



School of Health Education

Medical Laboratory Technician Program

INFORMATION MANUAL



Revised March 2020
MLT Faculty

MADISON AREA TECHNICAL COLLEGE MEDICAL LABORATORY TECHNICIAN PROGRAM

INFORMATION MANUAL TABLE OF CONTENTS

OVERVIEW OF THE MLT PROGRAM	
Description.....	3
Program Outcomes.....	3
Essential Functions.....	3
Request for Reasonable Accommodations.....	5
Mission Statement.....	5
Program Instructors and Personnel.....	6
Forms Required by the MLT Program	
a. Personal Health History form.....	6
b. Reference Authorization.....	7
c. Program Policy Forms and Waivers.....	7
Health Insurance.....	7
Liability Insurance.....	7
Caregiver Background Check.....	7
MLT Electrolyte Club.....	8
Madison College Catalog/Student Policies	8
Health Services.....	8
Emergency Procedures.....	8
Teach-Out Plan	9
Student Conflict Resolution.....	9
MLT PROGRAM CURRICULUM	
Program Goals.....	9
MLT Program Course Descriptions.....	10
Program Curriculum Summary.....	13
Advanced Standing.....	14
Academic Advising.....	14
Grade Requirements.....	15
Grading Policy.....	16
Grade of Incomplete	16
Professional Behaviors.....	17
Professional Clinical Portfolio	17
Attendance and Punctuality.....	18
Progressing Through the MLT Program.....	18
Reasons for Being Dismissed from the MLT Program.....	19
Withdrawing from the MLT Program.....	19
Requirements for Graduation.....	19
Clinical Rotations.....	19
Confidentiality Policy.....	20

MLT PROGRAM COURSE INFORMATION

Hybrid/Blended Curriculum.....	21
Course Syllabus.....	21
Laboratory Sections	
a. Laboratory Attire.....	21
b. Children in the Laboratory.....	
Safety Training.....	22
Class Disruptions.....	22
Use of Laboratory Computers and Telephones.....	23

FOURTH SEMESTER CLINICAL EXPERIENCES

Prerequisites.....	23
Course Outcomes.....	24
Clinical Experience Courses Description	
a. On-Campus Clinical Experiences	24
b. Affiliating Agency Clinical Experiences	24
Attendance During the Clinical Experience	
a. On-Campus Clinical Experience.....	25
b. Affiliating Agency Clinical Experience.....	25
Clinical Site Placement	
a. Clinical Sites.....	25
b. Placement Procedure	25
c. Clinical Facilities.....	26
Participating in the Clinical Experience on a Probationary Basis.....	27
Disciplinary Action, Suspension, Dismissal.....	27
Student Responsibilities During the Clinical Experience.....	28
Grading Policy.....	28
Clinical Examination Policy.....	28
Repeating or Extending a Section Rotation.....	28
Service Work Policy.....	29
Certification.....	29
Code of Ethics.....	29

OVERVIEW OF THE MLT PROGRAM

DESCRIPTION

The Medical Laboratory Technician program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (5600 N. River Road, Suite 720, Rosemont, IL, 60018; 773-714-8880). The first class started in 1974 and graduated in 1976. Graduates of the MLT program are eligible to take the American Society of Clinical Pathologists (ASCP) Board of Certification MLT Examination. They may also be eligible for the certification examinations of other national agencies if they fulfill the degree requirements and/or work experience requirements of those agencies. Graduation from the program is not contingent upon passing any type of external certification exam.

PROGRAM OUTCOMES

Throughout the MLT program, students acquire various skills that prepare them for entry-level MLT positions. A student who graduates from the program will be able to:

1. Collect, process and preserve blood and other body fluid samples.
2. Perform and report laboratory tests in a variety of laboratory settings.
3. Operate laboratory equipment and instruments, performing preventive and corrective maintenance as required.
4. Identify pre-analytical, analytical, and post-analytical variables that affect procedures, instruments and results, and take appropriate corrective action.
5. Perform mathematical functions as required by laboratory procedures.
6. Perform and monitor quality assurance and quality control techniques.
7. Practice laboratory safety and regulatory compliance.
8. Perform information processing functions in the Medical Laboratory.
9. Apply laboratory results to diagnosis and treatment of clinical conditions and/or diseases.
10. Communicate with colleagues and patients in a professional manner.
11. Model professional behaviors, ethics, and appearance.
12. Work effectively as a team member recognizing the comprehensive impact this has on health care.

ESSENTIAL FUNCTIONS

During the course of the Medical Laboratory Technician Program, students must demonstrate, with or without appropriate and reasonable modifications to policies and practices, the ability to perform the functions listed below safely, reliably and efficiently. If you believe you may need any accommodation to demonstrate these functions, please contact the Disabilities Resource Center Services (DRS) at Madison College (608-246-6716) or email drs@madisoncollege.edu. More information on DRS follows under Request for Reasonable Accommodation on page 5 of this document.

Essential Functions for the Medical Laboratory Technician Profession

STANDARD	SOME EXAMPLES OF NECESSARY ACTIVITIES (This list is not all inclusive.)
Critical thinking ability sufficient for clinical judgment and professional behavior	<ul style="list-style-type: none"> • Identify cause-effect relationships in laboratory situations • Solve problems • Consider consequences of solutions • Make and defend sound judgments • Establish priorities • Distinguish significant from insignificant • Note relationships and patterns • Evaluate outcomes • Organize workload and manage time in order to complete technical tasks within realistic time limits
Interpersonal abilities sufficient to interact with others from a variety of social, emotional, cultural and intellectual backgrounds	<ul style="list-style-type: none"> • Support peers and health care professionals in order to promote a team approach to learning, task completion, problem solving and patient care • Be honest and forthright about errors • Critically evaluate performance, accept constructive criticism, and be responsible for improving performance • Be compassionate and ethical
Communication abilities sufficient for interaction with others	<ul style="list-style-type: none"> • Read and comprehend technical and professional materials (textbooks, journal articles, handbooks, technical inserts, and procedure manuals) • Follow instructions in order to correctly perform laboratory test procedures • Communicate concisely, effectively and courteously with patients regarding test orders and specimen collection instructions • Communicate effectively with instructors, peers, laboratory staff and other health care professionals • Maintain clear, concise and accurate laboratory records and reports
Physical abilities sufficient to maneuver as required to perform laboratory procedures	<ul style="list-style-type: none"> • Move freely and safely about the laboratory • Perform moderately taxing continuous physical work, often requiring prolonged sitting or standing • Reach laboratory bench tops and shelves, patients lying in hospital beds or patients seated in blood collection furniture
Gross and fine motor abilities sufficient to work safely and effectively in a laboratory	<ul style="list-style-type: none"> • Maneuver phlebotomy and culture equipment to collect laboratory specimens from patients without endangering patient safety • Control laboratory equipment (pipettes, inoculating loops, test tubes, etc.) and adjust instruments to perform laboratory procedures • Use electronic keyboard to operate laboratory instruments and calculate, record, evaluate and transmit data

Visual ability sufficient to observe and perform laboratory procedures	<ul style="list-style-type: none"> • Observe laboratory demonstrations of specimens, techniques, and instruments • Differentiate the color, consistency and clarity of biological specimens and reagents • Distinguish detail in minimal contrast mediums • Read and comprehend text, numbers, and graphs displayed in print or on a digital/video monitor
Ability to work in a high stress environment, respond to emergencies and maintain emotional control	<ul style="list-style-type: none"> • Calmly react to urgent situations • Recognize own stress level and communicate need for assistance appropriately • Set realistic expectations to meet requirements • Perform multiple tasks and establish priorities
Ability to protect self and others from environmental risks and hazards	<ul style="list-style-type: none"> • Follow established safety procedures • Utilize appropriate laboratory safety equipment • Perform frequent hand washing • Utilize disinfectants and cleaning agents appropriately • Work safely with potentially biohazardous and unpleasant biological specimens

REQUEST FOR REASONABLE ACCOMODATIONS

The MLT faculty is committed to providing each student with the opportunity to successfully complete the MLT program. Therefore, if you have a diagnosed disability that would interfere with your ability to complete the requirements of a course, to participate in the activities described in the course syllabus, or to perform the program related essential functions, you should contact the Disability Resource Service Office at (608)246-6716 or email drs@madisoncollege.edu to arrange appropriate academic adjustments. Information about this resource can be on the Madison College Home page under A-Z , look under “D” or for Disability Resources or use the URL <http://madisoncollege.edu/disability-resource-services-drs> All requests are held in confidence. For questions, you may also see FAQs at [http:// madisoncollege.edu/providing-disability-documentation-drs](http://madisoncollege.edu/providing-disability-documentation-drs).

