

Advising Course Plan - Molecular and Cellular Biology Major

This plan indicates an effective way to earn a Bachelor of Science degree in Molecular Biology. This basic plan may be altered depending upon your post-graduate plans. Please see other advising plans that consider specific post-graduate plans.

First Year

		Units
BIOL 142P	Introductory Biology II: Animal and Plant Physiology	1
FSEM 100	First Year Seminar	1
MATH 130 ¹	Calculus I with Review Part I	1
General Education requirement		1

Term Units 4

Spring

BIOL 141P	Introductory Biology I: Biochemistry, Cell Biology and Molecular Genetics	1
General Education requirement		1
MATH 131Q ¹	Calculus I with Review Part 2	1
General Education requirement		1

Term Units 4

Second Year

BIOL 243Q	Biostatistics	1
CHEM 141P	General Chemistry I	1
PHYS 121P ²	College Physics I	1
General Education requirement		1

Term Units 4

Spring

General Education requirement		1
CHEM 142P	General Chemistry II	1
PHYS 122P ²	College Physics II	1
Elective		1

Term Units 4

Third Year

BIOL 302 ³	Genetics	1
CHEM 201	Organic Chemistry I	1
Junior Seminar ⁴		1
Elective		1

Term Units 4

Spring

BIOL 300	Molecular Biology and Biotechnology	1
CHEM 301	Organic Chemistry II	1
BIOL 497	Research Proposal	0.5
CHEM 204 ⁷	Biochemistry I	1
Elective ⁵		1

Term Units 4.5

Fourth Year

BIOL 300 or 400 level course ⁶		1
BIOL 498	Senior Project I	1
Elective		.5
Elective		1

Term Units 3.5

Spring

BIOL 499	Senior Project II	0.5 to 1
Elective		1
Elective		1

Elective		1
	Term Units	3.5 to 4

Total Unit: 31.5 to 32

- 1 The timing of the Math course is not critical; it can be taken at a later time. Some students may place into, and wish to take, MATH 141Q instead of MATH 130 and MATH 131Q.
- 2 The Physics courses can be taken later.
- 3 BIOL 300, BIOL 302 and the other BIOL 300- or 400-level course can be taken in any order.
- 4 The JSEM can be taken in the spring instead of the fall.
- 5 During the spring of this year or year 4, you will need to take another 0.5 or 1 unit course to average 4 units per semester.
- 6 The last required upper division Biology course must be chosen from BIOL 301, BIOL 314, BIOL 315, BIOL 425, BIOL 401, BIOL 409, BIOL 410, BIOL 415, BIOL 422, or CHEM 304.
- 7 CHEM 204 can be taken in Fourth Year.