



California State University Channel Islands

Bachelor of Arts

BIOLOGY: Pre-Professional Studies

Advisement Form 2007-2008

Name _____ ID _____

B.A. in Biology with Pre-Professional Studies Emphasis major is 66-69 units. A minimum of 120 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 (27-28 units) | | | | | | | |
| Chemistry (16 units) <i>A year-long organic chemistry sequence with laboratory taken at a community college may be accepted in lieu of CHEM 311, 312, 314, and 315.</i> | | | | | | | |
| 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 |
| CHEM 311 Organic Chemistry I <i>Must receive grade of C or better</i> | 3 | | | | | | Prereq: CHEM 122 |
| CHEM 312 Organic Chemistry I Lab <i>Must receive grade of C or better</i> | 1 | | | | | | Prereq: CHEM 311 (or taken concurrently) |
| CHEM 314 Organic Chemistry II <i>Must receive grade of C or better</i> | 3 | | | | | | Prereq: CHEM 311 |
| CHEM 315 Organic Chemistry II Lab | 1 | | | | | | Prereq: CHEM 311, 312, and 314 (or taken concurrently) |
| Statistics, Mathematics and Computer Applications (3-4 units) <i>Select one of the following:</i> (Check with professional schools or pre-professional advisor for specific requirements in this category) | | | | | | | |
| BIOL 203 Quantitative Methods for Biology | 3 | | | | | | Prereq: A passing score entry level math exam (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 |
| Physics (8 units) | | | | | | | |
| PHYS 100 Introduction to Physics I | 4 | | | | | | GE: B1 |
| PHYS 101 Introduction to Physics II | 4 | | | | | | Prereq: PHYS 100; GE: B1 |
| Upper Division Major Requirements (31-33 units) | | | | | | | |
| Biology (21-22 Units) | | | | | | | |
| BIOL 300 Cell Biology <i>Must receive grade of C or better</i> | 4 | | | | | | Prereq: BIOL 201 with a grade of C or better & CHEM 122 |
| BIOL 302 Genetics <i>Must receive grade of C or better</i> | 4 | | | | | | Prereq: BIOL 201 with a grade of C or better & CHEM 122 |
| BIOL 304 Comparative Animal Physiology | 3 | | | | | | Prereq: BIOL 200 & BIOL 201 |
| BIOL 400 Molecular Biology | 4 | | | | | | Prereq: BIOL 300 or 302 with grade of C or better |
| BIOL 499 Senior Capstone in Biology | 3 | | | | | | Prereq: Consent of instructor |
| <i>AND select one of the following:</i> | | | | | | | |
| BIOL 303 Evolutionary Biology | 3 | | | | | | Prereq: BIOL 200 & BIOL 201 |
| BIOL 433 Ecology and the Environment | 4 | | | | | | Prereq: BIOL 200; GE: B2 & INTD |

| | | Instit. | Course | Units | Grade | Term | Prerequisites, GE & comments |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----|---------|--------|-------|-------|------|---------------------------------------------------------------------------------|
| Electives in Biology (10-11 units) <i>Select at least three courses from the following list, one of which must be a Lab 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 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 Biology electives 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) _____ Course 2 (in major) _____ Course 3 (outside of major) _____
(may choose BIOL 431, 432 or 433) (Choose from GE A-E)

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: _____
