints are responded to promptly with impartiality, procedural fairness and confidentiality. The DMRT views student complaints as an opportunity to review and improve policies and procedures and gain insight into levels of student satisfaction. Depending on the nature of the complaint, students are encouraged to begin by formally expressing their concern with the lowest appropriate level of management, which is usually the course coordinator, and if not satisfied follow the organizational chain of command presented in the Student Grade Appeal procedure published in the DMRT Student Manual. Formal complaints made to the Interim Program Director should be submitted in writing to ensure procedural fairness. Concerns may also be voiced informally at the periodic Town Hall meetings with the Chair. Any DMRT student on clinical rotation/externship may formally document a concern or grievance by completing the MT Student Grievance Report Form provided at Clinical Orientation and submitting for review to the Interim Program Director. Records of formal student complaints and resolution shall be maintained securely in student files of the Office of Student Affairs.

Formal Grade Appeal Process

A non-passing final grade may be appealed (Formal Grade Appeal) only on the basis that the grade is arbitrary or capricious. Arbitrary or capricious grading means assignment of the grade: 1) on some basis other than performance in the course, 2) based on unreasonable application of standards different from the standards applied to other students in the course, or 3) a substantial and unreasonable departure from the instructor's initially articulated standards.

Students may appeal a **non-passing final grade** according to the following procedure:

1. Discuss with the Course Coordinator the rationale for the grade assignment being appealed. Justify to the Course Coordinator why you believe the grade should be changed. If you are dissatisfied with the Course Coordinator's final decision consult with the Interim Program Director. Refer to #2.

2. Submit the appeal in writing to the Interim Program Director. An Advancement Committee will be called to review the case. The Advancement Committee will consist of representative members of the Department's faculty and the Interim Program Director. The faculty member(s) involved in the appeal will report to the committee if consultation as needed, but will not have a vote in the decision rendered. The Advancement Committee will forward a recommendation to the Chair for final approval. Upon approval, the student will be notified of his/her standing.

3. If the student is dissatisfied with the Advancement Committee decision, the final departmental level in the grade appeal process is to schedule an appointment with the Chair.

If the appeal is not resolved to the student's satisfaction at the departmental level, a Grade Appeal may be filed with the Dean of the School of Medicine. **The Dean may appoint an Appeals Committee comprised of one DMRT faculty member not involved in the Grade Appeal and two non-DMRT SOM faculty. The Grade Appeal will proceed in accordance with SOM policy,** https://www.medschool.umaryland.edu/dmrt/Academic-Programs--Policies/Student-Grievance--Appeals/

4. The Appeals Committee will review input from the student, the Course Coordinator and, others as appropriate, and advise the Dean with recommendations for decision and action. The decision of the Dean will be made in writing with a copy to the student, DMRT Interim Program Director, Chair of DMRT and SOM Student Affairs. The decision of the Dean is final.

   The Dean or his designee may dismiss the Grade Appeal if a) the student has submitted the same, or substantially the same, complaint through any other formal appeal or grievance procedure; b) the appeal does not allege actions which would constitute arbitrary and capricious grading as defined here; c) the appeal was not filed timely; or d) the student has not conferred with the Course Coordinator prior to filing the Formal Grade Appeal.

   In the case where a student wishes to make a "formal appeal" of a failing grade and the failing grade leads to automatic dismissal, any appeal to the Dean will encompass both the grade itself, and the dismissal from the program.

Please refer to Appendix D for a flow chart of this process.

Academic Dismissal & Appeals Process

Upon the recommendation of the Program Committee or an Advancement Committee of the Department of Medical and Research Technology, the Chair reserves the right to request the Dean of the School of Medicine to dismiss a student from the program for failure to meet academic and/or professional requirements.

Academic Appeals Process

The Appeals Process will proceed in accordance with SOM policy, https://www.medschool.umaryland.edu/osa/handbook/School-Policies/Guidelines-for-Advancement-Dismissal--Graduation--/

1. The Advancement Committee is not permitted to make any modifications to these guidelines for individual students.

2. A student who is dismissed may appeal to the Dean for reinstatement. A written appeal must be submitted within 14 days of official notification of dismissal. The written appeal should include an explanation of any extenuating circumstances which the student believes

justify reinstatement. The Dean may reject the appeal or may accept it and appoint an Appeals Committee to advise the Dean on reinstatement.

3. The Appeals Committee is comprised of three (3) full-time faculty members of the School of Medicine.

4. If an Appeal Hearing is granted, the student may meet with a Dean in the Office of Student Affairs to review the appeals process. The entirety of the student's academic record will be made available to the Appeals Committee by the Office of Student Affairs. The student may also request a copy of the student's academic record.

5. If an Appeals Committee is appointed, the student may submit additional, relevant information, including a written statement which should address circumstances not previously considered, and may include letters of support from faculty, students or others. The student's written response must be received at least two (2) full school days prior to the Hearing.

6. The Office of Student Affairs will notify the student in writing of the Committee members and any individuals the School of Medicine intends to call to the hearing no less than two (2) full days in advance of the Hearing. It is improper conduct and grounds for disciplinary action for a student or other person to contact a member of the Committee or other individuals invited to attend the hearing about the appeal at any time during the process. Issues or concerns should be directed to a Dean in the Office of Student Affairs.

7. Any person to be called to the Hearing by the student must be made known to a Dean in the Office of Student Affairs no less than two (2) full school days in advance of the Hearing.

8. The Committee Chair may limit or refuse to consider testimony or other information that is irrelevant or repetitive.

9. The purpose of the Hearing is to permit the student, and persons called by the student or Committee, to answer questions presented by or through the Committee, which will allow the Committee to clarify its understanding of issues relevant to the dismissal. Persons called will be limited to faculty, staff and students who are able to speak about a significant role the person has had in the events leading to the dismissal/failure or the recommendation for dismissal. A student will not be permitted to call more than one character witness but may submit written statements from others.

10. Only individuals identified in writing to the OSA at least two (2) full school days in advance of the Hearing may participate.

11. Neither the student nor the School may be represented by counsel at the Hearing. The student may be accompanied by a non-attorney advisor of his or her choice. In instances where criminal charges may be pending or under investigation, the student may have an attorney present. The Committee may, at its option, have University Counsel or an

Assistant Attorney General present or available to provide guidance. Advisors and attorneys may act only in an advisory capacity and may not address the Committee or examine or cross-examine participants. The student will be permitted to be present during the presentation of all testimony and other information. The student will be permitted to speak to the Committee and to request that questions be presented to individuals through the Committee.

12. A Dean from the Office of Student Affairs will be present at the Hearing ex officio, to assure adherence to policy and to provide information as required or requested by the Committee. The Dean from the Office of Student Affairs does not participate in deliberations or vote on the outcome of the hearing.

13. The Hearing will be closed to the public. All proceedings and decisions will be considered confidential by all participants and advisors.

14. The three members of the Committee are the sole voting members. Discussions about the Appeal, except for final deliberations of the Committee, will occur with the student present.

15. The recommendation of the Appeals Committee will be sent to the Dean who will consider the recommendation and communicate his/her decision to the student. The recommendations of the Appeals Committee are advisory only and not binding on the Dean.

16. A student who is dismissed from school for reasons specified in section F. 1-4 above and who is re-admitted following an appeal shall be dismissed automatically, and without the possibility of appeal, upon a final failing grade in any course.

Factors Typically Taken into Consideration by Appeals Committees

Does the student have a good understanding of why the dismissal took place? Were there reasonable extenuating circumstances presented by the student? Did the student seek assistance with any problems that he or she was facing? Was appropriate assistance offered (e.g., remedial assistance, counseling, recommendation for leave of absence)? Did the student take advantage of recommendations made? Does the student take responsibility for his or her behavior? How motivated is the student to successfully complete the curriculum and to behave in a professional manner? What plans does the student offer to prevent a similar situation from recurring? In making its recommendations to the Dean for reinstatement, the Appeals Committee may include certain conditions, such as repeating courses or repeating an entire year, regular monitoring by faculty members or administrators, counseling, that certain coursework be taken under certain conditions (e.g., at UMB rather than off-campus).

REINSTATEMENT PROCEDURES

Process for Students in Good Academic Standing:

No student is guaranteed reinstatement. Reinstatement **may be** possible upon the recommendation of the Admissions Committee if a student has withdrawn in good standing. Many factors must be evaluated including prior issues, progress, and reason for leaving the program. All requests for reinstatement must be submitted in writing. Such requests should be made to the DMRT Office of Student Affairs and must be received **no later than six weeks prior to the start of the next semester.**

The following information should be included in the student's written request:

1. The reasons(s) the student left the program.
2. What the student has been doing since leaving the program.
3. The reason the student wants to return to the program at this time.

Such requests are considered individually under these guidelines:

1. General admission policies of the University and the School prevail (e.g. University rules and regulations, space available).
2. Students may be reinstated only once.
3. Student must meet all admissions standards in effect at the time of application for reinstatement.
4. Undergraduate students not in attendance at the DMRT program for one or more years will have their academic records reviewed by a DMRT Committee to determine placement in the program, and they may be required to repeat all or selected courses.
5. Upon reinstatement, undergraduate students not in attendance during the previous three (3) years will be required to repeat all or selected courses.

It is important to note that degree requirements must be completed within five (5) years of original enrollment.

JUDICIAL REVIEW SYSTEM

Please refer to the publication "Statement of Ethical Principles" Judicial Review System & By-laws of the Judicial Board Honor Code & Judicial Review System, UMSOM July 1, 1996, distributed at orientation.

Inclement Weather Policy

Extreme weather conditions or unexpected events may require UMB to cancel or delay classes. Students on clinical rotations/externships are to make every effort to attend their practicum. Time missed due to inclement weather must be made-up unless the UM campus is officially closed. Absences must be reported to both the Interim Program Director (410-706-7664) and the clinical preceptor at the laboratory site.

In the case of inclement weather and the campus is officially closed, the student is NOT obligated to report to the clinical site for rotation/externship. In the case of the campus delaying opening until 10:00 a.m. the student should report to the affiliate site by 10:00 a.m.

Sources of information concerning inclement weather announcements include: the Campus Emergency Information Phone number of 410-706-8622, the Campus Alerts web page at http://www.umaryland.edu/alerts, the TV station WBAL-TV, and the radio station WBAL (97.9 FM). Please note that the DMRT will close **ONLY** if the University of Maryland campus is closed. Students should also periodically check Blackboard for course specific announcements as well as their University of Maryland e-mail.

As a result of varying conditions, students are urged to use their personal judgment on whether to travel to the University of Maryland campus or to affiliate laboratories. Students are to also follow the attendance protocol as previously described in this manual.

Liberal Leave Due to Inclement Weather

The Liberal Leave policy for UMB in the event of severe inclement weather, or other unusual conditions affecting traffic conditions or the operation of public transit or campus facilities authorizes the President or his designee to declare Liberal Leave to be in effect under which non-essential employees may elect to work or to take accrued annual, holiday, personal, or compensatory leave, or leave without pay.

Students are not covered under the campus Liberal Leave policy and should always check with their school or program, in the event of severe inclement weather or other unusual conditions affecting traffic conditions or campus facilities, regarding class cancelations and/or other academic program requirements such as clinical placement participation.

For DMRT students during Liberal Leave, on-site classes will begin no earlier than 10:00 am. The Course Coordinator will work with the Interim Program Director to evaluate the circumstances and make a decision. Students are responsible for monitoring University e-mail and Blackboard messages for the decision not to hold classes or proceed with a late start time. Students on clinical rotation placement should communicate with the clinical site to determine the need to attend rotation. Absence from class will not be counted against students who are not able to attend class when Liberal Leave is in effect.

PERSONAL APPEARANCE AND DECORUM

Since the environment of the UM campus and the laboratory affiliates of the Department is professional rather than typically collegiate, students shall conduct themselves at all times and in all places in a manner which will bring credit to the University, the School of Medicine, the Department of Medical and Research Technology and to themselves. Conduct of students in public, particularly within the affiliated hospitals and laboratories, should conform to the highest professional standards.

Dress Code/DMRT

DMRT Students are required to follow a dress code appropriate to the profession. Each student is responsible for conveying a professional image. The personal appearance of our students and the impression they make on campus and on rotation/externship experiences is important to the University. **Dress Code in the Didactic Classroom** and on Campus is less formal, but still encourages professionalism at all times with the following guidelines:

- Appearance is to be neat and clean, and demonstrate the use of good body and oral hygiene at all times.
- Hair must be clean, well-groomed and present a professional image. Non-natural hair color is not permitted. Keep hair looking natural.
- Male student's facial hair must be short, neatly trimmed, a natural hair color and maintained.
- Students are to visibly display their unaltered UMB issued photo One Card (ID badge) at all times while on campus and on clinical rotation placement.
- Clothing with promotional, suggestive, political or offensive logos and hooded sweatshirts are not permitted.
- Hats and hoods are NOT permitted unless for religious/cultural/medical reasons. This includes but is not limited to baseball caps, visors, and durags. Large adornments and/or headdresses will not be worn.
- Clothing should be clean, free from tears and not wrinkled or tattered. Skirt or pant hemlines should not touch the floor. Pants worn below the hip level are not permitted.
- Students are not permitted to wear mini-skirts, halter tops, tube tops or midriff baring tops.
- Highly fragranced lotion, perfume, body spray or after-shave should be avoided. Students should be free from offending odors.
- No more than two visible earrings are permitted in each ear. All other piercings (e.g.,) tongue, nose, eyebrow, lip studs or rings, etc.) must be removed while on clinical rotation placement or when visiting the Medical Center. Ear gauges and visible dermal implants are not permitted. No other visible pierce jewelry or body adornments are allowed.
- Sunglasses will not be worn inside the school or clinical laboratory.

