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Academic Learning Compacts

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Documents

2017

Academic Learning Compact : Environmental Science [Effective 2017]

University of South Florida St. Petersburg.

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Academic Learning Compact: Fall 2017- Spring 2018

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



Academic Learning Compacts

Academic Year: Fall 2017 & Spring 2018

Due: May 21, 2018

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) | 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 | | | | | 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 2017- Spring 2018

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

Signature Page for Academic Program

Academic Program: ESPG

Chair/Coordinator:

Date:

Summary Statement – Academic Program Performance in Fall 2017- Spring 2018

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

The program continues to grow. The new lab facilities allowed for greater interactive labs. The move to online presentations in EVR2001 led to greater individual participation. We have had to increase the hours taught by our adjunct faculty.

Our goals for next year need to be more clearly defined and achievable.

Summary Statement – Impact of Changes Made in Fall 2017- Spring 2018

*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*

We appear to be meeting the goals of most of our ALCs.

We need to work together as a group to come up with simpler metrics for next year.

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/bsesp/>

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 2016 & Spring 2017

1. Content / Discipline Skills:

| Learning Outcomes | Means of Assessment | Criteria for Success | Findings | Plan for Use of Findings Fall 2018 & Spring 2019 |
|---|---|--|--|--|
| 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. | Only 84% scored 80% or higher. | The next ALC will not be set at 100% requirement. We will provide extra practice on the scientific method. |
| 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. | 100% of the students scored 80% or better. | We will work up a better assessment that is online. |
| 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. | 100% of ESP majors will answer correctly a minimum of 80% of these questions. | 100% of the students scored 80% or better. | We will work up a better assessment that is online. |
| 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 integration of GIS | (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 | DIXON The class was small, but 75% of the students were able to earn 80% or | The midterm II is comprised of theoretical problem solving that requires critical and |

Academic Learning Compact: Fall 2017- Spring 2018

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|--|---|---|--|---|
| environmental science. | concepts tools and thinking and (b) the Midterm II. | questions in Midterm II. | higher for the term project, while only 68% of the students were able to earned 85% or higher for the relevant question in Midterm II. | independent thinking skills. While I devoted 3 weeks toward ‘board work’ to get them comfortable with these ‘on demand’ problem solving skills, including development of process flow charts, I will spend 4 weeks next semester to see if these results could be improved. |
| 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 | Students were highly engaged in class discussions regarding sustainability principles in the context of environmental science. They enjoyed having the opportunity to present and discuss current topics relating to sustainability, and expressed these exercises positively added to their learning experience. 100% of students earned a grade of 80% or above in the Attendance and Participation portion of the final course grade. | |
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2. Communication Skills:

| Learning Outcomes | Means of Assessment | Criteria for Success | Findings | Plan for Use of Findings Fall 2018 & Spring 2019 |
|--|--|---|--|---|
| 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. | 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. 2) EVR 4921 – students will be required to write a critique of scientific literature (a published paper). | 1) 100% of ESP majors will earn a minimum grade of 80% in the lab term paper/portfolios, final paper, final review paper) respectively 2) 100% of ESP majors will earn a minimum grade of 80% in the assignment. | 1. 90 % earned 80% or higher in EVR2001 on the final paper. 2. EVR 4921: 100% earned 80% or better. | We need to develop separate assessments for the labs. |
| 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. | 1) EVR 2001, GLY 3720, GLY 4734 – oral presentations will be required of students in all three courses. 2) EVR 4921 - All ESP majors will be required to deliver an oral presentation on an approved topic relevant to environmental science and/or policy. | 1) 100% of ESP majors will earn a minimum grade of 80% in the oral presentations. 2) All ESP majors will earn a minimum of 80% in the oral presentation portion of the course | 1)EVR2001 84% earned a grade of 80 or better. 2). EVR 4921: 100% of ESP majors earned a grade of 80% or better. | |
| 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. | 1) EVR 2001, GLY 3720, GLY 4734 – oral presentations will be required of students in all three courses. 2) EVR 4921 - All ESP majors will be required to deliver an oral presentation on an approved topic relevant to environmental science and/or policy. | 1) 100% of ESP majors will earn a minimum grade of 80% in the oral presentations. 2) All ESP majors will earn a minimum of 80% in the oral presentation portion of the course | 1) EVR2001 88% of the ESP major earned 80% or higher. 2) EVR4921: All ESP majors earned a grade of 80% or more. | |

3. Critical Thinking Skills:

| Learning Outcomes | Means of Assessment | Criteria for Success | Findings | Plan for Use of Findings Fall 2018 & Spring 2019 |
|--|--|---|--|---|
| 3a. Developing an appropriate problem-solving strategy involving formulating and testing a research hypothesis. | 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 | EVR2001: 89% of the students earned a grade of 80 or better. | |
| 3b. Identify assumptions and underlying relationships 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. | 100% of the students scored 80% or better. | |
| 3c. Synthesize competing perspectives, understand dichotomies and dualism and draw reasoned inferences 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 | 100% of the students met this requirement | |
| 3e. Evaluate the feasibility of strategies in environmental research and planning. | | | 81% of the students earned a grade of 80% or better. | |

4. Civic Engagement (optional):

| Learning Outcomes | Means of Assessment | Criteria for Success | Findings | Plan for Use of Findings Fall 2018 & Spring 2019 |
|-------------------|---------------------|----------------------|----------|---|
| | | | | |

ALC GOALS ESTABLISHED FOR DATA COLLECTION: Fall 2017 & Spring 2018

| 1. Content/Discipline Skills | | | | |
|------------------------------|---|----------------------|----------|--|
| Goals/Objectives | Means of Assessment/ Corroborating Evidence* | Criteria for Success | Findings | Plan for Use of Findings in Fall 2018 – Spring 2019 |
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*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 2018 – Spring 2019 |
| 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 and written critiques of environmental science and policy research. | In EVR 4873 students will identify a topic related to environmental science and sustainability policy. They will then develop a 15 minute oral presentation to demonstrate research capabilities and communication skills. Additionally, students will be required to write two reflection/synthesis papers that demonstrate their knowledge and personal experience related to several sustainability topics. | To be determined... | | |
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“... to ensure student achievement in undergraduate and graduate degree programs ...”

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3. Critical Thinking Skills

| Goals/Objectives | Means of Assessment/ Corroborating Evidence* | Criteria for Success | Findings | Plan for Use of Findings in Fall 2018 – Spring 2019 |
|------------------|---|----------------------|----------|--|
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*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 2018 – Spring 2019 |
|------------------|---|----------------------|----------|--|
| | | | | |

*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