

Biology, Geology and Environmental Sciences

B.S. in Molecular Biology

Program Description

The Bachelor of Science in Molecular Biology degree builds lab experience and skills as well as knowledge related to the structure and function of biological molecules.

Delivery Mode

Traditional (on campus)

Curriculum

The following eight-semester schedule of courses provides a recommended framework for completing this program of study in four years.

Course	Credits
Freshman Year	
First Semester	15
BIO 125 General Botany	4
CHE 101 General Chemistry I	4
ENG 101 English Composition I	3
UNI 100 First-Year Seminar	1
General Education Course	3
Second Semester	17
BIO 120 General Zoology	4
CHE 102 General Chemistry II	4
ENG 102 English Composition II	3
MAT 273 Applied Calculus OR MAT 281 Calculus I	3
General Education Course	3
Sophomore Year	
Third Semester	14
BIO 215 Introduction to Cellular and Molecular Biology	4
PHY 121 General Physics I	4
Free Elective	3
General Education Course	3
Fourth Semester	15

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Course	Credits
BIO 218 Genetics	4
BIO 266 Cell Culture	4
CHE 331 Organic Chemistry	4
General Education Course	3
Junior Year	
Fifth Semester	15
BIO 320 Molecular Biology	4
BIO 326 General Microbiology	4
Free Elective	4
General Education Course	3
Sixth Semester	14
BIO 300/400 Level Required Course*	4
BIO 480 Cell Biology	4
Free Elective	3
General Education Course	3
Senior Year	
Seventh Semester	15
BIO 300/400 Level Required Course*	4
Free Elective	4
Related Elective	4
General Education Course	3
Eighth Semester	15
BIO 300/400 Level Required Course*	4
Free Elective	4
Related Elective	4
General Education Course	3

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Course	Credits
Total	120

* Pick three of the following:

- **BIO 322** Methods of DNA Analysis
- **BIO 426** Clinical Microbiology
- **BIO 427** Cell. Microbial Physiology
- **BIO 450** Biology of Cancer

Program Webpage

<https://www.calu.edu/academics/undergraduate/bachelors/molecular-biology/index.aspx>