

LSUHSC Department of Medical Laboratory Science

Categorical Certificate Program

The Categorical Certificate programs are discipline specific route for students that possess a Baccalaureate degree in a related science. The Categorical Certificate programs under a Medical Laboratory Science NAACLS accredited program allows a student to obtain needed specific coursework to qualify for discipline specific certification. The required curriculum is a specific structured program in each category which includes courses necessary for competency in only that discipline. The applicant must possess a Baccalaureate degree in a science or have a minimum of 30 hours of science coursework with a non-science degree. The recommended GPA for all applicants is 2.5 or higher.

Through the below listed courses and clinical experiences the student will learn and develop the skills necessary develop and establish scientific laboratory procedures, evaluate and solve problems related to biological specimen analysis, perform and troubleshoot complex laboratory procedures, operate sophisticated scientific instrumentation, analyze data and verify accuracy and precision of a laboratory method, answer inquiries related to specific laboratory tests, and interact with other healthcare professionals to solve problems and interpret laboratory test results.

The Categorical MLS Tracks include:

1. Microbiology
2. Chemistry
3. Immunohematology
4. Hematology
5. Chematology

Microbiology Structured Program required courses:

Course Number	Course Name	Credit Hours
Fall Semester		
MLS 3107	Immunology	2
MLS 5128	Serology (+dilutions/ELISA)	2
Spring Semester		
MLS 3112	Professional Skills in CLS	2
MLS 3140	Statistics & Quality Assurance	1
MLS 5117	Genetics	1
MLS 5119	Molecular Diagnostics	2
Fall Semester		
MLS 5104	Clinical Microbiology	4
MLS 4125	Clinical Microbiology Laboratory	2
Spring Semester		
MLS 4105	Clinical Parasitology/Mycology	2
MLS 4135	Microbiology Practicum	5

Chemistry Structured Program required courses:

Course Number	Course Name	Credit Hours
Fall Semester		
MLS 3107	Immunology	2
MLS 5128	Serology (+dilutions/ELISA)	2
Spring Semester		
MLS 3112	Professional Skills in CLS	2
MLS 3140	Statistics & Quality Assurance	1
MLS 5117	Genetics	1
MLS 5119	Molecular Diagnostics	2
Fall Semester		
MLS 5109	Clinical Biochemistry	4
MLS 4120	Clinical Biochemistry Laboratory	2
MLS 4130	Chemistry/Immunology Practicum	3

Immunohematology Structured Program required courses:

Course Number	Course Name	Credit Hours
Fall Semester		
MLS 3107	Immunology	2
MLS 5128	Serology (+dilutions/ELISA)	2
Spring Semester		
MLS 3112	Professional Skills in CLS	2
MLS 3140	Statistics & Quality Assurance	1
MLS 5117	Genetics	1
MLS 5119	Molecular Diagnostics	2
Summer Semester		
MLS 5111	Immunohematology	2
MLS 4122	Immunohematology Laboratory	2
Fall Semester		
MLS 4132	Immunohematology Practicum	4

Hematology/Microscopy Structured Program required courses:

Course Number	Course Name	Credit Hours
Spring Semester		
MLS 3112	Professional Skills in CLS	2
MLS 3140	Statistics & Quality Assurance	1
MLS 3101	Clinical Hematology I	2
MLS 3121	Clinical Hematology Lab	2
Summer Semester		
MLS 5101	Clinical Hematology II	2
MLS 4121	Clinical Hematology II Lab	2
Fall Semester		
MLS 3107	Immunology	2
MLS 5128	Serology (+dilutions/ELISA)	2
MLS 4102	Urinalysis	2
Spring Semester		
MLS 5117	Genetics	1
MLS 5119	Molecular Diagnostics	2
MLS 4131	Hematology/Urinalysis Practicum	4

Chematology Structured Program required courses:

Course Number	Course Name	Credit Hours
Spring Semester		
MLS 3112	Professional Skills in CLS	2
MLS 3140	Statistics & Quality Assurance	1
MLS 3101	Clinical Hematology I	2
MLS 3121	Clinical Hematology Lab	2
Summer Semester		
MLS 5101	Clinical Hematology II	2
MLS 4121	Clinical Hematology II Lab	2
Fall Semester		
MLS 4102	Urinalysis	2
MLS 5109	Clinical Biochemistry	4
MLS 4120	Clinical Biochemistry Laboratory	2
Spring Semester		
MLS 5119	Molecular Diagnostics	2
MLS 5117	Genetics	1
MLS 3107	Immunology	2
MLS 5128	Serology (+dilutions/ELISA)	2
Summer Semester		
MLS 4131	Hematology/Urinalysis Practicum	4
MLS 4130	Chemistry/Immunology Practicum	3