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Academic Learning Compact : Environmental Science and Policy [Effective 2012]

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Academic Learning Compacts
ENVIRONMENTAL SCIENCE AND POLICY
2012 – 2013
Due: May, 2013

Signature Page for Academic Program

Academic Program: ENVIRONMENTAL SCIENCE, POLICY AND GEOLOGY
Chair/Coordinator: Drs. Henry Alegria and Barnali Dixon

Summary Statement – Academic Program Performance in 2012-13

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

The 2012-13 academic year was also a year of transition for the department. Under the leadership of the interim Chair (Dr. Alegria) a new MA degree was launched (first cohort were given admission to the MA program in Fall 2012 and Spring of 2013 – see more under graduate ALC). The graduate handbook was rewritten for MS students as well as for MA students. Additionally, a new track in ‘sustainability’ was added to the undergrad degree (totaling 3 tracks scene, policy and sustainability). The existing concentrations were formalized for the undergraduate degree program and should be incorporated in the new catalog (2013 – 2014). This was done as part of an overall effort that streamlined the curriculum to offer students a much clearer path to graduation. A new minor in geospatial science was also launched and we had cohorts of 9 in the year 1.

During the 2011-12 academic year, a totally new set of ALCs were developed for the undergraduate section (with new/improved student learning outcomes, along with methods of assessment and criteria for success) and 2012 and 2013 will be the first time these ALCs will be evaluated. A new and improved course design was created for the EVR 4921 – Senior Seminar- course. As the exit course that all ESP majors must take we realized that this is the one course where we can assess that students have been equipped with the necessary skills and knowledge they will need for employment and/or graduate school. We hired a new Visiting faculty member in 2012 -2013 academic year and completed hiring process of a new tenure track Policy line. The Department developed two new study aboard programs: one to Belize (emphasizing the acquisition of practical field techniques in terrestrial and marine ecosystems, led by Drs. Alegria and Dixon) and one to India (emphasizing the understanding of the effects of pollution on India’s historical sites and on understanding the environmental aspects of mining, led by Drs. Pandey and Alegria). These two programs will expand our students’ horizons and give them field experiences. The first cohort of 13 students already participated in the Belize program, and recruitment efforts for the India course will begin this summer. In Spring 2013, the Department, under the leadership of Dr. Alegria, also offered a new Field Methods class for our students that used cutting edge robotics technology to collect water quality data. This was a successful class and we hope to convert this special topic class into a new course in the future. Importantly, this course was the result of outreach led by Drs. Alegria and Dixon to the

CMS. The Department is exploring additional collaborative efforts with CMS. Our undergraduate students participated in research month and presented their work at the undergraduate research symposium hosted by USFSP. Additionally, some of our undergrads who worked with Dr. Dixon presented their research in professional meetings such as Florida Society of Geographer (FSG).

Low points for the program have resulted from a lack of delineation of responsibilities in terms of course offering between the new Biology department versus ESPG. For example, Principle of Ecology is a required course for ESP (and any ESP degree around the world). However, since this course belongs to the newly created Biology dept, ESP has no control of the scheduling of this course – which may affect timely graduation for our students. Additionally, our ALC uses STA 2023 which historically has been offered by the math faculty from our department (Math program of CAS belongs to ESPG). Recently QEP was moved to College of Education (COE). Please note the QEP was originally created by tenure track math faculty from ESPG and they suggested STA 2023 to be included in our ALC. Due to this move to COE, ESPG doesn't have any control of this class (STA 2023) anymore and were not able to collect the necessary data. Needless to say our students must have quantitative skills and we must be able to evaluate their quantitative skills in our degree learning outcome. Given the fact that the QEP and STA 2023 moved to a different college, the dept is discussing creation of new statistics course for ESP students that will help us measure learning outcomes for quantitative skills. Our current Policy faculty member did not get tenure (nor did he provide data for this ALC). He was our only dedicated tenure track faculty in Policy. This makes our ALC assessment for 2012-2013 incomplete. Our students are required to take Internship or Project hours. Traditionally, this has been the Chair's burden. But with no compensation or support staff, this job of coordinating internships and grading internship reports is becoming a burden. We need to find ways to compensate faculty so that they are interested in taking on the responsibility of internship coordination and grading. Internships offer valuable experience for our students and faculty want students to have these experiences. However, without a course release or extra compensation, this is a burden no one wants to take on. For the 2012-2013 year, Dr. Alegria supervised 25 Internship students. While the duties are not evenly spread out over the semester, there are periods when the Internship Coordinator devotes considerable time to the Internship, namely at the beginning when helping students identify a suitable host agency, midway when initial drafts of papers are submitted for feedback, and at the end when the final term papers are graded and questionnaires are sent to host agencies. Averaged over the semester, the current Coordinator estimates that he easily spent 2 hours per week devoted to this duty.