In order to assure accommodations are in place when classes begin, students with disabilities should ideally complete this process at least four weeks before the first day of the semester. However, accommodations can be requested at any time throughout the semester. This process includes:

1. Provide documentation to DRS.
2. Take the Compass test.
3. Meet with a disability specialist.

If you are deaf or hard of hearing, DRS will talk with you through relay or the above email. To promote your success, accommodation request cards should be given to course instructors by the end of the second week of classes.

MISSION STATEMENT

As part of the Madison Area Technical College (Madison College) community, the MLT program embraces the college’s mission statement, which reads:

Madison College provides open access to quality higher education that fosters lifelong learning and success within our communities.

The MLT program is found in the School of Health Education at Madison College. Faculty envision a reachable education of excellence for their students; an education which impacts the heart of the community that we serve. The MLT Program Mission Statement is: Madison College's Medical Laboratory Technician program serves to offer an associate degree designed for entry-level positions as a medical laboratory technician, to prepare students to successfully take national certification examinations, and to be successful medical laboratory professionals.

Clarification of this mission statement and further information about Madison College's vision statement, values, and learning college principles can be found online under A-Z, choose "S" for Strategic Plan, or at <http://madisoncollege.edu/strategic-planning>.

PROGRAM INSTRUCTORS AND PERSONNEL

Name	Office Phone	Email
Leah Narans MLT Program Director	608 – 246 – 6787 608 – 335 - 1078	narans@madisoncollege.edu
Bauj Yang Faculty	608 – 616 –1056	Byang14@madisoncollege.edu
Kara Knutson Faculty	608 – 616 – 1066	Kknutson5@madisoncollege.edu
Trinity Pulvermacher	608 – 616 - 1065	tpulvermacher@madisoncollege.edu
Marci Trimborn Laboratory Planner	608 – 246 – 6382	mtrimborn@madisoncollege.edu
Dr Kendrick Hooker Dean	608 – 243 - 4088	khooker@madisoncollege.edu

FORMS REQUIRED BY THE MLT PROGRAM

PERSONAL HEALTH HISTORY

All students who are admitted into the MLT program must complete health and education requirements via the *Castlebranch* tracking website by the end of the 1st 8 week classes. The requirements include: evidence of measles, mumps and rubella immunity through two immunizations or immune titers, results for a two-step TB skin test, Tdap (tetanus, diphtheria and acellular pertussis) vaccination at or after age 12, evidence of varicella (chicken pox) immunity through two immunizations or a positive varicella titer, three Hepatitis B vaccinations or an immune titer, Healthcare provider CPR documentation, evidence of health insurance. Influenza vaccines must be received annually during the flu season and uploaded to the site two weeks prior to the first clinical rotation. Costs associated with the *Castlebranch* tracking website *are the responsibility of the student*. More information follows for this process. If a urine drug screen is required by a clinical site, students must go to the site to have the test done and pay the fee. See MLT program director for reimbursement for the fee.

Failure to complete these health requirements by the designated due date will result in the following consequences:

- The student will not be allowed to begin Phlebotomy or Urinalysis

Vaccines and titers are available through your private physician or through Madison College Student Health Services which provides immunizations at a reduced rate. Payment for vaccines

and titers is the responsibility of the student. Some health insurance policies will cover payment for these.

Registered students have access to student health services at the on campus Group Health Clinic located on the first floor of the Health Education building. Student Health Services provides TB skin testing to all registered students, free of charge. Other required immunizations or titers are offered at a reduced cost.

REFERENCE AUTHORIZATION

Students who want MLT faculty members to release information concerning their performance in the program to prospective employers who may contact the faculty at their request must complete the *Authorization to Disclose Academic Information & Grades* form. Absolutely no information can be given to anyone concerning a student's performance in the program unless a signed and dated authorization form is on file. A student may remove this authorization form from his/her file at any time, thus prohibiting the faculty member from releasing any information, by notifying the MLT Program Director in writing. The *Authorization to Disclose Academic Information & Grades* is available in the School of Health Education office (Room 103) or from any faculty member.

PROGRAM POLICY FORMS AND WAIVERS

At the beginning of the first semester in the MLT program, students are given an extensive orientation that includes a review of all policies, including the general program policy and safety policies. Each student is required to date and sign forms that state that they understand these policies and agree to abide by these policies as written. These signed and dated forms are kept in the students' files in the MLT Program Director's office. During subsequent semesters in the program, students will be required to complete safety self-study packets and/or program policy worksheets to demonstrate knowledge of policies and procedures.

HEALTH INSURANCE

Due to the inherent risk of exposure to harmful agents and to the requirements of some affiliating agencies, all students in the MLT program are required to have health insurance coverage prior to being assigned to a clinical facility. The clinical rotations include a 12-hour phlebotomy rotation and a 4-hour urinalysis rotation during the first semester and the clinical experience rotation during the fourth semester. A low cost student health insurance plan covering accident and illness is available to students in the health occupations programs. Information and enrollment forms are available during registration and in the Student Services and Student Life offices. Students may choose to obtain their own health insurance plan instead of the student health insurance. The range of such coverage must be at least as comprehensive as those of the student health insurance available through Madison College. Whichever type of health insurance the student chooses, evidence of coverage must be provided prior to the time when clinical assignments are made.

LIABILITY INSURANCE

The college provides liability insurance coverage for students during their clinical rotations.

CAREGIVER BACKGROUND CHECK

As required by Wisconsin law, any student who has access to patients during a clinical experience must undergo a Caregiver Background Check (CBC). A completed background check as prescribed under Wisconsin's law includes: 1) completed self-disclosure Background Information Disclosure (BID) form; 2) electronic status check of professional licenses and credentials through the Department of Regulation and Licensing; 3) electronic criminal history search from the Wisconsin Department of Justice; and 4) electronic review of records kept by the Department of Health and Family Services for any substantiated findings of abuse or neglect and license restrictions or denials.

Criminal history information discovered by this process may delay or prevent a student from participating in the clinical experiences required for graduation from the program. Further information about this law and the criminal history check process may be obtained from the *Wisconsin Department of Health and Family Services* at <http://www.dhs.wisconsin.gov/>(see the *Regulation and Licensing* section).

Castlebranch.com is an online service that performs the background checks and reviews health histories for health care students at Madison College. Once students sign up with Castlebranch.com, they have a permanent, electronic file, of all documents for future use. Students go through Castlebranch.com to be directed to set up their *Castlebranch* account for the Medical Laboratory Technician Program.

MLT ELECTROLYTE CLUB

All students in the MLT program are members of the Electrolyte Club. The major purpose of the club is to raise funds for student activities and educational seminars, to promote membership in professional organizations such as the American Society for Clinical Laboratory Science (ASCLS), and to participate in community service projects. All MLT students are encouraged to participate in club activities.

MADISON COLLEGE CATALOG / ONLINE STUDENT POLICIES

Information for the *College Catalog* is found on-line and available to students free of charge. This includes information regarding policies and procedures, student services, student rights and responsibilities, student resources, activities, programs of study, course descriptions, organizational structure, and faculty directory. A printed course schedule with registration information is printed each semester. You may pick up your copy of this course catalog at the Enrollment Center or the Health Education office. ***It is the responsibility of every student in the MLT program to read and be knowledgeable of the student policies and information presented at orientation and on the Madison College website.***

HEALTH SERVICES

The Student Health Clinic is located in room 151A inside the Health Education Building at the Truax Campus. All Truax, Downtown, West, Commercial Avenue, and South Madison students taking degree credit courses have access to health care services with a valid OneCard. For more information, please call 441-3220. TB skin tests are available at no cost to a students registered for classes. For any accident or illness that is considered serious and possibly life threatening, emergency personnel will be summoned by calling 9-911. All expenses incurred during an emergency are the responsibility of the student.

