

PROPOSED CURRICULUM STANDARD

Effective Term
Summer 2011
[2011*02]

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 the examinations given by the Board of ~~Registry-Certification of Medical Technologists~~ of the American Society of ~~for Clinical Pathologists Pathology~~ ~~or the Certifying Agency~~. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

- 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.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

*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.

PROPOSED

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

- 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

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE	46-56 SHC	NR	
Required Courses:			
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		
Required Subject Areas:			
Microbiology. Select one set of courses.			
MLT 140 Introduction to Microbiology	3 SHC		
MLT 240 Special Clinical Microbiology	3 SHC	or	
BIO 175 General Microbiology I	3 SHC		
MLT 141 General Clinical Microbiology	3 SHC		
Anatomy & Physiology. Select one course/sequence:			
BIO 163 Basic Anatomy and Physiology	5 SHC	or	
BIO 165 Anatomy and Physiology I	4 SHC	&	
BIO 166 Anatomy and Physiology II	4 SHC	or	
BIO 168 Anatomy and Physiology I	4 SHC	&	
BIO 169 Anatomy and Physiology II	4 SHC	or	
MLT 116 Anatomy and Medical Terminology	5 SHC		
Immunoematology. Select 5 SHC:			
MLT 125 Immunoematology I	5 SHC		
MLT 126 Immunology and Serology	2 SHC		
MLT 127 Transfusion Medicine	3 SHC		
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Chemistry. Select one course/sequence:			
CHM 130	General, Organic and Biochemistry	3 SHC &	
CHM 130A	General, Organic, and Biochemistry	1 SHC <i>or</i>	
CHM 131	Introduction to Chemistry	3 SHC &	
CHM 131A	Introduction to Chemistry Lab	1 SHC &	
CHM 132	Organic and Biochemistry	4 SHC <i>or</i>	
CHM 151	General Chemistry I	4 SHC &	
CHM 152	General Chemistry II	4 SHC <i>or</i>	
MLT 118	Medical Laboratory Chemistry	3 SHC	
Clinical Experience. Select at least 13 SHC:			
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	
B.	CONCENTRATION (<i>Not applicable</i>)		
C.	OTHER MAJORS <i>To be selected from the following prefixes:</i> BIO, BTC, CHM, CIS, COE, CSC, HSC, and MLT <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>		