In addition to the above requirements, a **Dress Code for Student Laboratories** on campus is enforced to ensure the personal safety of all students. Students in violation of these policies will not be permitted to participate in laboratory exercises.

- Male students must wear long pants or scrubs with pockets. Shorts are not acceptable. Socks are required when wearing pants or scrubs to cover legs below the hemline.
- Female students must wear pants, scrubs with pockets or skirts resting below the knee. Socks are required when wearing pants or scrubs; socks, stockings or hose are required when wearing a skirt to cover legs below the hemline. Capri pants are not acceptable.
- Cloth, open-toed or perforated shoes (such as crocs) are not permitted in the laboratories. Flip-flops, sandals and slippers are not acceptable. Loafers, dress boots, flats, leather tennis shoes/sneakers, and leather deck shoes are acceptable. The heels of footwear must be ≤ 2 inches.
- Hairstyles which extend below the shoulder must be tied back.

- Jewelry must be limited; long necklaces, dangling bracelets or other jewelry are not permitted. Earrings must be ½ inch or less below the earlobe.

Clinical Rotation Placement /Externship Dress Code

As professional representatives of the Department and the University of Maryland, students on rotation placement or externship must adhere to the established dress code guidelines for the specific facility. Students will project a professional image. "Business Casual" is the way of expressing a mode of dress that conveys neat attire appropriate for the business of the facility. In addition to observing the guidelines of the practicum site, students must adhere to the following minimum guidelines of the Department of Medical and Research Technology:

- Students are to visibly display their unaltered UMB issued photo One Card (ID badge) and facility issued ID (if any) at all times while on clinical rotation placement.
- Appearance is to be neat and clean, and demonstrate the use of good body and oral hygiene at all times.
- Clothing should be clean, free from tears and not wrinkled or tattered.
- Male students must wear long pants or scrubs with pockets. Dress pants, khakis, and corduroys are acceptable. Socks are required when wearing pants or scrubs to cover legs below the hemline.
- Female students must wear pants, scrubs with pockets or skirts resting below the knee. Dress pants, khakis, dressed crop pants and corduroys are acceptable. Dresses and skirts cannot be more than 3 inches above the knee. Socks are required when wearing pants or scrubs; stockings or hose are required when wearing a skirt to cover legs below the hemline.
- T-shirts, sweatshirts, hooded sweatshirts, strapless tops, midriff baring, halter-tops, tube tops, spandex and tops with plunging necklines are not permitted. Dress appropriately for a professional workplace. Shirts with a collar are recommended.
- Mini-skirts/dresses, shorts, blue jeans, sweatpants, stretch/yoga pants, overalls, spandex, capri pants and athletic pants are not permitted. Undergarments will not be visible through sheer fabrics or scrubs.
- Cloth, open-toed or perforated shoes (such as crocs, sandals, flip-flops) are not permitted in the laboratories. Canvas tennis shoes, flip-flops and slippers are not acceptable.
- Hairstyles which extend below the shoulder must be tied back. Non-natural hair color is not permitted. Keep hair looking natural.
- Jewelry must be limited; long necklaces, dangling bracelets or other jewelry are not permitted. Earrings must be ½ inch or less below the earlobe.
- Highly fragranced lotion, perfume, body spray or after-shave should be avoided. Students should be free from offending odors.
- No more than two visible earrings are permitted in each ear. All other piercings (i.e., tongue, nose, eyebrow, lip studs or rings, etc.) must be removed while on clinical rotation placement or when visiting the Medical Center. Ear gauges and visible dermal implants are not permitted. No other visible pierce jewelry or body adornments are permitted.
- Tattoos will be covered. Tattoos are not allowed on the face.
- Sunglasses will not be worn inside the clinical laboratory.
- The personal use of earphones, headphones, earbuds, Bluetooth ear devices or electronic music devices is not permitted while working in or traveling within any clinical affiliate site or visiting the Medical Center.

During clinical rotation placement, students must also adhere to the established dress code guidelines of the specific laboratory. Students should consult with the affiliate institution for site specific information. Instances when a student does not conform to the dress code will result in appropriate disciplinary action, including removal from rotation.

Policy on Fingernails

Natural fingernails must be kept clean, presentable and of professional length no longer than ¼ inch in length from the fingertip. Fingernails may not interfere with job duties or safety practices or protective glove requirements. No chipped nail polish is permitted. Artificial nails, nail extenders, nail enhancements, gel wraps or attached decorations will not be allowed when working directly with patients such as during phlebotomy class and phlebotomy rotation as well as when participating in student laboratory activities at DMRT and clinical rotation sites.

DEPARTMENT AND CAMPUS SECURITY AND ORDER

UMB Alerts

UMB Alerts is an alert system that allows the University of Maryland to contact you during an emergency by sending text messages to your:

- E-mail account (school, personal, other)
- Mobile phone
- Pager
- Personal devices capable of receiving SMS text messages

Please visit https://www.umaryland.edu/emergency/alerts/ for more information.

Students are responsible for maintaining security, neatness, and order in all departmental areas.

A. **Identification – UMB One Card**

Students must wear a UMB issued One Card (Identification badge) at all times and abide by the University's security regulations. When on rotation/externship, additional identification that may be required by the laboratory affiliate must be worn at all times and students must abide by the affiliates' security regulations. Students who lose their UMB One card must notify campus police and the DMRT Interim Program Director immediately. The student will absorb the cost of a replacement badge. The UMB One Card office is located at 621 West Lombard Street, SMC Campus Center, LL, Suite 004. IDs issued Monday-Friday, 8:30am-4:30pm. For questions or concerns, call (410) 706-6943 or send an email to umb-one@umaryland.edu.

B. **Faculty Offices**

1. Refer to page 56 for a list of faculty and their office locations.
2. Offices are restricted. Do not enter any faculty office without knowledge or consent.
3. All outgoing student phone calls are to be made on personal mobile phones. Incoming student calls should be limited to urgent or emergency messages only.

C. **Student Responsibilities**

Each student is solely responsible for his/her academic progression Students are also responsible for personal property and care of the departmental and affiliate institutional property.

D. The **Resource Room** is located on the 4th floor of the Allied Health Building, room 411. Students may use but may not remove materials from the Resource Room. The Resource Room provides a space for students on break and lunch and is equipped with three DMRT supported computers and one printer which are to be used for school work and school related activities. All activity on these computers can be tracked to the user. Unauthorized use would include accessing the internet for sending of unauthorized personal email, social media, games, pornography, or electronic shopping during the operation of school hours.

Should a student need the Internet for non-work-related activity, there are public PCs in the HS/HSL Library.

E. Use of UMB and UMB Affiliate **Information Technology** (IT) **Resources** must be responsible, professional, and in a manner consistent with the law and the opportunities of others to use the IT Resources. In general, acceptable use of UM resources include support of research, education, and administrative activities of UMB or of an Affiliate. Authorized Users should always use IT Resources in accordance with UMB, USM, and Affiliate policies, procedures, and guidelines, software licenses, and applicable laws. UMB depends upon a spirit of mutual respect and cooperation to create and maintain an open community of responsible users of UMB IT Resources.

Authorized Users are responsible for safeguarding their own identification (ID) codes and passwords, and for using them for their intended purposes only. For the full description of the IT policy refer to the http://www.umaryland.edu/umbcomputingpolicies/.

F. **Mailboxes**

Student mailboxes are located on the 4th floor corridor outside of room 440. Faculty and staff mailboxes are located in the main office areas on the 3rd and 4th floors. All DMRT faculty, staff, and student mailboxes are protected under Federal Laws, and tampering with anything placed in a mailbox may be punishable according to those laws. Tampering with information placed in any mailbox may also result in suspension and/or dismissal from the school.

G. **Policy on Visitors**

Due to campus security and safety regulations, students are NOT permitted to bring young children and/or siblings to school with them. Children, as well as adult visitors, are not allowed in the student laboratories and lounges and the Department is not responsible for their care.

H. **Classrooms**

1. Eating/drinking is not allowed in any classroom.
2. All personal belongings are to be placed in *assigned* locker. Books and other materials not being used should be kept in the locker. Lockers are the property of the University and are not to be written on, and/or defaced in any way. A copy of the student's lock combination must be on file in the Student Affairs/Interim Program Director's office. Food and drinks are not to be kept in lockers. Room 411, the Student Resource Room has facilities for

student use as a lunchroom**. Each student is responsible for removing all personal belongings and their lock from assigned lockers before leaving for summer break**.

I. **UMB Non-Smoking Policy**

UMB is a non-smoking campus and prohibits smoking in university owned/leased buildings (including the Allied Health Building); property outside of buildings or on any campus courtyard or other designated outdoor areas.

J. **Laboratory Practices**

The following practices will be adhered to by students in the laboratory. They are in compliance with the Occupational Safety and Health Administration (OSHA) guidelines, and are enforced to ensure the personal safety of students. Violation of these policies will result in immediate disciplinary action. Repeat violations may result in dismissal from the program. Students are responsible for cleaning the laboratory areas, and maintaining proper laboratory safety practices.

1. **Students are not permitted in departmental or affiliated laboratories unattended**. An instructor or teaching lab technician must be present when students perform any laboratory activity.
2. Standard laboratory precautions will be practiced at all times.
3. Personal protective equipment (PPEs) such as lab coats will be worn in the laboratory at all times. Lab coats are not to be worn outside the laboratory or laundered by the student.
4. Gloves must be worn when handling biological or hazardous materials.
5. DMRT students in all laboratory sessions will wear protective eye wear at all times except when using the microscope, performing phlebotomy, or at the discretion of the instructor.
6. Splash shields are to be utilized when appropriate.
7. Eating, smoking, chewing gum, drinking, applying cosmetics and handling of contact lenses are prohibited in the laboratory.
8. Biological waste and sharps are to be disposed of in appropriate containers.

K. **Electronic Device Policy**

Electronic devices must not disrupt instructional times. As a courtesy to the instructor(s) and other students, all electronic devices **will be turned off during lecture and laboratory sessions. Texting is not permitted during class or lab sessions.** The use of any electronic devices, including, but not limited to: mobile phones, pagers, programmable calculators, tablets, electronic reading or music devises, and earbuds/headphones, is not permitted during lecture, laboratory exercises, examinations, quizzes, laboratory practical examinations or clinical rotation placement. <u>These devices are distracting to you and others and do not allow you to concentrate on critical work and learning</u>.

If indicated by the instructor:

- Personal laptops, notebook and tablet computers will be permitted for lecture related activities in the **lecture class room.**
- Mobile phones may be left on with ringtones turned off and programmed to the silent or vibrate mode.
- Non-programmable calculators will be used for examinations and other assessments.

Students must obtain consent from staff, faculty, other students or affiliates before taking, uploading or sharing photos, recording audio, or capturing video while in class, lab, or on clinical rotation placement.

STUDENT HEALTH INSURANCE

The University requires all full-time students to carry health insurance. DMRT Students enrolled in 9 or more credits must carry health insurance. Students are also required to have health insurance when participating in a phlebotomy experience and senior clinical rotation placement. UMB has engaged **Gallagher Student Health & Special Risk** as Account Manager for our sponsored Student Health Insurance Program through **UnitedHealthcare StudentResouces** https://www.umaryland.edu/studentinsurance/

Gallagher Student Health will manage the online enrollment and waiver process. This online process is the only way to waive or enroll in the Student Health Insurance Plan. Students with comparable insurance must show proof of coverage to obtain a waiver though Gallagher. Students who are not enrolled, or have not filed for a waiver, will be automatically enrolled for individual coverage, and charged accordingly on their tuition bill. For students currently are enrolled in the University health insurance plan, their enrollment will remain the same unless they request a change via the student insurance enrollment website. The University of Maryland, Baltimore provides comprehensive health care services and offers UnitedHealthcare insurance options. Plan details may be reviewed at:
www.gallagherstudent.com/umb

Gallagher Student Health & Special Risk may be reached at toll free at **1-844-288-4916**, or through online LiveChat, by clicking on the icon at **www.gallagherstudent.com/umb** .

The UMB Office of Student Accounting bills full-time students for health insurance in the fall and spring. Students interested in receiving an insurance card sooner are advised to self-enroll on the insurance carrier's web site. UMB Student Accounts sends out letters detailing how to self-enroll. Student Health insurance at UMB includes prescription coverage. Please contact Student Accounting for further details by calling 410-706-2930.

MEDICAL EMERGENCIES/TREATMENT

A. For medical attention during class hours, students should notify the faculty and then report to the University of Maryland Immediate Care, 408 W. Lombard Street between Eutaw and Paca Streets, phone (667) 214-1899 to make an appointment or reach office staff at (667) 214-1883 Monday through Friday 8:30 am to 4:30pm. When on clinical rotation placement/externship, supervisory personnel should be consulted as to the procedure following injury, illness or accident; or the student's private physician should be consulted. To reach a physician after hours/weekend, phone (667) 214-1800.

