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Academic Learning Compact : Environmental Science and Policy [Effective 2015]

University of South Florida St. Petersburg.

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Academic Learning Compact: Fall 2015- Spring 2016

“ . . . to ensure student achievement in undergraduate and graduate degree programs . . . ”



Academic Learning Compacts

Academic Year: Fall 2015 & Spring 2016

Due: May 15, 2016

Academic Program-linked College Mission-based Goals/Objectives

In the matrix on the following page, please place an X in the grid that identifies the degree program goals and objectives that align with the institutional mission-based goals/objectives and the College based goals/objectives. These goals/objectives need to be documented in your ALC data.

UNIVERSITY OF SOUTH FLORIDA ST. PETERSBURG GOALS & OBJECTIVES		COLLEGE OF ARTS & SCIENCES GOALS & OBJECTIVES		UNDERGRADUATE PROGRAMS										
				Anthropology	Biology	Criminology	Literature & Writing	Environmental Science (BA)	Graphic Design	Political Science	Psychology	History	I.S.S.	Journalism (BA)
Academic Performance	Use sustained evidence of SLO's and student achievement for continuous improvement	Initiate and expand graduate programs and develop formal academic ties to other graduate programs within the USF system					X							
	Offer certificate, undergraduate and graduate programs that meet regional needs						X							
	Implement and support information and instructional technologies that facilitate effective pedagogies						X							
	Enhance programs that specifically support academic excellence						X							
	Increase student awareness of participating in a global society						X							
Student Engagement	Create a freshman experience that enables students to thrive and move successfully through to graduation	Our students will have critical skills and a broad outlook that will make them engaged and productive citizens					X							
	Foster institutional pride and strengthen connections within the campus community	Incorporate civic engagement, service learning, and experiential learning into their classes, when appropriate					X							
	Enhance opportunities for increased student involvement in curricular and co-curricular activities						X							
Diversity & Inclusion	Insure an inclusive community where differences are respected and valued	Cultivate a vigorous liberal arts culture by recruiting talented diverse students, maintaining small class sizes, and mentoring those students we have.					X							
	Attract and retain a diverse student population	Encourage free discussion, foster critical thinking, demand that our students write, and work across disciplines					X							
	Increase the diversity of faculty and staff						X							
Research & Creative Activities	Create a vibrant culture of faculty research and creative scholarship	Make significant and meaningful contributions to ongoing dialogues in our academic fields.					X							
	Promote and support undergraduate research as a meaningful aspect of campus life	We expect our undergraduate and graduate students to engage in research in collaboration with faculty					X							
	Enhance and support research and scholarly collaborations with community partners						X							

Academic Learning Compact: Fall 2015- Spring 2016

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Signature Page for Academic Program

Academic Program: ESPG

Chair/Coordinator:

Date:

Summary Statement – Academic Program Performance in Fall 2015- Spring 2016

Provide a summary statement about academic program performance over the previous year including high points and low points

During the 2015-2016 academic year, the department housing the Environmental Science and Policy major was reorganized. The year also saw the departure of 3 instructors teaching many of the courses contained in the ALCs. These two factors greatly complicated data acquisition. Nevertheless, the program experienced several successes during the academic year. Students presented research at the undergraduate student symposium and the first Initiative on Coastal Adaptation and Resilience was held, allowing students to interact with professionals in their field. In addition, internships continued to be a productive way for students to engage in experiential learning.

Summary Statement – Impact of Changes Made in Fall 2015- Spring 2016

*Provide a summary statement about the changes that were made in your program resulting from the ALC's in the preceding Academic Year.
Include both the high points and low points*

Mission of Academic Program (include URL):) The status of the Earth’s environment has been a major concern since the 1960s. Currently, it represents one of the most critical issues facing nearly all nations. Increased population, technology, globalization and diminishing natural resources all play important roles in the changing environment. As a consequence, governments at all levels are devoting resources to help understand and mitigate the problems we are facing. The actions of people, as individuals or society as a whole, are crucial for environmental well-being and long-term sustainability. This degree emphasizes the understanding of interrelationships between social phenomena and the natural (i.e., biological-physical-chemical) environment.

