

MEDICAL LABORATORY TECHNICIAN PROGRAM

NORTHEASTERN OKLAHOMA A&M COLLEGE

200 I Street N.E.

Miami, OK 74354

ASSOCIATE IN APPLIED SCIENCE DEGREE

ABOUT THE PROGRAM

PROGRAM DESCRIPTION: A Medical Laboratory Technician (MLT), also called a Clinical Laboratory Technician (CLT), performs routine tests in all areas of the clinical laboratory. An MLT assists the physician in the diagnosis, monitoring or treatment of disease by performing testing on blood and body fluids. This skilled individual must be dedicated and self-motivated to perform laboratory tests efficiently and accurately for high quality patient care. Attention to detail and logical sequencing of lab procedures is required.

NEO is the only college in Oklahoma to offer two formats for the MLT program courses:

A. TRADITIONAL LABS: Students enrolled in the hybrid program will complete theory online and labs on campus in the Osborn Science Lab building room 104. Students will be on campus Tuesdays and Wednesdays from 9:00 am to 11:59 am. Additional labs will be on ZOOM Monday and Thursday from 9:00 am to 11:59 am.

B. BLENDED HYBRID: Students enrolled in the distance program will complete theory online and labs both online and on campus. The campus labs for distance students will total six days during the semester: two days at the beginning, two days midterm and two days at the end of the semester (**BOTH** Fall and Spring semesters).

All students participate in clinical experiences in medical facilities for 4 rotations, with a total of 12 weeks (about 3 months) at 40 hours each week. Qualified students are accepted into the program provided contracts with suitable labs for clinical practicums are available. After clinical experiences, all students are required to return to campus for a one-day end-of-program review.

CLINICAL PRACTICE ROTATIONS

MLT Students perform four clinical practice rotations in area hospital laboratories. Clinical rotations are conducted eight hours per day, on day shift, five days per week (Monday through Friday). The first clinical experience will take place at the end of final fall semester of the program for 3 weeks. The last three clinical experiences will take place the second eight weeks of the final Spring semester of the program. Students are normally assigned to clinical rotations in more than one hospital laboratory in order to enhance their potential for employment and to experience different work environments.

CLINICAL PRACTICE I

PRACTICE II

CLINICAL PRACTICE III

CLINICAL PRACTICE IV

HEMATOLOGY/COAGULATION CLINICAL

BLOOD BANK

CLINICAL CHEMISTRY

MICROBIOLOGY

Note: During clinical practice rotations students should never be used in place of regular employees. Upon admission to the program students will receive more information regarding this in their handbooks. Clinical staff and students are also reminded of this when they are given their Clinical Experience Handbook.

APPLICATION PROCEDURE:

Apply to NEO A&M College by selecting the yellow "APPLY" button on the homepage www.neo.edu. Follow the onscreen instructions.

PROGRAM ADMISSION

Apply to the MLT program before March 1st of each year. The MLT Program Application is on the <http://www.neo.edu/MLT> website.

Submit applications, transcripts and immunizations by mail to Mitzie Miller, Director, MLT Program, Northeastern Oklahoma A&M College, 200 I Street N.E., Box 3900 Miami, OK 74354 or deliver to Mrs. Miller in Room 104B, Science Lab building. Mrs. Miller can be contacted by phone at (918) 540-6307 or email at mitzie@neo.edu.

CLASS SIZE

Class size is variable, based on availability of sites for clinical training and employment projections of area hospitals. Maximum on campus class size is normally 12 campus students and 12 distance students. Should there be more students than there are clinical sites available, the MLT Program Director will select students for clinical experience based upon their selection criteria.

- a. **Distance Program:** Class size is also limited by the ability to locate a hospital laboratory in the student's geographic area that will provide clinical experience to the student.
- b. **Teacher to Student Ratio:** Online delivery of theory is 1 teacher to 24 students. Lab sessions are 2 instructors to 12 students.

PROGRAM ADMINISTRATION

PROGRAM DIRECTOR

The Program Director must meet the NAACLS qualifications, which include a Master's Degree, hold a nationally recognized certification as a generalist and at least three (3) years' experience in Clinical Laboratory Science Education. The director must also have knowledge of current accreditation and certification procedures. The Program Director reports to the Department Chair of Nursing, Allied Health and PE and has teaching and administrative responsibilities.