ALL ACCIDENTS MUST BE REPORTED TO THE FACULTY MEMBER IN CHARGE OF THE LABORATORY AND AN INCIDENT REPORT FORM MUST BE FILED IN THE DEPARTMENT BY THE FACULTY MEMBER. ACCIDENTS IN THE AFFILIATE LABORATORIES MUST BE DOCUMENTED ACCORDING TO INSTITUTIONAL POLICIES. THE DMRT MUST BE NOTIFIED

IMMEDIATELY OF ANY INCIDENT/ACCIDENT INVOLVING A STUDENT DURING THEIR LABORATORY PRACTICUM. AN INCIDENT FORM MUST BE FILED IN THE STUDENT'S RECORD.

COST: All costs for medical treatment or post-exposure evaluation and follow-up activities for students are the responsibility of the student. All full time DMRT students are required to have health insurance and the insurance will be billed for all medical services.

B. Post-Exposure Evaluation and Follow-Up for Students

All student exposure incidents must be reported, investigated, and documented (see Accident & Injury report form in Appendix C).

Exposure on Campus (at DMRT)

When a DMRT student has an exposure incident at DMRT, the student must report it to the faculty responsible for the course. That faculty must then inform the Interim Program Director as soon as possible and complete the Accident and Injury form. Students with potential exposure Monday-Friday 8:30 am – 4:30 pm must:

1. Call the UMB Bloodborne Pathogen Exposure Hotline at (667) 214-1886. Your call will be answered by a medical professional who will advise you on the risk of your exposure, what treatment you may need and facilitate the "Source Patient's" blood being tested. Someone will respond within ten (10) minutes. If you do not receive a call back within fifteen (15) minutes, please try again. In the unlikely event that you do not get a call back from the second call, please contact the Department of Family & Community Medicine phone number, 667-217-1800, tell the operator that you have had a needle stick or body fluid exposure and that you must speak to a Student Health staff member immediately.

2. The student should report to the UMaryland Immediate Care site, located at 408 W. Lombard Street, Baltimore, MD 21201, between the hours of 7 a.m. and 5 p.m.

3. If the student needs to contact the office before reporting to the student Health Office, they are to call 667-214-1899. In the unlikely event the student is not able to reach a clinician at that number, please call the Student Health Director, Mario Majette, M.D., M.P.H. at 667-214-1883.

   When a student has a needle stick injury, the faculty member responsible for the course must contact the Needle Stick Hotline by dialing 667-214-1886. Current CDC guidelines call for initiation of medical treatment of high-risk exposures within 2 hours. *Please refer to the DMRT Safety Manual for further details.*

Exposure at Affiliates of DMRT

If a DMRT student has an exposure incident at an affiliate laboratory the student must inform that laboratory's Education Coordinator or the immediate supervisor to begin the post exposure

follow-up procedure. Some affiliate laboratories will perform the testing of both the student and the source individual's blood. However, other affiliates may send the student back to the Student and Employee Health Clinic at UM for all testing. It is important that ALL students know the affiliates' policy concerning student exposure to blood borne pathogens PRIOR to an incident occurring.

THE DMRT MUST BE NOTIFIED IMMEDIATELY OF ANY INCIDENT/ACCIDENT INVOLVING A STUDENT DURING CLINCIAL PLACEMENT.

Following a report of an exposure incident, the affected student must receive a confidential medical evaluation and follow-up, including a minimum of the following elements:

- Documentation of the route of exposure and the circumstances under which the exposure incident occurred.

- Identification and documentation of the source individual, unless it can be established that identification is infeasible or prohibited by state or local law.

- The source individual's blood will be tested as soon as feasible after consent is obtained to determine HBV and HIV infection. If consent is not obtained, the person responsible for the Hepatitis B vaccination program will establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, will be tested and the results documented.

- When the source individual is already known to be infected with HBV or HIV, testing for the source individual's HBV or HIV status needs to be repeated.

- Results of the source individual's testing must be made available to the exposed student along with information on applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

Collection and testing of blood for HBV and HIV serological status will comply with the following:

- The exposed student's blood will be collected as soon as feasible and tested after consent is obtained.

- The exposed student will be offered the option of having their blood collected for testing of HIV/HBV serological status. The exposed individual **MUST** have a blood test for HIV if the source patient consents for testing.

All DMRT students who experience an exposure incident will be offered post exposure evaluation and follow-ups in accordance with the OSHA standard. The health care professional responsible for the student's Hepatitis B vaccination and post-exposure evaluation will be provided with the following:

- A copy of 29 CFR 1910.1030, http//www.osha.gov.

- A written description of the exposed individual's duties as they relate to the exposure incident.

- Written documentation of the route of exposure and circumstances under which exposure occurred.

- Results of the source individual's blood testing, if available.

- All medical records relevant to the appropriate treatment of the person, including vaccination status.

The exposed student will be provided a copy of the evaluating health care professional's written opinion within 15 days of the completion of the evaluation.

The health care professional's written opinion for HBV vaccination must be limited to whether HBV vaccination is indicated and if the student has received such vaccination. It will include a statement that the student has been informed of the results of the evaluation and of any medical conditions resulting from exposure to blood or OPIM (other potentially infectious material) which required further evaluation or treatment. All other findings or diagnoses must remain confidential and will not be included in the written report.

IMMUNIZATION POLICY

I. Policy Statement

The University of Maryland strives to be a model health promoting campus and to support both the health of its students and the people of the community with whom they come in contact. All students, both full- and part-time, who wish to qualify for enrollment at the University, must satisfy the University's immunization requirements. All costs of student compliance with the immunization requirements are the responsibility of the student.

UM Immunization Policy and immunization requirements are based on Maryland law and public health recommendations of the U.S. Centers for Disease Control and Prevention. The policy and the requirements will be reviewed periodically and revised as necessary.

II. Requirements

A report of Medical History form which documents immunization history will be mailed to all new students and must be completed **prior to** the student's initial registration. All immunization data will be uploaded to the University of Maryland site hosted by Castle Branch Medical Document Manager. UMB students will have the ability to update their immunization, titer and tuberculosis screening history as needed. The account is free of charge for UMB students. All users have life time access to their account. The web address for Castle Branch site is: **https://portal.castlebranch.com/UP92 .**

A. All incoming students are required to provide to the satisfaction of Student Health:

1. Proof of immunization for measles, mumps, and rubella (MMR)
    - Positive antibody titer (lab report *OR* physician verification of results required) *OR*
    - Two vaccinations

    If series is in process, submit where you are in the series and new alerts will be created for you to complete the series. If all three titers are negative or equivocal, and no documentation of two vaccinations has been documented, you must repeat the two-dose series. If you have two documented vaccinations and have a negative titer or equivocal titer, you must receive a one-time booster. If only one or two components of the MMR vaccination show lack of immunity, a one-time booster is recommended.

2. Certification of varicella (chicken pox) immunity by
    - Positive antibody titer (lab report *OR* physician verification of results required) *OR*
    - Two vaccinations

    If series is in process, submit where you are in the series and new alerts will be created for you to complete the series. If the titer is negative or equivocal, and no documentation of two vaccinations has been documented, you must repeat the two-dose series. If you have two documented vaccinations and have a negative titer or equivocal titer, you must receive a one-time booster. *History of disease is NOT acceptable.*

3. Hepatitis B
    - Three vaccinations AND a positive antibody titer (lab report or physician verification of results required) *OR*
    - A positive antibody titer alone will also be accepted (lab report or physician verification of results required). If you have documentation of three vaccines, please submit them along with your titer.

4. Tetanus
    - Submit documentation of a Td *OR* a Tdap booster within the past ten (10) years. The renewal date will be set at 10 years.

5. Influenza
    - Due annually by December 1. Documentation of a flu shot administered during the current flu season (September-March).

6. Tuberculosis (TB) screening: Due date for all documentation is October 1st for summer/fall entry and March 1st for spring entry.

    Which screening is appropriate for you?
    The IGRA (blood test) or the PPD (skin test)?

Ask yourself the following questions. If you answer YES to any of these questions, you should provide an IGRA blood test, which is either the QuantiFERON TB Gold or the T-Spot for your TB screening.

- Have you received the BCG vaccine in the past?
- Have you ever had a positive PPD skin test?
- Have you ever had active OR latent TB?
- Have you ever been treated for active OR latent TB?
- Were you born outside the USA?
- Have you lived outside the USA for ≥ 1 year?
- Are you currently taking immunosuppressants/steroids/anti-cancer medications?
- Have you been vaccinated in the last 4-6 weeks for Measles, Mumps, Rubella or Varicella?

Students are REQUIRED to have ANNUAL TB screening tests. Upon entry into the program, students are required to have one of the following based upon the above screening questions:

- QuantiFERON Gold Blood Test *OR* T-spot Blood Test (preferred method) *OR*
- Two (2) TB skin tests (at least one-three (3) weeks apart but no more than twelve (12) months apart).
- If any of the above are positive, provide a clear chest x-ray result. Date must be on/after date of positive TB screening result.
- Renewal will be set for one year from date of skin test, blood test or chest x-ray.
  - Upon renewal, one of the following is required based on the above screening questions:
    - QuantiFERON Gold blood test OR T-Spot blood test *OR*
    - One-step test
  - Renewal will be set for one year from the date of the skin test, blood test or TB questionnaire.

7. Meningococcal Vaccine – although not a requirement for entry at UMB, the meningococcal vaccine should be considered for students if they have not already received the vaccine. Meningococcal disease consists of a bacterial infection with *Neisseria meningitides* causing meningitis, septicemia, and bacteremia.

   N. meningitides spreads through exchange of respiratory secretions and/or saliva. There are five strains (A, B, C, W, and Y) that cause most meningococcal disease worldwide. Those at risk for meningococcal

disease include youth or young adults, people living on college campuses, travelers to Sub-Saharan Africa and some immunocompromised individuals.

Typically, the meningococcal vaccine is given at ages 11-12 and then a booster is given at 15-16 years of age. Depending on your risk factors the meningococcal vaccine can be given up until age 55.

You can get your meningococcal vaccine at the UMaryland Immediate Care. The immunization is billed through your insurance company; please contact them for their coverage of the vaccine.

8. Students may be required to comply with additional immunization requirements specified by a particular School or program. Students should check with their School and program to determine which requirements may not be waived, and the possible curricular implications of waiving other immunization requirements.

9. To participate in clinical training at non-university sites, students must comply with the health and immunization requirements of the training sites.

10. **Those students not adhering to University policy governing immunizations will not be allowed to register for the subsequent semester or to advance to rotation placement/externship.**

III. Waivers

Immunizations required by law or mandated by a UMB school or program will not be waived. For example, **the requirement for immunization against Hepatitis B <u>cannot be waived</u> by students in the program**. Except for the following:

A. A student may receive a waiver on health grounds if he/she presents a written statement from a licensed physician or a local deputy state health officer indicating that immunization against any or all of the diseases for which immunization is required is medically contraindicated, detrimental to, or not in the best interest of the student. The physician's statement shall state whether the contraindication is permanent or temporary and, if temporary, provide assurance that the student will receive immunizations(s). The student subsequently must furnish evidence of completion of immunization at the first reasonable opportunity. In the absence of such evidence, the student will not be allowed to register.

B. Any student who objects to immunization upon grounds that immunization conflicts with his or her bona fide religious beliefs and practices may request a religious waiver. A waiver on religious grounds may be obtained by submitting a written request to Student Health. This waiver will not apply in case of an emergency or epidemic of disease which is declared by the Secretary of Health and Mental Hygiene or the Secretary's designee. Students requesting religious waivers

should refer to this policy and contact their School or program for possible curricular implications.

CLINICAL ROTATION PLACEMENT

Each student who meets the academic criteria and professional standards for advancement to clinical rotation placement is assured placement at an affiliate site. Every effort is made to assign senior and categorical medical laboratory science students to rotation placements according to geographic area and student interest. However, due to the availability of rotation commitments as well as affiliate specific criteria, special arrangements may be required for student placement at designated clinical affiliate laboratories. The final decision for all rotation placements is made by the program. **Once clinical rotation placement sites are assigned to the student no changes to the schedule will be made.**

The program works closely with the clinical affiliates to assure that all rotation placement experiences provide comparable entry level skills and training. A standardized set of Clinical (Behavioral) Objectives and rotation related policies have been developed with input from the clinical affiliates and are distributed annually at DMRT's Clinical Orientation. Prior to release to clinical rotation each student will sign a statement acknowledging agreement to adhere to departmental and affiliate policies and procedures (See Appendix C).

EXTERNSHIPS

Every effort is made to assign senior biotechnology students externships according to the geographical area(s) selected by the student. However, due to externship commitments by the affiliates, students may be required to rotate through a externship site not in their immediate geographical area. **Once externship sites are assigned to the student no changes to the schedule will be made**. Externship interviews may be required by the site and will be conducted **before** Fall finals week. Prior to release to externships, each student will sign a statement acknowledging agreement to adhere to departmental and affiliate policies and procedures (See Appendix C).

