College of Liberal Arts and Science

Institute for the Study of the Environment, Sustainability and Energy

Environmental Studies

BS/BA

2020-2021

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1. **Introduction and Context**

The goal of Environmental Studies (ENVS) is to foster interdisciplinary education, basic and applied research, and community engagement to promote understanding of the environment and the development of creative and effective solutions to environmental and sustainability issues. ENVS integrates perspectives and methods from the natural sciences, social sciences, humanities, technology, and engineering. The B.A./B.S. environmental studies (ENVS) degree program includes learning and engagement opportunities for students and provides the region and the nation with graduates prepared to take on the diverse suite of important challenges that exist in environmental quality, energy, and sustainability.

Environmental issues are found in every kind of workplace. As awareness of these issues grows, the need for people with a blend of science and policy knowledge will also grow. Environmental Studies alumni can expect to find careers as environmental planners, analysts, and policy-makers. They can also manage corporate compliance with environmental regulations and conduct audits of internal environmental efficiency.

Graduates in environmental studies are not only knowledgeable in their program emphasis; as interdisciplinary students, they have also gained the critical and job-ready skills of flexibility and versatility. There is a growing need in all forms of media for eloquent voices to communicate environmental messages. Informing the public about environmental issues and what they can do about them is a driving force behind the movement.

2. **Student Learning Outcomes**

   1. Integrate and apply knowledge from multiple disciplinary perspectives to evaluate the causes, consequences, and potential solutions to environmental challenges
   2. Critically evaluate the environmental, historical, and social context of environmental changes from the local to global scale
   3. Identify and analyze research at the cutting-edge of science, technology, social science, and humanities to generate solutions to contemporary environmental challenges.
   4. Effectively communicate complex issues and ideas to diverse audiences and successfully work in groups.

3. Program-by-Baccalaureate Learning Outcomes Matrix

Program Student Learning Outcome	Baccalaureate Student Learning Outcomes							
	A. Global inter-connections and inter-dependencies	B. Intercultural competencies	C. Analyze human life and natural world inter-connections	D. Critical, creative, and independent thought	E. Communicate clearly and effectively	F. Collaborate with others	G. Quantitative and qualitative reasoning	H. Apply knowledge/ skills creatively
1. Integrate and apply interdisciplinary perspectives	S		S	M		M	M	S
2. Critically evaluate context of environmental change	S	S	S	S				S
3. Identify and analyze research to generate solutions	M	S	M	S			S	S
4. Effectively communicate complex issues	M	M	S		S	S		
Overall	S	S	S	S	M	M	M	S

Note. Gauge whether each program outcome strongly supports (S), moderately supports (M), or doesn't support (leave blank) each baccalaureate learning outcome

4. Curriculum Map

Course	Program Student Learning Outcomes			
	1. Integrate and apply interdisciplinary perspectives	2. Critically evaluate context of environmental change	3. Identify and analyze research to generate solutions	4. Effectively communicate complex issues
ENVS 100	B	B	B	
ENVS 301	P	B	D	B
ENVS 302	B	D	P	P
ENVS 303	D	P	B	P
ENVS 304	P	D	B	D
ENVS 305X	D	D	P	B
ENVS 490/491/492/ 498/450	P	P	P	P

Note. Course supports the outcome at the B=beginning, D=developing, or P=proficient level.

All other courses for the degree are offered by other departments. We only offer a course to introduce the major, a core of content courses, and an engaged learning requirement (research/internship).

5. **Assessment Methods**

The description needs to be in enough detail to communicate to others what each assessment is, when it will be given, who is responsible for carrying out the assessment, what the desired target level of individual student performance is (to say a single student met the student learning outcome(s)), and what the desired overall target level of performance is for all students (to say the program is meeting the outcome(s)). Individual student-level achievement targets are often preset scores on an exam, scores on a rubric, etc. Program-level targets are often expressed as the percent of students demonstrating they meet individual student-level achievement targets.

