Academic Assessment Plan

University of Florida

Academic Affairs

Academic Colleges

College of Agricultural & Life Sciences

Soil & Water Science

Interdisciplinary Studies - Environmental Management in Agriculture & Natural Resources (BS)

BS in Interdisciplinary Studies – Environmental Management Mission

The mission of the Soil and Water Science Department (SWSD) is to provide scientific leadership of the highest level in research, teaching, and extension for soil, water, and environmental sciences. By discovering new scientific knowledge and imparting that knowledge to fellow scientists, students, and citizens, the Department intends to assist in the resolution of soil and water issues related to agriculture and natural resources in Florida, the nation, and the world. This supports the missions of the college and university to serve the nation’s and state’s critical needs by contributing to a well-qualified and broadly diverse citizenry, leadership and workforce.

Responsible Roles: Associate Dean (Brendemuhl, Joel)
Program: Interdisciplinary Studies - Environmental Management in Agriculture & Natural Resources (BS)
Progress: Ongoing

PG 1: Enrollment

Increase the IS-EMANR student enrollment, retention and proportion of students meeting student learning outcomes.

Evaluation Method

- Evaluate the number of new students, transfer students and UF-Online students in the program
- Determine the retention rate and number of semesters to graduation
- Review statistics of Student Learning Outcomes Report

Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

PG 2: Employment Preparation

Prepare students for employment in areas including agricultural production, private consulting, and governmental agencies.

Evaluation Method

- Exit interviews for graduating seniors
- Tracking employment or graduate study programs of our graduates.

Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

PG 3: Enhance Distance Education Experience

Enhance the distance education students’ learning experience.

Evaluation Method

- Number of students enrolled in the distance education sections
- Number of courses available for these students

Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

PG 4: Student Diversity

To provide a graduate program that creates a diverse population of students with the expertise and skills necessary for development of successful professional careers in animal molecular and cellular biology or related fields.

Evaluation Method

- Graduate school records on ethnic origin of American students will be scrutinized to determine the proportion of students coming from an underrepresented group.
- The goal is to have 20% of American students in the program from an underrepresented group.

Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

SLO 1: Agronomic Production and Environmental Protection Issues

Appraise similarities between agronomic production and environmental protection issues.

SLO Area (select one): Content (UG)
Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

Assessment Method

Content student learning outcomes are assessed through the average of test scores in ALS 3133 and the score on a final comprehensive exam in SWS 4223.

SLO 2: Illustrate the Interconnectedness of Ecosystems

Describe the role of soil and water in transport of contaminants in ecosystems and illustrate the interconnectedness of ecosystems and ecosystem components with specific examples.

SLO Area (select one): Content (UG)
Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

Assessment Method

Average of assignment and test scores in SWS 4116 – Environmental Nutrient Management

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SLO 3: Public Policy Issues and Stakeholder Interests

Cite specific examples of natural resources and environmental public policy issues and identify contending stakeholder interests with respect to each issue.

SLO Area (select one): Critical Thinking (UG)
Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

Assessment Method

Critical thinking student learning outcomes are assessed through the average of test scores in FNR 4660, score on the project presentation in SWS 4720C and score on the policy position paper in FNR 4660.

SLO 4: Develop a Plan using GIS

Develop a plan for the analysis of an environmental/agricultural study using geographic information systems software.

SLO Area (select one): Critical Thinking (UG)
Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

Assessment Method

Critical thinking student learning outcomes are assessed through the average of test scores in FNR 4660, score on the project presentation in SWS 4720C and score on the policy position paper in FNR 4660.

SLO 5: Evaluate Natural Resource Policies

Critically evaluate natural resource policies using basic economic tools and applying ecological, social, and political criteria.

SLO Area (select one): Critical Thinking (UG)
Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

Assessment Method
Critical thinking student learning outcomes are assessed through the average of test scores in FNR 4660, score on the project presentation in SWS 4720C and score on the policy position paper in FNR 4660.

SLO 6: Effective Communication

Create, interpret and analyze written text, oral messages and multimedia presentations used in agricultural and life sciences.