Also, the department has kept losing faculty members with no replacements, which has created uncertainty regarding the administration's plans for the department. This has also strained the department as demand for courses in ESPG continues to grow. Under the leadership of Dr. Alegria, the departmental curriculum has been streamlined, but the Department will only be able to fulfill its commitment to our majors if it is allowed to replace lost faculty members. Departmental priorities include two Environmental Scientists and one additional dedicated Policy expert.

We have ongoing discussions about several strategies to engage undergraduates more closely to develop a greater sense of identity as belonging to ESPG and having a greater esprit de corps. Dr. Alegria and Mr. Martinez-Colon (our Visiting faculty member) are leading efforts to establish the Pi Epsilon honor society. It is expected that the honor society will be established in Fall 2023. Another high point is that the department has been successful in encouraging undergraduate students to engage in more research activities. Several undergraduate students working on projects co-supervised by Drs. Pandey and Alegria won prizes for their posters in local and state-wide conferences. In addition, the department faculty members have continued having success in generating publications. Finally, the department has done a creditable job of graduating undergraduate majors, comparable to other programs at USFSP, as evidenced by the graduation numbers for 2012-13. Our students and faculty are also engaged in sustainability efforts in the campus including student green energy funds and student organization such as SEAS and garden club (current president of the SEAS and garden clubs are EPS students).

Summary Statement – Impact of Changes Made in 2011-12

Provide a summary statement about changes that were made in your program as a result of ongoing assessment in 2012-13 and the positive/negative impact of the changes that were made.

The department successfully identified several areas for changes and improvements in 2011-2012 and implemented them in 2012-2013. We recognized that the previous ALCs (prior to 2011-2012) relied excessively on one course – over 60% of learning outcomes (goals) were associated with one course, EVR 2001. We recognized that it was not a good idea to base the majority of assessment on the introductory course for the department. Instead, we recognized that students must be assessed throughout their entire time (introductory course, beyond, and at the end in the Senior Seminar). Thus, the new ALCs call for students to be assessed as to meeting the ALC goals at several points along their studies. We also recognized the need to assess mathematical/quantitative skills, which was not being done previously to any extent. We also recognized that students' writing and oral skills need to improve and have introduced several avenues to assess these skills in the new ALCs. One of the required course is. *EVR 4921, which is only one credit hr course, but it is designed to be a cap stone experience. We will create a new 3 credit hrs course to replace the current 1 credit hrs EVR 4921.* This is a result of our observation during this 2012-2013 year that 1 credit is insufficient for the different areas we wish to assess in this course. Our new Visiting faculty member is teaching both EVR 2001 and EVR 4921 with a hope that we will see progress for individual students over the years. One strategy we have discussed and hope to implement hopefully in the future is to require students to maintain a portfolio for the duration of their studies so we can track their achievement of target goals over several years. This would also allow us to target areas of weaknesses. One problem we identified is that EVR 4921 is a Senior Seminar course, and requires senior standing. However, juniors have apparently regularly allowed to register for this course without approval of the department. Also, it appears that often students are seniors based on number of credits but they have not taken many of the upper level ESP courses which we need them to have taken in order to assess them as seniors about to graduate. This seems to be especially the case with transfer students who come with a lot of credit hours. It appears that such students are allowed to take this course as soon as they transfer to USFSP because they have enough credits to be classified as seniors but they struggle in the class because they have yet to take our upper level courses. The department will work with Advising to ensure that only true seniors in their last or penultimate semester are allowed to take this course. Since QEP and associated course STA 2023 (that is used for ALC for our degree) has moved to COE, ESPG in the process of discussing creation of new stats course for ESP students. Once it is created we will use the new stats course for ALC.