In addition, a variety of clinical services, including physical exams, chest X-rays, TB skin tests, vaccines (MMR, Hepatitis B series, tetanus/diphtheria, and varicella) and titers (Hepatitis B, measles, mumps, rubella, and varicella) are available to Madison College students through Concentra Clinical Center, 1619 N. Stoughton Road, Madison (244-1213). In addition, Concentra Clinical Center will provide general medical care and care for *non-life threatening* medical emergencies to Madison College students. All patients are seen at Concentra on a walk-in basis. Medical emergencies or injuries will receive immediate triage assessment. The cost of all health services is the responsibility of the student.

EMERGENCY PROCEDURES

Booklets explaining the emergency procedures used at Madison College are posted in the MLT labs, rooms 205, 209 and 282. The emergencies addressed in this booklet include:

- Bomb threat
- Called from class
- Campus closing

- Fire
- Chemical emergency
- Injury/ Health emergence
- Security
- Tornado warning

Emergency phone numbers are listed inside the flip folder booklet for quick reference. Students should familiarize themselves with these procedures. College security can be reached by dialing 246-4357.

TEACH-OUT PLAN

In the event of a need for program closure, the first step would be suspending any new applications. Any students who have already started in the program would need to have a path to completion. This could involve independent studies, other courses at other technical schools, on-line courses, etc. Each remaining student would receive individual advising to arrive at the best plan to achieve student success.

In the event of a natural disaster, the college would seek alternative spaces to conduct laboratory sessions, either at their regional sites or at UW-Madison or both. Lectures would be presented online.

STUDENT CONFLICT RESOLUTION

If a student has an academic or non-academic issue or problem that he/she feels requires attention, the student should first meet with the specific course instructor. Every effort is made to resolve the problem or address the issue at the student/instructor level. If the problem remains unresolved, the MLT program director is available to listen and advise the student and instructor on the best manner to resolve the problem. If the problem continues to be unresolved, the student may contact Conflict Management Services for assistance in resolving the conflict. Procedures for addressing specific types of conflict and the appeals process can be found on the college website under www.madisoncollege.edu/procedures.

MLT PROGRAM CURRICULUM

PROGRAM GOALS

Goals have been established to guide program instructors when designing curriculum, determining course content, and choosing teaching and evaluation methods. The MLT program goals are as follows:

1. Prepare technically competent students who are capable of working accurately and efficiently in a variety of laboratory settings.
2. Provide opportunities for students to develop problem solving and critical thinking skills.
3. Assist students in developing appropriate personal, social and professional work ethics.
4. Assist students in making appropriate academic choices, optimizing professional growth, and career laddering.
5. Provide opportunities for students to develop healthy interpersonal relationships and strong communication skills.
6. Individualize and personalize instruction as much as possible to meet the educational needs of a varied and diverse student population.
7. Assist students in developing self-assessment skills and setting goals for educational, personal and professional development.

MLT PROGRAM COURSE DESCRIPTIONS

BASIC LABORATORY SKILLS (10-513-110)

Explores health career options and fundamental principles and procedures of the Medical Laboratory. Incorporates medical terminology, basic laboratory equipment, safety and infection control procedures, and simple laboratory tests.

Prerequisites: Successful completion of the following high school courses with a grade of C or better: three years of English, one year of chemistry, one year of general biology, two years of algebra or one year algebra and one year of geometry; and a satisfactory score on the TEAS test or equivalent substitute.

PHLEBOTOMY (10-513-111)

Provides opportunities to perform routine venipuncture, capillary puncture, and special collection procedures. Prerequisite: 10-513-110

LAB QA/MATH (10-513-113)

Focuses on mathematical calculations used in the laboratory. Explores concepts of quality control and quality assurance, regulatory compliance requirements, and certification and continuing education programs.

Prerequisites: Successful completion of the following high school courses with a grade of C or better: three years of English, one year of chemistry, one year of general biology, two years of algebra or one year algebra and one year of geometry; and a satisfactory score on the COMPASS test or equivalent substitute.

BASIC IMMUNOLOGY CONCEPTS (10-513-115)

Provides an overview of the immune system including testing methods for diagnosis of immune system disorders and viral and bacterial infections.

Prerequisites: Successful completion of the following high school courses with a grade of C or better: three years of English, one year of chemistry, one year of general biology, two years of algebra or one year algebra and one year of geometry; and a satisfactory score on the TEAS test or equivalent substitute.

URINALYSIS (10-513-114)

Perform physical, chemical and microscopic analysis of urine. Explores renal physiology and correlates urinalysis results with clinical conditions.

Prerequisites: Satisfactory completion of all first semester, first year Medical Laboratory Technician courses.

BASIC HEMATOLOGY (10-513-120)

Covers theory and principles of blood cell production and function. Introduces basic practices and procedures in the hematology laboratory.

Prerequisites: Satisfactory completion of all first semester, first year Medical Laboratory Technician courses.

COAGULATION (10-513-121)

Introduces theory and principles of coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed on laboratory techniques used to diagnose disease and monitor treatment. Prerequisite: 10-513-120

INTRODUCTION TO MOLECULAR DIAGNOSTICS (10-513-170)

Introduces the principles and application of molecular diagnostics in the clinical laboratory. Corequisite: 10-513-132, 10-513-133

BLOOD BANK (10-513-109)

Begins with basic blood banking concepts and procedures including blood typing, antibody screening and compatibility testing, and then continues covering more advanced blood banking concepts and procedures. These include antibody identification workups, follow-up procedures for adverse transfusion reactions and transfusion disease states.

Prerequisites: Satisfactory completion of all first semester, first year Medical Laboratory Technician courses.

ADVANCED HEMATOLOGY (10-513-130)

Explores mechanisms involved in the development of hematologic disorders. Emphasis is placed on laboratory techniques used to diagnose disorders and monitor treatment.

Prerequisite: 10-513-120.

CLINICAL CHEMISTRY (10-513-116)

Introduces techniques and procedures for routine analysis using photometric, potentiometric and separation techniques. Covers pathophysiology and methodologies for carbohydrates, lipids, proteins, renal function, blood gas analysis. liver, bone, cardiac markers, tumor markers, endocrine function, fetal function, miscellaneous body fluids, and toxicology. Includes techniques and procedures for analysis using sophisticated laboratory instrumentation.

Prerequisites: satisfactory completion of all second semester, first year Medical Laboratory Technician courses and 20-806-201.

CLINICAL MICROBIOLOGY (513-133)

Presents the clinical importance of infectious diseases with emphasis on the appropriate collection, handling, and identification of clinically relevant bacteria. Disease states, modes of transmission and methods of prevention and control, including antibiotic susceptibility testing, will be discussed.

Prerequisites: Satisfactory completion of all second semester, first year Medical Laboratory Technician courses and 20-806-273.

ADVANCED MICROBIOLOGY (513-140)

Provides an overview of acid-fast organisms, fungi, parasites, and anaerobic bacteria. The organisms, their pathophysiology, epidemiology, the diseases and conditions that they cause, laboratory methods of handling, culturing and identification will be performed or discussed.

Prerequisite: 10-513-133.

INTRODUCTION TO MOLECULAR DIAGNOSTICS (513-170)

Gives students background knowledge in DNA and RNA structure and functioning including nuclear packaging, transcription, translation and modifications. We will also cover basic genetic inheritance. Specific methods we will perform or discuss will include nucleic acid isolation and detection, target amplification and sequencing of target genes. We will also address the use of molecular methods to identify microorganisms, classify neoplasms and characterize MCH loci.

PRE-CLINICAL EXPERIENCE (513-141)

Provides opportunities to review and practice the principles and procedures of laboratory medicine in the MLT laboratory on campus. Clinical content is reviewed and students run a mock clinical laboratory from specimen collection and acquisition to result reporting. Resume writing and interviewing techniques also are discussed.

Prerequisites: Satisfactory completion of all Medical Laboratory Technician program courses.

CLINICAL EXPERIENCE I (513-151)

Provides opportunities to practice the principles and procedures of laboratory medicine on-site, in a clinical laboratory facility. Students will practice on state of the art instrumentation in the areas of clinical chemistry and hematology, including urinalysis and coagulation.

Prerequisites: Satisfactory completion of on-campus Pre-Clinical Experience 10-513-141.