Personal Electronic Device Use on Clinical Rotation Placement/Externship

When on clinical placement, students are required to observe the policies of the affiliate regarding the use of electronic devices. The DMRT does not permit students to use tablets, electronic reading or music devices, earbuds/headphones etc. at any affiliate site and requires students to limit mobile phones use to break and lunch times. Mobile phones will not be used while performing assigned duties at affiliate facilities (includes phone calls, texting, social media).

BACKGROUND CHECKS

DMRT's academic requirements involve placement at one or more off-campus training sites, such as hospitals and other institutional settings. These off-campus clinical sites routinely require students to undergo and pass a background check, child abuse registry investigation, adult abuse registry investigation and, in some cases, urine drug testing.

More and more hospitals and other clinical training sites are requiring criminal background checks and drug tests to protect the safety of patients and other persons at these facilities, and to ensure the confidentiality of patient information.

Each training site sets its own standards for a background check and/or drug testing and typically conditions placement at the site on passing the check. You may also be asked by the training site to pay the cost of the background check and drug testing. You may have to complete more than one criminal background check and drug test during the course of your rotations, depending on the number of sites at which you are placed and the requirements of each site. Students should be aware that results from the criminal background check, urine drug screening, child abuse registry investigation, or adult abuse registry investigation could negatively impact the student's ability to participate in the clinical rotation placement courses. In addition, graduates applying for employment in healthcare are typically required to undergo a criminal background check and urine drug screening. Each student should use sound judgment and avoid situations which could result in poor decisions. Failure to do so could jeopardize the student's ability to complete the Medical Laboratory Science degree and may impact future employment in healthcare.
If you fail a site's criminal background check or drug test, you may be unable to complete your clinical course requirements. It is important for you to consider this before you enroll. The Department has no obligation to refund your tuition or fees, or to accommodate you in the event that you fail a background check or drug test and, as a result, are unable to complete your clinical course requirements. You should also be aware of the possible consequences under the UMB campus **Substance Abuse Policy**. Refer to:
https://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=215

IMMUNIZATION Compliance For Rotation Placement

In addition to the immunizations required by UMB and the State of Maryland, most affiliates also require the current Influenza vaccine for all students rotating at their facility. Influenza immunizations are offered by UMB Student Health, many affiliates or a personal physician. The student will provide documentation of compliance to each assigned clinical rotation site.

Clinical Rotation Placement/Externship for Baccalaureate Students

Clinical rotation placements/externships are graded on a pass/fail basis. Grades are "Passing with Excellence" (PE), "Passing" (P), or "Failing" (F). The minimum pass level for a clinical rotation is "P".

MEDT 402 Comprehensive Exam and Review

MEDT 402 is taken concurrently with clinical rotations for a letter grade. In addition to obtaining a passing grade for rotation, the student must also achieve a **grade of 75**% or higher on the discipline-specific, post-rotation examination in MEDT 402. Any student earning a score of less than 75% on one post-rotation exam in one discipline area will be required to take a second version of the exam within 1 week and achieve a score or 75% or higher. Any student earning a score of less than 75% on a second post-rotation exam in a second discipline area will not be permitted to sit for a re-take. A grade of "D" or "F" will be assigned for MEDT 402 and be required to repeat the course at a later time.

Clinical Rotation Placement for Post-Baccalaureate Categorical Students

Clinical practicums are graded on a pass/fail basis. Grades are "Passing with Excellence" (PE), "Passing" (P), or "Failing" (F). The minimum pass level for a clinical practicum is "P". In addition to obtaining a passing grade, the student must also achieve a grade of 80% or higher on the discipline-specific, post-rotation examination...

Evaluation of Students on Rotation Placement

1. Evaluation of a student's progress is the responsibility of the DMRT faculty liaison and the clinical faculty at each clinical rotation. The clinical faculty member has the prerogative to determine the grade based on the student's performance and professional behavior. The grade will be assigned in accordance with standard DMRT learning objectives and the standard DMRT grading scale.

   At the beginning of each course and clinical rotation placement/externship, the student will be informed of these policies and all other policies relevant to the course.

2. It is the student's responsibility to be aware of the date and time of scheduled evaluations.

3. Advancement from the didactic portion of the program to the laboratory portion in the senior year will be based on the student's overall academic record and professional behavior. Progression to clinical rotations/externships is only permitted upon successful performance in both these areas. The Chair reserves the right to deny advancement to clinical rotation/externship if any concerns related to professional behavior have been raised.

4. Twelve semester hours of Clinical Practice/Externship are taken on a Pass/Fail basis. A grade of "P" is not included in the calculation of the grade point average. Successful completion of each Clinical Practice/Externship component is required before graduation.

   The Interim and Final evaluations are used by the clinical faculty to determine final grades in addition to any written or oral examination procedures administered on site:

The Interim Evaluation is to be used by the clinical/externship instructor to monitor the student's progress *during* rotation/externship. This evaluation is an indication of the student's progress and performance. It should reflect the student's potential to successfully complete the rotation/externship. It will be collected during the faculty site visit.

The Final Evaluation was developed by academic faculty of the Department of Medical and Research Technology. This evaluation must include a recommendation for a grade, formal evaluation, and documentation of specific observed behaviors with appropriate narrative comments. Successful demonstration of acceptable affective behavior and attendance in accordance with the Department's policies and procedures will be required of all students in order to pass laboratory courses. It is the student's responsibility to return the original copy of the clinical professional evaluation in a sealed envelope to the Interim Program Director on the post rotation day. Final evaluation forms become a part of the student's permanent record. The

evaluations are confidential and utilized by program officials when recommendations are requested by prospective employers, graduate schools, professional schools, etc.

NOTE: Each student is required to complete a form authorizing release of information for **each** letter of recommendation for future employment at senior orientation in the beginning of the school year.

Students will evaluate their rotation/externship experience utilizing the following evaluative tools:

The Self Evaluation enables the students to rate themselves for comparison with the professional evaluation filled out by the clinical supervisor. This evaluation may also be used to assess student strengths and weaknesses. This form is to be filled out by the student at the Department on Post Rotation days.

The Laboratory Evaluation allows the students to evaluate and give feedback on their experience at the affiliate laboratory. This information is reviewed by the Interim Program Director, complied in a report, and shared with each clinical affiliate annually.

Clinical Rotation Placement/Externship: Academic Failure/Removal

Removal from a clinical rotation/externship, based on unethical behavior, unprofessional conduct and/or failure to meet academic or non-academic performance standards, may result in IMMEDIATE SUSPENSION. An Advancement Committee will convene to evaluate the student's case and will forward its recommendation for action to the Department Chair for approval. If warranted, the case will be forwarded to the Judicial Board or the Office of Student Affairs in the Medical School. The decision made by the Dean of the School of Medicine is **FINAL**. The Department of Medical and Research Technology will adhere to this decision.

Academic Failure of a Clinical Rotation/Externship

Failure of a laboratory rotation or externship (grade of "F") can result in academic dismissal.

ACCELERATED ROTATIONS (for MLT Students only)
MLT Transfer students may be eligible for shorted
Criteria for Qualifying for Accelerated Clinical Rotation Placement

1. MLT certified by ASCP BOC or equivalent.
2. Transferred to DMRT UMB under an active articulation agreement with an entering GPA of 3.0 or higher at the beginning of the Junior year.
3. Earned average of "B" or higher in the academic course/s (at DMRT and the articulating program) related to the Accelerated Rotation placement.
4. MLS/MT rotations must occur within three (3) years of the MLT rotations, or the student must show recent (within three years) related work experience in the discipline where the

student is seeking an Accelerated Rotation.

Procedure for Applying for Accelerated Clinical Rotation Placement

1. Submit an Accelerated Rotation Application to the Interim Program Director with a copy of ASCP Board of Certification (BOC) number (See Appendix C). A resumé detailing relevant work experience in the Medical Laboratory Sciences is also needed if applying by the work experience route.

2. The request will then be forwarded to the appropriate faculty Course Coordinator(s) for consideration.

3. Final Approval will be made by the Interim Program Director.

4. If approved, DMRT will forward to the clinical affiliate the recommendation for Accelerated Rotation for the student prior to rotation.

An affiliate may deny a student an accelerated rotation if a student does not demonstrate adequate competency in the assigned discipline, in which case the Clinical Rotation Placement will automatically convert to the standard rotation time. Advanced rotation placement is not offered by the National Institutes of Health and the Johns Hopkins Hospital.

HIPAA AND RELATED CONFIDENTIALITY POLICY

HIPPA or the Health Insurance Portability and Accountability Act is a federal standard that protects the privacy of patient health care information (PHI). All DMRT students are required to complete the online HIPAA training module offered by the University of Maryland in Baltimore. This module is part of the MEDT 409 Laboratory Management/QA/Regulatory Issues course with successful completion being documented by the printing of the related certificate and placement in the student's file. Completion of the HIPPA training module is one requirement for student progression to clinical rotation/externship.

Prior to participating in the clinical rotations, the student is required to sign a form whereby he/she agrees to abide by the rules and regulations of the clinical sites utilized by the program while on their premises during any assigned clinical or research rotations. Clinical sites may require the student to satisfy site-specific HIPAA policies.

FERPA and DISCLOSURE OF INFORMATION

In accordance with "The Family Educational Rights and Privacy Act (FERPA) of 1974" disclosure of student information, including financial and academic, is restricted. Release of information to anyone other than the student requires a written waiver from the student (see Appendix C). It is the policy of the University of Maryland to:

A. permit students to inspect their educational records;
B. limit disclosure of personally identifiable information from educational records without student's prior written consent; and
C. provide students the opportunity to seek correction of their educational records

where appropriate.

Student Directory Information

The following categories of information have been designated directory information: name, address, UMB email address, telephone listing, date and place of birth, photograph, major field of study, dates of attendance, degrees and awards received, and most recent previous educational institution attended.
This information may be disclosed even in the absence of consent unless the student elects nondisclosure via SURFS of any or all of the directory categories. This ("**opt out" or "directory information hold**") will remain in effect unless the student removes the opt out.
Directory information may appear in public documents and otherwise be disclosed without student consent unless the student elects non-disclosure as provided above.

NOTE: No faculty, staff or administrator will disclose any student information without verifying through SIMS that the student has not restricted the release of his/her information or opted-out of directory information. To check student status in SIMS, the faculty member must consult with a DMRT Student Affairs representative or the Interim Program Director.

SERVICE WORK PERFORMED BY STUDENTS

Students are not expected to provide "service work" for the clinical site during their clinical rotation placements. After demonstrating proficiency, students may be permitted to perform procedures under qualified supervision; however, it is the responsibility of the supervising employee for final verification of the data and release to the LIS (laboratory information system). Discipline specific course objectives are provided for each clinical rotation.

Any service work by students in the clinical setting outside of the academic hours is non-compulsory. If a student chooses to be hired by a clinical site for a job that does not require a certified medical laboratory scientist/technologist, the work hours must be scheduled at a time other than class hours (e.g., evenings or weekends). In such cases, the student is a *bona fide* employee of the site and the work is not considered to satisfy any part of the student's clinical practicum rotation.

REQUESTS for REFERENCE

A. Writing a letter of recommendation or serving as a professional reference is a voluntary professional courtesy provided by the faculty. Students requesting letters of reference are required to submit the following:

B. A signed "**Request for Reference (Letter of Recommendation) form**" (Appendix C) for each letter requested. This form is available on the DMRT website at https://www.medschool.umaryland.edu/media/SOM/Z-MIGRATION-/Migration---Nov-13-165323/dmrt/docs/Request-for-Letter-of-Recommendation.pdf as well as in the DMRT Office of Student Affairs.

C. A completed "**Student Facts Sheet For Recommendation Requests form**" (Appendix C) and, if available, a personal statement and resume. This form is available on the DMRT website at https://www.medschool.umaryland.edu/media/SOM/Z-MIGRATION-/Migration---Nov-13-165323/dmrt/docs/Student-Fact-Sheet.pdf as well as in the DMRT Office of Student Affairs.

D. If multiple references are needed, a complete electronic list of references with addresses and deadlines

E. Addressed and stamped envelopes

F. Special instructions for the recommender (if any) to emphasize specific notable accomplishments or experience

Requests for letters of reference shall be made well in advance of the deadline **no less than 2 weeks prior to due date:**

- It is at the discretion of the faculty member to write letters of recommendation so select someone who knows you well enough to write a strong reference and discuss your strengths in detail
- **Letters of reference should not be requested during high volume times such as the weeks prior to and including the weeks of graduation and orientation, as well as the first and last weeks of class**
- Generic letters of recommendation will NOT be written such as "To Whom it May Concern"

Current students should request no more than 4 sets of reference letters per academic year. DMRT alumni should request no more than one set of letters per calendar year.

STUDENT RECORDS

Student records consist of admission documents, unofficial grade reports that include grades and the sequence of courses, counseling records and program related letters and memorandums. All records are permanently maintained in a locked storage room at the Department of Medical and Research Technology (DMRT). Records are filed according to the year of graduation and are kept confidential. Only the Interim Program Director, education coordinator and admissions specialist have access to student files. Students may review their file by request. Official University transcripts may be obtained through the UM Office of Records and Registration.

CLEARANCE FOR GRADUATION

An **Application for Diploma** form must be filed with the Office of Records and Registration.

Submission of the Application for Diploma form must be filed by the following dates:

Spring Graduation - no later than February 4th
Summer Graduation - no later than June 9th

In addition, any student receiving financial aid must attend an exit interview conducted by the Office of Financial Aid.