<http://www.usfsp.edu/espg/programs/bseesp/>

List Program Goal(s) / Objective(s): (1) increase student awareness of these interconnections in their everyday lives; (2) introduce students to a variety of social science perspectives (including politics and policies) along with hard environmental science perspectives, that help students make sense of these connections; (3) identify the contributions of each of these perspectives to our understanding of environmental problems; (4) discuss how natural resource management and environmental policy reflect these perspectives; and (5) produce graduates who promote sustainability in all facets of human enterprise.

Program Goals / Objectives must be mapped to College Goals / Objectives – use consistent nomenclature.

[Please note impact of any changes that were made as a result of 2009-10 assessment]

ALCs must address student learning in four areas: 1. Content/Discipline Skills; 2. Communication Skills; Critical Thinking Skills; and 4. Civic Engagement.

ALC GOALS ESTABLISHED FOR DATA COLLECTION: **Fall 2015 & Spring 2016**

1. Content/Discipline Skills				
Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in Fall 2016 – Spring 2017
1a. Evaluate and implement the scientific process	EVR 2001 , questions asking students to explain the scientific process and to detail an example of its implementation will be administered in the final exam	100% of ESP majors will earn a minimum grade of 80% in the relevant questions in all three courses.	65% (39 of 60 students) obtained an 80% or better on the final exam	Criterion will be kept to generate data for comparison.
1b. Apply the science of ecology to specific issues in the field of environmental science.	EVR 4921 – An exit assessment test will be administered containing questions testing knowledge of ecological principles in environmental science.	100% of ESP majors will answer correctly a minimum of 80% of these questions.	N/A	
1c. Demonstrate an understanding of the major environmental issues, the science underlying them (including chemistry, geology, and biology), and potential solutions, including scientific and policy strategies.	EVR 4921 – An assessment test will be administered which will include questions testing knowledge in this area.	1) 100% of ESP majors will answer correctly a minimum of 80% of these questions.	N/A	
1d. Demonstrate competency in the application of mathematical and GIS concepts to the field of environmental science.	All ESP majors taking GIS 3006 and GIS 4043 will be assessed via (a) term project that requires synthesis and integration of GIS concepts tools and thinking and (b) the Midterm II.	1) (a) 65% of ESP students will earn 80% or higher on their term project. (b) 75% of ESP majors will earn a minimum of 85% in the relevant questions in Midterm II.	1a) For GIS 3006, (Fall 2015, 26 students enrolled) of the students enrolled in this class 16 of them were ESP majors. 1 of them earned 95%, 3- 90%, 2- 85%, 4 -80%, 4-75% and 2-70%. For GIS 4043, 7 students were ESP majors and 5 of these students earned 80% or above in their midterm (key questions).	This course (GIS 4043) is only required by ESP Science track students – hence give limited information. We should remove this course from ALC. But we should use GIS 3006 instead since all students are required to take GIS 3006.
1f. Demonstrate a thorough understanding of the major environmental policies under which political decisions are made.	EVR 2861 will assess student understanding of the state of US environmental policy in	100% of ESP majors will earn a minimum grade of 80% in the relevant questions in exams given.	There were 41 students enrolled in the class. Of the 41 students, 24 were ESP major. Thirty-one (31) students had 80% or more in	The students completed two objective type exams and two oral (role playing debate) type exams. The overall performance

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	relationship to air, water, land use, energy, waste management, biodiversity, natural resources, and human populations in a series of three examinations.		the final grade. Three (3) students had 70% or more, but less than 80%. One (1) student scored less than 70% but, more than 60%. Six (6) student scored less than 60%.	of the class was good. However, the goal of 100% of ESP majors earning a minimum grade of 80% in the relevant questions in exams was not meet. The criterion for success for 2016-17 will be modified: 100% of ESP majors will earn an overall minimum grade of 80% in the course. This criterion will be kept to generate data for comparison.
1g. Demonstrate an understanding of the framework of stages of policy development.	PUP 4203 will assess student understanding of the process of environmental policy formation, adoption, implementation and evaluation in Exam #1	100% of ESP majors will earn a minimum grade of 80% in the relevant questions	The class size was 30. Twenty-one (26) of the 30 students scored 80% or higher in the final grade. Two (2) students scored 70% or more, but less than 80%. Two (2) students scored less than 70%.	The students completed two short and long essay type exams. The goal of this class was met as 100% of ESP majors earned 80% or more in the relevant questions. The criterion for success for 2016-17 will be modified: 100% of ESP majors will earn an overall minimum grade of 80% in the course. This criterion will be kept to generate data for comparison.
1h. Demonstrate an understanding of underlying sustainability principles in the context of environmental sciences.	EVR 4873 will assess student understanding of environmental and sustainability issues, problems, and solutions in three examinations.	100% of ESP majors will earn a minimum grade of 80% in the relevant questions related to ecological economics, science and technology, and environmental policy	No Exams Given	

*Please include multiple assessments. For example: students perform well on classroom assignments, norm-referenced tests/surveys, and they get accepted to graduate school or are employed.

