

MEDICAL LABORATORY SCIENCES (BS/MS)

Contacts

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Curriculum: 2 Years, 71 Credits

- Credits Required for Admission: 82

Course	Title	Credits
First Year		
Fall		
Undergraduate Phase		
LS 301	Molecular Biology	3
LS 331	Immunology	3
MLS 300	Intro to Medical Lab Science	1
MLS 312	Clinical Microbiology I	4
MLS 323	Clinical Chemistry I	3.5
MLS 341	Clinical Hematology I	3
MLS 351	Immunohematology I	3
Credits		20.5
Spring		
LS 310	Intro to Molecular Diagnostics	2
LS 540	Current Resrch in Biosciences	3
MLS 313	Clinical Microbiology II	3.5
MLS 324	Clinical Chemistry II	3
MLS 343	Clinical Hematology II	3
MLS 352	Immunohematology	4
MLS 376	Urinalysis and Body Fluids	3
Credits		21.5
Second Year		
Fall		
Graduate Phase		
LS 603	Research Design	2
LS 640	Methods in Bioscience Edu	3
MLS 812	Med Lab Sci Practicum I	3
MLS 813	Med Lab Sci Practicum II	3
Program-Approved Electives		3
Credits		14
Spring		
LS 610	Reg & Fis Issues in Lab. Mgmt	3
LS 803	Contemporary Topics Research ²	2
MLS 575	Medical Laboratory Science Sem	2
MLS 814	Med Lab Sci Practicum III	3
MLS 815	Med Lab Sci Practicum IV	3
MLS 816	Comprehensive Exam	0
Program-Approved Elective		3
Credits		16
Total Credits		72

Curriculum: 1 Year, 57 Credits

- Advanced MS

Course	Title	Credits
First Year		
Fall		
LS 501	Molecular Biology	3
LS 531	Immunology (CT program only) ¹	3
LS 603	Research Design	2
MLS 500	Intro to Medical Lab Science	1
MLS 512	Clinical Microbiology I	4
MLS 523	Clinical Chemistry I	3.5
MLS 541	Clinical Hematology I	3
MLS 551	Immunohematology I	3
Credits		22.5
Spring		
LS 610	Reg & Fis Issues in Lab. Mgmt	3
LS 613	Pathology	2
Select one of the following:		1-2
LS 803	Contemporary Topics Research ²	
LS 805	Experimental Research II (requires special approval) ²	
LS 814	Practicum III	3
Select one of the following:		3-4
LS 815	Practicum IV	
LS 644	Laboratory Ed and Instruction ³	
LS 698	Special Topics in Lab Instruct	
Program-Approved Electives		2-4
Credits		14-18
Total Credits		36.5-40.5

¹ To meet entry-level competency requirements for immunology credits, students entering as certified cytotechnology graduates who have not completed three credits in immunology are required to enroll in LS 531 Immunology. Certified cytotechnology graduates who have completed three credits of immunology may enroll in a program-approved elective.

² To meet the research requirement, students may take a classroom literature review-based course (LS 803 Contemporary Topics Research) or, under special circumstances, engage in a two-semester wet bench research project with a selected PI (LS 804 Experimental Research I and LS 805 Experimental Research II). Students must meet with their faculty advisor and/or program director to determine which option best meets their educational goals. LS 804 Experimental Research I and LS 805 Experimental Research II are not a substitute for nor may run concurrently with practica courses.

³ Program approval and minimum course grade requirements must be met to register for LS 644 Laboratory Ed and Instruction.

Curriculum: 2 Years, 48-51 Credits¹

- Advanced MS, Part-Time

Course	Title	Credits
First Year		
Fall		
LS 603	Research Design	2
LS 640	Methods in Bioscience Edu	3
Select one of the following:		3-4
LS 812	Practicum I	
LS 644	Laboratory Ed and Instruction	
Administration, and Instruction		
Program-Approved Electives		3
Credits		11-12
Spring		
LS 813	Practicum II	3

2 Medical Laboratory Sciences (BS/MS)

Course	Title	Credits
LS 644 or LS 698	Laboratory Ed and Instruction or Special Topics in Lab Instruct	3-4
Credits		6-7
Summer		
LS 610	Reg & Fis Issues in Lab. Mgmt	3
LS 814	Practicum III	3
Credits		6
Second Year		
Fall		
Graduate Phase		
LS 504	Biochemistry (BT & MLS program only)	3
LS 531	Immunology (CT program only) ²	3
LS 804	Experimental Research I (requires special approval) ²	1
Program-Approved Electives		3
Credits		10
Spring		
LS 613	Pathology	3
Select one of the following:		1-2
LS 803	Contemporary Topics Research ³	
LS 805	Experimental Research II (approval)	
LS 815 or LS 698	Practicum IV or Special Topics in Lab Instruct	3-4
Credits		7-9
Total Credits		40-44

¹ To meet the research requirement, students may take a classroom literature review-based course (LS 803) or, under special circumstances, engage in a two-semester wet bench research project with a selected PI (LS 804 and LS 805). Students must meet with their faculty advisor and/or program director to determine which option best meets their educational goals. LS 804 and LS 805 are not a substitute for nor may run concurrently with practica courses.