Please Note: Conferring of the Bachelor of Science degree is not contingent upon passing the national certification examination(s).

STUDENT EMPLOYMENT

To support academic success, it is the recommendation of the Department that students not maintain full-time employment and work no more than 16 hours per week. If additional funds are required, financial aid avenues should be pursued. Contact the University of Maryland Financial Aid at (410) 706-7347 or a DMRT representative for scholarship opportunities.

PROFESSIONAL AND ACADEMIC INTEGRITY

Students are expected to maintain professional conduct on the University of Maryland campus and in clinical/externship settings at all times. Responsibility for patient care and personal professional behavior is learned and will be practiced by all DMRT students. Responsibility relates to the published mission and goals of the DMRT program as well as DMRT Core Values.

RIGHTS AND RESPONSIBILITIES FOR ACADEMIC INTEGRITY

The academic setting is characterized by reasoned discussion between student and teacher, a mutual respect for the learning and teaching process, and intellectual honesty in the pursuit of knowledge.

Standards of Academic Honesty and Ethical Conduct

Academic honesty and integrity guide the learning process and are fundamental values in a community of professionals. The Honor Code of the University of Maryland School of Medicine places the responsibility of ethical behavior squarely on each individual and requires formal review of questionable behavior. Each student as a member of this academic community is given notice that joining this institution voluntarily commits the individual to understand, accept and practice the general principles of ethical behavior promoted in the Honor Code.

Academic honesty and ethical conduct are expected from all students enrolled in courses and programs offered by the Department of Medical and Research Technology. Violations of the policies on academic honesty and ethical conduct will not be tolerated and will be formally addressed through Departmental and/or campus systems. Sanctions may include no credit on the assignment in question, course failure, and/or formal charges of student misconduct. Formal charges can result in academic probation or dismissal.

Violations of academic honesty and ethical conduct include, but are not limited to, plagiarism, cheating, falsification of data/results, obtaining unauthorized assistance from and/or giving unauthorized assistance to another individual during an examination or completion of an assignment, collaboration with other students on projects or assignments without the instructor's knowledge, as well as misuse of UM documents, identification cards and computers.

Failure to comply with the policies on academic honesty erodes one's own personal integrity and character and devalues grades, degrees and the institution. For more detailed information, please refer to https://www.medschool.umaryland.edu/osa/handbook/School-Policies/Statement-of-Ethical-Principles-Judicial-Review-System--By-Laws-of-the-Judicial-Board/

Honor Pledge

As members of this academic community, students in the Department of Medical and Research Technology make a commitment to uphold the values and principles of this Institution. The following Honor Pledge will be distributed with examinations, laboratory practical examinations, written papers and other designated assignments for student signature.

Please be advised that ALL DMRT students are required to uphold the Standards of Academic Honesty even if they choose not to sign the Honor Pledge.

"I promise to uphold the Department of Medical & Research Technology (DMRT) Core Values of academic excellence, accountability, integrity, honesty and good citizenship. As a DMRT student, I pledge that that this work is my own. I have followed the published standards of academic honesty and ethical conduct and have not shared or received information from other individuals or sources.

I understand that any violation of these standards can result in disciplinary action."

Students are expected to adhere to this pledge on all graded work even when they are not specifically told in advance to do so.

Please refer to Appendix C.

USE OF DMRT EDUCATIONAL MATERIALS

DMRT learning materials are for use within the DMRT academic program only. Students should presume that all DMRT learning material is protected by copyright and cannot be used except for the purposes expressly authorized by the Department. Students and others using these materials without the express written authorization of the author for purposes other than the DMRT academic program may be subject to claims of copyright infringement and violation of the Honor Code.

Academic Dishonesty: Cheating and Plagiarism

Cheating

Cheating is a type of academic dishonesty. It involves an act of fraud, deception or misrepresentation of one's academic work to increase one's grade or academic standing by trying to obtain an unfair advantage. Some examples are:

A. **Quizzes, Tests, Examinations of any Type**

- Communicating with another student or other individual during a test, quiz, practical, or examination. Copying from another student or allowing another student to copy your work during a quiz, test, practical, or examination.
- Taking a quiz, test or examination for another student.
- Using unauthorized notes or electronic devices during the taking of a quiz, test, practical or examination.
- Obtaining a copy of the exam, exam key, and/or information about the quiz, test, practical or examination prior to the academic assessment and/or giving information about such academic assessments to another student prior to the academic assessment
- Removing a test paper from the classroom without permission from the instructor.
- Changing any answers on a corrected quiz, test, or examination and returning for credit.
- Leaving the room during the quiz, test, or examination to go to the rest room or other area of the building to seek answers to a quiz, test, or examination questions.
- Sharing materials from previous years such as quizzes, exams, case studies and homework with students presently in a course or in the future.

NOTE: Any **s**tudent who repeats a course/or courses to improve a grade/s must read and sign an "Acknowledgement Form for Student Repeating a DMRT Course" form. By signing the form the student agrees to not share any materials with other students pertaining to the course/courses from previous years. The Interim Program Director may require the student to return any course materials from previous years.

B. **Classroom Assignments**

- Copying or allowing copying of homework, class work, or class projects or other materials unless specifically allowed by the instructor.
- Collaborating on homework, class work, class projects, or other assignments unless specifically allowed by the instructor. Unauthorized collaboration includes (a) jointly calculating homework problems, (b) sharing resources for an assignment, working in a group on a lab or computer assignment (c) presenting another student's homework or assignment as your own, (d) failing to acknowledge the contribution of another student or student(s) in an authorized group assignment.
- Obtaining pre-written papers or assignments from other students or commercial services and presenting the work as your own.
- Recycling written papers or class assignments from one course to another.

C. **Laboratory Activities**

- Falsifying laboratory results.
- Allowing another student to perform your laboratory test, or performing a test for someone else.

Course Assignments

All course assignments will be given a rating to designate whether the work will be carried out independently by each individual student or collaboratively with students working together. The DMRT rating system is defined as follows:

I = Independent Work Required
C = Collaborative Work Permitted

Plagiarism

- Plagiarism is defined as a form of "literary theft" and involves presenting the words, ideas, opinions, or graphic designs as your own work without proper attribution. Attribution means the ascribing (or acknowledgement of) a work to an author, date, publisher, and place of publication by the use of a designated system of referencing.

- Submitting another person's actual written words (from published or unpublished sources) without the use of quotation marks and properly acknowledging and referencing the source.

- Portraying another person's ideas, theories or written work as one's own without properly acknowledging and referencing the source.
- Paraphrasing the words, ideas or theories of another individual by merely reordering the sequence of sentences or finding synonyms for some of the words without properly acknowledging and referencing the source.

- Using the graphic designs (tables, graphs, figures, color plates, slides, and photographs) without properly acknowledging and referencing the source.

- Using information that is not considered common knowledge in the field without acknowledging and properly referencing the source.

- Submitting papers written by another student or obtained from a commercial source.

PROFESSIONALISM AND CIVILITY

One basic ethical principle is "Respect for Persons." Students in the Department of Medical and Research Technology are responsible for adhering to the following code of civility. Each member of this community is entitled to respect and should treat all others, regardless of status, respectfully and courteously. Professional relationships should be characterized by civility.

- **Respect**
  Students will treat faculty, staff and fellow students in a courteous and professional manner. Students will practice civility in all communications whether in person or in writing

Students will not use profanity, insults, or make disparaging remarks.

- **Cooperation**
  Students will work together with faculty, staff and fellow students to create a positive atmosphere conducive to achieving a learning environment that promotes personal integrity and academic achievement.

- **Nondiscrimination**
  Students will respect the differences in people, their ideas and opinions and will reject all forms of bigotry by practicing tolerance of others.

- **Courtesy** Students will adhere to the Department's Code of Professionalism and will ensure that their behavior does not disrupt learning activities either in the classroom or the laboratory.

DEPARTMENT OF MEDICAL & RESEARCH TECHNOLOGY
UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

PROFESSIONAL QUALITIES OBJECTIVES

Preparation for a career in clinical and biomedical laboratory science requires not only the development of cognitive (knowledge) and psychomotor (technical) skills, but also professional attitudes and behavior. All DMRT faculty members **expect the student to demonstrate professional attitudes and academic integrity as evidence of his/her readiness to enter clinical p**lacement**/externship, as well as the profession**al workplace**. Therefore, in this course the student will:**

1. Adhere to the lecture and laboratory schedule by attending every class on time. This is defined by being in your seat and ready to begin at the start of class or laboratory.

2. Adhere to the lecture and laboratory schedule by returning from breaks on time and remaining until the conclusion of the class.

3. Minimize behaviors that may be disruptive to the class or laboratory session. Examples of behaviors include, but are not limited to, personal communications, unprofessional behavior to faculty, side discussions, leaving the room while instruction is in progress, or using electronic devices.

4. Complete assignments, homework, and laboratory exercises within established timelines and adhere to the Departmental writing standards for grammar and punctuation.

5. Exhibit a commitment to learning by actively participating in discussions and in-class assignments as well as seeking clarification from the instructor(s) when material is not understood.

6. Actively participate in group or pair activities by equally contributing and sharing responsibility for the assignment.

7. Demonstrate flexibility with changes to the schedule, syllabus or planned laboratory activities, as well as recognizing and learning from both successful and failed laboratory exercises or results.

8. Comply with all safety policies and requirements.

9. Adhere to required student dress code policies.

10. Communicate with the instructor and other students in a manner that is characterized by civility and professionalism.

11. Cooperate with other students in sharing equipment and supplies as well as cleaning up at the completion of every laboratory session.

12. Maintain a clean work/study area that includes, but is not limited to, laboratory bench, classroom assigned locker, student resource room and all DMRT facilities.

13. Prepare for lecture and laboratory exercises by reading lecture and laboratory materials prior to class.

14. Observe program policies that do not allow unauthorized operation of personal electronic devices including, but not limited to laptop computers, mobile phones, tablets or ear buds/headphones during lecture and laboratory sessions or visiting affiliates.

15. Obtain consent from staff, faculty, other students or affiliates before taking, uploading or sharing photos, recording audio, or capturing video while in class, lab, or during examination(s)/quizzes/laboratory practical exams, visiting affiliates or on clinical rotation placement.

DEPARTMENT OF MEDICAL & RESEARCH TECHNOLOGY
UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

PROFESSIONAL QUALITIES EVALUATION

Student Name: _____
(please print)

1. ___ Returns from breaks as scheduled and remains until the conclusion of lecture & lab.
   ____ Days Late Returning from Breaks ____Days Left Early
2. ___ Actively exhibits a commitment to learning by participating in class activities and being prepared on a consistent basis for assigned tasks in lecture and laboratory.
3. ___ Complies with all safety regulations and dress code policies in the laboratory.
4. ___ Completes tasks within specified period of time.
5. ___ Communicates with the instructor and peers in a civil, professional manner.
6. ___ Cooperates with other students in sharing equipment and supplies and cleaning up at the completion of the laboratory sessions.
7. ___ Actively participates in all lecture and laboratory activities.
8. ___ Observes all program policies on the unauthorized use of personal electronic devices during lecture and laboratory or when visiting affiliates.

I have read and understand the expectations and requirements for this course and the program.

_____ _____
Student Signature Date

Revised 08-03-16

UMB Title IX Policy Against Sex-Based Harassment of Students

Title IX prohibits discrimination on the basis of sex in UMB's programs and activities. Prohibited sex discrimination under Title IX includes, but is not limited to: (a) harassment based on gender identity or nonconformity with sex stereotypes, and not necessarily involving conduct of a sexual nature; (b) applying any rule concerning parental, family, or marital status that treats persons differently on the basis of sex; and (c) discriminating against or excluding any student from its education program or activity, including any class or extracurricular activity on the basis of pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery therefrom.

The current UMB policies and procedures regarding prohibited sex discrimination are located at: https://www.umaryland.edu/oac/areas-of-responsibility/nondiscrimination-policies/title-ix-related-policies/ .

The University prohibits sex-based harassment of students by colleagues or faculty. Sex-based harassment is an infringement of an individual's right to work and study in an environment free from unwanted sexual attention and sexual pressure of any kind. It can result in a significant human resource drain for the University and hinder the scholastic efforts of students.

DEFINITION OF SEX-BASED HARASSMENT

The University has adopted the definition of sexual harassment used by the United States Equal Employment Opportunity Commission. Unwelcome sexual advances, unwelcome requests for sexual favors, and other behavior of a sexual nature constitute sexual harassment when:

A. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's participation in the University educational program; or

B. Submission to, or rejection of, such conduct by an individual is used as the basis for academic or employment decisions affecting that individual; or

C. Such conduct has the purpose or effect of unreasonably interfering with an individual's academic or work performance, or of creating an intimidating, hostile, or offensive educational or working environment.

EXAMPLES OF SEX-BASED HARASSMENT

Sexual harassment can include any or all of the following behaviors, as well as others which are not listed:

- Harassment through public or private insult, sexually suggestive comments concerning a person's body or behavior, and sexual demands.
- Subtle or overt pressure to comply with demands of sexual activity.
- Remarks about another person's clothing, body, sexual activities, sexual preferences, or sexual orientation, as well as teasing, jokes, remarks, or gestures which are sexual in nature.
- Unnecessary touching, pinching, patting, or exposure of another person's body.
- Unwarranted staring at another person's body.

