

# Medical Laboratory Technology

## MEDICAL LABORATORY TECHNOLOGY DEPARTMENT

*The Program in Medical Laboratory Technology is accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS).*

### Associate in Applied Science (A.A.S.) Degree

Qualified personnel are needed to work for laboratories, research laboratories, pharmaceutical companies, veterinary laboratories, as well as sales and quality control. Students can find positions in hospitals and reference laboratories. Technicians perform scientific analyses that facilitate physicians' diagnoses and treatment of diseases.

#### **What will students learn if they study Medical Laboratory Technology?**

Students receive an integrated experience, with lectures and laboratory practices, both on-campus and in clinical facilities off-campus. They learn how to test specimens accurately and swiftly, with the highest ethical standards.

#### **Are there any requirements that must be satisfied before taking courses in the major?**

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course. Students must have a "C" or better in high school laboratory biology and laboratory chemistry. As a result of the student's performance on the College's placement test, he or she may need developmental coursework. All developmental coursework must be completed before they will be considered for admission to the program.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. Students who register for an average of 17 credits each semester can complete the degree in two years. Students must register for the summer session following their first year.

#### **Are there any special requirements once the student is admitted to this major?**

He or she must meet the academic standards of progress outlined on the next page to stay in the program.

#### **Questions?**

**Contact Name:** Professor Stephen Larkin, department chair

**Contact Phone:** 732.906.2581

**Contact Email:** SLarkin@middlesexcc.edu

**Department Web:** <http://www.middlesexcc.edu/academi/med>

**MEDICAL LABORATORY TECHNOLOGY**  
**Associate in Applied Science (A.A.S.) Degree - MED.AAS**

*Below are required courses and recommended course groupings and sequences for program completion.  
 Courses may have prerequisite and corequisite requirements. Check course descriptions for details.*

<b>Courses</b>	<b>Credits</b>	<b>Requisites / Comments</b>
<i>Semester I</i>		
BIO 117 Biology I <sub>1</sub>	4	Appropriate score on the College's placement test or MAT 013 and one year high school laboratory science or BIO 010 or CHM 010.
CHM 117 Chemistry I <sub>1</sub>	4	MAT 013 or appropriate score on the College's placement test and one year of high school laboratory science or departmental approval.
ENG 121 English Composition I	3	A passing score on the College's placement test or a grade of "C" or better in ENG 010.
MAT 107 Mathematics I <sub>2</sub>	3	Appropriate score on the College's placement test, MAT 013 or MAT 013A/MAT 013B or departmental approval.
MED 101 Introduction to Medical Laboratory I	2	Admission to the Medical Laboratory Technology program required or departmental approval. MED 101 is only offered in the fall.
<hr/>		
<i>Semester II</i>		
BIO 118 Biology II <sub>1</sub>	4	BIO 117
CHM 118 Chemistry II <sub>1</sub>	4	CHM 117
ENG 122 English Composition II	3	A grade of "C" or better in ENG 121
MAT 108 Mathematics II <sub>2</sub>	3	MAT 107
MED 102 Introduction to Medical Laboratory II	3	BIO 117, CHM 117, ENG 121, MAT 107, MED 101. MED 102 is only offered in the spring.
PSY 123 Introduction to Psychology	3	
<hr/>		
<i>Semester III</i>		
MED 210 Medical Laboratory Technology I <sub>3</sub>	6	BIO 118, CHM 118, ENG 122, MAT 108, MED 102, and departmental approval. MED 210 is only offered in the summer.
<hr/>		
<i>Semester IV</i>		
MED 211 Medical Laboratory Technology II <sub>5</sub>	8	MED 210. MED 211 is only offered in the fall.
BIO 211 Principles of Microbiology <sub>4</sub>	4	One year of high school laboratory biology or BIO 010 and one year of high school laboratory chemistry or CHM 010. Also appropriate score on the College's placement test or MAT 013.
CHM 201 Principles of Organic Chemistry	4	CHM 118 or equivalent
Physical Education Elective	1	
<hr/>		
<i>Semester V</i>		
CHM 202 Biochemistry	4	CHM 201
MED 212 Medical Laboratory Technology III <sub>5</sub>	8	MED 211, BIO 211. MED 212 is only offered in the spring.

**Total Credits: 71**

- BIO 123-BIO 124 and **CHM 121/CHM 125 - CHM 122/CHM 126** may be substituted for BIO 117-BIO 118, CHM 117-CHM 118 for students who meet those course prerequisites and with the chairperson's written approval.
- MAT 123-MAT 124 or MAT 129-MAT 131 may be substituted for MAT 107-MAT 108 for students who have completed two or more years of high school Algebra, with the Chairperson's written approval.
- This is an eight week, 40 hour/week summer clinical practicum.
- BIO 221 may be substituted for BIO 211.
- This includes a 16 hour/week clinical practicum.

**Medical Laboratory Technology Department Standards of Progress**

- Maintain a cumulative grade point average of 2.0.
- Must achieve a "C" grade or better in all the Medical Laboratory and science courses. Those not attaining these levels of achievement will be dropped from the program.
- May retake a science or Medical Laboratory course only once and obtain a passing grade. (i.e. "C" or better) Repeating a Medical Laboratory course is subject to the restrictions as outlined below in #6.
- Any student achieving a grade less than a "C" in a clinical MED course may not continue in the program. The clinical course with the deficient grade must be repeated, subject to the restrictions of the program as outlined below in #6. Any student failing the practicum portion of the course will fail the course.
- Must complete the MED sequence of MED 210, MED 211, MED 212, in consecutive sequential semesters as offered, i.e. MED 210 in summer, MED 211 in fall, and MED 212 in spring.
- A break in the sequence of MED 210, MED 211, MED 212 for any reason will require the student to reapply. Readmission to the MED course(s) will be determined by seat availability.
- Formal sanctions for cheating in any course will result in dismissal from the MLT program.
- The goals of the program are consistent with the college's mission of developing competencies for employment and continuing education.

**Contact Name: Professor Stephen Larkin, department chair**  
**Contact Phone: 732.906.2581**  
**Contact Email: SLarkin@middlesexcc.edu**  
**Department Web: <http://www.middlesexcc.edu/academi/med>**