



California State University Channel Islands

Bachelor of Arts

BIOLOGY: Subject Matter Preparation in Teaching Biology Emphasis

Advisement Form 2007-2008

Name _____ ID _____

Biology with Emphasis in Subject Matter Prep. in Teaching major is 78 units. 120 minimum units are required for graduation.

Lower Division Major Requirements (8 units)		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 grade of C or better</i>	4						Prereq: CHEM 105 or 121; GE: B2
Required Supporting Courses (34 units)							
Education (3 units)							
EDUC 330 Introduction to Secondary Schooling	3						GE: D & INTD
Statistics and Mathematics (7 units)							
BIOL 203 Quantitative Methods for Biology	3						Prereq: A passing score entry level math exam (ELM) or MATH 105 or equivalent; GE: B3, B4
AND select one of the following:							
MATH 105 Pre-Calculus	4						Prereq: A passing ELM score
MATH 150 Calculus I	4						Prereq: A passing score on the Calculus Placement Exam or MATH 105; GE: B3
Physical Sciences (24 units)							
CHEM 121 General Chemistry I <i>Must receive grade of C or better</i>	4						Prereq: 1 year high school chemistry or CHEM 105; GE: B1
CHEM 122 General Chemistry II <i>Must receive grade of C or better</i>	4						Prereq: CHEM 121; GE: B1
GEOL 121 Physical Geology	4						GE: B1
PHYS 100 Introduction to Physics I	4						GE: B1
PHYS 101 Introduction to Physics II	4						Prereq: PHYS 100; GE: B1
PHYS/ASTR 105 Introduction to the Solar System	4						GE: B1
Upper Division Major Requirements (36 units)							
Biology (24 Units)							
BIOL 300 Cell Biology	4						Prereq: BIOL 201 with a grade of C or better & CHEM 122
BIOL 302 Genetics	4						Prereq: BIOL 201 with a grade of C or better & CHEM 122
BIOL 303 Evolutionary Biology	3						Prereq: BIOL 200 & BIOL 201
BIOL 304 Comparative Animal Physiology	3						Prereq: BIOL 200 & BIOL 201
BIOL 335 The Biosphere <i>*Until course is offered students may substitute any BIOL course numbered 330-349 or 430-449 not being used elsewhere in the major. BIOL 334 is recommended.</i>	3						GE: B2 & INTD
BIOL 433 Ecology and the Environment	4						Prereq: BIOL 200; GE: B2 & INTD
BIOL 499 Senior Capstone Colloquium	3						Prereq: Consent of instructor

		Instit.	Course	Units	Grade	Term	Prerequisites, GE & comments
Electives in Biology (12 units) <i>Select at least three courses from the following list, one of which must be a laboratory course</i>							
BIOL 301 Microbiology	4						Prereq: BIOL 201 with a grade of C or better & CHEM 122
BIOL 310 Vertebrate Biology	4						Prereq: BIOL 200
BIOL 311 Plant Biology and Ecology	4						
BIOL 312 Marine Biology	4						Prereq: BIOL 200
BIOL/ESRM 313 Conservation Biology	4						Prereq: BIOL 200
BIOL 316 Invertebrate Zoology	4						Prereq: BIOL 200
BIOL 317 Parasitology	4						Prereq: BIOL 200
BIOL 400 Molecular Biology	4						Prereq: BIOL 300 or BIOL 302 with a grade of C or better
BIOL 401 Biotechnology and Recombinant DNA Techniques	5						Prereq: BIOL 400 with a grade of C or better
BIOL 402 Toxicology	3						Prereq: BIOL 201 with a grade of C or better & CHEM 122
BIOL 403 Foundations of Structural Biology	4						Prereq: BIOL 300
BIOL 404 Plant and Animal Tissue Culture	3						
BIOL 405 Biochemical Engineering	4						Prereq: CHEM 318
BIOL 406 Evolutionary Biogeography	3						Prereq: BIOL 303
BIOL 407 Behavioral Ecology	3						Prereq: BIOL 200
BIOL 408 Nanobiotechnology	3						Prereq: BIOL 400
BIOL 420 Cellular and Molecular Immunology	4						Prereq: BIOL 300 with a grade of C or better & CHEM 122
BIOL 421 Virology	3						Prereq: BIOL 301 with a grade of C or better & CHEM 122
BIOL 422 Molecular Plant Physiology	4						Prereq: BIOL 300 with a grade of C or better
BIOL 423 Cellular and Molecular Neurobiology	3						Prereq: BIOL 300 with a grade of C or better & CHEM 122
BIOL 424 Human Physiology	3						Prereq: BIOL 300 with a grade of C or better & CHEM 122
BIOL 425 Human Genetics	3						Prereq: BIOL 300 and 302 with grades of C or better & CHEM 122
BIOL 427 Developmental Biology	4						Prereq: BIOL 300 with a grade of C or better & CHEM 122
BIOL 428 Biology of Cancer	3						Prereq: BIOL 300 with a grade of C or better & CHEM 122
BIOL 431 Bioinformatics	4						Prereq: BIOL 302 with a grade of C or better ; GE: B2, B4, & INTD
BIOL 432 Principles of Epidemiology and Environmental Health	3						Prereq: BIOL 201 with a grade of C or better and CHEM 122; GE: B2, D, & INTD
BIOL 450 Ichthyology: The Biology of Fishes	4						Prereq: BIOL 200
BIOL 451 Ornithology	4						Prereq: BIOL 200, 201
<i>No more than 2 units taken from the following may count towards the 12 units of Electives in Biology required:</i>							
BIOL 492 Internship	2-3						Prereq: Consent of the instructor and program approval
BIOL 494 Independent Research	1-3						Prereq: Consent of the instructor and program approval
BIOL 497 Directed Study	1-3						Prereq: Consent of the instructor and program approval

Additional University Graduation Requirements

9 Units Upper Division Interdisciplinary GE at CSUCI (courses numbered 330-349 or 430-449)

Course 1 (in major) BIOL 335 Course 2 (in major) BIOL 433 Course 3 (outside of major) EDUC 330

American Institutions Requirements: US History _____ State and Local Gov't POLS 150
(Choose from HIST 270, 271, 272, 275 or 350)

Students must receive a grade of C or better in the language and Multicultural Requirements

Language Requirement: GE C3a _____
(one semester of college level language)

Multicultural Requirement: GE C3b _____

Minimum total units to graduate: 120 of which 40 must be upper division. Please see catalog for a complete list of graduation requirements.

Advisor _____ Date Completed: _____

Advisor Comments: _____