- Unwanted communications of a sexual nature in writing, by telephone, or by other means.
- Requests or demands for sexual favors accompanied by implied or overt threats about grades, clinical assignments, class academic assignments, recommendations, student employment, etc.
- Repetition of unwanted invitations for dates.
- Physical assault of a sexual nature, up to and including attempted or actual rape.

STUDENT REMEDIES

The Education and Equal Access Team provides general compliance education and investigation services for Title IX, as well as for other protected categories including age, ancestry, color, gender expression, gender identity, marital status, mental disability, national origin, physical disability, sex, sexual orientation, race, religion, and veteran status.

Student questions about peer behavior that may constitute sex-based discrimination or sexual harassment and questions about disciplinary policies are directed to the **UMB Title IX Coordinator at** 410-706-1850.

Student questions about employee behavior that may constitute sex-based discrimination or sexual harassment and questions about disciplinary policies should be directed to the campus Manager of Diversity/EEO/Affirmative Action ("EEO Manager") at (410) 706-7302.

For more information please visit http://cf.umaryland.edu/hrpolicies/section6/t60120Bsa.html

Timely reporting of allegations of sex-based harassment permits effective University intervention to protect students and educate and discipline offenders. Complaints may be filed online at: https://secure.ethicspoint.com/domain/media/en/gui/28588/index.html To report an incident of sexual misconduct, please contact a member of the Title IX Compliance Team directly or you may file a report (anonymously if desired) through the UMB Ethics Point Hotline: Dial toll-free: 866-594-5220. Select "Report Sexual Misconduct" or "Report Other Forms of Discrimination/Harassment." Complaints received will be acknowledged.

For urgent inquiries, please contact Tricia D. O'Neill at tdoneill@umaryland.edu or call 410-706-2281 and leave a message. Your call be returned as soon as possible.

Other available resources include:

Campus Police	**711 or 410-706-3333 (emergencies)** **410-706-6882 (non-emergencies)**
Student and Employee Health	**667-214-1899**
Student Counseling Center	**410-328-8404**

For any other emergencies, dial 911 or visit the nearest emergency department.

TITLE IX Training

All members of the University of Maryland, Baltimore (UMB) community, students included, are required to complete Title IX awareness training each academic year. Training courses for employees, affiliates and students may be accessed at:
http://www.umaryland.edu/titleix/training/

EDUCATIONAL SUPPORT and DISABILITY SUPPORT SERVICES

The Office of Educational Support and Disability Services (ESDS) coordinates services to assist students with disabilities in obtaining reasonable accommodations through an interactive process involving the student and the school. The University of Maryland is committed to providing excellent educational programs for all qualified students who enroll in one of our many academic disciplines. Students with documented disabilities may request modifications, accommodations, or auxiliary aids which will enable them to reasonably participate in and benefit from our educational programs, activities, services and facilities. Students with a documented disability can request reasonable accommodation for their disability by following the steps found at the following web address: http://www.umaryland.edu/disabilityservices/. Questions regarding the process for requesting reasonable accommodations should be directed to Deborah Levy, Director by phone at 410-706-5889 or by e-mail at disabilityservices@umaryland.edu.

UMB SUBSTANCE ABUSE POLICY

1. This policy applies to all faculty, staff and students of the University of Maryland, Baltimore. The UMB Substance Abuse Policy is designed to: (1) observe state executive orders and State and Federal laws; (2) promote a campus free of illegal drug use; (3) stress moderation, safety, and individual accountability by those who choose to drink alcohol; (4) provide a campus atmosphere free of coercion for those who choose not to drink alcohol; (5) maintain a community where the effects of abuse are minimal and where problem behavior is reduced; (6) provide information and education on the health risks associated with drug and alcohol abuse; and (7) provide confidential and effective guidance and counseling for those with special needs related to substance abuse. More information is available at:

   https://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=215

2. DMRT students may be required to participate in to drug testing when on clinical placement at affiliate sites where drug-testing programs are in place.

DEPARTMENTAL PHOTOGRAPHS

Throughout the academic year, photographs are taken of students in lecture, lab, and during student activities. Students sign a waiver form at orientation stipulating whether or not they consent for their photographs to be used by the department. These photos may be used for recruitment and career awareness activities as well as the promotion of departmental programs and activities.

STUDENT/FACULTY ADVISORS

Students are assigned faculty advisors at junior/senior orientation. All students are requested to meet with their advisor to discuss their progress in the program at least once per semester preferable within the first month of classes. Students are encouraged to contact their advisor to discuss any academic or non-academic issues that they may be experiencing (within reason). If the advisor is unable to assist the student, a referral within the department or on campus will be made.

ADDRESS CHANGES/STUDENT INFORMATION

Students must notify the Registrar and the Interim Program Director regarding changes to address, phone number and/or name. Address changes should be made by logging into the SURFS system at http://www.umaryland.edu/surfs/.

SOM E-mail ACCOUNTS

SOM e-mail accounts will be assigned to all students entering the program. Since many DMRT courses are supported by BlackBoard, students are required to utilize and monitor (on a regular basis) their e-mail account provided by SOM. In addition, SOM e-mail accounts will be used to communicate with senior students on rotation/externship.

The School of Medicine HELP desk requires users with SOM network accounts to have their password changed every 120 days, otherwise the accounts will be deactivated and no longer work. If your account does not work please call the **SOM HELP Desk at 410-706-3998** and request to have your account reactivated.

RECOMMENDATIONS FOR SUCCESS IN DMRT COURSES

1. Attend every lecture AND actively take notes – not just what is written on the hand-out, but anything you need to understand the material.
2. Review the notes within 24 hours after the lecture and again the weekend before the related examination.
3. Use the objectives like study questions and write out the answers to them. Work from memory as much as possible then go back and fill in from your notes.
4. Complete all in-class assignments and homework. Study these materials the weekend before the related examination.
5. Form a study group to quiz one another before exams. Also, practice explaining what you understand to other group members, family members or your pet – you will know it when you explain it correctly to someone.
6. Periodically study previous notes and write down questions about what you do not understand to ask at the next class.
7. Start your intensive review for examinations several days before the exam.
8. Schedule an appointment with/or e-mail the course coordinator to get questions answered.
9. Read assignments in the book and use the textbook as a reference.

10. Plan your study time each week for this class. Allow enough time to review the lecture notes, read the text and prepared study materials (such as answering objectives, preparing flash cards).
11. Identify and communicate your learning needs to the course coordinator.

DEPARTMENT OF MEDICAL & RESEARCH TECHNOLOGY

FACULTY DIRECTORY 2019-2020

(NAME) @som.umaryland.edu	410-706-	**ROOM**
Dr. Leo Kenefic (lkenefic) Assistant Professor	x2626	415-A
Dr. Mike Lipsky Professor	x1415 443-257-5305 (cell)	
Dr. Lilia Mijares (lmijares) Assistant Professor	x3771	415-B
Eileen Patton (epatton) Assistant Professor Interim Program Dirctor	x3772	440-A
Cynthia Stambach (cstambach) Volunteer Adjunct Instructor	x7728	340-B
Dr. Sanford Stass Professor and Chair		340-D
Dr. Ivana Vucenik (ivucenik) Associate Professor Graduate Program Director	x1832	405-C
Harry Wandell (hwandell) Assistant Professor	X7535	435-C

A P P E N D I X A

C U R R I C U L U M

JUNIOR YEAR CORE CURRICULUM

		CREDIT HOURS
MEDT 308	Scientific & Technical Writing	1
MEDT 321	Introduction to Lab Techniques	1
MEDT 355	Biochemistry	3
MEDT 451	Cellular & Molecular Biology	4
MEDT 491	Clinical Immunology	4
	TOTAL	13

MINI-MESTER

MEDT 309	Professional Development	1

SPRING SEMESTER

MEDT 409	Laboratory Management/QA/Regulatory Issues	3
MEDT 471	Parasitology/Mycology	3
MEDT 356	Instrumentation/Analytical Methods	4
MEDT 331	Hematology I	3
MEDT 490	Pathogenic Microbiology	4
	TOTAL	17

SUMMER SESSION

MEDT 408	Research Project (optional elective)	1-3

SENIOR YEAR - SPECIFIC TRACK DECLARED

FALL SEMESTER: MEDICAL LABORATORY SCIENCE

MEDT 421	Urinalysis/Body Fluids	2
MEDT 472	Clinical Microbiology	3
MEDT 464	Immunohematology	4
MEDT 432	Hematology II	3
MEDT 452	Clinical Chemistry	4
	TOTAL	16

FALL SEMESTER: BIOTECHNOLOGY

		CREDIT HOURS
MEDT 454	Applied Cellular & Molecular Biology	4
MEDT 422	Computer Applications	3
MEDT 423	Applications in Biotechnology/Research Design	4
MEDT 433	Techniques in Biotechnology/Protein Applications	4
MEDT 410	Product Development & Commercial Applications	1
	TOTAL	16

SPRING SEMESTER: MEDICAL LABORATORY SCIENCE

MEDT 402	Comprehensive Review Course	1
MEDT 453	Clinical Practice Chemistry	3
MEDT 463	Clinical Practice Hematology	3
MEDT 473	Clinical Practice Microbiology	3
MEDT 467	Clinical Practice Immunohematology	3
	TOTAL	13

SPRING SEMESTER: BIOTECHNOLOGY

MEDT 475	Externship I	6
MEDT 476	Externship II	6
MEDT 402	Comprehensive Review Course	1
	TOTAL	13

A P P E N D I X B

C O U R S E D E S C R I P T I O N S

CHEMISTRY

MEDT 355 BIOCHEMISTRY (3 SEMESTER HOURS)

This course is designed to introduce students to the principles of biochemistry – the chemistry of living matter. The first section of the course will emphasize building blocks of biomolecules, biological buffers, protein structure and enzymes. The next section will deal with the molecular biology of the informational macromolecules, DNA and RNA, and with protein synthesis. The final section discusses the metabolic pathways of the macromolecules – carbohydrates, lipids, amino acids and nucleic acids – as well as the action and mechanisms of hormones.

MEDT 356 INSTRUMENTATION / ANALYTICAL METHODS
(4 SEMESTER HOURS)

This course is designed to introduce students to the basic laboratory instrumentation and analytical methods common to both clinical and research laboratories. The course will explore miscellaneous instruments and techniques through their application and use. Instructional formats include lecture, discussion, question and answer sessions, reading assignments and laboratory exercises. The laboratory component of the course will serve to complement and enhance lecture topics by both demonstrations and laboratory performance using the instrumentation and analytical techniques discussed.

The laboratory component of the course will serve to complement and enhance lecture topics.
Prerequisite: MEDT 355

MEDT 452 CLINICAL CHEMISTRY (4 SEMESTER HOURS)

This course is designed to present in-depth information relating to the pathophysiology of commonly measured analytes in the clinical chemistry laboratory. Discussion will include the following topics: proteins, clinical enzymology, carbohydrates/diabetes, lipids/lipoproteins, renal function, tumor markers, liver function, acid-base balance, blood gases, electrolytes, bone metabolism, cardiac markers, thyroid and adrenal endocrinology, and therapeutic drug monitoring/toxicology. The instructional formats used include lecture, discussion, question and answer sessions, case study presentations, reading assignments, and laboratory exercises which include sample/data analysis, evaluation of quality control parameters and clinical correlation exercises.

MICROBIOLOGY

MEDT 490 PATHOGENIC MICROBIOLOGY (4 SEMESTER HOURS)

Students are introduced to bacteria, which may cause disease or may reside as normal flora in humans. In the lecture portion of the course, each genus of pathogenic bacteria is studied according to its classification, structure, virulence, epidemiology, clinical syndrome(s) and treatment. Major emphasis is placed on learning the basic identification characteristics of each of the genera studied and the differentiation of the various species within each genus. Gram positive/negative, cocci/bacilli, aerobic/anaerobic organisms are studied as well as mycobacteria, mycoplasma/chlamydia, actinomycetes, rickettsia, and spirochetes. Conventional and/or automated and molecular techniques are discussed. The laboratory portion of the course supports the lectures by providing practical experience in the identification of pathogenic bacteria by conventional techniques. The student obtains expertise by working with known organisms as well as unknown samples.
Prerequisite: General Microbiology

MEDT 471 PARASITOLOGY/MYCOLOGY
(3 SEMESTER HOURS)

This course involves two different modules that together constitute a comprehensive introduction to parasitic and fungal infections of humans with emphasis on the major pathogens encountered in the clinical laboratory.

In the didactic portion of the course, students are introduced to each taxonomic group of parasites and fungi where morphology, life cycles, clinical symptoms, disease, diagnosis, treatment, and epidemiology are discussed in detail.

In the laboratory portion of the course, the emphasis is on visual identification of pathogenic organisms.

In the Parasitology Module, students will view stained slides and/or numerous reference vials of organisms such as cestodes, trematodes, filarial/intestinal/tissue nematodes, protozoans, malarial parasites, as well as *Babesia*, *Leishmania*, *Trypanosoma* and *Toxoplasma*. Each student will be responsible for accurate and independent identification of two unknowns (one from a concentration procedure and one from a trichrome-stained slide).