The responsibilities of the Program Director include the following:

- Manage MLT admissions process
- Chair of the MLT Advisory Board.
- Establish MLT program policies.
- Prepare teaching assignments and schedules for program faculty and staff
- Participate in preparation of departmental budget
- Approve purchase order of supplies and equipment
- Evaluate adjunct faculty and staff
- Periodically evaluate program effectiveness
- Coordinate orientation of new MLT students • Responsible for maintaining NAACLS accreditation.

- Recommend students for admission, retention, promotion and graduation

PROGRAM FACULTY

Adjunct faculty are required to have a bachelor degree, a degree from a NAACLS accredited medical lab program and hold a nationally recognized certification in the Medical Laboratory Field.

Full-time program Faculty are required to have a master's degree at least a bachelor degree from a NAACLS accredited medical lab program and hold a nationally recognized certification in medical lab science.

The responsibilities of the full-time college faculty include the following:

- MLT program curriculum development.
- Develop all MLT course objectives
- Instruct, test and evaluate students in laboratory and lecture
- Academic advisement of all MLT students.
- Participate in recruitment activities.
- Provide career counseling for MLT students
- Member of the established college committees
- Maintenance of the student laboratory
- Clinical coordinator and liaison with clinical affiliates
- Participate in evaluating and selecting text books and other educational resources
- Sponsor the MLT Club
- Recommend the purchase of supplies and equipment

LAB ASSISTANTS

The program lab assistant are required to hold at least an MLT degree from a NAACLS accredited medical lab program.

The responsibilities of the lab assistant is to coordinate with the director to prepare, set up, assist the instructor, teach, and break down student lab sessions.

Clinical Affiliate Instructors

The responsibilities of the clinical affiliate instructors are required to hold a degree from a NAACLS accredited medical lab program. Duties include the following:

- Coordinate the students' activities during the clinical rotation
- Demonstrate and teach techniques which the students
- Encourage student to refine skills
- Instruct students in clinical relevance of lab results
- Instruct the students in the use of the laboratory information system
- Evaluate the technical competencies of the students
- Evaluate the professional competencies of the students
- Provide input into curriculum development
- Provide input for evaluation of program effectiveness.

SELECTION CRITERIA

Students must complete all required non-medical laboratory technician courses prior to beginning the MLT courses. Students must have an overall grade point average of 2.0 or higher and must have achieved a minimum grade of "C" in the required chemistry course, anatomy and physiology or zoology course, immunology and serology course, medical laboratory operations, and microbiology course. Additionally, applicants must submit a formal Medical Laboratory Technician Program Application, submit required transcripts, submit ACT scores, be eligible for admission at Northeastern Oklahoma A&M College, and remove any academic deficiencies as assessed by the College assessment plan in order to be eligible for admission to the MLT Program. Laboratory and clinical space is limited. In the event that the number of qualified applicants exceeds the capacity to serve the students in the laboratory and/or clinical setting, a point process will be used to select the applicants for admission.

Applicants will be ranked based on point totals.

Possible point total = 146

1. GPA in all general studies and science courses listed in the MLT curriculum = 136 possible points
2. Fifteen (15) semester credit hours taken at NEO college = 5 points
3. Credit for passing science pre-requisite courses first time (C or better) = 5 points

No person shall be excluded from or be subject to discrimination in the Medical Laboratory Technician Program at Northeastern Oklahoma A&M College on any basis prohibited by applicable law. No regard will be given to race, color, creed, religion, sex, national origin, disability or status as a veteran for admission to or progression through the MLT Program.

NOTIFICATION OF ACCEPTANCE

Notification will be mailed by June 1ST of each year.

GRADE REQUIREMENTS

A. Students must have an overall GPA of 2.0 and a minimum grade of C or better in prerequisite science courses (Chemistry, Anatomy and Physiology, Microbiology).

B. Students must also maintain a minimum grade of "C" or better in all MLT Program courses to remain in the program.

Grading Scale: A

- 93.0% - 100%

B - 85.0% - 92.9%

C - 77.0% - 84.9%

D - 67.0% - 76.9%

F - 66.9% and below

A grade of 77% or above is required for any MLT course. If the grade of "C" is not achieved in one or more courses the student will not be allowed to continue to the following semester.