| Assessment Method | Explanation | | | | | |
	Description	Student-Level Achievement [a]	Program-Level Target [b]	When Data Will be Collected	Person Responsible	SLOs
Course-Embedded Book Review Assignment ENVS 301	Direct assessment method that involves using existing student coursework. Silent Spring book review demonstrates student ability to comprehend pollution and water quality issues and to integrate their knowledge of scientific observation and science communication.	A student will receive a score of at least 70% - meet minimum expectations.	85% of all students will meet the student-level target.	End of the semester.	Course instructor	1,3
Course-Embedded Public Outreach Instrument ENVS 302	Direct assessment method that involves using existing student coursework. The Public Outreach Instrument allows students to identify and analyze a specific environmental issue and then apply science communication.	A student will receive a score of at least 70% - meet minimum expectations.	85% of all students will meet the student-level target.	End of the semester.	Course instructor	2,3,4

Assessment Method	Explanation					
	Description	Student-Level Achievement [a]	Program-Level Target [b]	When Data Will be Collected	Person Responsible	SLOs
Course-Embedded Writing Assignment ENVS 303	Direct assessment method that involves using existing student coursework. The essay evaluating an NPR piece has students critically evaluate arguments and apply knowledge of sociocultural and ethical issues.	A student will receive a score of at least 70% - meet minimum expectations.	85% of all students will meet the student-level target.	End of the semester.	Course instructor	1,2,4
Course-Embedded Writing Assignment ENVS 304	Direct assessment method that involves using existing student coursework. Writing assignment requires students to apply their policy knowledge to a specific environmental problem and recommend methods for implementation.	A student will receive a score of at least 70% - meet minimum expectations.	85% of all students will meet the student-level target.	End of the semester.	Course instructor	1,2,4
Course-Embedded Report and Presentation ENVS 305	Direct assessment method that involves using existing student coursework. Students are asked to recommend a solution to a technical problem that demonstrates capacity to generate solutions to contemporary environmental challenges.	A student will receive a score of at least 70% - meet minimum expectations.	85% of all students will meet the student-level target.	End of the semester.	Course instructor	1,2,3

Assessment Method	Explanation					
	Description	Student-Level Achievement [a]	Program-Level Target [b]	When Data Will be Collected	Person Responsible	SLOs
Intern Site Evaluation	Internship or research experience is required of all of students. Internship evaluation highlights if our students are prepared for a career and can do the SLOs in the real-world.	80% of students identify experience as relevant to career. 80% of supervisors indicate students meet expectations.	80% of students identify experience as relevant to career. 80% of supervisors indicate students meet expectations.	End of the semester.	Assistant Director	1-4
Research Evaluation	Internship or research experience is required of all of students. Research evaluation highlights if our students are prepared for a career and can do the SLOs in the real-world.	The goal is that 80% of students will be able to evaluate and assess impact after completion of research.	The goal is that 80% of students will be able to evaluate and assess impact after completion of research.	End of the semester.	Assistant Director	1-4
ENVS 100 Survey	Initial survey to determine general knowledge of the program and SLOs.	The goal is that 100% of students will complete the survey.	The goal is that 100% of students will complete the survey.	Beginning of fall semester	Course Instructor	1-4
Exit Survey	Repeat survey to determine gained knowledge of the program and SLOs.	The goal is that 80% of graduating students will complete the survey.	The goal is that 80% of graduating students will complete the survey.	End of spring semester	Assistant Director	1-4
Note. [a] Student-level target is the score or performance an individual student must demonstrate to say the student met the student learning outcome. [b] Program-level target is the percent of all students that must demonstrate they meet the student learning outcome.						

ASSESSMENT METHODS-BY-OUTCOMES MATRIX

Assessment Method	Program Student Learning Outcome			
	Integrate and apply interdisciplinary perspectives	Critically evaluate context of environmental change	Identify and analyze research to generate solutions	Effectively communicate complex issues
ENVS 301	S, D	F, D	S, D	F, D
ENVS 302	F, D	S, D	S, D	S, D
ENVS 303	S, D	S, D	F, D	S, D
ENVS 305	S, D	S, D	F, D	S, D
ENVS 305	S, D	S, D	S, D	F, D
Intern Site Evaluation	S, I	S, I	S, I	S, I
Research Evaluation	S, I	S, I	S, I	S, I
ENVS 100 Survey	F, I	F,I	F,I	F,I
Exit Survey	S, I	S, I	S, I	S, I

Note. F=formative assessment, S=summative assessment, D=direct assessment, and I=indirect assessment. See the paragraph above for an explanation of each type of assessment.