2. Communication Skills

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in Fall 2016 – Spring 2017
<p>2a) Demonstrate the ability to write clearly and effectively and to produce well organized and well developed papers that report information on environmental science and policy, reflecting appropriate use of language and format.</p>	<p>1) All ESP students taking GIS 4043 will write an extensive report on the term project that includes: introduction, objectives, literature review, methods, results/discussion, and conclusions.</p> <p>2) EVR 2001 /GLY 3720/GLY 4734</p> <p>3) In EVR 2861 students will write a research project paper with 3 sequential phases related to an environmental policy topic.</p> <p>4) EVR 4921 – students will be required to write an appropriate term paper demonstrating these skills.</p>	<p>1) 60% of the ESP students will earn 80% or higher on their term project report.</p> <p>2) 100% of ESP majors will earn a minimum grade of 80% in the lab term paper and portfolio (EVR2001), final paper (GLY3720), and final review paper (GLY4734).</p> <p>3) 90% of ESP majors will earn a grade of 80% or better on the research project final paper.</p> <p>4) 100% of ESP majors will earn a minimum score of 80/100 in the term paper</p>	<p>No ESP students were enrolled in GLY 4734</p> <p>Of the 41 students who took this class, 35 of them completed the research paper component. Thirty-two (32) of them earned a grade of 80% and higher on the paper. The average score for the paper was 76%.</p> <p>N/A</p>	<p>The goal of 90% of ESP majors earning a grade of 80% or better on the final paper was not met. Only 79% of ESP majors (19 of 24 students) earned a grade of 80% or better on the final paper. Criterion will be kept to generate data for comparison.</p>

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<p>2b. Select a topic, and develop it for a specific audience and purpose, with respect for diverse perspectives, Demonstrate the ability to conduct literature research and to prepare written critiques of environmental science and policy research.</p>	<p>1) EVR 2001, students will be required to write lab term reports/portfolios, a final paper, and a final review paper respectively in these courses.</p> <p>2) In PUP 4203 students will write a research project paper in 3 sequentially phases with a review of the literature related to an environmental politics topic.</p> <p>3) In EVR 4873 students will write a research project paper in 3 sequential phases including a literature review related to a sustainability topic.</p> <p>4) EVR 4921 – students will be required to write a</p>	<p>1) 100% of ESP majors will earn a minimum grade of 80% in the lab term paper/portfolios, final paper, final review paper) respectively</p> <p>2) 90% of ESP majors will earn a grade of 80% or better on the research project final paper.</p> <p>3) 90% of ESP majors will earn a grade of 80% or better on the final paper.</p> <p>4) 100% of ESP majors will earn a minimum grade of</p>	<p>N/A</p> <p>Of the 30 student who took the class, 29 of them earned a grade of 80% or higher on the paper/oral presentation. Nine (9) students had a grade of 90% or higher. The average score was 87%, the high score 96%, and the low score was 0%</p> <p>On two writing assignments given to students, 10 out of 10 students (100%) earned at least an 80% or better on both papers</p> <p>N/A</p>	<p>The goal of 90% of ESP majors earning a grade of 80% or better on the research project final paper was attained, as 100% of ESP majors earned 80% and higher on the research project final paper. Criterion will be kept to generate data for comparison.</p> <p>Criterion will be kept to generate data for comparison</p>
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	critique of scientific literature (a published paper).	80% in the assignment.		
2c) Select a topic, and develop it for a specific audience and purpose, with respect for diverse perspectives. Demonstrate the ability to conduct literature research and to prepare oral critiques of environmental science and policy research.	<p>1) All ESP students taking GIS 4043 will present a power point presentation on their term project that includes: introduction, objectives, literature review, methods, results/discussion and conclusions.</p> <p>2) EVR 2001, GLY 3720, GLY 4734 – oral presentations will be required of students in all three courses..</p> <p>3) EVR 4921 - All ESP majors will be required to deliver an oral presentation on an approved topic relevant to environmental science and/or policy.</p>	<p>1) 70% of the ESP students will earn 80% or higher on the oral component of their term project report</p> <p>2) 100% of ESP majors will earn a minimum grade of 80% in the oral presentations.</p> <p>3) All ESP majors will earn a minimum of 80% in the oral presentation portion of the course</p>	<p>Of the 13 students who took this course, 7 were ESP majors. Of these 7 students, 1, earned 90%, 2, 85%, 2 earned 80%, 1 earned 75% and 1 earned an 'Incomplete'. Grade.</p> <p>In conclusion, 71% of the students earned 80% of higher grade for this assignment.</p> <p>No ESP students were enrolled in GLY 4734</p> <p>N/A</p>	<p>This course (GIS 4043) is only required by ESP Science track students – hence give limited information. We should remove this course from ALC. But we should use GIS 3006 instead since all students are required to take GIS 3006.</p>

