

# CURRICULUM STANDARD

*Effective Term*  
*Fall 1997*  
*[1997\*03]*

Curriculum Program Title

**Medical Laboratory Technology**

Code

**A45420**

Concentration

**(not applicable)**

## ***Curriculum Description***

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take examinations given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists or the Certifying Agency. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

## ***Curriculum Requirements\****

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
<b>Total Semester Hours Credit in Program</b>	<b>64-76</b>	<b>36-48</b>	<b>12-18</b>

*\*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*

## *Major Hours*

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration** (*if applicable*). A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

### **Medical Laboratory Technology A45420**

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
<i>Minimum Major Hours Required</i>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b>	<b>46-56 SHC</b>	<b>NR</b>	
<b>Required Courses:</b>			
MLT 110 Intro to Medical Laboratory Tech	3 SHC		
MLT 111 Urinalysis and Body Fluids	2 SHC		
MLT 120 Hematology/Hemostasis	4 SHC		
MLT 130 Clinical Chemistry	4 SHC		
<b>Required Subject Areas:</b>			
<b>Microbiology. Select one set of courses.</b>			
MLT 140 Introduction to Microbiology	3 SHC		
MLT 240 Special Clinical Microbiology	3 SHC	<i>or</i>	
BIO 175 General Microbiology I	3 SHC		
MLT 141 General Clinical Microbiology	3 SHC		
<b>Anatomy &amp; Physiology. Select one course/sequence:</b>			
BIO 163 Basic Anatomy and Physiology	5 SHC	<i>or</i>	
BIO 165 Anatomy and Physiology I	4 SHC	&	
BIO 166 Anatomy and Physiology II	4 SHC	<i>or</i>	
BIO 168 Anatomy and Physiology I	4 SHC	&	
BIO 169 Anatomy and Physiology II	4 SHC	<i>or</i>	
MLT 116 Anatomy and Medical Terminology	5 SHC		
<b>Immunohematology. Select 5 SHC:</b>			
MLT 125 Immunohematology I	5 SHC		
MLT 126 Immunology and Serology	2 SHC		
MLT 127 Transfusion Medicine	3 SHC		
<i>Continued on next page</i>			

## Medical Laboratory Technology A45420 (Continued)

<p><b>Chemistry. Select one course/sequence:</b></p> <p>CHM 130 General, Organic and Biochemistry 3 SHC &amp;            CHM 130A General, Organic, and Biochemistry 1 SHC <i>or</i></p> <p>CHM 131 Introduction to Chemistry 3 SHC &amp;            CHM 131A Introduction to Chemistry Lab 1 SHC &amp;            CHM 132 Organic and Biochemistry 4 SHC <i>or</i></p> <p>CHM 151 General Chemistry I 4 SHC &amp;            CHM 152 General Chemistry II 4 SHC <i>or</i>            MLT 118 Medical Laboratory Chemistry 3 SHC</p> <p><b>Clinical Experience. Select at least 13 SHC:</b></p> <p>MLT 251 MLT Practicum I 1 SHC            MLT 252 MLT Practicum I 2 SHC            MLT 253 MLT Practicum I 3 SHC            MLT 254 MLT Practicum I 4 SHC            MLT 255 MLT Practicum I 5 SHC            MLT 256 MLT Practicum I 6 SHC            MLT 257 MLT Practicum I 8 SHC            MLT 258 MLT Practicum I 10 SHC            MLT 259 MLT Practicum I 11 SHC            MLT 282 MLT Practicum I 12 SHC            MLT 283 MLT Practicum I 13 SHC            MLT 261 MLT Practicum II 1 SHC            MLT 262 MLT Practicum II 2 SHC            MLT 263 MLT Practicum II 3 SHC            MLT 264 MLT Practicum II 4 SHC            MLT 265 MLT Practicum II 5 SHC            MLT 266 MLT Practicum II 6 SHC            MLT 267 MLT Practicum II 8 SHC            MLT 268 MLT Practicum II 10 SHC            MLT 269 MLT Practicum II 11 SHC            MLT 284 MLT Practicum II 12 SHC            MLT 285 MLT Practicum II 13 SHC            MLT 271 MLT Practicum III 1 SHC            MLT 272 MLT Practicum III 2 SHC            MLT 273 MLT Practicum III 3 SHC            MLT 274 MLT Practicum III 4 SHC            MLT 275 MLT Practicum III 5 SHC            MLT 276 MLT Practicum III 6 SHC            MLT 277 MLT Practicum III 8 SHC            MLT 278 MLT Practicum III 10 SHC            MLT 279 MLT Practicum III 11 SHC            MLT 286 MLT Practicum III 12 SHC            MLT 287 MLT Practicum III 13 SHC</p>			
<p><b>B. CONCENTRATION (<i>Not applicable</i>)</b></p>			
<p><b>C. OTHER MAJORS</b>  <i>To be selected from the following prefixes:</i></p> <p>BIO, BTC, CHM, CIS, COE, CSC, HSC, and MLT</p> <p><i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i></p>			