



**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

Substantive Program Modification Program

UNIVERSITY:	SDSU
CURRENT PROGRAM TITLE:	Medical Laboratory Science (B.S.)
CIP CODE:	51.1005
UNIVERSITY DEPARTMENT:	Pharmacy & Allied Health Professions
BANNER DEPARTMENT CODE:	SPAH
UNIVERSITY DIVISION:	Pharmacy & Allied Health Professions
BANNER DIVISION CODE:	3P

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Vice President of Academic Affairs or
President of the University

Date

1. This modification addresses a change in:

- | | |
|---|--|
| <input type="checkbox"/> Total credits required within the discipline | <input type="checkbox"/> Total credits of supportive course work |
| <input type="checkbox"/> Total credits of elective course work | <input type="checkbox"/> Total credits required for program |
| <input type="checkbox"/> Program name | <input type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input checked="" type="checkbox"/> Other: Addition of an Accelerated Option |

2. Effective date of change: 2020-2021 Academic Year

3. Program Degree Level: Associate Bachelor's Master's Doctoral

4. Category: Certificate Specialization Minor Major

5. If a name change is proposed, the change will occur:

- On the effective date for all students
- On the effective date for students new to the program (enrolled students will graduate from existing program)
- Proposed new name:

6. Primary Aspects of the Modification:

Existing Curriculum

Proposed Curriculum (highlight changes)

Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.		
System General Education Requirements				33	System General Education Requirements				33
ENGL	101	Composition I (SGR #1)	3	ENGL	101	Composition I (SGR #1)	3		
ENGL	201	Composition II (SGR #1)	3	ENGL	201	Composition II (SGR #1)	3		
SPCM	101	Fundamentals of Speech (SGR #2)	3	SPCM	101	Fundamentals of Speech (SGR #2)	3		
		SGR #3	3			SGR #3	3		
		SGR #3	3			SGR #3	3		
		SGR #4	3			SGR #4	3		
		SGR #4	3			SGR #4	3		
MATH	114	College Algebra (SGR #5)	3	MATH	114	College Algebra (SGR #5)	3		
CHEM	106-106L	Chemistry Survey I & Lab (SGR #6)	4	CHEM	106-106L	Chemistry Survey I & Lab (SGR #6)	4		

Existing Curriculum

Proposed Curriculum (*highlight changes*)