*Please include multiple assessments. For example: students perform well on classroom assignments, norm-referenced tests/surveys, and they get accepted to graduate school or are employed

3. Critical Thinking Skills				
Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in Fall 2016 – Spring 2017
3a. Developing an appropriate problem-solving strategy involving formulating and testing a research hypothesis.	1) All ESP students taking GIS 4043 will be assessed via relevant questions in Midterm II. 2) EVR 2001 – essay question in test 3, students will be required to review a major paper and identify the hypothesis and the strategy used to test it.	1) 75% of the Students will earn 80% or greater 2) 100% of ESP majors will earn a minimum grade of 80% in the essay questions of test 3, final term paper, and final review paper, respectively.	For GIS 4043, 7 students were ESP majors and 5 of these students earned 80% or above in their midterm (key questions). N/A	This course (GIS 4043) is only required by ESP Science track students – hence give limited information. We should remove this course from ALC. But we should use GIS 3006 instead since all students are required to take GIS 3006.
3b. Identify assumptions and underlying relationships in environmental research and planning.	EVR 4921 – students will be required to critically analyze 3 published papers and identify any assumptions and underlying relationships in them.	70% of ESP majors will successfully demonstrate mastery of this in their critiques	N/A	
3c. Synthesize competing perspectives, understand dichotomies and dualism and draw reasoned inferences in environmental research and planning.	EVR 4921 – students will be required to assess competing perspectives on important environmental questions and write a report demonstrating these skills	70% of ESP majors will successfully demonstrate mastery of these skills in their written reports.	N/A	
3e. Evaluate the feasibility of strategies in environmental research and planning.	EVR 2001 – students will be tested with relevant questions in semester exams.	100% of ESP majors will earn a minimum grade of 80% in the relevant questions	72% (43 of 60 students) earned at least an 80% on semester exams	Criterion will be kept to generate data for comparison

*Please include multiple assessments. For example: students perform well on classroom assignments, norm-referenced tests/surveys, and they get accepted to graduate school or are employed

4. Civic Engagement:

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in Fall 2016 – Spring 2017
<p>4a. Demonstrate an understanding and ability to apply methods in environmental science and policy in dealing with human concerns related to environmental issues through participation in independent study, individual research, or internships with environmental organizations</p>	<p>1) Students who choose to complete an internship (EVR 4940) must complete 15-18 hours service per week, write a literature review relevant to their internship, and demonstrate in a journal their work time line.</p> <p>2) Students enrolled in PUP 4203 will select an ongoing public project and assist with policy implementation and practical application to a specific environmental politics and/or policy theme embodied by a community partner. Students are expected to spend at least 15 documented hours involved in civic engagement type activities related to a public project, keep a log sheet of the hours of engagement, and summarize their civic involvement and significant findings in the final paper on the civic engagement project.</p>	<p>1) Students must earn a grade of S for the paper.</p> <p>2) Civic Engagement will be assessed by student commentary on social, political, economic, environmental, and ethical parameters of their civic engagement as well as answer student reflection questions on importance, relevance, accessibility, and goal achievement in the project research. Success would be measured by 70% of students answering 80% of the parameter questions and 80% of students answering 75% of the self-reflection questions.</p>	<p>11/11 (100%) achieved a satisfactory grade.</p> <p>The overall goal of the civic engagement component of this class was attained, as 96% of students (28 of 30) earned 80% and higher on the project. In addition to the civic engagement project, the specific elements of this component of the class were measured using two strategy development (SDAs) activities dealing with human concerns related to environmental issues. These activities were used to assess student's ability to apply policy tools in resolving environmental problems. For SDA #1, 87% of the students answered the questions, while 90% answered the questions in SDA #2. Overall, this component of the class is rated as a success as 89% of the students responded to question in this activity, surpassing the 75% response rate required for success.</p>	<p>Criterion will be kept to generate data for comparison.</p> <p>Criterion will be kept to generate data for comparison.</p>

