



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

Substantive Program Modification Form

UNIVERSITY:	SDSU
CURRENT PROGRAM DEGREE:	B.S.
CURRENT PROGRAM MAJOR/MINOR:	Medical Laboratory Science
CURRENT SPECIALIZATION:	Accelerated Program
CIP CODE:	51.1005
UNIVERSITY DEPARTMENT:	Allied & Population Health
BANNER DEPARTMENT CODE:	SAPH
UNIVERSITY COLLEGE:	Pharmacy & Allied Health Professions
BANNER COLLEGE 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.

Dennis D. Hedge

12/17/2024

Vice President of Academic Affairs or
President of the University

Date

1. This modification addresses a change in:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Total credits required within the discipline | <input type="checkbox"/> Total credits of supportive course work |
| <input checked="" type="checkbox"/> Total credits of elective course work | <input type="checkbox"/> Total credits required for program |
| <input type="checkbox"/> Program name | <input checked="" type="checkbox"/> Existing specialization |
| <input type="checkbox"/> CIP Code | <input type="checkbox"/> Other (explain below) |
| <input type="checkbox"/> Modification requiring Board of Regents approval
<i>Must have prior approval from Executive Director or designee</i> | |

2. Effective date of change: 2025-2026 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. Is the program being modified associated with a current articulation agreement?

Yes No

- a. If yes, will the articulation agreement need to be updated with the partner institution following the approve of the program change? Please explain: N/A

7. Primary Aspects of the Modification:

Existing Curriculum

Proposed Curriculum (highlight changes)

Prof.	Num.	Title	Cr. Hrs.	Prof.	Num.	Title	Cr. Hrs.
System General Education Requirements			33	System General Education Requirements			33
System General Education Requirements - Electives			21	System General Education Requirements - Electives			21
		SGR #1	3			SGR #1	3
		SGR #1	3			SGR #1	3
		SGR #2	3			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
System General Education Requirements - Required			12	System General Education Requirements - Required			12
MATH	114	College Algebra (SGR #5)	3	MATH	114	College Algebra (SGR #5)	3
CHEM	106	Chemistry Survey I (SGR #6)	3	CHEM	106	Chemistry Survey I (SGR #6)	3
CHEM	106L	Chemistry Survey I Lab (SGR #6)	1	CHEM	106L	Chemistry Survey I Lab (SGR #6)	1
CHEM	108	Chemistry Survey II (SGR #6)	4	CHEM	108	Chemistry Survey II (SGR #6)	4
CHEM	108L	Chemistry Survey II Lab (SGR #6)	1	CHEM	108L	Chemistry Survey II Lab (SGR #6)	1
Major Requirements			79	Major Requirements			69
BIOL	221	Anatomy	4	BIOL	221	Anatomy	3
BIOL	221L	Anatomy Lab	0	BIOL	221L	Anatomy Lab	1
BIOL	325	Physiology	4	BIOL	325	Physiology	3
BIOL	325L	Physiology Lab	0	BIOL	325L	Physiology Lab	1
MICR	231- 231L	General Microbiology and Lab <i>Accelerated program students only</i>	4	MICR	231- 231L	General Microbiology and Lab <i>Accelerated program students only</i>	4
OR MICR	233- 233L	Introductory Microbiology and Lab <i>Accelerated program students only</i>		OR MICR	233- 233L	Introductory Microbiology and Lab <i>Accelerated program students only</i>	
MLS	201	Understanding Medical Laboratory Science	2	MLS	201	Understanding Medical Laboratory Science	2
MLS	301	Hematology I	2	MLS	301	Hematology I	2
MLS	301L	Hematology I Lab	1	MLS	301L	Hematology I Lab	1
MLS	311	Clinical Chemistry I	4	MLS	311	Clinical Chemistry I	4
MLS	341	Diagnostic Microbiology I	3	MLS	341	Diagnostic Microbiology I	3
MLS	341L	Diagnostic Microbiology I Lab (2) <i>Accelerated program students do not take this lab</i>	--	MLS	341L	Diagnostic Microbiology I Lab (2) <i>Accelerated program students do not take this lab</i>	1
MLS	401	Hematology II and Hemostasis	3	MLS	401	Hematology II and Hemostasis	3
MLS	401L	Hematology II and Hemostasis Lab	1	MLS	401L	Hematology II and Hemostasis Lab	1
MLS	403	Diagnostic Immunology	3	MLS	403	Diagnostic Immunology	3
MLS	403L	Diagnostic Immunology Lab (1) <i>Accelerated program students do not take this lab</i>	--	MLS	403L	Diagnostic Immunology Lab (1) <i>Accelerated program students do not take this lab</i>	1
MLS	411	Clinical Chemistry II	3	MLS	411	Clinical Chemistry II	3
MLS	411L	Clinical Chemistry II Lab	4	MLS	411L	Clinical Chemistry II Lab	4
MLS	412	Laboratory Methods	3	MLS	412	Laboratory Methods	3
MLS	412L	Laboratory Methods Lab (1) <i>Accelerated program students do not take this lab</i>	--	MLS	412L	Laboratory Methods Lab (1) <i>Accelerated program students do not take this lab</i>	1
				MLS	420	Fundamentals of the Medical Laboratory	2
				MLS	421	Foundations of Medical Chemistry	4
				MLS	422	Foundations of Hematology	3
				MLS	423	Foundations of Urine & Body Fluid Analysis	2
				MLS	424	Foundations of Medical Immunology	2
				MLS	425	Foundations of Immunohematology	2