Academic Program: ESPG
Person Responsible: Barnali Dixon

Mission of Academic Program (include URL): 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 (<http://www.usfsp.edu/coas/espg/gradprogram/index.htm>).

List Program Goal(s) / Objective(s):

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 2010-11 assessment]

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

1. Content/Discipline Skills

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in 2013-14
Ia. Evaluate and implement the scientific process	EVR2001, GLY3720, GLY4734 – 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.	Fall: 69% of students scored >80% between EVR 2001/GLY3720 Spring: 30% of students scored >80% in EVR 2001 25 out of 26 students in GLY4734 met the 80% threshold on their final paper. The data seems to satisfy several section on the sheet you highlighted.	Students were tested in the first and final exam. Also, students did the scientific process during lab (those who registered for it). Examples of implementing the scientific methods were added to lectures. Criterion will be kept to generate data for comparison.
Ib. Demonstrate the ability to apply concepts from other sciences (e.g. environmental science) to interpret biological phenomena.	PCB 3043 – present seminar describing the historical development of an ecological hypothesis, and methods used to examine hypotheses.	80% of students complete presentation with a minimum grade of 75%.	The total class size was 48 and 6 ESP students in this class, all but one were juniors. Since total class size was 48, so the ESP component	

			<p>represented 12.5% of the total.</p> <p>All 6 students received a grade higher than a 75% on the presentation. The average was 93%.</p> <p>So, the results for a population size of 6 is this:</p> <p>100% of the students (N=6) completed a presentation with a minimum grade of 75%.</p> <p>Average grade for cohort was 93%.</p>	
Ic. Apply the science of ecology to specific issues in the field of environmental science.	1. 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. 2.	This was not tested in Fall 2012/Spring 2013	This is a 1credit course. The idea of seminar is to teach them how to develop oral presentations and how to deliver them successfully. This goal and objective (1f) will not be tested in the following semesters since it is not in alignment with the actual objectives of the course. This has to be tested in other upper level courses.
Id. 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.	1. Students in Environmental Chemistry will be assessed via a final exam covering climate change, fate and transport of pollutants, ozone chemistry. 2. EVR 4921 – An assessment test will be administered which will include questions testing knowledge in this area.	1. 100% of ESP majors will earn a minimum grade of 80% in the relevant questions. 2. 100% of ESP majors will answer correctly a minimum of 80% of these questions.	1. Env. Chemistry was not offered during 2012-2013. 2) This was not tested for EVR 4921 in Fall 2012/Spring 2013.	2. For EVR 4921 see comments above.
Ie. Demonstrate competency in the application of mathematical and GIS concepts to the field of environmental science.	1. All ESP majors taking GIS 3006, or GIS 5049 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. 2. EVR2001, GLY3720,	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. 2. 100% of ESP majors will earn a minimum grade of 80% in the	1a. For Fall 2012 , 6 ESP students took GIS 5049. 4 out of 6 students earned 84% or higher on their term project. No one earned 90% on the term project – highest grade earned was 88%. 1b. Fall 2012 : 100% of the students (all 6) earned 88% or higher on the relevant Midterm II	We are pleased with overall performance of these students on their term project for GIS 5049. The goal set seems achievable. Fall 2011 : Midterm: We are pleased with the performance. Students should know these concepts and they were able to demonstrate their knowledge.

