

Department of Biological Sciences
 California State University, East Bay
 510-885-3471



**B.S. Degree in Biological Science
 CELL AND MOLECULAR OPTION**

Physical Sciences & Mathematics Core

		<u>Units</u>
Chem 1101, 1102, 1103	General Chemistry	15
Chem 3301, 3302, 3303	Organic Chemistry	15
Chem 4411, 4412	General Biochemistry	8
Math 1300 or 1304	Trigonometry or Calculus I	4
Physics 2701, 2702, 2703	Introductory Physics	12
Stat 3031	Statistical Methods in Biology	<u>4</u>
		58

Biology Core

Biol 1401	Molecular and Cellular Biology	5
Biol 1402	Plant Biology	5
Biol 1403	Animal Biology	5
Biol 3121	Principles of Genetics	5
Biol 3122	Principles of Developmental Genetic Analysis	4
Biol 3151	Principles of Animal Physiology	<u>5</u>
		29

Concentration in Cell and Molecular Biology

Biol 4455	Molecular Cell Biology	4
Biol 4456 (or 4485)	Molecular Techniques (or PCR from below)	<u>3 (or 4)</u>
		7 (min.)

Cell and Molecular Elective Courses (12 units min.)

Biol 3405	Microbiology	6
Biol 3430	Hematology	4
Biol 4430	Immunology	4
Biol 4441	Principles of Virology	4
Biol 4450	Cell Culture Techniques	4
Biol 4485	PCR, DNA Seq'ncing & Frag. Anal. (f not used above)	4
Biol 4490	Bioinformatics	4
Chem 4430	General Biochemistry Laboratory	4

TOTAL UNITS for Option: 106 Units (min.)