SLO Area (select one): Communication (UG)
Responsible Role: Associate Dean (Brendemuhl, Joel)
Progress: Ongoing

Assessment Method
Introduction to aspects of written and oral communication is presented in required coursework (AEC 3030C and AEC 3033C). Completion of AEC 3030C with a C or better is the measure of oral communication proficiency. Completion of AEC 3033C with a C or better is the measure of written communication proficiency. A sample rubric for AEC 3033C is attached. Letter grades from AEC 3030C, AEC 3033C are compiled from a report provided by CALS.

BS in Interdisciplinary Studies – Environmental Management AAP Detail

Start: 7/1/2016
End: 6/30/2017
Progress: Ongoing
Providing Department: Interdisciplinary Studies - Environmental Management in Agriculture & Natural Resources (BS)
Responsible Roles: Associate Dean (Brendemuhl, Joel)

Research (Graduate and Professional AAPs only)

Assessment Timeline (Graduate and Professional AAPs only)

Curriculum Map (UG AAPs only)
Curriculum Map for:

Interdisciplinary Studies - Environmental Mgmt. in Agriculture and Natural Resources College of Agricultural and Life Sciences

Key: **I**ntroduced **R**einforced **A**ssessed

Courses SLOs	AEB 3133	AEC 3033C	AEC 3030C	ALS 3133	AOM 4643	FNR 4660	SWS 3022	SWS 4116	SWS 4720C	SWS 4223
Content Knowledge										
#1				I, A= average of tests	R			R		R
#2				I	R		I			R, A=final compre-hensive exam
Critical Thinking										
#1				I		R, A= average of tests				
#2					I				R, A= project present-ation	
#3	I					R, A= policy position paper				
Communication										
#1		I, R A= course grade	I, R A= course grade			R		R	R	R

Assessment Cycle (All AAPs)
Assessment Cycle for:

IS – Environmental Mgmt. in Ag and Nat Resources College of Agricultural and Life Sciences

Analysis and Interpretation:	May – June annually
Improvement Actions:	Completed by August 1 of each year
Dissemination:	Completed by August 1 of each year

Year SLOs	16-17	17-18	18-19	19-20	20-21	21-22
Content Knowledge						
#1	X	X	X	X	X	X
#2	X	X	X	X	X	X
Critical Thinking						
#1	X	X	X	X	X	X
#2	X	X	X	X	X	X
#3	X	X	X	X	X	X
Communication						
#1	X	X	X	X	X	X

Methods and Procedures (UG and Certificate AAPs)

SLO Assessment Matrix

2015-16 Student Learning Outcome	Assessment Method	Measurement Procedure
Appraise similarities between agronomic production and environmental protection issues.	average of tests	Test scores
Describe the role of soil and water in transport of contaminants in ecosystems and illustrate the interconnectedness of ecosystems and ecosystem components with specific examples.	final comprehensive exam	Exam score
Cite specific examples of natural resources and environmental public policy issues and identify contending stakeholder interests with respect to each issue.	average of tests	Test scores
Develop a plan for the analysis of an environmental/agricultural study using geographic information systems software.	project presentation	
Critically evaluate natural resource policies using basic economic tools and applying ecological, social, and political criteria.	policy position paper	
Create, interpret and analyze written text, oral messages and multimedia presentations used in agricultural and life sciences.	Course grade	Rubric

Content Assessment

Content student learning outcomes are assessed through the average of test scores in ALS 3133 and the score on a final comprehensive exam in SWS 4223. Average of assignment and test scores in SWS 4116 – Environmental Nutrient Management. The criterion for success is 75% of our students having an average test and assignment scores of 70% in SWS 4116 – Environmental Nutrient Management.

Critical Thinking Assessment

Critical thinking student learning outcomes are assessed through the average of test scores in FNR 4660, score on the project presentation in SWS 4720C and score on the policy position paper in FNR 4660.

Communication Assessment

Introduction to aspects of written and oral communication is presented in required coursework (AEC 3030C and AEC 3033C). Completion of AEC 3030C with a C or better is the measure of oral communication proficiency. Completion of AEC 3033C with a C or better is the measure of written communication proficiency. A sample rubric for AEC 3033C is attached. Letter grades from AEC 3030C, AEC 3033C are compiled from a report provided by CALS.

Indirect Assessment

All students will complete an exit interview in their final semester. The students will be asked about their experiences in the classrooms, laboratories, faculty accessibility, and club participation/other activities.

