

MEDICAL LABORATORY TECHNICIAN PROGRAM
NORTHEASTERN OKLAHOMA A&M COLLEGE
200 I Street N.E.
Miami, OK 74354

ASSOCIATE IN APPLIED SCIENCE DEGREE

1. APPLICATION PROCEDURE:

Apply to the Medical Laboratory Technician (MLT) program before March 1st of each year. The MLT Program Application is on the <http://www.neo.edu/MLT> website. Applicants must have completed all general studies and science prerequisites prior to the beginning the program. Late applications will be considered if space allows.

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.

2. 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

3. PHYSICAL AND MENTAL ESSENTIAL FUNCTIONS:

A. Communication skills

- i. Communicate effectively in written and spoken English
- ii. Comprehend and respond to both formal and conversational English
 - Person to person
 - By telephone
 - In writing
- iii. Appropriately assess nonverbal and verbal communication

B. Large and small motor skills

- i. Move freely from one location to another in physical settings such as the clinical laboratory, patient care areas, corridors, and elevators
- ii. Possess sufficient eye-motor coordination to allow delicate manipulations of specimens, instruments, and tools
- iii. Grasp and release small objects (e.g., test tubes, pipette tips, microscope slides and coverslips); twist and turn dials/knobs (e.g., on microscopes, balances, centrifuges, spectrophotometers)
- iv. Manipulate other laboratory materials (e.g., reagents, manual and automated pipettes)

C. Other physical requirements

- i. Visual acuity

- Identify and distinguish objects macroscopically and microscopically
- Read charts, graphs, and instrument scales/readout devices
- ii. Lift and move objects of at least 20 pounds
- iii. Possess a sense of touch and temperature discrimination
- D. Professional and application skills
 - i. Follow written and verbal directions
 - ii. Possess and apply mathematical skills
 - iii. Work under time constraints
 - iv. Prioritize requests and work concurrently on at least two different tasks
 - v. Maintain alertness and concentration during a normal work period
 - vi. Apply knowledge, skills, and values learned from course work and life experiences to new situations
 - vii. Work safely with potential chemical, radiologic, and biologic hazards using universal precautions
- E. Valuing skills
 - i. Show respect for self and others
 - ii. Project an image of professionalism including appearance, dress, and confidence
- F. Stability
 - i. Possess the psychological health required for full utilization of abilities
 - ii. Recognize emergency situations and take appropriate actions

4. NOTIFICATION OF ACCEPTANCE: Notification will be mailed by June 15 each year.

5. SELECTION CRITERIA: Possible point total = 114

Applicants will be ranked based on point totals.

1. GPA in all general studies and science courses listed in the MLT curriculum = 104 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

6. 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.

- A. **ON CAMPUS PROGRAM:** The theory portion of the course will be delivered online. The lab portion will be delivered on the NEO campus in the Osborn Science Lab building room 104.
- B. **DISTANCE PROGRAM:** The theory portion of the course will be delivered online. Distance students are required to be present on the NEO campus two days prior to each semester, two days mid-semester, two days at the end of each semester for final exams, and one day for end-of-program review. Qualified students are accepted into the program provided contracts with suitable labs for clinical practicums.

7. 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). 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

HEMATOLOGY/COAGULATION

CLINICAL PRACTICE II
CLINICAL PRACTICE III
CLINICAL PRACTICE IV

BLOOD BANK
CLINICAL CHEMISTRY
MICROBIOLOGY

MLT PROGRAM MISSION

The mission of the NEO A&M College Associate in Applied Science Degree in medical laboratory technician is to prepare traditional and nontraditional students to successfully move into the profession by providing entry level competencies in all areas of the clinical laboratory.

8. MLT PROGRAM GOALS AND OBJECTIVES

The primary goal of this program is to prepare students for a career as medical laboratory technicians. This goal is accomplished through the following objectives:

- A. Provide a curriculum that will produce a laboratory technician who 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.
- B. Provide qualified program and clinical instructors
- C. Provide clinical experience in affiliate facilities.
- D. Provide a curriculum that will stress critical thinking processes to prepare a students for rapidly changing instrumentation and procedures in the clinical laboratory world.
- E. Encourage leadership and professional advancement.
- F. Promote continuing education seminars for students and laboratory professionals.
- G. Promote the profession of medical technology and the allied health professions in the community.
- H. Provide an efficient monitoring and feedback system for students so he/she may realistically evaluate his/her progress and potential.
- I. Monitor the needs of the student and clinical laboratories and incorporate any changes that will provide a valid education.
- J. Continually monitor student progress and assess program effectiveness on a yearly basis.

9. 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 Grade Point Average (GPA) in MLT Program courses.

A. Distance Program: Class size is limited by the ability to locate a hospital laboratory in the student's geographic area that will provide clinical experience to the student.