Existing Curriculum				Proposed Curriculum (highlight changes)			
Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
				MLS	426	Foundations of Medical Laboratory Microbiology	3
				MLS	427	Medical Chemistry Theory & Practice	4
				MLS	428	Hematology & Hemostasis Theory & Practice	5
				MLS	429	Immunohematology Theory & Practice	3
				MLS	430	Medical Laboratory Microbiology Theory & Practice	4
MLS	431	Immunohematology	2	MLS	431	Immunohematology	2
MLS	431L	Immunohematology Lab (1) <i>Accelerated program students do not take this lab</i>	--	MLS	431L	Immunohematology Lab (1) <i>Accelerated program students do not take this lab</i>	1
				MLS	432	Foundations of Molecular Methods	1
MLS	441L	Diagnostic Microbiology II Lab	2	MLS	441L	Diagnostic Microbiology II Lab	2
MLS	444	Diagnostic Microbiology II	3	MLS	444	Diagnostic Microbiology II	3
MLS	451	Immunohematology II	2	MLS	451	Immunohematology II	2
MLS	451	Immunohematology II Lab	1	MLS	451	Immunohematology II Lab	1
MLS	461	Intro. To Management and Education	3	MLS	461	Leadership & Education in the Medical Laboratory	3
				MLS	465	Introductory Medical Laboratory Practice Intensive	1
MLS	471	Advanced Medical Diagnostics	2	MLS	471	Advanced Medical Diagnostics	2
MLS	471L	Advanced Medical Diagnostics Lab	2	MLS	471L	Advanced Medical Diagnostics Lab	2
MLS	472	Advanced Clinical Experience I	5	MLS	472	Advanced Clinical Experience I	5
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	476	Clinical Practicum I	4
				MLS	477	Clinical Practicum II	4
				MLS	478	Clinical Practicum III	3
				MLS	479	Clinical Practicum IV	3
MLS	483	Senior Capstone Clinical Experience	3	MLS	483	Medical Laboratory Capstone	1
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 (Additional elective credits needed to reach 120 credits)			8	Electives (Additional elective credits needed to reach 120 credits)			18
Summary of Credits Medical Laboratory Science (B.S.) - Accelerated Program							
System General Education Requirements			33	System General Education Requirements			33
Major Requirements			79	Major Requirements			69
Electives			8	Electives			18
Total number of hours required for major			91	Total number of hours required for major			81
Total number of hours required for degree			120	Total number of hours required for degree			120

8. Explanation of the Change:

The MLS Academic Affairs committee redesigned the MLS Accelerated Program curriculum based on feedback from students and key stakeholders, including the MLS program advisory committee, which includes representatives from key health system partners. Both students and advisory committee members suggested implementation of a 12-month curriculum (currently 16 months), utilizing asynchronous online courses and a “train in place” approach to laboratory and experiential learning, with a minimum amount of on-campus training. Health system partners that serve as clinical affiliate sites further expressed their ability and commitment to provide the majority of clinical laboratory and experiential learning opportunities necessary for a “train in

place” approach. These partners feel the 12-month curriculum and “train in place” elements are an essential piece of attracting the students necessary to meet workforce shortages without compromising academic quality.

Considering student and stakeholder feedback, the MLS Academic Affairs Committee has chosen a modular course approach for the revised accelerated pathway. The modular courses will combine elements of multiple existing courses into more intensive, partial semester courses that are carefully sequenced for efficient delivery in a way that meets program outcomes with a lower credit requirement compared to our on-campus pathway. This revised accelerated pathway will be delivered over three total semesters to accomplish the goal of a 12-month curriculum. The first semester (spring) will be delivered entirely asynchronously online, followed by a short on-campus, 1-week intensive laboratory during the May interim. Following the intensive laboratory experience, students will complete both asynchronous online courses and laboratory experiences at a designated partner site (e.g. train in place) during the remainder of the summer term. The final semester will be comprised of one online didactic course, four clinical practicum experiential courses and a final capstone course, all completed at the partner site.

With the change to a modular course approach, this pathway will require the use of new courses. The workload associated with these new courses will be offset by eliminating current course sections intended for accelerated pathway students.