CLINICAL EXPERIENCE 2 (513-152)

Provides opportunities to practice the principles and procedures of laboratory medicine on-site, in a clinical laboratory facility. Students will practice in the areas of blood banking and microbiology, including serology and immunological procedures. Students also complete a case study for presentation.

Prerequisites: Satisfactory completion of on-campus Pre-Clinical Experience 10-513-141.

PROGRAM CURRICULUM SUMMARY

The normal sequence of courses for the MLT program is as follows.

FIRST YEAR

First Semester		Credits	Hours/Week
10-513-110	Basic Lab Skills	1	2
10-513-111	Phlebotomy	2	3
10-513-113	Lab QA/Math	1	2
10-513-114	Urinalysis	2	3
20-806-206	General Anatomy and Physiology*	4	5
20-806-201	General, Organic, and Biological Chemistry*	5	6
20-801-151	Communication Skills 1* OR	3	3
20-801-201	English Composition 1*	(3)	(3)
Semester Total		18	24

Second Semester		Credits	Hours/Week
10-513-115	Basic Immunology Concepts	2	3
10-513-120	Basic Hematology	3	4
10-513-121	Coagulation	1	2
10-513-109	Blood Bank	4	6
20-806-273	University Microbiology*	5	6
10-801-196	Oral/Interpersonal Communications* OR	3	3
20-801-201	Fundamentals of Speech	(3)	(3)
Semester Total		17	21

Summer Session		Credits	Hours/Week
10-809-197	Contemporary American Society* OR	3	3
20-809-203	Introduction to Sociology*	(3)	(3)
10-809-199	Psychology of Human Relations* OR	3	3
20-809-231	Introduction to Psychology*	(3)	(3)
Semester Total		6	6

SECOND YEAR

First Semester		Credits	Hours/Week
10-513-130	Advanced Hematology	2	3
10-513-170	Introduction to Molecular Diagnostics	2	3
10-513-116	Clinical Chemistry	4	6
10-513-133	Clinical Microbiology	4	7
99-999-999	Elective	2-3	3
Semester Total		14-15	22

Second Semester		Credits	Hours/Week
10-513-140	Advanced Microbiology	2	2
10-513-141	Pre-clinical Experience	2	40
10-513-151	Clinical Experience I	3	40
10-513-152	Clinical Experience 2	4	40
10-513-153	Capstone Project	1	1
Semester Total		12	42

Students who plan to obtain a four-year Clinical/Medical Laboratory Science degree after completing the two-year Medical Laboratory Technician degree should refer to the MLT program curriculum sheet for the suggested course substitutions. The MLT Program Director or designated academic advisor also will provide information pertaining to course requirements and articulation agreements with medical laboratory science programs.

In order to change the sequence of courses, permission should be obtained from the instructor and program director.

Students should be aware that some courses are prerequisites for other courses. They are:

- *All first semester, first year program courses, including: Basic Lab Skills, Phlebotomy, Lab QA/Math, and Urinalysis for all subsequent program courses.*
- *University Microbiology (806-273) for Clinical Microbiology*
- *Clinical Microbiology for Advanced Microbiology*
- *Basic Hematology for Advanced Hematology*
- *General, Organic and Biological Chemistry (806-201) for Clinical Chemistry Diagnostics*
- *All MLT program courses (except Advanced Microbiology) for Clinical Experience 1*

ADVANCED STANDING AND TRANSFER CREDIT

Courses taken at another university or college may fulfill some of the requirements for graduation from the program. To have these courses considered for advanced standing, the student must request official transcripts to be sent to the Madison College Admissions Office and submit a form (from the website) to have the courses evaluated for transfer credit. The Dean, MLT program director and transfer credit assessor will review the transcripts and grant credit for all qualifying courses. Consideration for advanced standing does not apply to program (513) courses unless comparable courses have been taken at another MLT program or Medical Laboratory Science program, and the courses are 3 years old or less, or if the student has Medical Laboratory work experience related to both the didactic and clinical portions of a specific course. In these circumstances, the student may be required to successfully complete written and practical examinations before advanced standing is granted for program courses. A student who is a practicing phlebotomist and has taken the Phlebotomy course can request to test out of the class. A student who has taken the phlebotomy course within one year is also eligible to test out of the class.

ACADEMIC ADVISING

Academic advising has proven to be the single most important factor influencing student retention and success. The MLT program has a formalized advising system to ensure that all students will experience the benefits of a consistent and meaningful advising relationship. The mission of this system is to:

- Facilitate the academic and career success of MLT program students
- Foster responsibility in each student for her/his own academic success
- Provide a clear and continuous system of support for all program students
- Act as a bridge between the student and various other Madison College departments and service providers
- Enhance the quality of education at Madison College by helping to ensure that students are correctly placed in classes

Student participation in the academic advising process, including a group meeting at the beginning of the first semester, is strongly encouraged. The responsibilities of the student involved in academic advising are to:

1. Know the name and office location of your faculty advisor.
2. Schedule appointments as needed during the academic term, and be prepared for the meeting by having pertinent information and materials.
3. Keep scheduled appointments or be sure to reschedule by calling, e-mailing or stopping in the advisor's office.
4. Meet with your advisor at least once a semester.
5. Consult with your advisor concerning registration and changes in your approved schedule (i.e., changing sections, adding or dropping classes).
6. Consult with your faculty advisor when you are having academic difficulty.
7. Become familiar with other campus resources (i.e., Student Development Center, Career Center, Computer Center, Library Center, Student Financial Planning, and Counseling).
8. Set goals and make decisions based on consideration of information, alternatives, and personal values. Follow through on the actions identified during each advising session.
9. Explore the consequences of your choices and accept personal responsibility for them.
10. Request a different advisor if necessary.

The MLT program director and faculty will participate in academic advising for students in the MLT program. Students will meet formally with a MLT faculty member during the first semester in the program to discuss course selection and progression through the program. During subsequent semesters, the program director or faculty advisor will review student progress and may meet with students again. Students may request an advising session with their advisor or MLT program director at any time. Student requests for changes in academic advisor assignments should be made to the program director.

GRADE REQUIREMENTS

Students must receive at least a "C" in all program courses and supporting science courses. Program courses include:

- Basic Lab Skills (513-110)
- Phlebotomy (513-111)
- Lab QA/Math (513-113)
- Basic Immunology Concepts (513-115)
- Urinalysis (513-114)
- Basic Hematology (513-120)
- Coagulation (513-121)
- Advanced Hematology (513-130)
- Blood Bank (513-109)
- Clinical Chemistry (513-116)
- Introduction to Molecular Diagnostics (513-170)
- Clinical Microbiology (513-133)
- Advanced Microbiology (513-140)
- Clinical Experiences (513-141, 151, 152)

Supporting science courses include:

- General, Organic, and Biological Chemistry (806-201)
- University Microbiology (806-273) General Anatomy and Physiology (806-206)

If a student receives less than a “C” in any of the courses listed above, or withdraws from any of these courses, the student must repeat the course, obtaining a C or better grade, in order to continue in the program. The student will be allowed to repeat a course only with the permission of the MLT faculty, and if there is space available in the class. A course may be repeated only once.

In addition, students must maintain an overall “C” average (grade point average of 2.0 or better) for all coursework. If, at any time, a student’s GPA drops below 2.0, he/she will be placed on academic probation. Failure to raise the GPA to above 2.0 during the next semester will result in academic dismissal.

GRADING POLICY

Each MLT instructor establishes her own course policies and decides how grades will be determined for the class. All MLT instructors, however, use the same grading scale to issue letter grades. The grading scale is as follows:

A	93 – 100%
AB	89 – 92%
B	85 – 88%
BC	81 – 84%
C	76 – 80%
D	71 – 75%
F	≤70%

GRADE OF INCOMPLETE

A student may request a grade of incomplete if unusual circumstances prevent a student from completing the course activities by the end of the semester. The decision to take an incomplete is reached after a discussion with the course instructor. An incomplete grade must be completed by the end of the next semester or the grade automatically becomes an “F.” An incomplete will not be granted after a student has taken the final exam.