	GLY4734	final test math questions, final paper, and data analysis assignment, respectively.	<p>questions for GIS 5049 1a. For Spring 2012 GIS 5049 was NOT offered.</p> <p>Fall 2012 GIS 3006: Nine students took GIS 3006. Of these students 6 (66%) earned 80% or higher on their term project. One earned 75% and two earned 62%.</p> <p>Fall 2012 GIS 3006: Midterm II : One student did not take midterm II. Of the remaining students, seven (77%) earned 90% on the relevant questions in the midterm.</p> <p>Spring 2013, GIS 4043 was taught by a new adjunct . 1. In Spring 2012, 8 ESP students took this class. 75 earned 90% on the midterm..</p> <p>2) This was not tested for EVR 2001 in Fall 2012, /Spring 2013</p> <p>For GLY3720 100% of the students scored >80% on the math related questions in Fall 2012.</p>	<p>.</p> <p>Fall 2011 GIS 3006: The goal (65% of the student will earn 80% or higher on their term project) was achieved. We are pleased with the performance given the nature of the assignments. Some of these under-performing students, continually show poor performance in class – which I would attribute to general lack on preparedness with STEM. The department should initiate a discussion, preferably before the new academic year begins, of ways to assess STEM preparedness of incoming ESP majors and of tracking knowledge/skills in STEM as they progress in the program. This will allow for better advising on which students are ready for these courses.</p> <p>Spring 2013, GIS 4043 was taught by a new adjunct , who Commented on under-preparedness of students.</p> <p>For GLY 3720 every exam and lab exercise included the application of basic math, trigonometry, and geometry to address hydrological problems. Students performed very well. Criterion will be kept to generate data for comparison.</p>
If. Demonstrate a thorough understanding of the major environmental policies under which political decisions are made.	<p>1.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.</p> <p>2.EVR 4921 – An exit assessment test will be administered covering major environmental policies in the</p>	<p>1.100% of ESP majors will earn a minimum grade of 80% in the relevant questions in exams given.</p> <p>2.100% of ESP majors will answer correctly a minimum of 80% of these questions.</p>	<p>Instructor did not provide data despite repeated requests from Chair and Associate Chair so this goal could not be assessed.</p> <p>2) This was not tested for EVR 4921 in Fall 2012/Spring 2013. However, several students did their oral</p>	<p>This is a 1credit course. The idea of seminar is to teach them how to develop oral presentations and how to deliver them successfully.</p>

	US and globally.		presentations related to Policy issues and their approach and understanding were appropriate.	This goal (1f) and objective will not be tested in the following semesters since it is not in alignment with the actual objectives of the course. This has to be tested in other upper level courses.
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	MISSING Instructor did not provide data despite repeated requests from the department.	
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	Was this course taught? If so, I'd include the statement as above.	

*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 2013-14
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>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. EVR2001, GLY3720, GLY4734 .</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>1. In Spring 2012, No data collected.</p> <p>2) No lab term paper was requested from the students in Fall 2012/Spring 2013 for EVR 2001/GLY3720.</p> <p>Fall 2012: 100% of the students scored >80% in in answering essay type questions for GLY3720. 80% of the students scored >80% in answering essay type questions for EVR2001.</p> <p>Spring 2013: 25% of the students scored >80% in in answering essay type questions for EVR2001.</p> <p>3. Was data missing from Dorsey or someone? Or was this course not taught? A statement is needed here.</p> <p>4) Fall 2012: this was not tested. Spring 2013: 91% scored >80% in the term paper for EVE 4921.</p>	<p>Upon encountering under preparation of some of the students in STEM concepts, the new adjunct decided to redo the syllabus and omit the term project, hence could not measure the same outcome as outlined in the original syllabus. In the future we will make sure the targeted assessment are not compromised from the syllabus.</p> <p>2) No term papers were requested but, all exams and lab exercises included essay type questions which address Objective 2a.</p> <p>4) This objective will not be tested in subsequent semesters for EVR4921. This is a 1credit course. The idea of seminar is to teach them how to develop oral presentations and how to deliver them successfully. Term papers can be addressed in other upper level courses.</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.EVR2001, GLY3720, GLY4734 – 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. EVR4921 – 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>1) This was not tested for EVR 2001/GLY 3720 in Fall 2012/Spring 2013</p> <p>2. Missing</p> <p>3. Missing</p> <p>4) Fall 2012: 100% scored >80%. Spring 2013: 1% scored >80%. Only 2 students read the assigned paper to discuss in class.</p>	<p>4) This objective was tested by performing an oral evaluation of 2 scientific papers. Students where asked direct and open-ended questions relevant to the assigned article.</p> <p>Criterion will be kept to generate data for comparison.</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.EVR2001, GLY3720, GLY4734 – 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>Although they didn't complete term project, they summarized and presented research paper (review from scholarly journals) 85% of the students earned 88% or higher.</p> <p>2) This was not tested for EVR 2001/GLY 3720 in Fall 2012/Spring 2013</p> <p>3) Fall 2012: 100% scored >80%. Spring 2013: 95% scored >80%.</p>	<p>In the future, we will ensure that students are required to complete term projects.</p> <p>3) Students did an oral presentation of 12 minutes followed by 3 minutes of questions from the audience.</p> <p>Criterion will be kept to generate data for comparison.</p>

