1-1-2015

Academic Learning Compact : M. S. Environmental Science, Policy and Geography [Effective 2015]

University of South Florida St. Petersburg.

Academic Learning Compacts
Environmental Science, Policy and Geography
Graduate Programs

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	*GRADUATE PROGRAMS*												
			Anthropology	Biology	Criminology	Literature & Writing	Environmental Science (BA)	Graphic Design	Political Science	Psychology	History	I.S.S.	journalism (BA)	World Languages
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 Incorporate civic engagement, service learning, and experiential learning into their classes, when appropriate												
	Foster institutional pride and strengthen connections within the campus community													
	Enhance opportunities for increased student involvement in curricular and co-curricular activities													
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. Encourage free discussion, foster critical thinking, demand that our students write, and work across disciplines												
	Attract and retain a diverse student population													
	Increase the diversity of faculty and staff													
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. We expect our undergraduate and graduate students to engage in research in collaboration with faculty												
	Promote and support undergraduate research as a meaningful aspect of campus life													
	Enhance and support research and scholarly collaborations with community partners													

Signature Page for Academic Program

Academic Program: ESPG Graduate Program

Chair/Coordinator: Scott Burghart, Ph.D. Assistant Dean 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 spring of 2016, the department administering the program went through reorganization. In addition, the current program coordinator was not involved in the program during the academic year. This complicated data compilation. The M.A. program was suspended by the College of Arts & Sciences. During the academic year, five students defended their thesis proposal, five completed their degree program and fourteen new students were admitted. Two competitive fellowships were awarded.

Summary Statement – Impact of Changes Made in Fall 2014- Spring 2015

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 program provides advanced training, education and research opportunities to post-baccalaureate students interested in applied environmental science and/or in the interactions of society and the environment. Graduates of the program are trained to serve as environmental professionals in local, state, and federal environmental resource agencies; in the private sector, as environmental consultants; or are prepared to enter doctoral programs in environmental science and/or related fields.

List Program Goal(s) / Objective(s): Our program graduates will be able to:

- develop solutions to the increasingly urgent problems resulting from human impacts on the environment;
- contribute to efforts to better understand and respond to those impacts; and
- protect and manage environmental resources in the face of population growth and economic change.

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:

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2016 & Spring 2017
1a. *Graduate students will demonstrate proficiency in statistical methods and use of statistical programming software in presenting, analyzing, interpreting and decision making concerning scientific data of real world problems*	The final exam for STA 5166 consists of two parts. In the first part students have to explain the data from descriptive statistic given. They have to explain the statistical structure of the data. In the second part they use statistical software to analyze the data and make recommendations based on their findings.	We want all students to earn at least a 70% on the final exam in STA 5166.	50% of students earned a grade of 70% or greater		This criterion will be kept to provide a basis of comparison.
1b. *Demonstrate a knowledge and understanding of contemporary issues in environmental science, especially as they pertain to human interactions with natural ecosystems, and how scientists have documented and reported those interactions as well as proposed future*	The final grade for EVR 6936 (Seminar in Environmental Science) taught during Fall of 2015 is comprised of 30% from Research Proposal (written and presentation), 30% from weekly scholarly article review, presentation and 10% discussion Including summarization, 20% from exams and 10% on short project.	We want all students to earn at least 80% on the research proposal. Students need to score 75% or higher on comprehensive exam to show proficiency in environmental	Of the 10 students, 4 earned A (>=96%), 2 A- (90) 1 B+ (85%), 2 B (80%) and 1 C (70%). Comp Exam was given to MA students in Sp 2016 to 3 students.		I worked with them throughout the semester and gave repetitive feedback to ensure that they are making adequate progress toward developing their research. However, some students really struggled to develop the research proposal and hence, failed to earn a passing grade

research to better understand and manage those same anthropogenic changes		science	2 students earned passing grade and 1 student earned conditional pass		

2. Communication Skills:

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2016 & Spring 2017
2a. *Students will demonstrate an ability to conduct literature research and prepare both written and oral critiques of environmental science or policy research*	1) All graduate students are required to take EVR 6936 (Seminar in Environmental Science), and complete a literature review and write a research Proposal. They are also required to present their research proposal in class.	1) All students in EVR 6936 are required to present their research proposal in class. They have to earn >80% to pass.	Of the 10 students,2 earned 90%, 3 earned 85% in their presentation, 3 earned 80%, 1 earned 78% and 1 earned an F (missed the presentation)		I have discussed the presentation rubric with them beforehand. I have incorporated many presentation opportunities in class for them to practice. Perhaps in the future, I will schedule a 'practice presentation' for students to present research project before the final presentation.
	2) Students are also required to complete thesis proposal (written and oral defense).	2) Students are required to write a thesis proposal and present their work in	Five students successfully completed this process		This criterion will be maintained

