



Bachelor of Science

BIOLOGY: Biotechnology Emphasis

Advisement Form 2008-2009

Name _____ ID _____

Lower Division Major Requirements (8 units)	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
BIOL 200 Principles of Organismal and Population Biology	4						GE: B2
BIOL 201 Principles of Cell and Molecular Biology <i>Must receive a C or better</i>	4						Prereq: CHEM 105 or 121; GE: B2
Required Supporting Courses (21 units)							
Chemistry (14 units) <i>An Organic Chemistry I equivalent course with laboratory taken at a community college may be accepted in lieu of CHEM 311.</i>							
CHEM 121 General Chemistry I <i>Must receive a C or better</i>	4						Prereq: 1 year high school chemistry or CHEM 105; GE: B1
CHEM 122 General Chemistry II <i>Must receive a C or better</i>	4						Prereq: CHEM 121 with a C or better; GE: B1
CHEM 311 Organic Chemistry I <i>Must receive a C or better</i>	3						Prereq: CHEM 122 with a C or better
CHEM 318 Biological Chemistry	3						Prereq: CHEM 311 with a C or better
Statistics, Mathematics and Computer Applications (7 units)							
BIOL 203 Quantitative Methods for Biology	3						Prereq: A passing score on the ELM or MATH 105 or equivalent; GE: B3, B4
MATH 150 Calculus I	4						Prereq: A passing score on the Calculus Placement Exam or MATH 105; GE: B3
Upper Division Major Requirements (49-50 units)							
Biology (37-38 units)							
BIOL 300 Cell Biology <i>Must receive a C or better</i>	4						Prereq: BIOL 201 with a C or better and CHEM 122
BIOL 301 Microbiology	4						Prereq: BIOL 201 with a C or better and CHEM 122
BIOL 302 Genetics <i>Must receive a C or better</i>	4						Prereq: BIOL 201 with a C or better and CHEM 122
BIOL 400 Molecular Biology <i>Must receive a C or better</i>	4						Prereq: BIOL 300 or 302 with a C or better
BIOL 401 Biotechnology & Recombinant DNA Techniques	5						Prereq: BIOL 400 with a C or better
BIOL 404 Plant and Animal Tissue Culture	3						
BIOL 405 Biochemical Engineering	4						Prereq: CHEM 318
BIOL 420 Cellular and Molecular Immunology	4						Prereq: BIOL 300 with a C or better and CHEM 122
BIOL 492 Internship	2-3						Prereq: Consent of the instructor and program approval (CR/NC)
BIOL 499 Senior Capstone in Biology	3						Prereq: Consent of instructor
Electives in Biology and Physics (12 units) Select from the following list of courses:							
BIOL/PHYS 315 Introduction To Biophysics	4						Prereq: PHYS 200; Coreq: BIOL 300
BIOL 403 Foundations of Structural Biology	4						Prereq: BIOL 300
BIOL 408 Nanobiotechnology	3						Prereq: BIOL 400

Electives in Biology and Physics, cont.	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & comments
BIOL 421 Virology	3						Prereq: BIOL 301 with a C or better and CHEM 122
BIOL 422 Molecular Plant Physiology	4						Prereq: BIOL 300 with a C or better
BIOL 423 Cellular & Molecular Neurobiology	3						Prereq: BIOL 300 with a C or better and CHEM 122
BIOL 424 Human Physiology	3						Prereq: BIOL 300 with a C or better and CHEM 122
BIOL 425 Human Genetics	3						Prereq: BIOL 300, 302 with C's or better and CHEM 122
BIOL 426 Hematology	3						Prereq: BIOL 300
BIOL 428 Biology of Cancer	3						Prereq: BIOL 300 with a C or better and CHEM 122
BIOL 431 Bioinformatics	4						Prereq: BIOL 302 with a C or better, GE: B2, B4, INTD
MGT 471 Project Management	3						Prereq: MGT 307
BIOL 503 Biotechnology Law and Regulation	3						

Additional University Graduation Requirements

9 Units Upper Division Interdisciplinary GE at CSUCI (courses numbered 330-349 or 430-449)		
Course 1 _____ (may choose BIOL 431)	Course 2 _____	Course 3 _____ (outside major)
American Institutions Requirements: US History _____ State and Local Gov't _____ (choose from HIST 270, 271, 272, 275 or 350) (choose POLS 150)		
<i>Students must receive a grade of C or better in the language and Multicultural Requirements</i>		
Language Requirement: GE C3a _____ (one semester of college level language)		
Multicultural Requirement: GE C3b _____		
<i>Minimum total units to graduate: 120 of which 40 must be upper division. Please see catalog for a complete list of graduation requirements.</i>		
Advisor _____	Date Completed: _____	
Advisor Comments: _____ _____		