Grading for each Clinical Practicum will be according to the following criteria:

60% of grade for Clinical Competencies (Psychomotor Objectives) 15% of grade for Interpersonal Competencies (Affective Objectives) 25% of grade for internet assignments and quizzes.

- A - 93.0% - 100%
- B - 85.0% - 92.9%
- C - 77.0% - 84.9%
- D - 67.0% - 76.9%
- F - 66.9% and below

If a student receives a grade of less than a "C" in any Clinical Practicum, he/she may enroll the next time the class is offered but must obtain permission of the Director of the MLT Program. See also "Probation Policy." Students may only repeat one Clinical Practicum because of a grade less than 77%.

PHYSICAL AND MENTAL ESSENTIAL REQUIRMENTS

In order to successfully progress through the Medical Laboratory Technician Program and function as a practicing medical laboratory technician upon graduation, an individual must be able to perform certain physical and mental tasks*. These tasks may require the following skills:

Communication:

- Communicate effectively in written and spoken English.
- Comprehend and respond to both formal and casual conversation; which includes but is not limited to person to person, by telephone, and in writing.

Visual:

- Differentiate color changes during the performance of laboratory procedures.
- Observe patient's condition during phlebotomy procedures.
- Read laboratory instruments technical procedure manuals, standard operating procedures, and information system computer screen.
- Identify and distinguish objects macroscopically and microscopically.
- Read charts, graphs, and instrument scales/readout devices.

Physical:

- Move freely from one location to another in physical settings such as the clinical laboratory, patient care areas, corridors, and elevators.
- Stand on your feet for extended periods of time.
- Lift and move objects of at least 40 pounds
- Possess sufficient eye-motor coordination to allow delicate manipulations of specimens, instruments, and tools.
- Possess a sense of touch and temperature discrimination. **Behavioral and Social Skills:**
- Able to follow written and verbal instruction.
- Show respect for self and others.
- Demonstrate professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals, and the public.
- Maintaining alertness and concentration while working under time constraints.

- Work safely with potential chemical, radiologic, and biologic hazards using universal precautions.
- Project an image of professionalism including appearance, dress, and confidence.
- Exhibit the psychological health required for full utilization of abilities.

Reasoning Abilities:

- Recognize factors that affect procedures and results and take appropriate actions within predetermined limits when corrections are indicated.
- Prioritize requests and work concurrently on at least two different tasks.
- Monitor quality control within predetermined limits.
- Apply basic scientific principles in learning new techniques and procedures relating laboratory findings to common disease processes.
- Perform preventive and corrective maintenance of equipment and instruments or refer to appropriate source for repairs.
- Possess and apply mathematical skills.
- Recognize emergency situations and take appropriate actions.

****Americans with Disabilities Act Policy Statement:***

The Americans with Disabilities Act (ADA) is a Federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the ADA Coordinator Carla Murphy. Carla can be reached by phone: 918-540-6969 or email: carla.murphy@neo.edu. Her office is in Shipley Hall 309

NEO A&M COLLEGE MISSION STATEMENT

Northeastern Oklahoma A&M College is dedicated to providing opportunities that promote excellence in learning, service, and leadership in a global society.

MLT PROGRAM MISSION STATEMENT

The mission of the NEO College Associate in Applied Science Degree in medical laboratory technician is to prepare traditional and nontraditional students to successfully move into the profession of medical laboratory technician.

MLT PROGRAM GOALS AND OBJECTIVES The

MLT Program Mission is obtained by the following objectives:

- Provide a curriculum that will produce a laboratory technician that is competent in handling technical procedures, reliable, and adept in handling interpersonal relationships with patients, peers, and other healthcare professionals. This curriculum will meet the requirements for an Associate of Applied Science Degree as set forth by the College and for an MLT as set forth by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
- Provide an efficient monitoring and feedback system for students so he/she may realistically evaluate his/her progress and potential.
- Provide qualified program and clinical instructors.

