#### **Environmental Studies Minor Assessment Plan**

To verify the effectiveness of personal learning outcomes (PLOs) 1-3 for the ENST minor, the Environmental Studies Faculty Advisory Board will use the following process:

**Year 1:** Prior to the start of the academic year, the ENST Faculty Advisory Board will share a rubric (see **Year 1 Rubric 1**) with the faculty of the foundational course ENST 100 "Environment, Culture, and Society" to ensure that the competencies specific to social and cultural environmental literacy (PLO 2) are embedded within the design of the course. Given that the faculty members for ENST 100 are also members of the Faculty Advisory Board, we anticipate this process to run smoothly.

After completion of the first full academic year of the minor, the Faculty Advisory Board will review the effectiveness of the foundational course ENST 100 "Environment, Culture, and Society" by sampling submitted student final papers using a rubric as a guide (see **Year 1 Rubric 2**) to determine whether students are demonstrating the competencies specific to social and cultural environmental literacy (PLO 2). If the Faculty Advisory Board determines that the competencies are not being met, they will adjust the content of the foundational course accordingly.

**Year 2:** Prior to the start of the academic year, the Faculty Advisory Board will share a rubric (see **Year 2 Rubric** 1) with the faculty of the foundational courses available to fill the natural sciences foundational requirement to ensure that the competencies specific to scientific environmental literacy (PLO 1) are embedded within the design of the courses.

After completion of the second full academic year of the minor, the Faculty Advisory Board will review the effectiveness of each of the four courses that meet the natural sciences foundational requirement by sampling final work (exams, projects, and papers as applicable, as it may vary per class) with a rubric (see *Year 2 Rubric 2*) to determine whether students are demonstrating the competencies specific to scientific environmental literacy (PLO 1). If the Faculty Advisory Board determines that the competencies are not being met in any of the natural sciences foundational courses, they will work with the faculty member leading the course in question to adjust the content accordingly, or take other corrective action as necessary to ensure that the learning outcome is met.

Year 3: At the beginning of the third full academic year of the minor, the Faculty Advisory Board will review minor student enrollment in elective courses and identify the three most commonly completed elective courses within each of the natural sciences/engineering track and the humanities/social sciences/architecture track. The Faculty Advisory Board will then develop an evaluation rubric to share with faculty to ensure that the competencies specific to developing a cross-disciplinary perspective (PLO 3) are embedded within the design of the courses. Then, the Faculty Advisory Board will work with the faculty who lead those courses to obtain a sampling of student work at the end of the academic year, and will use the same rubric to evaluate whether students are indeed demonstrating competencies specific to developing a cross-disciplinary perspective (PLO 3). If the Faculty Advisory Board determines that the competencies are not being met within any of the electives on the approved list, they will work with the faculty member leading the course in question to adjust the content accordingly, or take other corrective action as necessary to ensure that the learning outcome is met.

Year 4: Repeat process.

## Rice University Environmental Studies (ENST) Faculty Advisory Board ENST Minor PLO2 – Social and Cultural Environmental Literacy Year 1, Rubric 1

Course Number and Title: ENST 100: "Environment, Culture, and Society"

Instructor(s):

Semester and Year:

Using a 4-point scale please rate your expectation that students in this course will be able to demonstrate the following knowledge and skills. A zero indicates that students are <u>not</u> expected to demonstrate this knowledge and/or skill, and a three indicates that this knowledge and/or skill is a central component of the course.

Please return completed form to Dominic Boyer, Center for Energy and Environmental Research in the Human Sciences, dcb2@rice.edu.

Through some form of oral or written communication, students who complete this course will

demonstrate that they can:

Theory					
Utilize terms, theories, and concepts from the humanities, social sciences, arts, and architecture and apply them to environmental issues.	0	1	2	3	
Communication					
Apply critical thinking and develop long-form cohesive arguments and articulate insights related to the interrelation between social and environmental systems.	0	1	2	3	

## Rice University Environmental Studies (ENST) Faculty Advisory Board ENST Minor PLO2 – Social and Cultural Environmental Literacy Year 1, Rubric 2

Course Number and Title: ENST 100: "Environment, Culture, and Society"

Instructor(s):

Semester and Year:

Using a 4-point scale, please rate whether based on a review of the sample materials the students in this course demonstrated the following knowledge and skills. A zero indicates that students did <u>not</u> demonstrate this knowledge and/or skill, and a three indicates that this knowledge and/or skill was clearly demonstrated.

Please return completed form to Dominic Boyer, Center for Energy and Environmental Research in the Human Sciences, dcb2@rice.edu.

Through a review of a sampling of final papers, did students who completed this course

demonstrate the ability to:

Theory					
Utilize terms, theories, and concepts from the humanities, social sciences, arts, and architecture and apply them to environmental issues.	0	1	2	3	
Communication					
Apply critical thinking and develop long-form cohesive arguments and articulate insights related to the interrelation between social and environmental systems.	0	1	2	3	

# Rice University Environmental Studies (ENST) Faculty Advisory Board ENST Minor PLO1 – Scientific Environmental Literacy Year 2, Rubric 1

Course Number and Title: Instructor(s): Semester and Year:

Using a 4-point scale please rate your expectation that students in this course will be able to demonstrate the following knowledge and skills. A zero indicates that students are <u>not</u> expected to demonstrate this knowledge and/or skill, and a three indicates that this knowledge and/or skill is a central component of the course.

Please return completed form to Dominic Boyer, Center for Energy and Environmental Research in the Human Sciences, dcb2@rice.edu.

Through tests, problem sets, and papers as applicable, students who complete this course will:

Demonstrate a working knowledge of basic concepts and facts in the field of earth science and/or ecology, evolutionary biology, and conservation biology.	0	1	2	3
Demonstrate an introductory understanding of some key environmental issues.	0	1	2	3
Demonstrate the ability to apply critical thinking and problem solving skills to evaluate scientific research	0	1	2	3
Demonstrate an understanding of the scientific method.	0	1	2	3

# Rice University Environmental Studies (ENST) Faculty Advisory Board ENST Minor PLO1 – Scientific Environmental Literacy Year 2, Rubric 2

Course Number and Title: Instructor(s): Semester and Year:

Using a 4-point scale please rate whether based on a review of the sample materials the students in this course demonstrated the following knowledge and skills. A zero indicates that students did <u>not</u> demonstrate this knowledge and/or skill, and a three indicates that this knowledge and/or skill was clearly demonstrated.

Please return completed form to Dominic Boyer, Center for Energy and Environmental Research in the Human Sciences, dcb2@rice.edu.

Through tests, problem sets, and papers as applicable, students who completed this course:

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Demonstrated a working knowledge of basic	0	1	2	3	
concepts and facts in the field of earth science					
and/or ecology, evolutionary biology, and					
conservation biology.					
Demonstrated an introductory understanding of	0	1	2	3	
some key environmental issues.					
Demonstrated the ability to apply critical thinking and	0	1	2	3	
problem solving skills to evaluate scientific research	0	ı	_	3	
problem solving skills to evaluate scientific research					
Demonstrated an understanding of the scientific	0	1	2	3	
method.					