

BS Med Lab Sci

Bachelor of Science in Medical Laboratory Sciences

Under Review | Spring 2024

Proposal Information

Status

Active

Workflow Status

In Progress

Faculty Senate Approval, Faculty Senate

expand ▲

Waiting for Approval | Faculty Senate Approval

Rick Holmes

Nancy Middlebrook

Changes

- Requirements
- Proposed Effective Term and Year
- Degree Hours
- Admissions Requirements
- Learning Outcomes

Show All ▼

Proposal Information

Proposed

Sponsoring faculty/staff member

Margaret Alba

Proposed

Sponsoring faculty/staff email

malba@salud.unm.edu

Existing

Sponsoring faculty/staff member

Existing

Sponsoring faculty/staff email

College

School of Medicine

Department

Pathology & Medical
Laboratory Sciences

Campus

Main Campus

Effective Term and Year

Proposed

Proposed Effective Term and Year

Spring 2024

Existing

Proposed Effective Term and Year

Fall 2006

Justification

Proposed

Program Justification

Dropping 3 prerequisite courses to lower the total MLS program minimum to 123 credit hours.

Existing

Program Justification

Program Category and Level

Program Category

Program

Program Level

Undergraduate

Degree, Minor, or Certificate Name

Bachelor of Science in Medical
Laboratory Sciences

Degree Type

Bachelor of Science

Degree/Certificate Level

Undergraduate

Is this program also offered online?

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Associated Forms

Select any associated course forms that exist

Select any associated program forms that exist

Shared Credit and Dual Degree information

Interdepartmental Program

No

Catalog Information

Program Description

Medical Laboratory Sciences or Medical Technology is the rapidly expanding health profession of clinical laboratory medicine. With tremendous advances in medical research in recent years, modern health care has become increasingly dependent on a growing variety of complex laboratory tests to diagnose and treat disease.

The Medical Laboratory Sciences (MLS) program may be taken as part of a four-year curriculum leading to the Bachelor of Science degree in Medical Laboratory Sciences from the UNM School of Medicine *OR* as part of a degree from another four-year academic institution. The program follows a prescribed curriculum which requires two and one half years of pre-professional academic study and one and one half years in the MLS program.

Students earning a B.S. degree from an academic institution other than the University of New Mexico must meet the degree requirements established by that university in addition to the minimum educational requirements specified below for entering the UNM MLS program. Students register through UNM for all MEDL courses.

Proposed

Admissions Requirements

Minimum education requirements are 60 credit hours of acceptable coursework from a college or university approved by a recognized accrediting agency including the required courses listed below. All credit hours must be acceptable towards a baccalaureate degree. A minimum grade of "C" or better in all subjects and a grade of "C" or better in each prerequisite biology, chemistry and math course is required. All students are required to meet with the Medical Laboratory Sciences Program advisor on North Campus if they are interested in applying for the program.

Students coming from other universities or colleges who will earn their baccalaureate degree from their parent institutions or students who already have a baccalaureate degree must have the following prerequisites for admission to the Medical Laboratory Sciences Program at the University of New Mexico.

Total of 60 credit hours including:

1. Biological Sciences: approximately 18 credit hours including courses in anatomy and physiology and microbiology.
2. Chemistry: approximately 12 credit hours including one course in organic or biochemistry.
3. Mathematics: a minimum of one course in college-level algebra or a higher math course.

NOTE: Remedial and survey courses are not acceptable.

Students can be admitted to the program at the beginning of the Spring semester or Fall semester. An application must be submitted to the Office of Medical Laboratory Sciences by the **October 15** deadline for January admission or **June 15** for August admission. Application may be made while completing the final semester of prerequisites. Official transcripts of all college course work must be sent directly from each institution unless all course work was completed at UNM. Admission is limited, with selection based on cumulative grade point average, grade point average in chemistry, math, and science courses, letters of recommendation, and a personal interview. A minimum cumulative grade point average of 3.0 is required. Selection of applicants is made by the Medical Laboratory Sciences Admissions Committee. All applicants are notified of their admission status. Selection is given to qualified persons regardless of race, color, religion, gender, national origin, age, qualified handicap or military involvement. Residents of New Mexico receive preference in admission.

Existing

Admissions Requirements

Minimum education requirements are 69 credit hours of acceptable coursework from a college or university approved by a recognized accrediting agency including the required courses listed below. All credit hours must be acceptable towards a baccalaureate degree. A minimum grade of "C" or better in all subjects and a grade of "C" or better in each prerequisite biology, chemistry and math course is required. All students are required to meet with the Medical Laboratory Sciences Program advisor on North Campus if they are interested in applying for the program.

