

BIOCHEMISTRY AND MOLECULAR BIOLOGY MAJOR

Requirements

Degree Requirements

This major is available as a bachelor of arts or bachelor of science degree, as defined in the section on degree requirements (<http://catalog.linfield.edu/degrees-and-programs/undergraduate/ba-bs-bsn/>) for all majors in this catalog.

Major Requirements

67 credits

Code	Title	Credits
Pre-requisite Courses:		
MATH 170	CALCULUS I	5
MATH 175	CALCULUS II	3
PHYS 210	INTRODUCTION TO MECHANICS	5
PHYS 211	INTRODUCTION TO ELECTROMAGNETISM	5
Major Courses:		
CHEM 210	GENERAL CHEMISTRY	4
CHEM 211	GENERAL CHEMISTRY	4
CHEM 321	ORGANIC CHEMISTRY	4
CHEM 322	ORGANIC CHEMISTRY	4
CHEM 361	PHYSICAL CHEMISTRY I	4
CHEM 440	BIOCHEMISTRY	4
BIOL 210	PRINCIPLES OF BIOLOGY	4
BIOL 211	PRINCIPLES OF BIOLOGY	4
BIOL 400	MOLECULAR CELL BIOLOGY	5
BIOL 441	BIOCHEMISTRY AND MOLECULAR BIOLOGY	4
Select an additional 7 credits from courses that count toward either the Chemistry major or the Biology major. ¹		7
BCMB 486	SENIOR CAPSTONE	1
Total Credits		67

¹ No more than a total of 2 credits from the following may apply towards a Biochemistry and Molecular Biology major: BIOL 220, BIOL 480, BIOL 487, BIOL 490, CHEM 381, CHEM 382, CHEM 384, CHEM 385, CHEM 480, CHEM 490.

Student Learning Outcomes

- demonstrate an understanding the fundamentals of chemistry and biology and the key principles of biochemistry and molecular biology;
- obtain, evaluate, and use information from the scientific literature;
- dissect a question into its key features, design experiments, and interpret results (both quantitatively and qualitatively);
- think in an integrated manner and look at questions from different perspectives; and,
- communicate effectively, both orally and in writing, to both scientific and non-scientific communities.

Oregon Preliminary Teaching Licensure in Biology

Students who are also seeking an Oregon Preliminary Teaching License must also complete a Secondary Education major with Licensure. In order to complete the Secondary Education major with Licensure, students should begin taking education courses no later than their sophomore year. The student must be advised by faculty in both majors.