

# Advising Course Plan - Molecular and Cellular Biology Major - Dental School Interest

This plan indicates an effective way to earn a Bachelor of Science degree in Molecular and Cellular Biology (MCB) and to complete the prerequisites for most dental programs (although these can differ depending on the dental school).

First Year		
Fall		Units
BIOL 100	Current Perspectives Biology	0.0
FSEM 100	First Year Seminar	1
BIOL 141P	Introductory Biology I: Biochemistry, Cell Biology and Molecular Genetics	1
General Education requirement		1
General Education requirement		1
<b>Term Units</b>		<b>4</b>
Spring		
BIOL 142P	Introductory Biology II: Animal and Plant Physiology	1
General Education requirement		1
General Education requirement		1
General Education requirement		1
<b>Term Units</b>		<b>4</b>
Second Year		
Fall		
BIOL 243Q	Biostatistics	1
CHEM 141P <sup>+</sup>	General Chemistry I	1
MATH 130 <sup>1</sup>	Calculus I with Review Part I	1
General Education requirement		1
<b>Term Units</b>		<b>4</b>
Spring		
BIOL 300 <sup>4</sup>	Molecular Biology and Biotechnology	1
CHEM 142P	General Chemistry II	1
MATH 131Q	Calculus I with Review Part 2	1
Elective		1
<b>Term Units</b>		<b>4</b>
Third Year		
Fall		
BIOL 302 <sup>+</sup>	Genetics	1
CHEM 201	Organic Chemistry I	1
Junior Seminar <sup>3</sup>		1
Elective		1
<b>Term Units</b>		<b>4</b>
Spring		
BIOL 497	Research Proposal	0.5
CHEM 301	Organic Chemistry II	1
CHEM 204 <sup>6</sup>	Biochemistry I	1
Elective		1
Elective		1
<b>Term Units</b>		<b>4.5</b>
Summer		
During the summer between third year and fourth year, or early in fourth year, the DAT needs to be taken.		
<b>Term Units</b>		<b>0</b>

Fourth Year		
Fall		
BIOL 301	Microbiology	1
BIOL 498	Senior Project I	1
Elective		1
Elective		1
<b>Term Units</b>		<b>4</b>
Spring		
BIOL 499	Senior Project II	1
BIOL 300 or 400 level course <sup>2, 5</sup>		1
Elective		1
Elective		1
<b>Term Units</b>		<b>4</b>

**Total Unit: 32.5**

- <sup>1</sup> 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 or MATH 151 instead of MATH 130 and MATH 131Q.
  - <sup>2</sup> BIOL 300- or 400-level course can be taken in any order.
  - <sup>3</sup> The Junior Seminar can be taken in the spring instead of the fall.
  - <sup>4</sup> Can be taken in third year.
  - <sup>5</sup> Other recommended upper division courses include: BIOL 301, BIOL 314, BIOL 315, BIOL 425, BIOL 401, BIOL 409, BIOL 410, BIOL 415.
  - <sup>6</sup> CHEM 204 can be taken in Fourth Year.
- + Students can concurrently take BIOL 141P with CHEM 141P and/ or BIOL 142P with CHEM 142P. However, student must obtain additional academic advising and get permission from their academic advisor before enrolling in both courses.
- \* Two core courses are required for the MCB major (Core course options: BIOL 302, BIOL 425, and CHEM 204).