Medical Laboratory Science, B.S. *major* (3 + 1 Option)

Required Credits: 88
Required GPA: 2.25

REQUIRED CLINICAL STUDIES 3 + 1 OPTION

In this option, the student completes the required Medical Laboratory Science and Liberal Education courses at Bemidji State University, and then applies for admission to the clinical year program through the University of North Dakota or other affiliated institution. Please be aware admission to a clinical year program is competitive and not guaranteed; however, completion of a clinical year is required to complete a MLS 3+1 major. Additionally, a minimum 2.80 GPA in science courses is a requirement for admission to a clinical year program. The Medical Laboratory Science student must consult with the Medical Laboratory Science advisor at the start of the academic program and regularly throughout the course of study. The student must complete the Bemidji State University Liberal Education requirements before the clinical year of study.

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3074 Molecular Techniques (2 credits)
  *or*BCMB 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- BIOL 4715 Clinical Microbiology (3 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 4411 Biochemistry I (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 1170 College Algebra (4 credits)
- MATH 1470 Precalculus (5 credits)

II REQUIRED CLINICAL STUDIES

Clinical year courses, taken during the senior year beginning with summer term, are taken through entrance into the clinical year program at the University of North Dakota or at affiliated hospitals. The clinical year will consist of at least 37 credits.

NOTE: A clinical year position is not guaranteed. Students must apply for a clinical year position in October of the junior year. Please see advisor regarding the clinical year of study.

THE FOLLOWING COURSES ARE RECOMMENDED, BUT NOT REQUIRED
FOR COMPLETION OF THE MAJOR:

- BIOL 1212 Introductory Biology II (4 credits)
- STAT 2610 Applied Statistics (4 credits)
  or PSY 3401 Basic Statistics for Research (4 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

SUGGESTED SEMESTER SCHEDULE FOR MEDICAL LABORATORY SCIENCE MAJOR, B.S. 3+1 option

The following is a list of Medical Laboratory Science courses arranged by year. This suggested schedule is intended to help students plan their courses without course conflicts.

Freshman

- BIOL 1211 Introductory Biology I (4 credits)
- BIOL 2360 Genetics (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- ENGL 1151 Composition (3 credits)
- ENGL 2152 Argument and Exposition (3 credits)
- MATH 1170 College Algebra (4 credits)
  or MATH 1470 Precalculus (5 credits)
- Additional liberal education requirements

Sophomore

- BCMB 3074 Molecular Techniques (2 credits)
  or BIOL 3074 Molecular Techniques (2 credits)
- BIOL 3260 Human Physiology (4 credits)
- BIOL 3710 Microbiology (4 credits)
- BIOL 4210 Parasitology (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- Additional liberal education requirements

Junior

- BIOL 3300 Introduction to Hematology (4 credits)
- BIOL 3580 Immunology (3 credits)
- BIOL 4715 Clinical Microbiology (3 credits)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- STAT 2610 Applied Statistics (4 credits)
  or PSY 3401 Basic Statistics for Research (4 credits)
- Any remaining liberal education requirements

Senior

- Clinical year courses

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