BACHELOR OF SCIENCE IN MICROBIOLOGY (IMPACTED) Major Requirements Worksheet 2013-2014 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 (<u>ALL</u> Biology Department courses require a "C" or better in every
	CHEM 111A	General Chemistry (5)*		<i>pre-requisite course)</i> 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 pre/corequisite
	BIOL 212	Introduction to Cell and Molecular Biology (4)		BIOL 211 <i>and</i> CHEM 111A; CHEM 111B pre/corequisite
	BIOL 260	Biostatistics (3)		BIOL 211 or 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 pre/corequisite
PHVS 100B	General Physics (4) OR	PHVS 100A

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

M	ATH 119A	Survey of Calculus I (3) OR	MDPT placement* or MATH 113
M	ATH 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:

- FF			
	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 and CHEM 323A
	CHEM 323B	Organic Chemistry Laboratory (1)*	CHEM 322A and CHEM 323A
	CHEM 441A	Biological Chemistry (3)	Either 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 480	Seminars (1)	Taken during the semester the student is to graduate and has consent from dept
	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 and CHEM 441A
T 1			

Take a minimum of <u>11 elective units</u> 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