All assessment scores will be collected and compiled by Susan Curry and Michael Sisk.

SLO Assessment Rubric (All AAPs)

Figure 1. Rubric: AEC 3033C Introduction & Literature Review

AEC 3033C Introduction & Literature Review

75 Points

Assignment Objectives

1. To create a document that introduces your topic and explains the need for your research through the support of secondary sources.
2. To apply proper APA style to your writing.
3. To build a foundation for your analytical report.

Required Elements

1) Length of 1 ½ pages or more

2) Double spaced

3) 12 pt. font

4) 1 inch margins

5) At least 5 sources (in-text citations & reference page) – DON'T OVERUSE DIRECT QUOTES

a. At least 2 specialized/government sources (i.e. academic journals, government documents)
b. At least 2 trade/business sources (i.e. field specific or trade publications, books)
c. At least 1 popular media source (i.e. newspapers, radio, blogs, magazines, TV, etc…)
d. Make sure you include a reference page

Description

- Your introduction & literature review should provide the reader with information that explains and provides background information regarding your topic. Your introduction should build a case for your research topic and indicate why it is important. In other words, if the reader was to ask "So what?" about your research, your introduction and literature review should answer the so what question. Your introduction and literature review should demonstrate that you have begun thinking about and answering questions in your question web. Eventually this will be the first page of your final analytical report. The first page needs to attract the reader's attention and draw them into the topic. The information in your introduction and literature review should be supported by sources and be formatted in APA style.

0BFigure 2. Rubric: Introduction and Literature Review (75 points)

Item	**Unacceptable**	**Acceptable**	**Superior**	**Pts Avail-able**	**Pts Earned**
"So What" question and need for research	An introduction and literature review that needs extensive revisions to appropriately answer the "so what" question and describe the need for research **(0-7points)**	An introduction and literature review that satisfies most of these requirements, but could do more to answer the "so what" question, describe the need for research, or provide more supporting literature **(8-15 points)**	An introduction and literature review that meets professional requirements, answers the "so what" questions and describes the need for the research, is supported by literature **(16-20 points)**	**20**	
Content and Detail	An introduction and literature review that needs extensive revisions to demonstrate adequate content and detail **(0-7 points)**	An introduction and literature review that satisfies most of these requirements, but could benefit from additional content and detail **(7.5-10 points)**	An introduction and literature review that meets professional requirements, provides adequate content and detail, is supported by literature **(11-15 points)**	**15**	
Grammar / Mechanics / Formatting / Page Length	An introduction and literature review that has more than 6 grammar/mechanical mistakes, or the type or amount of mechanical, rhetorical, or formatting errors that would distract readers, length of document is 1/2 page or less **(0-8 points)**	An introduction and literature review that has between 3 and 6 grammar/mechanical mistakes, does not contain appropriate formatting, and is short of being 1 page long **(9-15 points)**	An introduction and literature review that has less than 3 grammar/mechanical mistakes, is formatted appropriately, and has an appropriate page length **(16-20 points)**	**20**	
Sources	Three or less of the required sources included, does not meet all requirements for each source level, all source not cited in-text or included on reference page **(0-5 points)**	Four of the required five sources included, or five sources included but does not meet the some requirements for each source level **(6-8 points)**	At least 5 sources included (at least 2 specialized/government sources, 2 trade/business sources, and 1 popular media source) both in in-text citations and on the reference page, no excessive use of direct quotes **(9-10 points)**	**10**	
APA Style	Correct APA style in-test citations and reference sheet with more than 6 errors **(0-4points)**	Correct APA style in-text citations and reference sheet with 6 or less errors **(5-7 points)**	Correct APA style in-text citations and reference sheet with 3 or less errors **(8-10 points)**	**10**	
Total Points				**75**	
Assignments submitted late (-10% each day)					
File not named correctly (-10%)					

Total Points Earned	
Comments:	

Measurement Tools (Graduate and Professional AAPs Only)

Assessment Oversight (All AAPs)

The Academic Assessment Plan for the Soil and Water Science Department will be overseen by the SWSD Undergraduate Programs Committee, which consists of five faculty members (including the Undergraduate coordinator) actively engaged in teaching.

Name	Department Affiliation	Email Address	Phone Number
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Academic Assessment Plan Entry Complete: ☑