

BACHELOR OF SCIENCE IN MICROBIOLOGY (IMPACTED)

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)
	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*
	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 <i>and</i> CHEM 111A*
	BIOL 260	Biostatistics (3)		BIOL 211 or BIOL 207 or MICR 200*; MATH 111* or 113* or 119A* or 122*
	MICR 211	General Microbiology (5)		BIOL 211, 212; CHEM 111B*

Take ONE course from EACH block:

PHYS 100A	General Physics (4) OR		MATH 109 or 113 or 117 or 119A or 120 or 122
PHYS 151	Mechanics and Heat (4)		MATH 122 (can also be a pre/corequisite)

PHYS 100B	General Physics (4) OR		PHYS 100A
PHYS 152	Electricity and Magnetism (4)		PHYS 151; pre/corequisite MATH 123

MATH 119A	Survey of Calculus I (3) OR		MDPT placement** or MATH 113*
MATH 122	Calculus I (4)		MDPT placement** or MATH 111* and 113*, or MATH 117*

Upper Division (for upper division advising, see your faculty advisor). Take All of the following courses:

CHEM 322A	Organic Chemistry (3) (lab required same semester**)		CHEM 111B*
CHEM 323A	Organic Chemistry Laboratory (1)**		CHEM 111B*
CHEM 322B	Organic Chemistry (3) (lab required same semester**)		CHEM 322A* <i>and</i> CHEM 323A*
CHEM 323B	Organic Chemistry Laboratory (1)**		CHEM 322A* <i>and</i> CHEM 323A*
CHEM 441A	Biological Chemistry (3)		Either CHEM 320B or both CHEM 322B <i>and</i> 323B
CHEM 441B	Biological Chemistry (3)		CHEM 441A*
BIOL 340	Molecular Cell Biology (3)		BIOL 211, 212; CHEM 320A* or 322A* or 327*
BIOL 480	Seminars (1)		Taken during the semester the student is to graduate and has consent from the undergraduate advisor
MICR 320	Bacterial Pathogenesis (3)		MICR 211*
MICR 355	Microbial Ecology (3)		MICR 211*, or BIOL 211, 212, 213
MICR 371	Microbial Genetics (3)		MICR 211*
MICR 372	Methods in Microbial Genetics (2)		MICR 211* (MICR 371 also recommended)
MICR 430	Immunology (3)		BIOL 340
MICR 471	Bacterial Physiology (3)		MICR 320* <i>and</i> CHEM 441A*

Take a minimum of **11 elective units** chosen from the following: BIOL 473, 477; MICR 320L, 322, 325, 355L, 416, 423, 429, 430L, 473, 490, and 495. Students may use only MICR 496 towards the additional units but *only* with prior permission of the advisor for this degree. Those students seeking a career as a **Clinical Laboratory Scientist/Medical Technologist** are encouraged to take MICR 320L, 416, 423, and 430L

* Must receive a "C" or better ** See exception or clarification in the catalog

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

Updated 12/10/12 LM