- Encourage leadership and professional advancement.
- Promote the profession of medical laboratory science in the community.
- Assess program effectiveness at the classroom, program, and institutional level.
- Promote continuing education seminars for students and laboratory professionals.
- Provide clinical experience in affiliate facilities.
- Continually monitor the needs of the student and clinical laboratories incorporating any changes that will provide an effective education.

Program Outcomes and Assessment Policy

Program assessment is conducted annually at several levels by various methods. MLT students are surveyed while attending NEO A&M College. These surveys are voluntary, anonymous and are based on self-perceptions. Program graduates are surveyed six months after graduation for information on transfer and employment activities. This survey also evaluates the program and clinical experiences. Program faculty members are surveyed and evaluated every year for the purpose of program review. After data is collected, the Program Director presents the assessment to the MLT Advisory Committee. Recommendations are made by the committee for any perceived changes that could be implemented. The Program Director meets with the Department Chair of Allied Health, and the Vice President of Academic Affairs to assess, develop, implement, and monitor the program changes.

The program director also evaluates the program continuously and responds to needs based on course assessments, student emails, texts, and conversations.

Instructional Program Outcomes & Assessment Plan			
Intended Outcomes	Means of Assessment	Criteria for Success	Analysis of Assessment Evidence
1. 75% of students starting the final half of the MLT program will complete the program as a competent entry level technician able to perform and evaluate routine clinical laboratory tests.	Graduation Rate	75% of students starting the final half of the program will complete graduation requirements.	
2. 75% of graduates taking the national certification exam will pass, meeting or exceeding the minimum standard of 400 within one year of graduation.	Certification Pass Rate	75% of graduates taking the national certification exam will pass, meeting or exceeding the minimum standard of 400 within one year of graduation.	

3. Within six months of graduation, 80% of graduates seeking employment in the laboratory field will be employed and/or continue their education in the Medical Laboratory Profession	Six Month Graduate Surveys	Within six months of graduation, 80% of graduates will report employment in the laboratory field and/or continuing their education in the laboratory field on six month student surveys	
4. 85% of employers and graduates will report satisfaction with educational preparation.	Six Month Graduate Surveys Six Month Employer Surveys	85% of graduates and employers will report satisfaction with educational preparation. This will be assessed through the evaluation of six month employer and student surveys.	
5. 100% of students will complete the HIPAA Module and Exam with a score of 80% or better	MediaLab CE (Continuing Education) HIPAA Exam	100% of students will complete the HIPAA Privacy and Security Exam on D2L with a score of 80% or better	
6. The average final grades for both hybrid and distance delivery of the program will be comparable within 5% of one another.	Program Grades	An average of hybrid student grades and distance student grades will fall within 5% of one another	

CURRICULUM

Section A: Gen. Ed. Requirements - 19 hours

Freshman Composition I (3)

Freshman Composition II (3)

American History (3)

American Government (3)

General Psychology (3)

Anatomy & Physiology or Animal Biology (4)

Program Requirements - 47 hours

Section B: Technical/Occupational Support – 12 hours

Chemistry for Health Science, Principles of Chemistry or General Chemistry I (4)

Introduction to Microbiology (4)

Immunology and Serology (4)

Section C: Technical/Occupational Specialty - 38 hours

Medical Laboratory Operations	
Basic Hematology	
Phlebotomy, Urinalysis & Body Fluids	
Clinical Chemistry	
Pathogenic Bacteriology	
Molecular Diagnostics	
Immunohematology	
Clinical Practice I	
Clinical Practice II	
Clinical Practice III	
Clinical Practice IV	
Total Hours	69

Cost of Attendance

Tuition, general fees, room, and board costs are available on the NEO College website www.neo.edu, under Admissions:

	Oklahoma Resident	Non-Resident
General Tuition Fee	\$99.00	\$99.00
Out-of-State Tuition Fee*	-----	\$205.00
Student Activity Fee	\$25.00	\$25.00
Student Assessment Fee	\$2.00	\$2.00
Student Technology Services Fee	\$10.50	\$10.50
Library Automation & Materials Fee	\$1.65	\$1.65
Student Government Fee	\$2.00	\$2.00
Student Union Fee	\$11.50	\$11.50
Intramural Fee	\$1.00	\$1.00

Facility Fee	\$8.35	\$8.35
Infrastructure Fee	\$2.25	\$2.25
Student Health Fee		
Total Per Semester Credit Hour	\$163.75	\$368.75