PROFESSIONAL BEHAVIORS

Although acquiring academic knowledge and gaining technical skills are very important aspects of the MLT program, developing appropriate professional behaviors is equally important. Therefore, students will be expected to exhibit satisfactory behavior in the following areas:

1. Attitude toward learning
2. Quality of work
3. Organization
4. Productivity and initiative
5. Reliability
6. Problem solving abilities
7. Professional ethics and integrity
8. Interpersonal skills
9. Teamwork
10. Laboratory safety

These behaviors and other aspects of professionalism will be introduced to students during the first semester of the program. During the second semester, students will self-assess their professional behaviors and will receive feedback about their self-assessment from their instructors. During the third semester, each student’s professional behaviors will be evaluated by

his/her peers and the MLT program instructors. At this time, any student receiving an unacceptable performance rating in any of the areas defined by the MLT program *Professional Behavior Evaluation* may be denied the opportunity to participate in the fourth semester clinical experience until the deficiencies are corrected. Failure to exhibit desirable professional behaviors during the clinical experience may result in disciplinary action and/or dismissal from the clinical agency and/or MLT program.

Any form of dishonesty, such as cheating or plagiarism, or knowingly furnishing false information to Madison College is considered a breach of the Madison College student code of conduct and may result in suspension, dismissal or legal action, depending on the severity of the offense (see www.madisoncollege.edu; *Resources for Current Students – Rights and Responsibilities*).

MLT CLINICAL PORTFOLIO

As a student progresses through the MLT program, he/she will be required to maintain a portfolio to provide documentation of his/her professional growth. This clinical portfolio is completed during the fourth semester clinical experience. The portfolio will include the following sections and information.

Section I: Resume and References

Students should complete their resumes during the fourth semester of the program and include a copy of it in their portfolios. They should also include a cover letter/letter of interest and a list of 3 professional references.

Section II: Transcripts

This section is for your previous transcripts and to place your Madison College Transcripts when your program is complete.

Section III: Certifications

This section is completed following graduation. A copy of the Board of Certification, MLT (ASCP), with certification number and a log for listing continuing education should be included along with a copy of your college transcript. This is also a place for your CPR card. Throughout the program, students are involved in numerous projects such as poster sessions, case studies, and oral presentations. The portfolio should include an example of the student's choosing of one project that was completed during each of the first three semesters. A copy of the student's case study completed during the fourth semester clinical externship is included here.

Section IV: Continuing Education

This section includes a complete listing of the service and continuing education activities in which a student participated during each semester of the program in addition to listing organizations to which a student belongs.

Section V: Organizations

This section is for your receipts and membership cards or all professional organizations you join. At a minimum you should have your ASCP membership.

Section VI: Projects and Evaluations

The following assessments and evaluations are to be included in the portfolio.

- First semester: Phlebotomy clinical rotation student evaluation
- First semester: Urinalysis rotation student evaluation
- Second semester: Professional Behavior Self-Assessment
- Third semester: Professional Behavior Peer and Instructor Evaluation
- Fourth semester: Composite Professional Behavior Evaluation

Section VII: Awards and Distinctions

This section is where you place any awards that you receive in school, out of school or at work.

ATTENDANCE AND PUNCTUALITY

Attendance is critical to MLT program courses to assure that each student acquires the skills and knowledge necessary to successfully participate in the clinical experience. Therefore, MLT instructors closely monitor attendance. Each instructor will explain his or her specific course attendance policy on the first day of class and/or on the course's Blackboard site.

A student is required to contact the instructor or School of Health Education office prior to an absence. Failure to do so will result in the student being denied the opportunity to make up missed work. The instructor has the option to excuse the absence or to record the absence as unexcused, depending on both the circumstances involved and the instructor's attendance policy.

The student is responsible for all information and activities presented in lecture or lab during his or her absence. If additional help is needed from the instructor outside of class time to cover material missed during an absence, the student must schedule an appointment with the instructor within 24 hours of his/her return to class. Due to the nature of some laboratory assignments (e.g., specimens or test kits not readily available), makeup is at the discretion of the instructor. A suitable alternative learning experience may be substituted for the original laboratory assignment to allow the student to achieve the required competencies.

According to Madison College policy:

- Students who will not be in attendance for their first class meetings must inform School of Health Education office in writing. Failure to comply may jeopardize continued enrollment.
- If the student is absent from class (lab and lecture) more than 25% of the time, or misses 16 consecutive calendar days (not class meetings), the instructor will advise the student on their class standing and how they might successfully complete the course. An instructor can not withdraw a student from a class. Students may choose to complete the appropriate paperwork for a withdrawal until 90% of the course is complete.
- Missing a final examination without notifying the instructor and without having a satisfactory excuse will result in an automatic "F" on the examination.

In the event of an absence in excess of three consecutive class periods, the student will be required to present a doctor's excuse at the time he/she returns to class. The student also will be required to meet with the course instructor and/or the program director to discuss whether it is possible to make up the work that was missed, or if the extended absence necessitates the student's withdrawal from the course.

Students also are expected to arrive on time and remain for the full class period. Students should not leave class until the instructor excuses them. If a student arrives late to a laboratory section, he/she may be dismissed from that particular lab, especially if directions have already been given. In this event, the student will be required to make up the lab at another time, and will not be allowed to continue in lab until the missed work is made up.

PROGRESSING THROUGH THE MLT PROGRAM

As outlined on the program webpage, the MLT program of study is normally scheduled for four semesters plus one summer session. Students who are entering the program with no advanced standing or students who have outside commitments, such as a job or family, may find this four-semester plan very intense. Therefore, students are given the option of extending the program of study over five or six semesters with the permission of the program director. Students who extend the program of study beyond six semesters will be required to audit program (513) courses prior to being allowed to participate in the clinical experience.

An alternative to extending the program of study beyond four semesters is to take some of the non-MLT program courses (any course listed in the program curriculum summary that does not

begin with 513) before beginning the MLT program courses. This would allow for a lighter load and may enable you to complete all required program courses in four semesters.

Students are permitted to take a one-semester leave for legitimate, documented reasons with the permission of the MLT program director. Should the leave exceed one semester, the student must obtain permission to return, and may be required to audit, review, or repeat program courses, or take re-entry exams. If re-entry exams are required by the instructor, they must be completed at least 30 days prior to re-entry. The student must contact the instructor to schedule the exams. The exams may be written, practical, oral, or a combination of all three. A fee may be charged for the exams. The responsibility for making these arrangements lies with the student. If arrangements have not been made, the student may not re-enter the program. If the instructor gives a passing grade for these re-entry exams, the student may start the sequence of courses provided there is room in the program course requested.

The MLT program director is available to help you with any of your class scheduling questions or concerns.

REASONS FOR BEING DISMISSED FROM THE MLT PROGRAM

The MLT faculty reserves the right to drop a student from the program if the student performs unsatisfactorily in or withdraws from program courses and supporting science courses (refer to pages 14 and 15 of this packet for a list of these courses). The circumstances under which a student may be dropped from the program include:

1. Three withdrawals from the listed courses.
2. Two withdrawals in combination with one D for the listed courses.
3. Two Ds in the listed courses, either in the same or different courses.
4. Failing the Clinical Experience courses

A grade of "incomplete" may be given if a student has done passing work and, because of illness or cause beyond the student's control, fails to complete the course requirements. Refer to the *Madison College website*, www.madisoncollege.edu/incompletes, for further information regarding a grade of "incomplete."

WITHDRAWING FROM MLT PROGRAM COURSES

Any student who is considering withdrawing from any course should first consult with the MLT program director to discuss options and alternatives. The procedure for course withdrawal is outlined on the *Madison College website*. In addition, the MLT program director should be notified in writing of intentions to drop a course or the program. A student may withdraw from a class until 90% of the course has been offered. If a student withdraws from the MLT program, they can reapply at a later date. A student is only allowed to enter the program two times. Courses may have to be repeated, depending on individual circumstances. All MLT courses would need to be repeated after three years.

REQUIREMENTS FOR GRADUATION

General requirements for graduation from Madison College are found on the Madison College website, www.madisoncollege.edu/graduation-requirements. Requirements for graduation from the MLT program are stated under MLT Curriculum on the Madison College web site for the MLT program, www.madisoncollege.edu/files/program-sheets/clinical-laboratory-technician.pdf.