In the Mycology Module, students will view a variety of yeast strains as well as lactophenol cotton blue –stained slides of pathogenic molds. Organisms such as Zygomycetes, Dermatophytes, Dematiaceous, Hyaline and Dimorphic fungi as well as *Pneumocystis jiroveci* will be examined. Students will be responsible for the accurate and independent identification to the genus and species level of one unknown organism.

MEDT 472 CLINICAL MICROBIOLOGY (3 SEMESTER HOURS)

The course presents a review of pathogenic microbiology/virology with the approach used in the clinical microbiology laboratory. Students are introduced to medical microbiology and the clinical basis of infectious diseases. Each system of the body is discussed in terms of anatomy and physiology, normal flora, occurrence of infectious diseases, expected pathogens, their characteristics, and factors which predispose them to pathogenesis in that particular body site. In the laboratory, students become acquainted with the proper collection, handling, identification and appropriate treatments of pathogens from the various body sites. Students use the information and laboratory skills acquired in Pathogenic Microbiology. During the course each student works independently building self-reliance and analytical skills to identify pathogens from clinical specimens and in the reporting of their findings.
Prerequisite: MEDT 490 – Pathogenic Microbiology

MEDT 491 CLINICAL IMMUNOLOGY (4 SEMESTER HOURS)

This course presents a systematic review of the structure and function of the human immune system and its relationship to disease. Students will acquire the background and practical skills necessary to work in a clinical immunology laboratory. Some lecture topics include innate and acquired immunity, antigens, antibody structure/function, B & T lymphocytes, immunodeficiencies, MHC and antigen processing/presentation, soluble mediators of immunity, immune response to infection, hypersensitivity, autoimmunity, and transplantation/tumor immunology. Some laboratory topics include laboratory safety, phagocytosis, complement, various precipitation/agglutination assays, various labeled immunoassays (including ELISA, FTA-ABS, IFA) serology of various disease states, antinuclear antibody testing (colorzyme vs. fluorescent) and the basics of flow cytometry.

HEMATOLOGY

MEDT 331 HEMATOLOGY I (3 SEMESTER HOURS)

This course is an introduction to the fundamental concepts and principles of the field of clinical hematology. Components include: units on hematopoiesis, normal values, introduction to stem cells, and in-depth study of various anemias, hemoglobinopathies, qualitative leukocyte disorders and related laboratory tests. The pathogenesis, clinical and laboratory manifestations of hematologic disorders are described. Students learn to distinguish normal and abnormal cellular characteristics of peripheral blood smears by examining and applying systems of qualitative differentiating criteria. Association of abnormal morphologic findings with underlying disorders are emphasized. Other laboratory topics include: general laboratory safety precautions, routine hematological tests, an introduction to automated hematology cell counters and quality control measures for the hematology laboratory. Instructional methods include lectures with educational objectives and comprehensive outlines, small group discussions, case histories, and study guide review questions. Grades are determined by lecture examinations, laboratory competency exercises, quizzes and homework.

MEDT 432 HEMATOLOGY II (3 SEMESTER HOURS)

This course is designed to emphasize advanced theoretical concepts in hematology and hemostasis and their practical applications. Students are exposed to the pathogenesis, laboratory diagnosis, clinical correlation and peripheral blood cell identification of the acute myeloid and lymphocytic leukemias. Other topics include: myeloproliferative and lymphoproliferative disorders, the myelodysplastic disorders, and plasma cell disorders. Cytochemical staining patterns in acute leukemias are stressed and their utility in the diagnostic process is developed through case study exercises. Students learn to interpret abnormal automated CBC results and perform follow-up procedures. Anemias are reviewed throughout the course of the semester. Topics in coagulation include an overview of hemostasis, platelet disorders, hereditary factor disorders, von Willebrand's disease, fibrinolysis, DIC, physiologic and pathologic inhibitors, thrombosis and anticoagulant therapy. Each hemostasis concept is supported by laboratory exercises which emphasize the practical aspects of coagulation test systems, and reagent, quality control and diagnostic usefulness. Instructional methods include lectures and educational objectives, case studies, problem-based exercises, and homework.
Prerequisite: MEDT 331 – Hematology I

MEDT 464 IMMUNOHEMATOLOGY (4 SEMESTER HOURS)

This course is designed to cover practical and theoretical concepts in the study of blood group serology and transfusion medicine. Students will learn and apply basic knowledge of immunological principles to the ABO, Rh, and other significant blood group systems. Transfusion medicine topics discussed include donor screening, component preparation, apheresis, and blood component therapy. The course will also cover topics in the investigation of hemolytic disease of the newborn (HDN), drug related red blood cell sensitization, transfusion reactions and autoimmune hemolytic anemias. Emphasis will be placed on quality control and regulations in transfusion medicine. In lab, students will demonstrate proficiency in ABO/Rh grouping, direct antiglobulin testing, antibody screening, and compatibility testing. In addition, students will be introduced to various blood bank special techniques and apply basic knowledge of concepts and techniques to the investigation of unexpected serological reactions in Blood Banking.
Prerequisite: MEDT 491 Clinical Immunology or equivalent

LABORATORY SCIENCES

MEDT 321 INTRODUCTION TO LABORATORY TECHNIQUES
(1 SEMESTER HOUR)

This course serves as a basic introduction to the field of clinical and research laboratory sciences. Students will acquire the fundamental skills necessary to ensure competency in the clinical and research laboratory. Course topics include: laboratory safety, organization of the clinical laboratory, phlebotomy, collection and processing of laboratory specimens, quality assurance, systems of measurement, basic laboratory equipment, microscopy, laboratory mathematics and point-of-care testing. This course includes a mandatory phlebotomy rotation at the University of Maryland Medical Center.

MEDT 421 URINALYSIS / BODY FLUIDS (2 SEMESTER HOURS)

This course covers the anatomy and physiology of the genitourinary system, procedures and principles behind the complete urinalysis including physical, chemical, microscopic properties, and genitourinary disease status. Other body fluids including spinal fluid, synovial fluid, seminal fluid, transudates, exudates and fecal analysis are also covered. Specimen handling, analysis and disease correlation are discussed for all fluids.

PROFESSIONAL DEVELOPMENT

MEDT 309 PROFESSIONAL DEVELOPMENT (1 SEMESTER HOUR)

Utilizing a problem-based learning approach towards instruction, this course is designed to heighten students' awareness of professional and ethical issues impacting the practice of medical laboratory science and biotechnology science research. Modes of instruction include group exercises, web-based activities, oral presentations and written assignments. Professional societies are introduced along with career development strategies, cover letter and resume writing and interviewing skills. In addition, emphasis will be placed on fine-tuning presentation skills. Students will be required to give a group presentation using a graphics software program. At the end of the term, each student submits a portfolio, which is an accumulation of course assignments and their individually tailored career plan.

MEDT 308 SCIENTIFIC & TECHNICAL WRITING (1 SEMESTER HOUR)

Scientific and Technical Writing is designed to meet competencies defined by the industry and the National Accrediting Agency for Clinical Laboratory Science. This one-credit course will provide undergraduate students with the basic structure, format and content for writing scientific papers, technical reports, professional essays and personal correspondence. In addition, the course also focuses upon conducting literature searches and ethical conduct in scientific and technical writing.

MEDT 408 RESEARCH PROJECT
(OPTIONAL ELECTIVE, THIS COURSE MAY BE TAKEN MORE THAN ONCE, 1-3 SEMESTER HOURS)

Under DMRT faculty mentorship, students identify a suitable research topic, conduct a comprehensive literature search, carry out a project, analyze the data generated and submit a publication quality written project.

MEDT 409 LABORATORY MANAGEMENT / QUALITY CONTROL / REGULATORY ISSUES (3 SEMESTER HOURS)

This course is designed to enhance students' oral and written communication skills, promote critical thinking, foster team building and endorse professionalism. Utilizing a problem-based learning approach towards instruction, students will develop managerial skills in the following areas: leadership, human resources, problem solving, laboratory information systems, financial analysis, education methodology, training, and regulatory issues. In addition, students will conduct a mock inspection of a laboratory. Modes of instruction include case studies, group exercises, role-play, oral presentation and written assignments.

BIOTECHNOLOGY

MEDT 451 CELLULAR & MOLECULAR BIOLOGY
(4 SEMESTER HOURS)

This course is an introductory course in which students acquire the basic skills, concepts and theoretical background needed for the biotechnology research and clinical laboratories. The first part of this course will focus on the basic concepts of molecular cell biology. The molecules, structures, organization and function of prokaryotic and eukaryotic cells are examined and compared. Analysis and characterization of nucleic acids is discussed, as well as methods and techniques used in the laboratory. The second part of this course is devoted to the application of molecular diagnostic principles to the diagnosis of human disease. This will include lectures covering molecular oncology and hematology applications as well as forensic and infectious disease applications. In the laboratory portion of the course, the students learn basic skills in DNA technology, including laboratory skills in nucleic acid extraction, quantification, agarose gel analysis of genomic and plasmid DNA, restriction endonuclease digestion, analysis and mapping. Multiple variants of PCR amplification and analysis will be emphasized, and DNA sequencing principles will be discussed and demonstrated.

MEDT 454 APPLIED CELLULAR AND MOLECULAR BIOLOGY
(4 SEMESTER HOURS)

This course builds upon the concepts of skills learned in Molecular Biology in MEDT 451. In the lecture portion of this course, the principles of molecular techniques and the application of these techniques in creating useful products and solving research and commercial problems are emphasized. In the laboratory portion, a series of experimental molecular biology techniques are linked together in a continuous project to give the student a sense of how a complete project might be carried out. During the course-long project, the student will master the following techniques: Nucleic acid amplification (PCR), cloning, nucleic acid isolation, restriction digestion, reagent preparation, experimental planning, vector selection, antibiotic selection and protein expression. In addition, students maintain a scientific notebook during this laboratory project; teaching them proper recording and documentation of experiments.
Prerequisite: MEDT 451 – Cellular and Molecular Biology

MEDT 422 COMPUTER APPLICATIONS (3 SEMESTER HOURS)

This course is designed to introduce biotechnology students to a variety of software packages and computer applications. Students are prepared for work settings where utilization of their professional and scientific training will occur. Components of the course will include use of software for the design of oligonucleotide primers, analysis of nucleic acid primary structure, DNA sequencing chromatograms, use of a reference database, and bioinformatics. Students will also become proficient in Microsoft Excel and be able to prepare spreadsheets, charts, and graphs.
Prerequisite: MEDT 451 – Cellular and Molecular Biology

MEDT 433 TECHNIQUES IN BIOTECHNOLOGY / PROTEIN APPLICATIONS
(4 SEMESTER HOURS)

This course is designed to provide the students with the theoretical knowledge and laboratory techniques to purify and characterize proteins, in order to understand their structure and function. Methodologies that will be discussed and covered in laboratory exercises include peptide synthesis, ultrafiltration, fractional precipitation, quantitation, chromatography, electrophoresis, mass spectrometry, crystallography and nuclear magnetic resonance (nmr).
Prerequisite: MEDT 356 – Instrumentation & Analytical Methods

MEDT 423 APPLICATIONS IN BIOTECHNOLOGY / RESEARCH DESIGN
(4 SEMESTER HOURS)

This course explores the theory of research design and requires that the student demonstrate his/her understanding through integration of design theory into actual laboratory research. The didactic portion of the course is presented during a weekly one-hour class where theory is presented and discussed. Under the direction of an assigned academic UM researcher, the student performs hands-on, non-paid, independent and original research as a means of applying the research design theory. Weekly homework assignments, on such topics as hypothesis formulation, design of a research study and critique of the scientific paper, are reviewed in class and will serve to meld the theory with its laboratory application. At the end of the term, students will present their research findings as an abstract, a poster, an oral presentation and a paper.
Prerequisite: MEDT 451 – Cellular and Molecular Biology

MEDT 410 PRODUCT DEVELOPMENT / COMMERCIAL APPLICATIONS
(1 SEMESTER HOUR)

This course is designed to introduce and familiarize the student with the process of product development within the biotechnology industry. The process of taking a product from inception through FDA approval will be discussed. Lectures will concentrate on defining a product for commercialization through research and development, small-scale and large scale manufacturing processes, optimization, validation and verification processes. Clinical trials will be discussed as well as data analysis and clinical evaluations. The course will also focus on the commercial applications of biotechnology-derived products. Specific applications include biopharmaceutical products, in-vitro diagnostic products, medical devices and agricultural products. Industry professionals will be utilized for lectures in their areas of expertise.

