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## **Academic Learning Compact : Environmental Science and Policy [Effective 2018]**

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# 2018-19 Academic Learning Compact Report

## ALC - Environmental Science and Policy (BS) (CIP CODE 03.0104)

<i>Program Outcomes</i>	<i>Means of Assessment</i>	<i>Findings</i>	<i>Use of Findings</i>
<p><b>Content/Discipline Skills (Scientific Process)</b> - Evaluate and implement the scientific process  <b>Outcome Status:</b> Active  <b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p><b>Direct Measure</b> - 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  <b>Criterion for Success:</b> 100% of ESP majors will earn a minimum grade of 80% in the relevant questions  <b>Person(s) Responsible:</b> James Ivey</p>	<p><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Did Not Meet Expectations            96% of the ESP majors earned 80% or greater on these questions. Of 25 total environmental science majors who took EVR2001, 24 scored 80% or more on the questions related to the scientific methods. 84% scored 100% on these questions. (06/14/2019)</p>	<p><b>Use of Findings:</b> The criteria is unrealistic. It is usually not possible that 100% of the students will complete the course. Since this is a course taken by first year students usually one or two will fail to finish the course and not show up for the final exam. (06/14/2019)</p>
<p><b>Content/Discipline Skills (Ecology)</b> - Apply the science of ecology to specific issues in the field of environmental science.  <b>Outcome Status:</b> Active  <b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>EVR 4921 – An exit assessment test will be administered containing questions testing knowledge of ecological principles in environmental science.  <b>Criterion for Success:</b> 100% of ESP majors will answer correctly a minimum of 80% of these questions.</p>	<p><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Meets Expectations            100% of the EVR4921 students scored 80% or better on ecological principle questions. (06/14/2019)</p>	<p><b>Use of Findings:</b> We will continue along the current course. (06/14/2019)</p>
<p><b>Content/Discipline Skills (Environmental Issues)</b> - 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.  <b>Outcome Status:</b> Active  <b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>EVR 4921 – An assessment test will be administered which will include questions testing knowledge in this area  <b>Criterion for Success:</b> 100% of ESP majors will answer correctly a minimum of 80% of these questions.</p>	<p><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Meets Expectations            100% of the EVR4921 students scored 80% or better on general knowledge questions. (06/14/2019)</p>	<p><b>Use of Findings:</b> We will not require this as part of this course in the future. (06/14/2019)</p>

<i>Program Outcomes</i>	<i>Means of Assessment</i>	<i>Findings</i>	<i>Use of Findings</i>
<p><b>Content/Discipline Skills (GIS) -</b> Demonstrate competency in the application of mathematical and GIS concepts to the field of environmental science.  <b>Outcome Status:</b> Active  <b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>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>Criterion for Success:</b> 65% of ESP students will earn 80% or higher on their term project.</p>	<p><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Exceeds Expectations  For GIS3006 – 68% of students earned 80% or higher in their term project  For GIS 4043 – 75% of the students earned 80% of higher (06/14/2019)</p>	<p><b>Use of Findings:</b> Appropriate modifications will be implemented to improve students outcomes. (06/14/2019)</p>
	<p>All ESP majors taking GIS 3006 and GIS 4043 will be assessed via Midterm II  <b>Criterion for Success:</b> 75% of ESP majors will earn a minimum of 85% in the relevant questions in Midterm II.</p>	<p><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Did Not Meet Expectations  GIS3006 70% of the ESP major earned 85% or higher in relevant questions in Midterm II  GIS4043: 81% of the ESP majors earned 85% or higher in relevant questions Midterm II (06/14/2019)</p>	<p><b>Use of Findings:</b> Appropriate modifications will be implemented to improve students outcomes. (06/14/2019)</p>
<p><b>Content/Discipline Skills (Sustainability) -</b> Demonstrate an understanding of underlying sustainability principles in the context of environmental sciences.  <b>Outcome Status:</b> Active  <b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>EVR 4873 will assess student understanding of environmental and sustainability issues, problems, and solutions in three examinations.  <b>Criterion for Success:</b> 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.</p>	<p><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Meets Expectations  <b>Criterion for Success:</b> 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.  All my students made &gt; 90%.  The performed policy analysis of active legislation.  Meet with lawmakers and their staff to discuss policy that drives Florida wastewater treatment  Looked at the economics of a cost of inaction of upgrading Florida wastewater treatments.  Five students published opinion pieces, all authored articles and some will be published later in the summer  All students presented on various wastewater treatment methods that provide drinkable wastewater and shrinks carbon footprint.  (06/14/2019)</p>	<p><b>Use of Findings:</b> The metric needs to be less than 100%. Student community engagement activities in this course were very successful. (06/14/2019)</p>
<p><b>Communication Skills (Writing) - 2a)</b> Demonstrate the ability to write clearly and effectively and to produce well organized and well developed papers that report information on</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><b>Reporting Period:</b> 2018 - 2019  <b>Conclusion:</b> Did Not Meet Expectations  89% of the ESP majors in EVR2001L scored 80% or greater.  97% of the ESP majors in EVR4921 scored 80% or greater on the literature review of a published paper. (06/14/2019)</p>	<p><b>Use of Findings:</b> The students did well in this course but the metric needs to be below 100%. These are first year students and at least one will stop attending the course</p>