**Out-of-State Tuition Fee waivers are available for qualifying students.*

SPECIAL FEES

As of 09/01/2020

FEES ASSESSED PER SEMESTER HOUR

	Fee Amount
Academic Service Fee`	\$4.00 per semester hour
Advanced Standing Exam (departmental)	\$5.00 per semester hour
Developmental/Remedial Courses	\$40.00 per semester hour
Music Lessons	\$60.00 per semester hour
Off-campus Courses, Excluding Grove Center	\$20.00 per semester hour
Online Courses	\$40.00 per semester hour

PROGRAM COSTS

MLT students incur costs associated with the program in addition to normal college expenses for tuition, fees, books, housing, meals, etc. The following is a list of estimated additional expenses incurred by MLT students.

Liability Insurance	\$19.00
Criminal History Background Check	
Drug Screen	
Immunization tracker	\$128.00
Cardiopulmonary Resuscitation (CPR) Certification	\$35.00
Name Tag	\$3.00
MLT lapel pin	\$36.00
Tablet or iPad	\$400.00
Books and Supplies (MLT course)	\$785.00 (approximately)
Heptavax Vaccine	\$150.00
MMR TB Skin Test	\$10.00
Professional Membership	\$25.00
Board of Certification Exam	\$215.00

Physical Examination

\$45.00 (may vary)

These fees are subject to changes without notice.

MLT students are responsible for their own transportation to the clinical sites. Lab Coats will be furnished by the MLT program for the student labs.

Students are responsible for any expenses associated with sitting for the certification examination upon graduation from the MLT Program.

POINT OF CONTACT: Mitzie Miller, M.Ed., MLS(ASCP); Director, MLT Program; Phone: 918 540-6307; Cell: 918 533-2989; Email: mitzie@neo.edu

Teach Out Plan

In the event that the MLT Program should need to discontinue or in the case of catastrophe at Northeastern Oklahoma A&M College, in accordance to NAACLS accreditation rules and regulations, the following proposed protocols would come to affect.

The College will continue to provide the necessary resources and support to the professional medical laboratory technician program in meeting all requirements.

The Administration, Department Chair, Program Director and Faculty of the NEO A&M College MLT Program will continue to adhere to and remain accountable for complying with NAACLS while the NEO A&M College program completes the teach-out plan.

The Program will not admit additional students into the MLT Program. Currently Enrolled Students will receive didactic and clinical instruction under the curriculum plan that is currently in place.

The College administration will provide direct support to the currently appointed program director in fulfilling his/her responsibilities and duties until all students enrolled in the MLT Program have completed their studies. The College will continue to maintain open communication with all currently enrolled students. These students will be informed about the status of the program and be able to address concerns to the Vice President of Academic Affairs.

The College will provide sufficiency of resources while currently enrolled students complete their studies. Resource support provided by the College includes financial, personnel, equipment, facilities, and organizational support. The Program will maintain a sufficient number of faculty by continuing to employ, recruit and maintain qualified faculty. Documentation of faculty qualifications, licensure, continuing education and evaluations will be maintained in accordance with existing institutional practice.

The program of study will continue to consist of didactic, skills labs and clinical learning experiences.

The program curriculum will continue to be delivered on Desire 2 Learn. If the lab building is no longer available for skills lab, the students will be assigned a clinical site to complete skills lab. A sufficient number of approved clinical affiliations will be maintained in order to provide clinical experiences. The director will ensure that all clinical affiliate contracts remain current.

All current records will be maintained in a secure manner to prevent loss, destruction, or unauthorized use. All records will be maintained for the required specified time and will remain accessible to those with a need for access in accordance with required MLT Program guidelines.

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

PROGRAM ACCREDITATION: The MLT Program at Northeastern Oklahoma A&M College is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) located at 5600 N. River Rd, Suite 720, Rosemont, IL 60018. The telephone number for NAACLS is (773) 7148880 and their email address is: www.naacls.org. Students are eligible to take the certification examination offered by the American Society of Clinical Pathology (ASCP), after graduation. Successful completion of national certification is not a requirement for graduation nor awarding of the Associate in Applied Science degree.