*Please include multiple assessments. For example: students perform well on classroom assignments, norm-referenced tests/surveys, and they get accepted to graduate school or are employed

ALC GOALS ESTABLISHED FOR DATA COLLECTION: Fall 2016 & Spring 2017

1. Content / Discipline Skills:

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2017 & Spring 2018
1a. Evaluate and implement the scientific process	EVR 2001, questions asking students to explain the scientific process and to detail an example of its implementation will be administered in the final exam	100% of ESP majors will earn a minimum grade of 80% in the relevant questions in all three courses.			
1b. Apply the science of ecology to specific issues in the field of environmental science.	EVR 4921 – An exit assessment test will be administered containing questions testing knowledge of ecological principles in environmental science.	100% of ESP majors will answer correctly a minimum of 80% of these questions.			
1c. Demonstrate an understanding of the major environmental issues, the science underlying them (including chemistry, geology, and biology), and potential solutions, including scientific and policy strategies.	EVR 4921 – An assessment test will be administered which will include questions testing knowledge in this area.	1) 100% of ESP majors will answer correctly a minimum of 80% of these questions.			
1d. Demonstrate competency in the application of mathematical and GIS concepts to the field of	All ESP majors taking GIS 3006 and GIS 4043 will be assessed via (a) term project that requires synthesis and	1) (a) 65% of ESP students will earn 80% or higher on their term project.			

environmental science.	integration of GIS concepts tools and thinking and (b) the Midterm II.	(b) 75% of ESP majors will earn a minimum of 85% in the relevant questions in Midterm II.			
1f. Demonstrate a thorough understanding of the major environmental policies under which political decisions are made.	EVR 2861 will assess student understanding of the state of US environmental policy in relationship to air, water, land use, energy, waste management, biodiversity, natural resources, and human populations in a series of three examinations.	100% of ESP majors will earn a minimum grade of 80% in the relevant questions in exams given.			
1g. Demonstrate an understanding of the framework of stages of policy development.	PUP 4203 will assess student understanding of the process of environmental policy formation, adoption, implementation and evaluation in Exam #1	100% of ESP majors will earn a minimum grade of 80% in the relevant questions			
1h. Demonstrate an understanding of underlying sustainability principles in the context of environmental sciences.	EVR 4873 will assess student understanding of environmental and sustainability issues, problems, and solutions in three examinations.	100% of ESP majors will earn a minimum grade of 80% in the relevant questions related to ecological economics, science and technology, and environmental policy			

2. Communication Skills:

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2017 & Spring 2018
<p>2a) Demonstrate the ability to write clearly and effectively and to produce well organized and well developed papers that report information on environmental science and policy, reflecting appropriate use of language and format.</p>	<p>1) All ESP students taking GIS 4043 will write an extensive report on the term project that includes: introduction, objectives, literature review, methods, results/discussion, and conclusions.</p> <p>2) EVR 2001 /GLY 3720/GLY 4734</p> <p>3) In EVR 2861 students will write a research project paper with 3 sequential phases related to an environmental policy topic.</p> <p>4) EVR 4921 – students will be required to write an appropriate term paper demonstrating these skills.</p>	<p>1) 60% of the ESP students will earn 80% or higher on their term project report.</p> <p>2) 100% of ESP majors will earn a minimum grade of 80% in the lab term paper and portfolio (EVR2001), final paper (GLY3720), and final review paper (GLY4734).</p> <p>3) 90% of ESP majors will earn a grade of 80% or better on the research project final paper.</p> <p>4) 100% of ESP majors will earn a minimum score of 80/100 in the term paper</p>			