CLINICAL ROTATIONS

Students in the MLT program participate in clinical rotations during the first and fourth semesters. There is a 12-hour phlebotomy rotation for Phlebotomy (513-111) and a 4-hour clinic rotation for Urinalysis (513-114) during the first semester of the program. Although the 12-hour phlebotomy

rotation is included as class contact hours, the scheduled hours of the rotation may be at a time and day different than the scheduled class. Students must communicate with their assigned clinical facility to determine rotation schedules that are acceptable for all parties involved. The 4-hour clinical rotation assigned for Urinalysis is above and beyond regular class times. As with the phlebotomy rotation, students will work with their assigned facilities to determine an acceptable schedule.

The first semester clinical rotations are intended to reinforce skills being learned in program courses. The rotations also offer students the opportunity to observe and participate in the activities of a real clinical laboratory. Students who are not performing satisfactorily in any of the courses associated with these rotations will not be allowed to participate. Also, students who fail to have completed health forms and CPR certification on file with Certified Background Check or students who do not exhibit appropriate professional behaviors will be denied participation.

The major clinical rotation is the clinical experience during the fourth semester of the MLT program. During the first 4 weeks of the clinical experiences, students are involved in a variety of lectures and workshops on campus. The remaining 12 weeks are split equally between chemistry, hematology, blood banking and microbiology clinical rotations. Currently, the MLT program has a number of excellent affiliation sites in Madison and throughout the Madison College region. Students entering the program should be aware that there is a possibility of being placed outside the Madison area for their clinical experiences. There also is the possibility that students will be completing their clinical experience at more than one site. The clinical site placement policy and additional information about this experience can be found under the **MLT Fourth Semester** section in this information packet. In the rare instance that there are not enough clinical sites, students may have to wait and complete their rotations in the fall semester.

CONFIDENTIALITY POLICY

Throughout the program, students are advised of the importance of maintaining confidentiality of all information pertaining to patients, medical data, and business operations while participating in clinical rotations. Students are introduced to the Health Insurance Portability and Accountability Act (HIPAA) and are made aware of the serious implications of breaching patient confidentiality as defined by HIPAA. Prior to participating in any off-campus clinical rotation, students will be required to read and sign the MLT program confidentiality policy. Students must be aware that compliance with this policy is mandatory and that any breach of confidentiality rules may result in disciplinary action, including dismissal from the clinical site and the MLT program, and possible legal action as allowed by HIPAA.

MLT PROGRAM COURSE INFORMATION

HYBRID CURRICULUM

Some of the courses in the MLT program are presented in a hybrid curriculum format, with “lecture” material being presented on-line or through other alternative delivery methods and laboratory sessions occurring face-to-face on campus. For these courses, laboratory sessions will begin with a discussion of the lecture material. The discussion will:

- Summarize key concepts encountered in the lecture material
- Clarify difficult and complex concepts
- Correlate lecture material with laboratory activities
- Provide an opportunity for students to ask questions

Students are expected to complete all required readings, assignments, and activities **prior** to coming to the laboratory so that they can fully participate in the discussion. Due to the complex content of many of the core MLT courses, students also may augment their learning experiences by utilizing instructor office hours as a forum for inquiry and clarification of subject material.

COURSE SYLLABUS

For each MLT course, a course syllabus and other relevant course information will be given to you during the first class period of the semester or made available on-line at the start of the course. These documents contain course descriptions, course outcomes, class schedules, textbooks, course policies, assignments, instruction methods, evaluation procedures, grading policies, attendance policies, competencies and objectives for each unit of instruction. Use the course syllabus, objectives, and expected competencies as a guide for successful course completion.

LABORATORY SECTIONS

LABORATORY ATTIRE

Students will be issued personal protective equipment (PPE), including disposable lab coats, gloves, face shields, and safety glasses, during the first week of class. In order to receive this equipment, students must first pay a personal protective equipment lab fee, which is included in the registration fees.

Failure to conform to this policy will result in the student being excluded from laboratory sections until the fee is paid and the PPE is issued. This policy of exclusion is for the student's safety.

- Students are issued a full-length lab coat at the start of the semester. It must be clean and in good repair at all times. Lab coats are always worn when obtaining blood specimens and performing bench work. Each student will write his/her name on the lab coat.
- In addition, MLT students wear black scrub pants and red scrub tops while in the lab.

In order to prevent transmission of infectious material to others in the college, this lab coat **must not** be worn outside the lab.

Lab coats will be rolled and kept in the student's drawer when not in use. When it becomes contaminated with blood or other body fluids, or becomes torn or tattered, a new lab coat should be obtained by the student.

Other items pertaining to student laboratory attire and appearance are as follows.

- Satisfactory personal hygiene is expected.
- A name badge must be purchased
- Long hair must be pulled back and fastened.
- **No open-toed shoes or sandals are allowed in the laboratory.**
- Hats and head coverings may only be worn for religious, medical or other reasons approved by faculty.
- If an instructor suspects student use of an altering substance such as drugs or alcohol, they will be asked to leave the classroom and not be allowed make-up time.

CHILDREN IN THE LABORATORY

Children 14 years of age or younger should not be taken to classrooms or the laboratories.

SAFETY TRAINING

The MLT program has a detailed safety policy that is designed to protect students from potential hazards posed by exposure to blood, body fluids, and chemicals. Annually, students are required to review this policy and participate in a safety orientation. A major component of a safe laboratory work environment is appropriate safety apparel, including gloves, lab coats, and face shields and/or safety glasses. These safety items will be provided to students as needed.

In order to provide you with appropriate and comfortable laboratory safety apparel, we ask that you notify the MLT program director in advance if you will require either extra large or extra small gloves, or if you have a known sensitivity to any type of glove material, such as latex.

CLASS DISRUPTIONS

Students who arrive late to a laboratory session must avoid disrupting the class while demonstrations or instructions are being given. Students who arrive to a laboratory session after instructions have been given may be dismissed from class.

Cell phones and all other electronic devices must be turned off while class is in session. If a student anticipates the need to be contacted by phone during class, he/she must notify the instructor of the potential disruption prior to the start of class. In an emergency situation, the student should take the phone call outside of the lecture or lab setting, provided they have removed their personal protective equipment and washed their hands.

USE OF LABORATORY COMPUTERS AND TELEPHONES

During class time, computers in the laboratories are to be used for class work only. No personal email or Internet browsing is allowed during scheduled class time. When class is not in session, students will be allowed to use computers for their personal work. Students are strongly advised to use discretion when accessing information on the Internet. Improper use of the Internet will result in disciplinary action. Downloading of programs from the Internet onto laboratory computers is strictly prohibited.

Telephones in the laboratories and office area are not for student use. If necessary, the School of Health Education office personnel (room 103) will accommodate your need to make an urgent telephone call in case of an emergency.

FOURTH SEMESTER CLINICAL EXPERIENCES

PREREQUISITES

The fourth semester of the MLT program is a professional clinical experience. This clinical experience consists of four classes: Pre-clinical Experience, Clinical Experience 1, Clinical Experience 2, and the Clinical Portfolio. In order to participate in these clinical experiences, the student must have:

1. Maintained an overall grade point average of 2.0 or better.
2. Obtained a C or better grade for each program course (designated 513) and each support science course (University Microbiology, 806-273; General Anatomy and Physiology, 806-206; and General, Organic and Biological Chemistry, 806-201).
3. Satisfactory completion of all required courses up to the fourth semester of the program.
4. Exhibited satisfactory affective behaviors as outlined by the *MLT Professional Behavior Evaluation*.
5. Exhibited satisfactory punctuality and attendance.
6. Received a 2-step TB skin test within 6 months of beginning the clinical rotation. Written results must be on file in the School of Health Education. TB skin tests can be done by Student Health Services for free for registered students or can be performed by the student's physician.
7. Students are eligible to enroll for insurance through the WTCS for a nominal semester fee.

In addition to the previous requirements, the student must:

1. Be currently enrolled in the program.
2. Carry professional and general liability insurance during the clinical rotation. (The college purchases this on behalf of the student.)
3. Have a completed physical health form on file with Certified Background Check.
4. Have CPR certification on file with Certified Background Check.
5. Have a Wisconsin Caregiver Background Check on file with Certified Background Check.
6. Show evidence of current personal health insurance coverage.
7. Have an up-to-date student information form stating current address, health insurance information, etc. on file in the School of Health Education office.
8. Sign a release form granting Madison College permission to send the *Personal Health History* form, *Student Information* form and information obtained through the *Caregiver Background Check* process to the affiliating agency at which he/she will be completing his/her clinical rotation.

