

Certificate Assessment Plan: Soil Ecosystem Services 2012- 2013

Institutional Assessment
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Office of the Provost

University of Florida

Institutional Assessment

*Continuous Quality
Enhancement Series*

Soil Ecosystem Services

College of Agricultural and
Life Sciences

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Soil Ecosystem Services

College of Agricultural and Life Sciences

2012-13 Certificate Assessment Plan

A. Rationale

Soil is a fragile and finite resource. It plays unique role in maintaining air and water quality and climate change. Use and management of native, agricultural, forested, range, and urban lands play an integral part in influencing soil and water quality within a watershed. Soils provide various ecosystem services including water quality improvement and nutrients to support plant productivity. Training future scientists and managers to protect wetland and water resources is one of the primary missions of the Soil and Water Science Department, and of the discipline in general. Recent offerings of the courses in the proposed certificate have included students employed in state and federal agencies and private industry who would be well served by such a certificate program.

B. Mission

The Soil Ecosystem Services certificate program 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.

C. Student Learning Outcomes (SLOs)

1. Analyze the role of soils as long-term integrators of ecosystem processes and functions.
2. Quantify the role of soils in performing various ecosystem services including: providing nutrients to plants, carbon sequestration, retention of contaminants, and improving water quality.
3. Describe role of soils as sources and sinks for greenhouse gases (carbon dioxide, nitrous oxide, and methane).
4. Apply soil science principles to determine on how various management practices affect soil and water quality and identify best management practices to protect soil resources.

D. Assessment Timeline for Certificates

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SLOs	Courses	Competency Exam
#1		X
#2		X
#3		X
#4		X

E. Assessment Cycle Chart for Certificates

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Analysis and Interpretation:
Improvement Actions:
Dissemination:

May – June annually
Completed by August 1 of each year
Completed by September 1 of each year

SLOs	Year	12-13	13-14	14-15	15-16
#1		X	X	X	X
#2		X	X	X	X
#3		X	X	X	X
#4		X	X	X	X

F. Methods and Procedures

Instructors of core courses in the certificate program will submit a minimum of 10 questions each that will test student’s competency for the SLOs associated with these courses. These questions will be compiled into a single on-line examination. Students will be required to score a minimum of 85% correct to pass the exam. The exam may be taken multiple times if necessary

G. Assessment Oversight

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