Environmental Studies AS Major - Active

Department: Earth Sciences

Approval: March 2016

Effective Semester: Fall 2017

CCSF's Environmental Studies major is designed to demonstrate the interdisciplinary nature of the field and to provide students with a strong foundation in the natural and social sciences in preparation for transfer to a bachelor's degree program.

Although Environmental Studies majors should be able to complete most or all of their lower division preparation at CCSF before transfer, they should meet with a counselor to confirm their program of study and the specific requirements of the transfer institution.

Through the required units for the Environmental Studies major, students will apply core principles and methods across disciplines to explore how the environment influences and is influenced by human institutions. Students will be able to analyze scientific, economic, political, and societal factors impacting environmental and natural resource problems and both critically evaluate and propose sustainable solutions. The major also provides opportunities for experiential learning through laboratory work and field investigations.

Learning Outcomes
Upon completion of this program, students will be able to:

- Apply concepts, models, and quantitative techniques from mathematics and the natural and social sciences to solve complex problems related to the natural world and society.
- Apply tools, practices, and quantitative reasoning to collect, analyze, and interpret environmentally relevant data both in laboratory and field settings.
- Analyze, interpret, and evaluate quantitative and qualitative evidence regarding the causes and consequences of human impacts on the environment and their implications for societal welfare.
- Apply concepts and models from scientific, economic, and sociopolitical disciplines to both critically evaluate and propose sustainable solutions to environmental degradation and resource depletion.
- Quantify and evaluate personal impacts on the environment and integrate and apply sustainable solutions to their own lifestyle and career choices.

See major requirements at the intended transfer institution to choose the appropriate course(s) when options are given.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Environmental Studies AS

Course	Units
Core course:	
BIO 31/GEOG 31/SUST 31 - Introduction to Environmental Science	3.00
Total:	3.00

Choose one of the following biological science courses:	
BIO 11 - Science of Living Organisms	4.00
BIO 100A - General Biology	5.00
BIO 20 - Introduction to Ecology	3.00
BIO 19 - Ecology	4.00
Total:	3.00 - 6.00
Choose one of the following chemistry courses:	
CHEM 40 - Introduction to Chemical Principles	5.00
CHEM 101A - General College Chemistry	6.00
Total:	5.00 - 6.00
Choose one of the following earth science course combinations:	
GEOG 1 - Physical Geography	3.00
and	
GEOG 1L - Physical Geography Laboratory	1.00
GEOL 10 - Physical Geology	3.00
and	
GEOL 10L - Physical Geology Lab	2.00
GEOL 30 - Environmental Geology	3.00
and	
GEOL 30L - Environmental Geology Lab	1.00
Total:	4.00 - 5.00
Choose one of the following math courses:	
ECON 5 - Introductory Statistics for Economics, Business and Social Sciences	5.00
MATH 80 - Probability and Statistics	5.00
PSYC 5 - Statistics for Behavioral Sciences	5.00
MATH 100A - Short Calculus I	3.00
MATH 110A - Calculus I	5.00
Total:	3.00 - 5.00
Choose two of the following social science courses:	
ANTH 3 - Introduction to Social and Cultural Anthropology	3.00
ANTH 3C - Introduction to Cultural Anthropology: Focus on American Cultures	3.00
ECON 1 - Principles of Macroeconomics	3.00
ECON 3 - Principles of Microeconomics	3.00
GEOG 4 - Cultural Geography	3.00
GEOG 7 - Economic Geography	3.00
POLS 22 - Environmental Politics and Policy	3.00
Total:	6.00
Choose 6 units from the following courses:	
BIO 33 - Introduction to Conservation Biology	3.00
BIO 100B - General Biology	5.00
CHEM 101B - General College Chemistry	5.00

ENRG 3 - Introduction to Alternative Energy	3.00
ENRG 3L - Introduction to Alternative Energy Laboratory	1.00
GEOG 41A - Climate Change	1.00
GEOG 110 - Introduction to GIS	3.00
HLTH 53 - Personal and Community Health	3.00
HLTH 221 - Health and Social Justice	3.00
PHYC 10 - Conceptual Physics	3.00
PHYC 10L - Conceptual Physics Laboratory	1.00
Any of the above earth science, mathematics, biology, or social science options not already completed	
Total:	6.00
Total:	**30.00 - 37.00**

Generated on: 5/21/2019 4:53:51 PM