		to their thesis advisory committee and ESPG faculty. The thesis committee will evaluate the success of the thesis proposal. A rubrics ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent, 2 = Marginal, 1 = Unacceptable). To be successful, the student must receive an overall average score of "Competent" or better from all Committee members AND no individual score of "Unacceptable" in any category			
	3) Students are also required to complete thesis (written and oral defense) for their degree.	3) Students are required to write a thesis and present their work in a public event (including open and closed door defense). The thesis committee will evaluate the success of the thesis. A rubrics ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent,	Five students turned in their thesis and successfully presented their work.		This criterion will be maintained

	4) All graduate students are required to take EVR 6937 (Seminar in Environmental Policy), students will be required to complete four short critical review papers on current environmental policy issues, a term project on environmental policy analysis, a midterm take-home exam, and an oral final exam. Students must earn 80% or higher on the four course components to validate the class.	2 = Marginal, 1 = Unacceptable). To be successful, the student must receive an overall average score of "Competent" or better from all Committee members AND no individual score of "Unacceptable" in any category. 4) Students will identify an environmental issue from the assigned readings and are expected to write a research paper on analysis of environmental policy options for the identified issue. The objective of the research paper is threefold: 1) Identifying the interests at stake; 2) Assessing where the issue stands in the policy process; and 3) Evaluating the policy design elements. Students must earn 80% or higher on the paper to	There were 13 students in this class. All 13 students (100%) met the 80% threshold on their policy analysis paper. Eleven (11) students earned 90% and higher on the paper, and 2 students earned 80% and higher but less than 90%. The average score on the paper was 92%. The high score was 95% and low score was 88%. With respect to the response/reflection reviews, all 13 students scored 90% and higher in all 5 reviews. For review #1, the average score was 100%; high score was 100% and the low score was 95%. For review #2, the average score was 100%; high score was 100% and the low		For 2016-17, students will be required to complete five (5) short critical review papers on current environmental policy issues, a term project on environmental policy analysis, a midterm take-home exam, and an oral final exam. Students must earn 80% or higher on the four course components to validate the class.

		be successful. In addition to the policy analysis paper, every third week of the semester each student is required to read a current event article (not more than two weeks old) of their choice, relating to environmental policy and write a response/reflection summary of the article in response to the following 3 questions: 1) Explicitly, how does this article relate to the themes of this course? 2) What are the implications of the thesis of the article for environmental policy? 3) What is your reaction to it (how it's written/represented/etc.)?	score was 95%. For review #3, the average score was 95%; high score was 100% and the low score was 95%. For review #4, the average score was 95%; high score was 100% and the low score was 90% For review #5, the average score was 95%; high score was 100% and low score was 90%. Finally, overall, 10 students validated the class with a 90% and higher final grade, while three (3) students validated the class with 80% and higher grade, but less than 90%.		This criterion will be maintained

ESTABLISHED GOALS FOR 2016-2017 ACADEMIC YEAR

3. Critical Thinking Skills:					
Learning Outcomes	**Means of Assessment**	**Criteria for Success**	**Findings**	**Results**	**Plan for Use of Findings Fall 2016 & Spring 2017**
3a. *Students will demonstrate the ability to design and conduct an original program of research in environmental science and policy, which results in a scholarly work of publishable quality*	Write a research proposal that provides an introduction to the research question, methodology to be used, and significance of research. Successfully defend the thesis (written and oral)	Thesis proposal, thesis research and results presented in a public forum and successfully defended by the student to the satisfaction of the thesis committee members. A rubrics ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent, 2 = Marginal, 1 = Unacceptable). To be successful, the student must receive an overall average score of "Competent" or better from all Committee members AND no individual score of "Unacceptable" in	Five students successfully presented their thesis proposal, and five successfully defended their thesis.		. This criterion will be maintained

		any category.			