3. Critical Thinking Skills

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in 2013-14
<p>3a. Developing an appropriate problem-solving strategy involving formulating and testing a research hypothesis.</p>	<p>1. Students taking Introductory Statistics I (STA 2023) will be assessed on descriptive and inferential statistics through a comprehensive final exam.</p>	<p>1. Students must core of 60 or more in the comprehensive final exam.</p>	<p>2) 80% of the students earned 90% or higher.</p> <p>3) Fall 2012: Term paper and review paper was not tested</p>	<p>So a comment is needed here.</p>

	<p>2. All ESP students taking GIS 4043 will be assessed via relevant questions in Midterm II.</p> <p>3. EVR2001 – essay question in test 3, GLY3720 – final term paper, GLY4734 – final review paper; in each case students will be required to review a major paper and identify the hypothesis and the strategy used to test it.</p>	<p>2. 75% of the Students will earn 80% or greater</p> <p>3. 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.</p>	<p>for EVR 2001/GLY 3720.</p> <p>100% of the students scored >80% in in answering essay type questions for GLY3720. 80% of the students scored >80% in answering essay type questions for EVR2001.</p> <p>Spring: Term paper and review paper was not tested for EVR 2001</p> <p>25% of the students scored >80% in in answering essay type questions for EVR2001.</p>	<p>All exams include essay type questions. I noticed students having more trouble answering applied knowledge type questions. More examples will be given in class to address this concern.</p> <p>Criterion will be kept to generate data for comparison.</p>
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	<p>Fall 2012: 100% scored >70%.</p> <p>Spring 2013: 100% scored 70%.</p>	<p>Students did a good job in addressing this during their oral presentations. I told them that they should include potential issues and inconsistencies in the papers that they analyzed.</p> <p>Criterion will be kept to generate data for comparison.</p>
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.	<p>Fall 2012: 100% scored >70%.</p> <p>Spring 2013: 100% scored >70%.</p>	See comments above.
3d. Demonstrate the ability to represent mathematical information using proper notations and to mathematically analyze quantitative relations between physical parameters	MAC2311(Calculus I) - comprehensive final exam	Score or 65% or better.		
3e. Evaluate the feasibility of strategies in environmental research and planning.	EVR2001 – 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	Fall/Spring: this was not tested.	

4. Civic Engagement:

Goals/Objectives	Means of Assessment/ Corroborating Evidence*	Criteria for Success	Findings	Plan for Use of Findings in 2013-14
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	1. As a component of EVR 4910 [ESP project], students will prepare a formal paper detailing literature research and knowledge of the "place" of the project relative to current environmental thought, the	1. Students must earn a grade of S for the course.	1. 100% (2 of 2) students who took EVR 4910 earned an S; both students wrote outstanding papers; it must be noted that these two students are exceptional students overall.	1. Department should seriously consider changing course to a grade-based course rather than S/U so as to increase the importance of the paper.

<p>environmental organizations</p>	<p>materials and methods used in the project, the results of the project, and the analysis and conclusions based upon those results.</p> <p>2. 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>3. 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>2. Students must earn a grade of S for the paper.</p> <p>3. 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>2. While 100% (28 of 28) of students earned an S in the paper, these were of uneven quality, from satisfactory to outstanding.</p> <p>MISSING</p>	<p>2. In an internship course, where the major activity is the fulfillment of internship duties, it becomes difficult to integrate the quality of a term paper into a grade that is S/U. Department should discuss changing grade to a letter grade where different weights can be assigned to each activity (duties, log journal, and paper) to make the paper a more significant part of the experience.</p>
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