<p>2b. Select a topic, and develop it for a specific audience and purpose, with respect for diverse perspectives, Demonstrate the ability to conduct literature research and to prepare written critiques of environmental science and policy research.</p>	<p>1) EVR 2001, students will be required to write lab term reports/portfolios, a final paper, and a final review paper respectively in these courses.</p> <p>2) In PUP 4203 students will write a research project paper in 3 sequentially phases with a review of the literature related to an environmental politics topic.</p> <p>3) In EVR 4873 students will write a research project paper in 3 sequential phases including a literature review related to a sustainability topic.</p> <p>4) EVR 4921 – students will be required to write a critique of scientific literature (a published paper).</p>	<p>1) 100% of ESP majors will earn a minimum grade of 80% in the lab term paper/portfolios, final paper, final review paper) respectively</p> <p>2) 90% of ESP majors will earn a grade of 80% or better on the research project final paper.</p> <p>3) 90% of ESP majors will earn a grade of 80% or better on the final paper.</p> <p>4) 100% of ESP majors will earn a minimum grade of 80% in the assignment.</p>			
<p>2c) Select a topic, and develop it for a specific audience and purpose, with respect for diverse perspectives. Demonstrate the ability to conduct literature research and to prepare oral critiques of environmental science and policy research.</p>	<p>1) All ESP students taking GIS 4043 will present a power point presentation on their term project that includes: introduction, objectives, literature review, methods, results/discussion and conclusions.</p> <p>2) EVR 2001, GLY 3720, GLY 4734 – oral presentations will be required of students in all three courses..</p>	<p>1) 70% of the ESP students will earn 80% or higher on the oral component of their term project report</p> <p>2) 100% of ESP majors will earn a minimum grade of 80% in the oral</p>			

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	3) EVR 4921 - All ESP majors will be required to deliver an oral presentation on an approved topic relevant to environmental science and/or policy.	presentations. 3) All ESP majors will earn a minimum of 80% in the oral presentation portion of the course			
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3. Critical Thinking Skills:

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2017 & Spring 2018
3a. Developing an appropriate problem-solving strategy involving formulating and testing a research hypothesis.	1) All ESP students taking GIS 4043 will be assessed via relevant questions in Midterm II. 2) EVR 2001 – essay question in test 3, students will be required to review a major paper and identify the hypothesis and the strategy used to test it.	1) 75% of the Students will earn 80% or greater 2) 100% of ESP majors will earn a minimum grade of 80% in the essay questions of test 3, final term paper, and final review paper, respectively.			
3b. Identify assumptions and underlying relationships in environmental research and planning.	EVR 4921 – students will be required to critically analyze 3 published papers and identify any assumptions and underlying relationships in them.	70% of ESP majors will successfully demonstrate mastery of this in their critiques			
3c. Synthesize competing perspectives, understand dichotomies and dualism and draw reasoned inferences in environmental research and planning.	EVR 4921 – students will be required to assess competing perspectives on important environmental questions and write a report demonstrating these skills	70% of ESP majors will successfully demonstrate mastery of these skills in their written reports.			

3e. Evaluate the feasibility of strategies in environmental research and planning.	EVR 2001 – students will be tested with relevant questions in semester exams.	100% of ESP majors will earn a minimum grade of 80% in the relevant questions			
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4. Civic Engagement (optional):

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2017 & Spring 2018
4a. Demonstrate an understanding and ability to apply methods in environmental science and policy in dealing with human concerns related to environmental issues through participation in independent study, individual research, or internships with environmental organizations	<p>1) Students who choose to complete an internship (EVR 4940) must complete 15-18 hours service per week, write a literature review relevant to their internship, and demonstrate in a journal their work time line.</p> <p>2) Students enrolled in PUP 4203 will select an ongoing public project and assist with policy implementation and practical application to a specific environmental politics and/or policy theme embodied by a community partner. Students are expected to spend at least 15 documented hours involved in civic engagement type activities related to a public project, keep a log sheet of the hours of engagement, and summarize their civic involvement and significant findings in the final paper on the civic engagement project.</p>	<p>1) Students must earn a grade of S for the paper.</p> <p>2) Civic Engagement will be assessed by student commentary on social, political, economic, environmental, and ethical parameters of their civic engagement as well as answer student reflection questions on importance, relevance, accessibility, and goal achievement in the project research. Success would be measured by 70% of students answering 80% of the parameter questions and 80% of students answering 75% of the self-reflection questions.</p>			

*Please include multiple assessments. For example: students perform well on classroom assignments, norm-referenced tests/surveys, and they get accepted to graduate school or are employed.