10. PROGRAM LENGTH: One year; once general education and science pre-requisite courses have been completed. Four (4) MLT Program courses are taught in the Fall semester, two 8-week courses in the Spring semester followed by 12 consecutive weeks of clinical experience (rotations) at an affiliated hospital (Mid-March through the first week of June).

11. PROGRAM HOURS: MLT courses are offered online. Course labs for campus students will be conducted from 9:00 AM to 12:00 Noon Monday through Thursday. Dates and times for distance student labs will be announced at the beginning of each semester. **Clinical rotations are conducted eight hours per day on day shift only, Monday through Friday.**

12. 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) 714-8880 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.

13. CURRICULUM:

PROGRAM DEGREE REQUIREMENTS & CURRICULUM SEQUENCE

The Medical Laboratory Technician Program requires students to complete all of the required non-MLT courses prior to enrolling in the MLT courses. The prerequisite chemistry course, anatomy and physiology course, immunology and serology course, medical lab operations, and microbiology course must be completed with a grade of "C" or better.

Upon admission to the program, students enroll in the MLT courses. During the fall semester, students will take four MLT courses on-line that include an on-campus or on-campus and virtual laboratory component. The first 8 weeks of the spring semester, the students continue their on-line courses with laboratory components. During the second 8 weeks of the spring semester and during the May interim session, students are assigned to hospital laboratories in the region for the clinical practicum.

First Semester Total 69 Credit Hours

Medical Laboratory Operations MLAT 1113 3

Freshman Composition I ENGL 1113 3

American History HIST 1483/1493 3

Chemistry for Allied Health CHEM 1144 4

OR Other Chemistry Courses w/Lab

Second Semester

Freshman Composition II ENGL 1213 3

American Government POLS 1113 3

General Psychology PSYC 1113 3

Anatomy & Physiology OR BIOL 2114 4

Zoology BIOL 1604

Immunology & Serology MLAT 1414 4

Third Semester (Summer Semester)

Intro to Microbiology MCRO 2124 4

Fourth Semester (offered during Fall semester only)

Basic Hematology MLAT 1304 4

Phlebotomy, Urinalysis & Body Fluids MLAT 1313 3

Pathogenic Microbiology MLAT 2354 4

Clinical Chemistry MLAT 2344 4

Clinical Practice I MLAT 1323 3

Fifth Semester (offered during Spring semester only)

First 8 weeks

Intro to Molecular Diagnostics MLAT 2375 4

Immunohematology MLAT 2374 4

Second 8 weeks

Clinical Practice II MLAT 1333 3

Clinical Practice III MLAT 2373 3

May Interim Session

Clinical Practice IV MLAT 2383 3

Clinical Practice IV MLAT 2383 3

Section A: Gen. Ed. Requirements - 19 hours
Freshman Composition I (3)
Freshman Composition II (3)
American History (3)
American Government (3)
General Psychology (3)
Animal Biology or Anatomy/Physiology (4)
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 (3)
Basic Hematology (4)
Phlebotomy, Urinalysis & Body Fluids (3)
Clinical Chemistry (4)
Pathogenic Bacteriology (4)
Molecular Diagnostics (4)
Immunochemistry (4)
Clinical Practice I (3)
Clinical Practice II (3)
Clinical Practice III (3)
Clinical Practice IV (3)
Total Hours
69

14. COLLEGE TUITION AND FEES: Tuition, general fees, room and board costs are available on the NEO College website www.neo.edu, under Admissions. Additional fees include, but are not limited to:

	Oklahoma Resident	Non-Resident
General Tuition Fee	\$90.50	\$90.50
Out-of-State Tuition Fee*		\$193.00
Student Activity Fee	\$20.00	\$20.00
Student Assessment Fee	\$2.00	\$2.00
Student Technology Services Fee	\$10.50	\$10.50
Library Automation & Materials Fee	\$1.40	\$1.40
Student Government Fee	\$2.00	\$2.00
Student Union Fee	\$11.50	\$11.50
Intramural Fee	\$1.00	\$1.00
Facility Fee	\$7.35	\$7.35
Infrastructure Fee	\$2.00	\$2.00

Total Per Semester Credit Hour \$148.25 \$341.25

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

SPECIAL FEES

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
Campus Maintenance Fee	\$25.00 per course

PROGRAM FEES: 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	\$15.50
Criminal History Background Check (code provided)	\$75.00
Name Tag	\$3.00
Drug Screen	\$40.00
MLT lapel pin	\$36.00
Tablet or iPad	\$400.00
Books and Supplies (MLT course)	\$785.00
Heptavax Vaccine	\$150.00
MMR & TB Skin Test	\$10.00 (may vary)
Professional Membership	\$25.00
Board of Certification Exam	\$215.00
Physical Examination	\$45.00 (may vary)
Proctor U Exams	\$20.00 each (for two hour exams, up to eight exams)

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