Prof.	Num.	Title	Cr. Hrs.	Prof.	Num.	Title	Cr. Hrs.
CHEM	108-108L	Chemistry Survey II & Lab (SGR #6)	5	CHEM	108-108L	Chemistry Survey II & Lab (SGR #6)	5
Major Requirements			80	Major Requirements			80-82
MLS	201	Understanding Medical Laboratory Science	2	MLS	201	Understanding Medical Laboratory Science	2
BIOL	221-221L	Anatomy and Lab	4	BIOL	221-221L	Anatomy and Lab	4
BIOL	325-325L	Physiology and Lab	4	BIOL	325-325L	Physiology and Lab	4
				MICR	231-231L	General Microbiology and Lab <i>Accelerated program students only</i>	4
				OR		OR	
				MICR	233-233L	Introductory Microbiology and Lab <i>Accelerated program students only</i>	
MLS	301-301L	Hematology I and Lab	2, 1	MLS	301-301L	Hematology I and Lab	2, 1
MLS	311	Clinical Chemistry I	4	MLS	311	Clinical Chemistry I	4
MLS	341-341L	Diagnostic Microbiology I and Lab	3, 2	MLS	341-341L	Diagnostic Microbiology I and Lab <i>Accelerated program students do not take this lab</i>	3, 2
MLS	401	Hematology II and Hemostasis	3	MLS	401	Hematology II and Hemostasis	3
MLS	402L	Advanced Hematology/Hemostasis Lab	1	MLS	402L	Advanced Hematology/Hemostasis Lab	1
MLS	403-403L	Diagnostic Immunology and Lab	3, 1	MLS	403-403L	Diagnostic Immunology and Lab <i>Accelerated program students do not take this lab</i>	3, 1
MLS	411-411L	Clinical Chemistry II and Lab	3, 1	MLS	411-411L	Clinical Chemistry II and Lab	3, 1
MLS	412-412L	Laboratory Methods and Lab	3,1	MLS	412-412L	Laboratory Methods and Lab <i>Accelerated program students do not take this lab</i>	3,1
MLS	431-431L	Immunohematology and Lab	2, 1	MLS	431-431L	Immunohematology and Lab <i>Accelerated program students do not take this lab</i>	2, 1
MLS	441-441L	Diagnostic Microbiology II and Lab	3, 2	MLS	441-441L	Diagnostic Microbiology II and Lab	3, 2
MLS	451-451L	Immunohematology II and Lab	2, 1	MLS	451-451L	Immunohematology II and Lab	2, 1
MLS	461	Intro. To Management and Education	3	MLS	461	Intro. To Management and Education	3
MLS	471-471L	Advanced Medical Diagnostics and Lab	2, 2	MLS	471-471L	Advanced Medical Diagnostics and Lab	2, 2
MLS	472	Advanced Clinical Experience I	8	MLS	472	Advanced Clinical Experience I	8
MLS	473	Advanced Clinical Diagnostics I	3	MLS	473	Advanced Clinical Diagnostics I	3
MLS	474	Advanced Clinical Diagnostics II	3	MLS	474	Advanced Clinical Diagnostics II	3
MLS	475	Advanced Clinical Experience II	3	MLS	475	Advanced Clinical Experience II	3
MLS	483	Senior Capstone Clinical Experience	3	MLS	483	Senior Capstone Clinical Experience	3
MLS	489	Phlebotomy Clinical Experience	1	MLS	489	Phlebotomy Clinical Experience	1
STAT	281	Introduction to Statistics	3	STAT	281	Introduction to Statistics	3
Electives (<i>Additional elective credits needed to reach 120 credits</i>)			7	Electives (<i>Additional elective credits needed to reach 120 credits</i>)			8-10
Summary of Credits Medical Laboratory Science (B.S.)							
System General Education Requirements			33	System General Education Requirements			33
Major Requirements			80	Major Requirements			80
Electives			7	Electives			10
Summary of Credits Medical Laboratory Science (B.S.) - Accelerated Program							
				System General Education Requirements			33
				Major Requirements			82
				Electives			8
Total number of hours required for major			80	Total number of hours required for major			80-82
Total number of hours required for degree			120	Total number of hours required for degree			120

Medical Laboratory Science Accelerated Program admission requirements:
Admission to the Medical Laboratory Science Accelerated Program will require:

- Completion of all system general education requirements
- Completed coursework in anatomy, physiology, general or introductory microbiology with a lab, and CHEM 106 and CHEM 108 or equivalent
- Completion of a minimum of 90 credits of coursework

7. Explanation of the Change:

This request will add an accelerated option for the B.S. degree in Medical Laboratory Science. The Department of Allied and Population Health currently offers an on-campus B.S. in Medical Laboratory Science (MLS) program as well as an online Upward Mobility program for Medical Laboratory Technicians to the B.S. degree. The proposed accelerated program would allow students with the necessary prerequisites to complete their degree more quickly and enter the workforce in a shorter period of time. Students that complete the accelerated program will either be almost complete with another bachelor's degree (double major) or have completed a bachelor's degree. The accelerated MLS program will utilize online MLS courses, campus lab experiences (completed over the summer), and clinical experiences completed at clinical partner sites. The program will use existing MLS courses, and no new courses will be created. General or introductory microbiology coursework is being added to the admission requirements for the accelerated program so students will not need to take those courses and labs within the program.

This program is needed to address a workforce shortage for medical laboratory scientists. According to the U.S. Bureau of Labor and Statistics, employment of clinical laboratory technologists and technicians is projected to grow 11 percent from 2018 to 2028, much faster than the average for all occupations. There is also a shortage of medical laboratory scientists in South Dakota. Dialogue with SDSU's clinical partners has revealed that health systems in South Dakota are in significant need of more medical laboratory scientists; due to the shortage, the major health systems in the state have had to start hiring traveling technologists. The accelerated MLS program would provide a more accessible program completed over a short timeframe and allow SDSU to graduate medical laboratory scientists twice a year. This program has significant appeal to SDSU's health partners by helping address this critical workforce need.