COURSE OUTCOMES

Following successful completion of the Clinical Experiences (513-151, 152), the student will be able to:

1. Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria.
2. Perform preventative and corrective maintenance of equipment and instruments according to predetermined criteria.
3. Collect and process biological and other specimens.
4. Perform and report results of Medical Laboratory tests.
5. Apply laboratory results to diagnosis of clinical conditions and/or diseases.
6. Monitor and evaluate quality control in the laboratory.
7. Practice laboratory safety and regulatory compliance.
8. Communicate with colleagues and patients in a professional manner.
9. Perform information processing in the Medical Laboratory.
10. Model professional behaviors, ethics, and appearance.

DESCRIPTION OF THE CLINICAL EXPERIENCES

The professional clinical experiences are a 17-week rotation that begins at the start of the fourth semester at Madison College. The first five weeks are spent on campus at Truax, while the last 12 weeks occur at the students' designated clinical sites.

ON-CAMPUS CLINICAL EXPERIENCE

During the first three weeks of the experience, students participate in a variety of meetings, workshops, and lectures on-campus. These include:

- Meetings to review policies and procedures related to the clinical experience
- Technical workshops designed to review theory and reinforce skills learned during the first 3 semesters of the program and to provide students with the opportunity to multitask, prioritize workload, and practice teamwork skills. Some technical workshops will introduce new skills, such as specialized blood banking procedures, resume writing and interview techniques.
- Lectures addressing various clinical topics, such as proficiency testing, test method validation, viral testing, etc.
- A comprehensive serology exam covering immunology topics and the study of antibodies and antigens in serum (serology).

AFFILIATING AGENCY CLINICAL EXPERIENCES I & II

At the beginning of the fourth week of the clinical semester, students report to their designated affiliating agencies for the next 12 weeks. While at the clinical agency(ies), students are supervised by clinical faculty. Objectives and evaluations prepared by MLT program faculty, guide the students' clinical learning experiences. MLT program faculty monitor student progress and communicate regularly with MLT students and clinical faculty via telephone, email, site visits, and the clinical experience website. Other requirements of the clinical experience are as follows.

- Comprehensive examinations covering the major areas (chemistry, hematology, blood bank, microbiology, and urinalysis) are taken at the clinical site upon completion of that specific section rotation. All examinations are prepared and graded by MLT program faculty.
- A case study involving at least three laboratory sections is completed during the clinical experience with the assistance of their clinical supervisor. Students present their case studies at their clinical site and again at Madison College for the rest of the students and faculty at the end of the semester.
- Students complete their Capstone Course during their clinical experiences. Clinical Portfolios must be submitted by the end of the semester for program completion.

Students must be aware that the clinical experience semester is scheduled for 8 hours per day, 5 days per week. There will be time off for spring break.

Only those students who exhibit appropriate academic, safety and professional behaviors will be allowed to participate in the affiliating agency clinical experience.

ATTENDANCE DURING THE CLINICAL EXPERIENCES

ON-CAMPUS CLINICAL EXPERIENCE

Students are required to attend all on-campus meetings and lectures and participate in the technical workshops. A student who fails to attend any meeting or lecture or to participate in any workshop without a reasonable and valid excuse will not be allowed to proceed in the clinical experience and will automatically fail the course. In the event of an excused absence, an "incomplete" will be recorded until the meetings and/or activities are completed and all requirements are fulfilled. A student will not graduate from the program and cannot take the certification examination until the "incomplete" is removed.

AFFILIATING AGENCY CLINICAL EXPERIENCE

Regular attendance at the clinical site is necessary to allow the student to achieve the level of knowledge, technical expertise and professionalism required for an entry level MLT position. Therefore, attendance will be monitored closely.

1. The affiliating agency must be notified at least one hour prior to your scheduled start time that you will be absent. Failure to do so may result in your being withdrawn from the agency.
2. Arrangements for making up missed time should be made with the affiliating agency and approved by the MLT faculty. Time can be made up by extending the day, coming in on a weekend, or by extending the length of the clinical rotation.
3. For each absence, a ***Student Absence Report*** must be completed by the affiliating agency and forwarded to Madison College School of Health Education office immediately via FAX at (608)246-6013.
4. ***Absences during the Clinical Experience may result in extended time or disciplinary action.***

CLINICAL SITE PLACEMENT

CLINICAL SITES

The MLT program has a number of excellent clinical sites in Madison and throughout the state of Wisconsin. A list of clinical sites is posted on the MLT website. Students should be aware that not all sites on the list are available every semester. Students also must realize that there is a possibility that they may be placed outside the Madison area for their clinical experiences and that their clinical experience may occur at more than one site.

PLACEMENT PROCEDURE

Clinical site selection occurs during the third semester of the MLT program. The selection process is as follows:

1. The clinical coordinator will announce which clinical sites will be available for the clinical experience. Students will have an opportunity to gather information about the available sites and discuss placement options with the clinical coordinator.
2. After announcement of the available sites, students who will be completing all prerequisites for the clinical experience during the current semester will be allowed to indicate their top three

clinical site preferences to the clinical coordinator. The clinical coordinator will then assign each student to an available site, taking into account student preferences. Although every effort will be made to accommodate student preferences, many other factors are involved in clinical site assignment, and there is no guarantee that a student will be assigned to one of their top three choices.

The following conditions apply to the clinical experience placement procedure:

1. No special consideration will be given by the MLT faculty to students who are married, have children, or may experience other difficulties related to the location of the clinical site (i.e., lack of transportation or a need to relocate), when determining clinical placements.
2. Special consideration will be given to students who have diagnosed disabilities or documented special needs that will require specific accommodations during the clinical experience.
3. When there are more qualified students than there are available clinical sites, a lottery will determine those students who will be placed. **Those students who cannot be placed will be put on an alternate list and given a site when one becomes available, or will be matched with available sites the following semester.**
4. Changes in affiliation assignments by the affiliating agency may occur up to 30 days prior to the beginning of the clinical experience. Therefore, students should make only tentative or non-binding commitments until a firm agreement has been reached between the school and the affiliating agency.
5. If a clinical site becomes available as a result of a student's inability to complete all prerequisites for the clinical experience, another student may be given the opportunity to choose the surrendered site if the late change is acceptable to the affiliation agency involved, the MLT program director, and the MLT clinical coordinator.
6. If a student chooses not to take the affiliation site assigned to him/her during the clinical site selection process, he/she may participate in the affiliation site selection process the following semester only after all other students have **finalized** their site selections.

CLINICAL FACILITIES

Our clinical facilities are located throughout our district. On unique circumstances we will use some additional listed facilities.

Beaver Dam Community Hospital
Covance Laboratories, Inc
Dean Clinics
Divine Savior Hospital
Fort healthcare
GHC Clinics
Janesville Mercy Health
Mercy East Clinic, Janesville
SSM Health, Janesville
Meriter Unity Point Lab
Prairie Clinic, Sauk City
Prairie Ridge Community Hospital
Reedsburg Area Medical Center
Sauk Prairie Healthcare, Prairie du Sac
SSM Health Baraboo
SSM Health – St Mary's Hospital, Madison
Stoughton Hospital
Upland Hills Health, Dodgeville
UW Health –Central, Beaver Dam, Verona, Mt Horeb, Belleville, Odana, Deforest
University Hospital & Clinics

UW Health West, East Clinic
UW Health American Center
Watertown Regional Medical Center
Wm S Middleton Memorial Veterans Hospital

PARTICIPATING IN THE CLINICAL EXPERIENCE ON A PROBATIONARY BASIS

A student who has had chronic attendance problems or has demonstrated unprofessional behaviors while at Madison College may be denied clinical experience placement. The MLT faculty and School of Health Education dean will make this decision. If the student has been showing recent improvement in the problem area(s), he/she may be allowed to attend clinical experience on a probationary basis. The MLT faculty, the School of Health Education dean and the affiliation site supervisor will determine the conditions of the probation and summarize these conditions in a written document. The student must agree to the conditions of the probation by signing the written documentation in order to be placed at an affiliation site.