4. Civic Engagement (optional):

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2016 & Spring 2017
In GEO 6116, the required seminar in Environmental Thought, students will demonstrate the ability to research, through field and archival methods, the perspective and praxis of a prominent environmental community organization. Students will volunteer for an approved local environmental organization for the duration of the semester (a minimum of 10 hours). Students will keep a field notebook of their experiences and activities; a photo journal and map.	Students will write a 15 to 20 page paper evaluating the organization, its mission and philosophy, praxis, and impact on environmental problems.	100% of students will receive a score of 80% or higher on their community paper.	Research Paper: Initially, only 10/13 students (77%) met the target of greater than an 80% on the final research paper. The three students that did not meet the target revised and resubmitted their papers during December 2015 and January 2016. By end of January 2016, all students has successfully met the target.		Writing and research skills continue to be lacking in some of the students admitted to the ESP master's program. I also observed that some of the students are very ill-prepared for the analytical challenges of graduate work. There is little that can be done about this problem, since these weaknesses do not seem to show up on students' applications. Making students conduct research during their first semester in the program continues to be an important step in bringing some of the weaker students up to the level they will need in order to be successful. However, having students continue to work on their projects after the end of the semester is not ideal. Given that 23% of students struggled with this research paper, it is worth considering if the assignment is too challenging for them. However, since it is unlikely that the ESP master's program will continue beyond this coming year in its current form, there is no need to

	Students will present the results of their findings orally to the class in a professional presentation	80% of students will receive a 80% or higher on their oral presentation of their community project.	12 out of 13 (93%) students met the target of achieving an 85% or higher on the final presentation		alter this assessment at this time This assessment will be continued in Fall 2016.

5. Multiculturalism / Diversity

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Results	Plan for Use of Findings 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. *Graduate students will demonstrate proficiency in statistical methods and use of statistical programming software in presenting, analyzing, interpreting and decision making concerning scientific data of real world problems*	The final exam for STA 5166 consists of two parts. In the first part students have to explain the data from descriptive statistic given. They have to explain the statistical structure of the data. In the second part they use statistical software to analyze the data and make recommendations based on their findings.	We want all students to earn at least a 70% on the final exam in STA 5166.			

1b. *Demonstrate a knowledge and understanding of contemporary issues in environmental science, especially as they pertain to human interactions with natural ecosystems, and how scientists have documented and reported those interactions as well as proposed future research to better understand and manage those same anthropogenic changes*	The final grade for EVR 6936 (Seminar in Environmental Science) taught during Fall of 2015 is comprised of 30% from Research Proposal (written and presentation), 30% from weekly scholarly article review, presentation and 10% discussion Including summarization, 20% from exams and 10% on short project.	We want all students to earn at least 80% on the research proposal. Students need to score 75% or higher on comprehensive exam to show proficiency in environmental science	.		

2. Communication Skills:

Learning Outcomes	Means of Assessment	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2017 & Spring 2018
2a. *Students will demonstrate an ability to conduct literature research and prepare both written and oral critiques of environmental science or policy research*	1) All graduate students are required to take EVR 6936 (Seminar in Environmental Science), and complete a literature review and write a research Proposal. They are also required to present their research proposal in class.	1) All students in EVR 6936 are required to present their research proposal in class. They have to earn >80% to pass.			

	2) Students are also required to complete thesis proposal (written and oral defense).	2) Students are required to write a thesis proposal and present their work in to their thesis advisory committee and ESPG faculty. The thesis committee will evaluate the success of the thesis proposal. A rubrics ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent, 2 = Marginal, 1 = Unacceptable). To be successful, the student must receive an overall average score of "Competent" or better from all Committee members AND no individual score of "Unacceptable" in any category			
	3) Students are also required to complete thesis (written and oral defense) for their degree.	3) Students are required to write a thesis and present their work in a public event (including open and closed door defense). The thesis committee will evaluate the success of the thesis. A rubrics ranking will be			

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	4) All graduate students are required to take EVR 6937 (Seminar in Environmental Policy), students will be required to complete four short critical review papers on current environmental policy issues, a term project on environmental policy analysis, a midterm take-home exam, and an oral final exam. Students must earn 80% or higher on the four course components to validate the class.	4) Students will identify an environmental issue from the assigned readings and are expected to write a research paper on analysis of environmental policy options for the identified issue. The objective of the research paper is threefold: 1) Identifying the interests at stake; 2) Assessing where the issue stands in the policy process; and 3) Evaluating the policy			

		design elements. Students must earn 80% or higher on the paper to be successful. In addition to the policy analysis paper, every third week of the semester each student is required to read a current event article (not more than two weeks old) of their choice, relating to environmental policy and write a response/reflection summary of the article in response to the following 3 questions: 1) Explicitly, how does this article relate to the themes of this course? 2) What are the implications of the thesis of the article for environmental policy? 3) What is your reaction to it (how it's written/represented/etc.)?			

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Students will volunteer for an approved local environmental organization for the duration of the semester (a minimum of 10 hours). Students will keep a field notebook of their experiences and activities; a photo journal and map.	Students will present the results of their findings orally to the class in a professional presentation	80% of students will receive a 80% or higher on their oral presentation of their community project			

5. Multiculturalism / Diversity

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Results	Plan for Use of Findings Fall 2017 & Spring 2018