Students coming from other universities or colleges who will earn their baccalaureate degree from their parent institutions or students who already have a baccalaureate degree must have the following prerequisites for admission to the Medical Laboratory Sciences Program at the University of New Mexico.

Total of 69 credit hours including:

Graduation Requirements

1. Biological Sciences: approximately 16 credit hours including courses in anatomy and physiology and microbiology.
2. Chemistry: approximately 12 credit hours including one course in organic or biochemistry.
3. Mathematics: a minimum of one course in college-level algebra or a higher math course.

NOTE: Remedial and survey courses are not acceptable. Other recommended courses are: anatomy and physiology, cell biology, parasitology, pathogenic bacteriology, biochemistry, psychology, sociology, computer science, communications, management and education.

Professional Credential/Licensure Program Information

Proposed

License/Certification associated with program

Yes

submitted to the Office of Medical Laboratory Sciences by the **October 15** deadline for January admission or **June 15** for August admission. Application may be made while completing the final semester of prerequisites. Official transcripts of all Existing

License/Certification associated with program

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courses, letters of recommendation, and a personal interview. A minimum cumulative grade point average of 3.0 is

Licensure information

required. Selection of applicants is made by the Medical Laboratory Sciences Admissions Committee. All applicants are notified of their admission status. Selection is given to qualified persons regardless of race, color, religion, gender, national origin, age, qualified handicap or military involvement. Residents of New Mexico receive preference in admission.

Licensure requirements met in the following states:

Licensure requirements not met in the following states:

Licensure requirements undetermined in the following states:

For each state selected, is there a state or regional licensing board that oversees Professional Licensure?

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National licensing board

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Degree Information

Proposed
Degree Hours
123

Minimum Major Hours
63

Existing
Degree Hours
130-134

Professional Accrediting Bodies

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119, (773) 714-8880. Students who successfully complete the program are eligible to sit for the national certification examination given by the Board of Certification (ASCP).

Degree Requirements

Requirements

- Complete all of the following

Pre Admission Curriculum

- Complete all of the following

Biological Sciences

- Complete all of the following
 - Complete 1 of the following
 - Complete the following:
 - BIOL1140 - Biology for Health Sciences (3)
 - BIOL1140L - Biology for Health Sciences Lab (1)
 - **BIOL2101 - Principles of Biology: Molecules to Cells (3)**
 - **BIOL2103L - Principles of Biology: Introductory Laboratory (1)**
 - Complete the following:
 - ~~BIOL2110C - Principles of Biology: Cellular and Molecular Lecture and Laboratory (4)~~
 - BIOL2410C - Principles of Biology: Genetics Lecture and Laboratory (4)
 - **BIOL2101 - Principles of Biology: Molecules to Cells (3)**
 - **BIOL2103L - Principles of Biology: Introductory Laboratory (1)**
 - Complete the following:
 - BIOL2210 - Human Anatomy and Physiology I (3)
 - BIOL2225 - Human Anatomy and Physiology II (3)
 - Complete 1 of the following
 - Complete the following:
 - BIOL2305 - Microbiology for Health Sciences (4)
 - Complete the following:
 - BIOL351 - General Microbiology (3)
 - BIOL352L - General Microbiology Laboratory (1)

Chemistry

- Complete all of the following
 - Complete the following:
 - CHEM1215 - General Chemistry I for STEM Majors (3)
 - ~~CHEM1225 - General Chemistry II for STEM Majors (3)~~
 - **CHEM1215L - General Chemistry I for STEM Majors Laboratory (1)**
 - Complete the following:
 - ~~CHEM1215L - General Chemistry I for STEM Majors Laboratory (1)~~
 - CHEM1225 - General Chemistry II for STEM Majors (3)
 - **CHEM1225L - General Chemistry II for STEM Majors Laboratory (1)**
- Complete 1 of the following
 - Complete the following:
 - CHEM2120 - Integrated Organic Chemistry and Biochemistry (4)
 - Complete the following:
 - CHEM301 - Organic Chemistry (3)
 - CHEM303L - Organic Chemistry Laboratory (1)

Mathematics

- Complete all of the following
 - Earn at least 3 credits from the following:
 - MATH1220 - College Algebra (3)
 - MATH1350 - Introduction to Statistics (3)
 - Earn at least 3 credits from the following types of courses:
Higher-level math or statistics

