

Bachelor of Science in Environment and Society

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (<http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate>).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (<http://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements>).
- Complete the General Education Requirements for Baccalaureate Degrees (<http://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements/gers>). Some major requirements may be used to satisfy General Education Requirements.
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
BIOL A271	Principles of Ecology	3
BIOL A473	Conservation Biology	3
CEL A292	Introduction to Civic Engagement	3
COMM A241	Public Speaking	3
ECON A210	Environmental Economics and Policy	3
ENGL A478	Public Science Writing	3
ENVI A211 & A211L	Environmental Science: Systems and Processes and Environmental Science: Systems and Processes Laboratory	4
ENVI A212	Living on Earth: Introduction to Environmental Studies	3
ENVI A280	Professional Preparation in Environmental Fields I	1
ENVI A370	Environmental Field Methods	3
ENVI A395	Environmental Studies Internship	3
ENVI A470	Environmental Planning and Problem Solving	4
ENVI A480	Professional Preparation in Environmental Fields II	1
ENVI A490	Topics in Environment and Society	3
GEOG/ENVI A111	Earth Systems: Elements of Physical Geography	3
GEOG A375	Environmental Applications of Geographic Information Systems (GIS)	3

Complete one of the following 100-level math options: * 3-7

MATH A121	College Algebra for Managerial and Social Sciences	
MATH A151 & MATH A152	College Algebra for Calculus and Trigonometry	
MATH A155	Precalculus	
MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	
PHIL A303	Environmental Ethics	3
STAT A253	Applied Statistics for the Sciences	4
Total		59-64

* Students planning on taking the spatial concentration below should not take MATH A121 to fulfill this requirement. Fulfilling this requirement with MATH A121 might require additional prerequisites when completing the spatial concentration.

Complete one of the following concentrations:

Code	Title	Credits
Biology Concentration		
BIOL A108	Principles and Methods in Biology	6
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106	General Chemistry II	3
Complete 9 credits from the following upper-division courses:		9
BIOL A431	Plant Diversity and Evolution	
BIOL A467	Wildlife Ecology	
BIOL A472	Biogeography	
BIOL A474	Ecotoxicology	
BIOL A477	Tundra and Taiga Ecosystems	
BIOL A478	Biological Oceanography	
BIOL A481	Marine Biology	
BIOL A482	Spatial Ecology	
BIOL A483	Exploration Ecology	
BIOL A484	Experiential Learning: Exploration Ecology Field Study	
Total		22

Code	Title	Credits
Geology Concentration		
BIOL A102	Introductory Biology	3
CHEM A103	Introduction to General Chemistry	3
Complete one of the following:		4
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	
GEOL A115 & A115L	Environmental Geology and Environmental Geology Laboratory	

GEOL A121	Physical Geology for Science and Engineering Majors	
GEOL A221	Historical Geology	4
GEOL A225	Earth Surface Processes	3
Complete 6 credits of the following:		6
GEOL A315	Geological Data Visualization and Analysis	
GEOL A350	Geomorphology	
GEOL A361	Earth Resources and Society	
GEOL A436	Petroleum Geology	
GEOL A454	Glacial and Quaternary Geology	
GEOL A455	Permafrost	
GEOL A458	Geology of Alaska	
GEOL A490	Advanced Topics in Geology (with environmental topic)	
GEOL A492	Geology Seminar	
Total		23

Code	Title	Credits
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Social Science Concentration

BIOL A102	Introductory Biology	3
CHEM A103	Introduction to General Chemistry	3
Complete 6 credits from the following:		6
ANTH A202	Cultural Anthropology	
ANTH A211	Archaeology	
SOC A101	Introduction to Sociology	
Complete 9 credits from the following upper-division courses:		9
ANTH A415	Applied Anthropology	
ANTH A431	Field Methods in Archaeology and Bioanthropology	
ANTH A454	Culture and Ecology	
GEO A354	City and Regional Planning	
SOC A307	Demography	
SOC A309	Urban Sociology	
SOC A361	Social Science Research Methods	
SOC A404	Environmental Sociology	
SOC A462	Social Science Statistics	
Complete one additional course from any of the courses listed in this concentration.		3
Total		24

Code	Title	Credits
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Spatial Concentration

BIOL A102	Introductory Biology	3
CHEM A103	Introduction to General Chemistry	3
GIS A101	Introduction to Geographic Information Systems	3
GIS A201	Intermediate Geographic Information Systems	3

Complete 9 credits from the following upper-division courses:		9
GIS A301	Spatial Data Structures	
GIS A351	Remote Sensing	
GIS A370	GIS and Remote Sensing for Natural Resources	
GIS A458	Spatial Data Management	
GIS A466	Spatial Analysis	
Total		21

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Environment and Society will be able to:

- Explain the fundamental role of natural/living systems in supporting life and social well-being, enabling beneficial relationships between people and the natural world, and underpinning the key human threats to the environment.
- Demonstrate the ability to employ the following liberal education skills in a disciplinary and professional setting: critical thinking, problem solving, and decision making; conceptual engagement with ethics and civic issues; use of the scientific method; and technical writing skills.
- Apply the following skill sets to address environmental problems and develop solutions in professional, academic, and civic settings: communication and teamwork, stakeholder engagement, field research techniques, environmental assessment, survey design, data collection and analysis, mapping techniques, knowledge of key environmental laws and policies, environmental planning.