

BACHELOR OF SCIENCE IN BIOLOGY (IMPACTED)

Option in Cell and Molecular Biology Major Requirements Worksheet

2012-2013 Catalog

Name: _____

Student ID: _____

Note: This checklist is not intended to replace advising from the major department. Students should consult with the major advisor to determine the appropriate sequence of courses. This checklist is to inform students of major requirements and course prerequisites only. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification. **Pre-Biology** majors must complete their GE Foundation courses, and the highlighted areas below all with a "C" or better and a cumulative GPA of 2.5, by 60 units to be considered for the major.

Grade	Course #	Course Title	Semester	Prerequisites (<i>ALL</i> Biology Department courses require a "C" or better in every pre-requisite course)
	BIOL 211	Introduction to Evolution and Diversity (4)		CHEM 111A (can also be a corequisite)
	BIOL 212	Introduction to Cell and Molecular Biology (4)		BIOL 211 and CHEM 111A*
	BIOL 213	Introduction to Ecology and Physiology (4)		BIOL 211, 212 and CHEM 111B*
	BIOL 260	Biostatistics (3)		BIOL 211 or BIOL 207 or MICR 200*; MATH 111* or 113* or 119A* or 122*
	CHEM 111A	General Chemistry (5)**		A passing score on the CPT; MATH 113* or 117* or 119A* or 122*
	CHEM 111B	General Chemistry (5)		CHEM 111A*

Take ONE course from EACH block set:

	MATH 119A MATH 122	Survey of Calculus I (3) OR Calculus I (4)		MDPT placement or MATH 113* Appropriate MDPT placement or MATH 111* and 113*, or 117*
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	MATH 119B MATH 123	Survey of Calculus II (3) OR Calculus II (4)		MATH 119A or 122 MATH 122*
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	PHYS 100A PHYS 151	General Physics (4) OR Mechanics and Heat (4)		MATH 109 or 113 or 117 or 119A or 120 or 122 MATH 122 (can also be a pre/corequisite)
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	PHYS 100B PHYS 152	General Physics (4) OR Electricity and Magnetism (4)		PHYS 100A PHYS 151; Pre/corequisite MATH 123
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Upper Division (for upper division advising, please see your faculty advisor). Take ALL of the following courses:

	CHEM 322A	Organic Chemistry (3)		CHEM 111B* (lab required same semester**)
	CHEM 323A	Organic Chemistry Laboratory (1)**		CHEM 111B*
	CHEM 322B	Organic Chemistry (3)		CHEM 322A* and CHEM 323A* (+ lab**)
	CHEM 323B	Organic Chemistry Laboratory (1)**		CHEM 322A* and CHEM 323A*
	CHEM 441A	Biological Chemistry (3)**		CHEM 320B* or both CHEM 322B* and 323B*
	CHEM 441B	Biological Chemistry (3)		CHEM 441A*
	BIOL 340	Molecular Cell Biology (3)		BIOL 211, 212; CHEM 320A* or 322A* or 327*
	BIOL 370	General Genetics (4)		BIOL 211, 212, and either BIOL 260 or CHEM 251*
	BIOL 440L	Molecular Cell Biology Laboratory (3)		BIOL 340, 370 and consent from the instructor
	BIOL 480	Seminars (1)		Taken during the semester the student is to graduate and has consent from the faculty advisor

Take ONE course from the following:

	BIOL 312	Evolutionary Biology (3)		BIOL 211, 212, 213, 260
	BIOL 350	General Ecology (3)		BIOL 211, 212, 213, 260; MATH 119A* or 122*

Take FIVE courses from the following totaling at least 15 units: MICR 211; BIOL 431, 433, 443, 445, 447, 472, 473, 477; CHEM 547; BIOL/MICR 416, 430. Students contemplating graduate school should consider taking 1- 3 units of BIOL 496 in addition to the above requirements. In exceptional cases, students may use 3 units of BIOL 496 towards these five courses but only with *prior* permission of the advisor for this option.

* Must receive a "C" or better ** See catalog for more information

NOTE: See the catalog for courses that *do not* meet any specific or elective requirements

Updated 12/10/12 LM