English

- Complete all of the following
 - Earn at least 3 credits from the following:
 - ENGL1110 - Composition I (3)
 - ENGL1110Y - Composition I: Stretch II (3)
 - ENGL1110Z - Enhanced Composition (4)
 - Complete the following:
 - ENGL1120 - Composition II (3)

Interpersonal Communicative Skills

- Complete at least 1 of the following:
 - ~~COMM2120 - Interpersonal Communication (3)~~
 - ~~COMM2140 - Small Group Communication (3)~~

Management Theory

- Complete the following:
 - ~~BUSA1110 - Introduction to Business (3)~~

Computer Science

- Complete the following:
 - ~~BCIS1110 - Fundamentals of Information Literacy and Systems (3)~~

General Education Curriculum

- Complete all of the following
 - Courses must be taken to fulfill General Education curriculum requirements in the following areas listed. Refer to the Undergraduate Program section of this Catalog for information on courses that meet General Education curriculum and U.S. and Global Diversity and Inclusion requirements.
 - Earn at least 6 credits from the following types of courses:
Area 4: Social and Behavioral Sciences
 - Earn at least 6 credits from the following types of courses:
Area 4: **Social and Behavioral Science** Area 5: Humanities
 - Earn at least 3 credits from the following types of courses:
Area 6: Second Language
 - Earn at least 3 **9** credits from the following types of courses:
Area 7: Arts and Design **Area 8: Student Choice**

Major Requirements

- Complete the following:
 - MEDL234 - Introduction to Clinical Immunology (3)
 - MEDL300L - Molecular Diagnostics & Applied Clinical Math (2)
 - MEDL310 - Introduction to Clinical Chemistry (3)
 - MEDL311L - Introduction to Clinical Chemistry Lab (2)
 - MEDL315L - Clinical Serology (2)
 - MEDL320 - Introduction to Clinical Hematology-Hemostasis (4)
 - MEDL321L - Clinical Hematology-Hemostasis Lab (2)
 - MEDL330 - Introduction to Clinical Microbiology (3)

- MEDL331L - Introduction to Clinical Microbiology Lab (2)
- MEDL340L - Introduction to Clinical Immunohematology (2)
- MEDL350L - Clinical Urinalysis (2)
- MEDL410L - Advanced Clinical Chemistry (3)
- MEDL420L - Advanced Clinical Hematology-Hemostasis (3)
- MEDL430 - Advanced Clinical Microbiology (3)
- MEDL431L - Advanced Clinical Microbiology Lab (2)
- MEDL432L - Clinical Parasitology (2)
- MEDL440L - Advanced Clinical Immunohematology (2)
- MEDL445 - Clinical Management and Education (2)

Clinical Rotation Courses

- Complete the following:
 - MEDL351 - Basic Clinical Chemistry Rotation (3)
 - MEDL352 - Basic Hematology-Hemostasis Rotation (3)
 - MEDL355 - Clinical Urinalysis Rotation (1)
 - MEDL452 - Advanced Hematology and Hemostasis Rotation (2)
 - MEDL453 - Clinical Microbiology Rotation (5)
 - MEDL454 - Clinical Immunohematology Rotation (4)
 - MEDL451 - Advanced Clinical Chemistry Rotation (1)

Grand Total Credits: 123

Concentrations

Program Concentrations

Code

Title

Concentration Required

No

Emphases

Emphasis required

N/A

Emphasis Hours

Emphasis Rules

No Rules

Sample Degree Plan

Proposed

Sample Degree Plan Upload

- 2023 MLS Degree Plan.pdf

Existing

Sample Degree Plan Upload

Program Learning Outcomes

Proposed

Learning Outcomes

Knowledge

- Identify, define, and apply the scientific principles and knowledge necessary for the competent practice of laboratory medicine
- Differentiate physiologic from pathophysiologic states of various patient analyzed samples

Laboratory Skills

- Analyze all patient samples with accuracy and precision in a timely manner
- Gather additional laboratory data and apply problem-solving skills to solve problem results/discrepancies

Diagnostic Ability

- Interpret patient laboratory findings in health and disease

Communication Skills

- Demonstrate effective communication behaviors and skills with colleagues in program and clinical rotation sites
- Work effectively with others as a member/leader of a hospital team

Professionalism Ethics

- Define and apply ethical principles in the diverse and complex context of laboratory medicine

Existing

Learning Outcomes