College of Health, Science and Technology
Department of Biological and Health Sciences

Bloomsburg LOCK HAVEN MANSFIELD
COMMONWEALTH UNIVERSITY

MEDICAL LAB SCIENCE

Bachelor of Science (BS) – Biomedical Sciences

This degree map is based on the current Academic Catalog and is subject to change. Please note that the degree map is designed to give you a sense of roughly how courses might be distributed over a 4-year degree. Your exact schedule will differ depending on a range of factors though we recommend taking a minimum of 15 credits each fall and spring semester. Regular consultation with your academic advisor is the best way to make sure that you are taking the courses you need in the right order to ensure efficient progress through your degree program.

Sample 4-Year Plan

First Year			
Fall Courses	**Credits**	**Spring Courses**	**Credits**
BIOL 110 Principles of Biology 1	4	BIOL 180 Anatomy and Physiology 1	4
FYS 100 First Year Seminar	3	CHEM 121 General Chemistry 1	4
General Education	3	WRIT 103 Foundations in Composition	3
General Education	3	General Education	3
Semester Total	13	Semester Total	14

Second Year			
Fall Courses	**Credits**	**Spring Courses**	**Credits**
BIOL 181 Anatomy and Physiology 2	4	BIOL 211 Cell Biology	4
CHEM 122 General Chemistry 2	4	CHEM 231 Condensed Organic Chemistry	4
STAT 141 Introduction to Statistics	3	General Education	3
General Education	3	General Education	3
General Education	3		
Semester Total	17	Semester Total	13

Third Year			
Fall Courses	**Credits**	**Spring Courses**	**Credits**
CHEM 351 Biochemistry	4	BIOL 443 Molecular Biology	3
BIOL 340 Microbiology	4	General Education	3
BIOL 446 Immunology	3	General Education	3
General Education	3	Free Elective	3
Free Elective	3	Free Elective	3
Semester Total	17	Semester Total	16

Fourth Year			
Fall Courses	**Credits**	**Spring Courses**	**Credits**
MedTech 401 Clinical Microbiology	6	MedTech 404 Clinical Immunohematology	6
MedTech 405 Clinical Immunology/Serology	2	MedTech 402 Clinical Hematology/Coagulation	6
MedTech 403 Clinical Chemistry	6	MedTech 406 Clinical Seminar	4
Semester Total	14	Semester Total	16

Winter/Summer College - Optional

While not required, Winter and Summer sessions are offered each year and may help you stay on track or get ahead. You may take up to seven (7) credits during Winter College and up to 14 credits during Summer College.

Revised February 2025

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Curriculum Checklist

Biology Core Requirements (26 credits)

___ BIOL 110 Principles of Biology 1 (4)
___ BIOL 180 Anatomy and Physiology 1 (4)
___ BIOL 181 Anatomy and Physiology 2 (4)
___ BIOL 211 Cell Biology (4)*
___ BIOL 340 Microbiology (4)*
___ BIOL 443 Molecular Biology (3)*
___ BIOL 446 Immunology (3)*

Students seeking employment in New York State are encouraged to complete BIOL 447 Immunology Laboratory (available on the Mansfield campus only)

Related Core Requirements (19 credits)

___ CHEM 121 General Chemistry 1 (4)^
___ CHEM 122 General Chemistry 2 (4)*
___ CHEM 231 Condensed Organic Chemistry (4)*
___ CHEM 351 Biochemistry 1 (4)*
___ STAT 141 Intro to Stats (3)

Credits from a NAACLS accredited MLS program (30 Credits)

___ MEDTECH 401 Clinical Microbiology (6-10)*
___ MEDTECH 402 Clinical Hematology/Coagulation (6-10)*
___ MEDTECH 403 Clinical Chemistry (6-10)*
___ MEDTECH 404 Clinical Immunohematology (3-6)*
___ MEDTECH 405 Clinical Immunology/Serology (2-4)*
___ MEDTECH 406 Clinical Seminar (1-6)*

Students are responsible for applying and securing placement in an NAACLS accredited MLS program. Clinical placement is not guaranteed with enrollment in MLS program track.

^ Enrollment in course is contingent on an ALEKS math placement score >61 or successful completion of MATH118 College Algebra with a grade of C or better.

Note: Progression through the sequence of all chemistry courses requires achievement of a minimum grade of C in pre-requisite

General Education Requirements (45 credits)

Note: Some requirements may be fulfilled by coursework in your major program including directed Gen Ed courses noted below

- Foundations (15 credits)
  - STAT Introduction to Statistics 141 (3)
- Interconnections (9 credits)
- Citizenship & Responsibility
  (6 credits from at least two goals)
- Natural World & Technologies (9 credits)
  - BIOL 110 Principles of Biology 1 (4)
  - BIOL 180 Anatomy and Physiology 1 (4)
  - CHEM 121 General Chemistry 1 (4)
- Creativity & Expression (6 credits)

Degree Requirements

All students must obtain a minimum of 120 credits (a minimum of 42 credits must be advanced coursework), complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements.

A minimum GPA of 2.0 in the major and overall are required.

*Denotes advanced coursework

Students must take a minimum of 42 credits of advanced coursework. Advanced coursework can be met in major courses, minor courses, free elective courses, and general education courses. Courses that meet this requirement are designated in Banner.