CLINICAL ROTATION PLACEMENTS/EXTERNSHIPS

MEDT 453 CLINICAL PRACTICE CHEMISTRY (3 SEMESTER HOURS)

This course provides exposure to practical experience in Clinical Chemistry acquired through a 18-day rotation placement at an affiliated hospital or physician's office laboratory. Students are introduced to daily operations, workflow, quality control and the laboratory information system as they perform automated diagnostic chemistry procedures. Emphasis is placed on the operation and troubleshooting of chemistry analyzers and equipment as well as enhancement of skills used in manual techniques. Focus is also placed on the assessment of specimen integrity with proper follow-up.
Prerequisite: MEDT 452

MEDT 463 CLINICAL PRACTICE HEMATOLOGY (3 SEMESTER HOURS)

This course provides exposure to practical experience in Hematology and Coagulation acquired through a 18-day rotation placement at an affiliated hospital or physician's office laboratory. Students are introduced to daily operations, workflow and the laboratory information system as they perform manual and automated hematology and coagulation procedures. Procedures include manual and automated cell counts, evaluation of abnormal CBC results and formulation of an appropriate course of action, examination of normal and abnormal peripheral smears, recognition of abnormal red cell and white cell morphology, and identification of the most common anemias and leukemias.
Prerequisites: MEDT 331 & 432

MEDT 467 CLINICAL PRACTICE IMMUNOHEMATOLOGY (3 SEMESTER HOURS)

This course provides exposure to practical experience in Blood Banking and Transfusion Medicine acquired through a 18-day rotation placement at an affiliated hospital laboratory. Students are introduced to daily operations, workflow and the laboratory information system as they perform routine and specialty pre-transfusion testing on patient and simulated samples. Techniques performed include ABO/Rh testing, antibody detection and direct antiglobulin testing as well as antibody identification, direct antiglobulin battery and other reference techniques and methods.
Prerequisite: MEDT 464

MEDT 473 CLINICAL PRACTICE MICROBIOLOGY (3 SEMESTER HOURS)

This course provides exposure to practical experience in Microbiology acquired through a 18-day rotation placement at an affiliated hospital or reference laboratory. Students are introduced to daily operations, workflow and the laboratory information system as they perform diagnostic techniques for microorganism identification. Tasks and techniques include specimen processing and culturing, identification of pathogenic microorganisms, and susceptibility testing for selecting the most appropriate antibiotic. Other specialized methods may include parasitic, fungal and viral identification.
Prerequisites: MEDT 472 & 471

MEDT 475/476 BIOTECHNOLOGY EXTERNSHIP (6 SEMESTER HOURS EACH)

This course provides exposure to practical experience for the biotechnology track students acquired through a 17-week externship at an industry-based biotechnology company. Through professional training, the student will utilize the expertise gained through previous didactic coursework, applying various technologies and good laboratory practices. This experience provides the student with exposure to the daily operations of the industry as well as the opportunity to learn while they work on research projects. Working with a multidisciplinary team of scientists, students will have the opportunity to gain hands-on research, practical laboratory and business experience, and develop entry-level skills, which will enable them to join the biotechnology field. The biotechnology site will serve as a preceptor to train, guide, and evaluate the student.
Spring Semester 6 credits each
Prerequisites: MEDT 454, 433 & 423

MEDT 402 COMPREHENSIVE REVIEW COURSE
(1 SEMESTER HOUR)

This course will provide a comprehensive review of the major discipline areas within the clinical laboratory or biotechnology science research. Students are required to attend all scheduled review sessions which will facilitate preparation for the exam portion of the course. For students in the medical laboratory science track, four post rotation exams will be administered. For students in the biotechnology science research track, two exams will be given during the externship experience. All students will take a final comprehensive exam at the end of the semester. Final grades will be assigned a letter grade. As with all DMRT courses, successful completion of MEDT 402 is a requirement for graduation.

A P P E N D I X C

S U P P L E M E N T A L F O R M S

LOA / Abbreviated Academic Curriculum Checklist

- **Medical Insurance:**
  You are covered by your medical insurance through the semester for which you are registered, after which a conversion must be initiated by calling UnitedHealthcare at 1-844-288-4916.

- **Student Accounts & Financial Aid:**
  It is the responsibility of the student to contact both Student Accounts (Jordan Nixon, Bursar 410-706-2930) and the office of Financial Aid (Patricia Scott 410-706-7347) to clear up any balances, and to find out how this LOA will affect your financial aid award(s).

- **Schedule:**
  - Notify the DMRT Interim Program Director of your dates of departure and return.
  - Contact the DMRT Office of Student Affairs no later than six (6) weeks before your return to the program.
  - Set up an appointment 3-weeks prior to your return and meet with the Interim Program Director (410-706-7664) to confirm your registration plans so that the correct information is entered into the system.

- **Class Email List:**
  Contact Joanne Manning (410-706-7728) to have your name temporarily removed from the DMRT list serve.

- **Contact Information:**
  Please provide your information below in case the school needs to contact you while on LOA:
  Address: _____ Email: _____
  _____ Phone: _____

I have read the above and understand that it is my responsibility to address these issues prior to my leaving. Further, I understand that I should reassess the implications of all of these issues should I change my return plans.

_____ _____
Student Signature Date

_____
Student Name (Please Print)

cc: Student File

For Internal Use Only
Received request for LOA
_____
Received LOA Permission Letter
_____

Department of Medical and Research Technology

Accident and Injury Report Form

1. Name of injured person
2. Date of injury
3. Name of person first contacted about the injury (supervisor/instructor)
4. Description of injury
5. How did accident occur? (describe fully)
6. What was person doing when injured (be specific)
7. Name of object which injured individual
8. Was safety equipment provided?
9. Was safety equipment in use at time of injury?
10. Was accident caused by injured's failure to use or observe safety regulations?
11. Was injured person treated at the scene of accident or sent to doctor? (student health)
12. If treated at scene of accident, describe treatment
13. Did injured person return to school or work, if so time and date
14. Follow up
15. Signature of person filing report

UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

Request for Reference
Department of Medical and Research Technology

This form may be used by a student to authorize release of non-directory information from his/her education record for purposes of a letter of recommendation, application to an educational institution, professional reference, etc. For each request, this form should be completed and presented to the individual making the recommendation at least two (2) weeks prior to the deadline for submission.

Student Name _____Date Requested _____

Student ID # _____ Class of _____

Student e-mail _____

I hereby authorize _____
Name of Professor or Other University Official or Organization (Please Print)

To: ☐ Write a letter of recommendation
☐ Complete an evaluation form
☐ Serve as a professional reference (phone)
☐ Other (specify) _____

Send to:
Name, Employer or Educational Institution:_____

_____

Street 1: _____

Street 2: _____

City/State/Zip: _____

Deadline for mailing: _____

Purpose: ☐ Employment
☐ Admission to an educational institution
☐ Application for scholarship or honorary award
☐ Other (specify) _____

To the Student:

Please provide the information requested above. The student must initial one of the following statements and sign this form before submitting it to the evaluator. In accordance with the Family Rights and Privacy Act of 1974, I understand that federal legislation provides me with a right of access to confidential letters of evaluation relating to application for admission to another school, for a job, or for an award, and that no school or person can require to me waive this right.

I give my consent for the faculty member named above to review my student records for the purpose of providing a reference (written or oral) to the person/program above. It is my understanding that the evaluation will be based upon the faculty member's knowledge of my academic performance and character traits. He/She has my permission to include my grades, grade point average, class rank, and any relevant information.

Further, I hereby: _____ *waive* _____ *do not waive* my right to see the recommendation at any time in the future.

Student Name: _____
(Print Name)

Student Signature: _____

DMRT Student Fact Sheet
University of Maryland School of Medicine

Student Name _____

Phone Number _____

E-mail Address _____

☐ Resume Attached ☐ Portfolio Submitted

EDUCATION

Current University of Maryland GPA: _____

Transfer College: _____ GPA: _____ Credits Completed: _____

Transfer College: _____ GPA: _____ Credits Completed: _____

Academic honors or awards: _____

_____

_____

Participation in Extracurricular Programs/Projects/Committees/Activities: _____

_____

_____

WORK EXPERIENCE

Employer: _____

Job Title: _____

Date Started and Ended: _____

Hours per week: _____

Responsibilities: _____

Employer: _____

Job Title: _____

Date Started and Ended: _____

Hours per week: _____

Responsibilities: _____

EXTRACURRICULAR ACTIVITIES

Professional Membership, Committee or Activity: _____

Date Started and Ended: _____

Describe your participation: _____

Professional Membership, Committee or Activity: _____

Date Started and Ended: _____

Describe your participation: _____

Community and/or **Volunteer** Experience: _____

Date Started and Ended: _____

Describe your participation: _____

Community and/or **Volunteer** Experience: _____

Date Started and Ended: _____

Describe your participation: _____

Other Noteworthy Achievements or Skills: _____

_____

_____

UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

Student Acknowledgement & Agreement of Safety Policies
Department of Medical and Research Technology

Please acknowledge your understanding and agreement by initialing each item below:

_____I recognize that I am responsible for assuming the role of both health care provider and patient in laboratory sessions. To meet this responsibility, I agree to obtain, as well as provide, clinical specimens of body fluids including blood.

_____I have been informed that biological specimens and blood products hold the potential for transmitting infectious diseases such as hepatitis and acquired immune deficiency syndrome. Accordingly, I agree to observe standard precautions and OSHA Blood Borne Pathogen regulations when handling and processing all samples. I am satisfied that I have received sufficient training of these practices. Furthermore, I have had the opportunity to request additional training, but have not made such a request.

_____I understand that diagnostic products and reagents derived from human sources are tested for viral markers such as Hepatitis B surface antigen and HIV antibodies. As no test can assure that every product is free of infectious disease, I agree to handle all diagnostic products as potentially infectious.

_____

STUDENT SIGNATURE DATE

UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

Honor Pledge

Department of Medical and Research Technology

I promise to uphold the Department of Medical & Research Technology (DMRT) Core Values of academic excellence, accountability, integrity, honesty and good citizenship. As a DMRT student, I pledge that that this work is my own. I have followed the published standards of academic honesty and ethical conduct and have not shared or received information from other individuals or sources.

I understand that any violation of these standards can result in disciplinary action.

Student Signature Date

UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

DEPARTMENT OF MEDICAL AND RESEARCH TECHNOLOGY
APPLICATION FOR SHORTENED, ACCELERATED ROTATIONS
MLT STUDENTS ONLY

- I have met the following criteria for accelerated (shortened) rotation placement/s: (initial app that apply)

___ MLT certification by ASCP (BOC) or equivalent. Certification #: _____
Copy of official MLT certification number attached.

___ Transferred to DMRT UMB under an active articulation agreement with an entering GPA of 3.0 or higher.

___ Earned an average of "B" or higher in academic course/s (at DMRT and the articulating program) related to the area of Accelerated Rotation Placement.

___ MLS/MT rotations occur within three (3) years of the MLT rotations, or has current related work experience in the discipline where the student is seeking the accelerated rotation placement (within the last 3-years).

___ All requirements of the MLT-Transfer Student Enrollment Agreement.

- I request permission for an Accelerated Rotation in the following area/s:

_____ Chemistry ____ Hematology

_____ Microbiology

Reason for Request:

_____
_____
_____
_____
_____

MLT Student Signature: _____

Print Name: _____ _____
Date

For DMRT Office of Student Affairs Use only

____ Approved ____ Not Approved

Policy Statement

Clinical Rotation Placement Assignments

It is the goal of the DMRT to provide a diversity of exposure and experience in the clinical rotations scheduled for the spring semester of the senior year. We are fortunate to have the support and participation from clinical sites for clinical rotations throughout the Mid-Atlantic region. Clinical rotation sites for the medical laboratory science track are located throughout the Mid-Atlantic region.

A sincere effort is made to match student needs and desires to available site locations in the assignment of rotation sites. Please note, assignments may require travel to a site that was not originally requested by the student. Lodging and travel arrangements to and from clinical rotation sites are the responsibility of the student.

I understand this policy and accept the conditions stated pertaining to clinical rotation assignments.

_____

Name (printed)

_____

Signature and Date

CLINICAL ROTATION PLACEMENT SITES

Anne Arundel Medical Center
Baltimore VA Medical Center
Frederick Memorial Hospital
Greater Baltimore Medical Center
Holy Cross Hospital
Johns Hopkins Bayview Medical Center
Johns Hopkins Suburban Hospital
Kaiser Permanente
MedStar Franklin Square Medical Center
MedStar Georgetown University Hospital
MedStar Harbor Hospital
MedStar Montgomery Medical Center
Mercy Medical Center
Quest Diagnostics
St. Agnes Hospital
The Johns Hopkins Hospital
The National Institutes of Health
University of Maryland Harford Memorial Hospital
University of Maryland Medical Center
University of Maryland Pathology Associates
University Of Maryland Prince George's Hospital Center
University of Maryland Rehabilitation Orthopaedic Hospital
University of Maryland St. Joseph's Medical Center
University of Maryland Upper Chesapeake Medical Center

DEPARTMENT OF MEDICAL AND RESEARCH TECHNOLOGY
UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE
STUDENT POLICY AND PROCEDURES FOR
ROTATION PLACEMENTS AND EXTERNSHIPS

Please acknowledge your understanding and agreement by initialing each item listed below:

_____ The Clinical Rotation Placement Manual of the Department of Medical and Research Technology was distributed. The key policies and procedures were reviewed at Clinical Orientation in December. I agree to abide by the policies and procedures established in this document.

_____ I have been advised that each clinical affiliate may have policies and procedures specific to the institution. I agree to abide by the policies and procedures of each clinical site where I have been assigned a rotation.

Student Name (please print)

Student Signature Date

- This form will be kept as part of the student's permanent file in the Student Affairs Office in DMRT.

Student Affairs/clin rot mat/student clin rot policy agreement

A P P E N D I X D

P r o c e s s F l o w c h a r t s

School of Medicine, Department of Medical & Research Technology Formal Grade Appeal Process