



# California State University Channel Islands

## Bachelor of Science

### ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

#### Environmental Science Emphasis

#### Advisement Form 2007-2008

Name \_\_\_\_\_ ID \_\_\_\_\_

The ESRM degree consists of 80-82 units. 120 minimum units are required for graduation.

Lower Division Requirements (37-39 units)		Instit.	Course	Units	Grade	Term	Prerequisites, GE and 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
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 with grade of C or better; GE: B1
ECON 110 Principles of Microeconomics	3						GE: D
ECON 111 Principles of Macroeconomics	3						GE: D
ESRM 100 Introduction to Environmental Science and Resource Management	3						GE: B2, D
ESRM 200 Principles of Resource Management, Conservation, and Stewardship	3						Prereq: ESRM 100 and BIOL 200
GEOL 121 Physical Geology <b>OR</b> GEOL 122 Historical Geology	4 <i>or</i> 3						GE: B1
MATH 140 Calculus for Business Applications <b>OR</b> MATH 150 Calculus I	3 <i>or</i> 4						<u>MATH 140 Prereq:</u> Passing score on Calculus Placement Exam or MATH 101 or 105; GE: B3.  <u>MATH 150 Prereq:</u> Passing score on the Calculus Placement Exam or MATH 105; GE: B3.
<i>NOTE: Although not required, Math 151 Calculus II is highly recommended for this major</i>							
MATH/PSY 202 Biostatistics <b>OR</b> MATH 329 Statistics for Business and Economics <b>OR</b> BIOL 203 Quantitative Methods for Biology	3						<u>MATH/PSY 202 Prereq:</u> Passing score on ELM Exam or MATH 105 or equivalent; GE: B3  <u>MATH 329:</u> GE: B3  <u>BIOL 203 Prereq:</u> Passing score on ELM Exam or MATH 105 or equivalent; GE: B3
<b>Upper Division Requirements (43 units)</b>							
<b>Major Courses (27 units)</b>							
BIOL 433 Ecology and the Environment	4						Prereq: BIOL 200; GE: B2 and INTD
ECON 362 Environmental Economics	3						Prereq: ECON 110 and 111, or ECON 300
ENGL 337 Literature of the Environment	3						GE: C2, D and INTD
ESRM/BIOL 313 Conservation Biology	4						Prereq: BIOL 200
ESRM 328 Introduction to Geographical Information Systems	3						Prereq: ESRM 100 or consent of instructor
ESRM 329 Environmental Law and Policy	3						Prereq: ESRM 100 or consent of instructor

Upper Division Requirements, cont.		Instit.	Course	Units	Grade	Term	Prerequisites, GE and comments
ESRM/HIST 342 Environmental History	3						GE: D and INTD
ESRM 491 Capstone Preparation	1						Prereq: Senior standing in the Environmental Science and Resource Management major
ESRM 499 Capstone	3						Prereq: Upper division required courses in the ESRM major(may be taken concurrently)
<b>Emphasis Requirements (16 units)</b>							
ESRM 352 Theory and Practice of Ecological Restoration	3						
CHEM 250 Quantitative Analysis	2						Coreq: CHEM 251; Prereq: CHEM 122 with grade of C or better
CHEM 251 Quantitative Analysis Laboratory	2						Coreq: CHEM 250; Prereq: CHEM 122 with grade of C or better
<i>Select <b>9 units</b> from the following courses:</i>							
BIOL 301 Microbiology	4						Prereq.: CHEM 122, BIOL 201 both with grade of C or better
BIOL 310 Vertebrate Biology	4						Prereq: BIOL 200
BIOL 312 Marine Biology	4						Prereq: BIOL 200
BIOL 316 Invertebrate Zoology	4						Prereq: BIOL 200
BIOL 333 Emerging Public Health Issues	3						GE: B2, E and INTD
BIOL 334 Natural History of Ventura County	3						GE: B2, INTD
BIOL 402 Toxicology	3						Prereq: CHEM 122, BIOL 201 both with grade of C or better
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 and INTD
BIOL 450 Ichthyology: The Biology of Fishes	4						Prereq: BIOL 200
BIOL 451 Ornithology	4						Prereq: BIOL 200 and BIOL 201
CHEM 311 Organic Chemistry I <i>Must receive grade of C or better</i>	3						Prereq: CHEM 122
CHEM 312 Organic Chemistry I Laboratory <i>Must receive grade of C or better</i>	1						Prereq: CHEM 311(or taken concurrently) with grade of C or better
CHEM 314 Organic Chemistry II <i>Must receive grade of C or better</i>	3						Prereq: CHEM 311 with grade of C or better
CHEM 315 Organic Chemistry II Laboratory	1						Prereq: CHEM 311, CHEM 312, CHEM 314(or taken concurrently with CHEM 314) with grades of C or better
CHEM 318 Biological Chemistry	3						Prereq: CHEM 311 with grade of C or better
ENGL 482 Technical Writing	3						Prereq: ENGL 330
ENGL 483 Technical Visual Communication	3						
ESRM 350 Ecological Restoration Design and Construction	4						Prereq: ESRM 352
ESRM 351 Field Methods: Monitoring and Assessment	4						Prereq: ESRM 313
ESRM/COMM 443 Environmental Communication	3						Prerequisite: ESRM 100 and COMM 101 or COMM 320
ESRM 481 Topics in Environmental Pollution	3						Prereq: BIOL 433 and 432, CHEM 250 and 251. Repeatable by topic.
ESRM 490 Special Topics	3						Prereq: Consent of instructor

Emphasis Requirements, cont.		Instit.	Course	Units	Grade	Term	Prerequisites, GE and comments
ESRM 492 Service Learning/Internship	3						Prereq: Consent of instructor
ESRM 494 Independent Research	1-3						Prereq: Consent of instructor
MATH 430 Research Design and Data Analysis	3						Prereq: MATH/PSY 202 with a grade of C or better or MATH 352; GE: B2, B3 and INTD
PHYS 201 General Physics II	4						Prereq: PHYS 200, GE: B1
PHYS/CHEM 344 Energy and Society	3						GE: B1 and INTD

### Additional University Graduation Requirements

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

Course 1 (in major) BIOL 433 Course 2 (in major) ENGL 337 Course 3 (outside of major) \_\_\_\_\_  
 (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: \_\_\_\_\_

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