Program Outcomes	Means of Assessment	Findings	Use of Findings
<p>environmental science and policy, reflecting appropriate use of language and format.</p> <p><b>Outcome Status:</b> Active</p> <p><b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>2) EVR 4921 – students will be required to write a critique of scientific literature (a published paper).</p> <p><b>Criterion for Success:</b> 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) 100% of ESP majors will earn a minimum grade of 80% in the assignment</p>		<p>and may drop out of college. (06/14/2019)</p>
<p><b>Communication Skills (Oral Presentation) - 2b)</b> 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><b>Outcome Status:</b> Active</p> <p><b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>1) EVR 2001, GLY 3720, GLY 4734 – oral presentations will be required of students in all three courses.</p> <p>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.</p> <p><b>Criterion for Success:</b> 1) 100% of ESP majors will earn a minimum grade of 80% in the oral presentations.</p> <p>2) All ESP majors will earn a minimum of 80% in the oral presentation portion of the course</p>	<p><b>Reporting Period:</b> 2018 - 2019</p> <p><b>Conclusion:</b> Did Not Meet Expectations 85% the ESP majors in EVR2001 scored 80% or greater. 94% of the students in EVR4921 earned 80% or greater on the presentation. (06/14/2019)</p>	<p><b>Use of Findings:</b> Oral presentations are no longer possible in EVR2001 as class sizes are now 120 students. This metric will no longer be used. 100% of the students will not complete the tasks. 90% is more realistic. (06/14/2019)</p>
<p><b>Communication Skills (Presentation) - 2c)</b> 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><b>Outcome Status:</b> Active</p>	<p>1) EVR 2001, GLY 3720, GLY 4734 – oral presentations will be required of students in all three courses.</p> <p>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.</p>	<p><b>Reporting Period:</b> 2018 - 2019</p> <p><b>Conclusion:</b> Did Not Meet Expectations 85% the ESP majors scored 80% or greater in EVR2001. 94% of the students earned 80% or greater on the presentation in EVR4921 (06/14/2019)</p>	<p><b>Use of Findings:</b> No oral presentations in this and future classes as class sizes now are capped at 120 students. For EVR4921, a 100% metric is not realistic due to students dropping out. (06/14/2019)</p>

<i>Program Outcomes</i>	<i>Means of Assessment</i>	<i>Findings</i>	<i>Use of Findings</i>
<p><b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p><b>Criterion for Success:</b> 1) 100% of ESP majors will earn a minimum grade of 80% in the oral presentations.</p> <p>2) All ESP majors will earn a minimum of 80% in the oral presentation portion of the course</p>		
<p><b>Critical Thinking Skills (Problem Solving) -</b> Developing an appropriate problem solving strategy involving formulating and testing a research hypothesis.</p> <p><b>Outcome Status:</b> Active</p> <p><b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>EVR 4921 – students will be required to critically analyze 3 published papers and identify any assumptions and underlying relationships in them.</p> <p><b>Criterion for Success:</b> 70% of ESP majors will successfully demonstrate mastery of this in their critiques</p>	<p><b>Reporting Period:</b> 2018 - 2019</p> <p><b>Conclusion:</b> Exceeds Expectations 96% of the students exhibited mastery in their critiques. (06/14/2019)</p>	<p><b>Use of Findings:</b> We will continue this pedagogical activity as it is producing the desired results. (06/14/2019)</p>
<p><b>Critical Thinking Skills (Assumptions/Relationships) -</b> Identify assumptions and underlying relationships in environmental research and planning.</p> <p><b>Outcome Status:</b> Active</p> <p><b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>EVR 4921 – students will be required to assess competing perspectives on important environmental questions and write a report demonstrating these skills</p> <p><b>Criterion for Success:</b> 70% of ESP majors will successfully demonstrate mastery of these skills in their written reports.</p>	<p><b>Reporting Period:</b> 2018 - 2019</p> <p><b>Conclusion:</b> Exceeds Expectations 94% of the students exhibited mastery in accessing a competing perspective on important environmental questions. (06/14/2019)</p>	<p><b>Use of Findings:</b> We will continue this pedagogical activity as it is producing the desired results. (06/14/2019)</p>
<p><b>Critical Thinking Skills (Dichotomies and Dualism) -</b> Synthesize competing perspectives, understand dichotomies and dualism and draw reasoned inferences in environmental research and planning</p> <p><b>Outcome Status:</b> Active</p> <p><b>Planned Assessment Cycle:</b> 2017 - 2018, 2018 - 2019</p>	<p>EVR 2001 – students will be tested with relevant questions in semester exams.</p> <p><b>Criterion for Success:</b> 100% of ESP majors will earn a minimum grade of 80% in the relevant questions</p>	<p><b>Reporting Period:</b> 2018 - 2019</p> <p><b>Conclusion:</b> Did Not Meet Expectations 84% of the students earned 80% or greater. 100% earned 70% or greater. (06/14/2019)</p>	<p><b>Use of Findings:</b> The criteria needs to be adjusted to &lt; 100%. The students will be challenged with greater critical thinking questions through their homework. (06/14/2019)</p>