DISCIPLINARY ACTION, SUSPENSION, AND DISMISSAL

The clinical experience is a privilege extended to us by the clinical facilities involved. During the rotation, students are expected to conduct themselves in a professional manner and to abide by the affiliating agency's standards for performance. Failure to do so may result in the affiliating agency and/or Madison College initiating disciplinary action that could lead to suspension and/or dismissal of the student from the affiliating agency and/or MLT program.

Disciplinary action, suspension, or dismissal can occur for a variety of reasons other than race, creed, color, sex, age, marital status, or national origin. These reasons include:

1. Unprofessional conduct or behavior including, but not limited, to:
 - a. Prefabricating laboratory results
 - b. Breach of patient confidentiality
 - c. Appearance on the job under the influence of drugs and/or alcohol
 - d. Disruption in patient care of the clinical laboratory
 - e. Dishonesty (cheating, plagiarism, etc.) or knowingly furnishing false information to the affiliated agency or Madison College

2. Repeated technical, clerical, or safety errors
The procedure that will be followed in the event that the student commits repeated significant technical errors, repeated significant clerical errors or fails to follow protocols and risks the safety of the student, peers or faculty, either in regards to phlebotomy or laboratory procedures is as follows.
 - a. The student will be given a written warning, and arrangements will be made for an additional learning experience that is appropriate for the error(s) made.
 - b. If the errors continue, the student may be suspended for a period of time or dismissed from the program, according to recommendations from the clinical faculty and Madison College instructors.
 - c. If further significant technical, clerical or safety errors occur, those errors, errors may result in dismissal from the clinical site and/or program.

The ***Student Disciplinary Action Report*** will be used to document unacceptable performance and begin the disciplinary action procedure.

STUDENT RESPONSIBILITIES DURING THE CLINICAL EXPERIENCE

1. The student shall dress professionally and abide by the dress code of the program. Madison College students wear Scrubs, Black bottoms and red tops, while at the clinical experience, and must wear their Madison College nametags.
2. The student will demonstrate responsibility for his/her education by:
 - a. Preparing for each clinical section rotation by reviewing applicable principles and procedures prior to and during the rotation.
 - b. Completing assignments required by Madison College faculty and returning them to the Madison College instructors at the end of the rotation.
 - c. Distributing evaluation forms to the affiliation education coordinator at the beginning of the clinical rotation and following up as needed to assure that the evaluations are completed, reviewed, signed, and returned to Madison College in a timely manner.
 - d. Performing satisfactorily on assignments and tests administered by the affiliating agency.
 - e. Completing weekly self-assessments and reviewing them with the clinical site instructor.
3. The student is expected to follow the policies and procedures, including safety policies, and perform up to the laboratory's standards of acceptable performance.
4. The student must follow the schedules established by Madison College and the affiliating agency, and make up all absences as requested by the MLT program director and affiliating laboratory education coordinator.
5. The student must understand that he/she is a guest of the affiliating agency and may be dismissed if his/her performance is not compatible with the laboratory's standards for quality.
6. The student will behave in a professional manner by demonstrating the desirable behaviors identified in the ***Professional Behavior Evaluation***.
7. The student should be aware that he/she is covered by professional liability insurance carried by Madison Area Technical College.
8. The student is responsible for his/her own health insurance, and must provide documentation that he/she is insured. Note: For students who do not have health insurance, an insurance policy is available to them through WTCS for a nominal fee added to the semester tuition.

GRADING POLICY

Each Clinical Experience course (513-141, 151 & 152) is assigned a grade. The grade is determined from completion of assignments, the clinical evaluations (including evaluations for technical skills, general laboratory skills, and professional behaviors), the case study, and the clinical examinations. The grading policy is explained in depth in the Clinical Experience Manual that is purchased by students prior to the beginning of the fourth semester clinical experience. Capstone (10-513-153) is graded pass/fail.

CLINICAL EXAMINATION POLICY

Comprehensive examinations covering the five major areas (chemistry, hematology, blood bank, microbiology and urinalysis) are taken at the clinical site upon completion of the specific section rotations. The serology/immunology comprehensive exam is taken at the end of the Pre-clinical Experience, before students leave for their off-campus clinical rotations. The examinations are prepared and graded by MLT program faculty. They cover all course information for each laboratory section.

REPEATING OR EXTENDING A SECTION ROTATION

The student must maintain a minimum grade of C during the clinical experience rotation. If a student receives less than a C in any one section of the clinical experience rotation, he/she will be required to repeat the section in order to raise the grade to a C or better. If the student is unable to raise the grade to a C or better after repeating the section, the student will be dropped from the clinical experience course. If the student wishes to continue in the program, he/she will be required to do the following in order as listed:

1. Audit the specific course(s) at Madison College that relate to the failed rotation(s). The student will only be permitted to register if there is laboratory space available.
2. Follow the faculty recommendations to either repeat the entire clinical experience or repeat only the rotation(s) that were graded less than a C.

In the event that a student does not fulfill all requirements of a given section in the time allowed for the section rotation, the student may be allowed to extend the rotation. Extension of the rotation will be allowed only in those circumstances where the student is performing satisfactorily overall, but is unable to complete all requirements in the time allowed. If overall performance is unsatisfactory, the section must be repeated as described above.

The decision whether to extend or repeat a section is made by the MLT faculty after conferring with the clinical faculty. The repeat rotation may be scheduled at a different clinical site.

SERVICE WORK POLICY

The major emphasis of the clinical experience is to help students achieve career entry competencies. Once these competencies are achieved, repetition of procedures, techniques and skills should be limited to periodic reinforcement. After demonstrating proficiency in a particular area, students may be permitted to perform laboratory work under qualified supervision. Students should not, however, be substituted for regular staff.

Students are not required to perform work outside the regular academic hours. In the event that a student loses time from the rotation due to absence, he/she may choose to schedule make-up time outside of regular academic hours. The schedule for making up lost time must be jointly agreed upon by the student and the clinical site's education coordinator.

Students who have elected to seek employment at the affiliating laboratory during the clinical experience rotation must schedule job hours outside of the hours designated for the clinical experience rotation. Job performance as an employee of the affiliating laboratory should not affect the content or duration of the student's clinical experience rotation, nor should it influence the evaluation of the student's performance during the clinical experience rotation.

CERTIFICATION

Students who successfully complete the program may sit for the Medical Laboratory Technician MLT(ASCP) Board of Certification (BOC) exam offered by the American Society for Clinical Pathologists. Specific information concerning this exam is presented to students during the first semester MLT mandatory Lunch and Learn seminar, the Clinical Experience orientation meeting and is available on-line in the Blackboard courses for the Clinical Experience and Clinical Portfolio courses and also at www.ascp.org. Graduation from the program is not contingent upon passing the BOC exam. Program graduates are able to seek an MLT position and begin employment prior to taking the certification exam. However, based upon the employer's policies, continued employment may be contingent upon successful completion of an exam and official certification as MLT(ASCP).

CODE OF ETHICS

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

PLEDGE TO THE PROFESSION

I. Duty to the Patient

Medical laboratory professionals are accountable for the quality and integrity of the laboratory services they provide. This obligation includes maintaining individual competence in judgment and performance and striving to safeguard the patient from incompetent or illegal practice by others. Medical Laboratory professionals maintain high standards of practice. They exercise sound judgment in establishing, performing and evaluating laboratory testing.

Medical laboratory professionals maintain strict confidentiality of patient information and test results. They safeguard the dignity and privacy of patients and provide accurate information to other health care professionals about the services they provide.

II. Duty to Colleagues and the Profession

Medical laboratory professionals uphold and maintain the dignity and respect of our profession and strive to maintain a reputation of honesty, integrity and reliability. They contribute to the advancement of the profession by improving the body of knowledge, adopting scientific advances that benefit the patient, maintaining high standards of practice and education, and seeking fair socioeconomic working conditions for members of the profession.

Medical laboratory professionals actively strive to establish cooperative and respectful working relationships with other health care professionals with the primary objective of ensuring a high standard of care for the patients they serve.

III. Duty to Society

As practitioners of an autonomous profession, Medical laboratory professionals have the responsibility to contribute from their sphere of professional competence to the general well being of the community.

Medical laboratory professionals comply with relevant laws and regulations pertaining to the practice of medical laboratory science and actively seek, within the dictates of their consciences, to change those which do not meet the high standards of care and practice to which the profession is committed.

As a Medical Laboratory professional, I strive to:

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

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