GS-5 Certified: Increasing Soil Science Educational Opportunities Online for Undergraduate Students and USDA Employees

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National Program Director
Challenge

In FY 2008 USDA Identified 20 Mission Critical Occupations

7. Soil Conservation Specialist (457)
8. Soil Conservation Technician (458)
11. Soil Science Specialist (470)
Challenge

As of 10/21/07 (51,211 employees)

0457-Soil Conservation Specialist
   4% Hispanic

0458-Soil Conservation Technician
   2.8% Hispanic

0470-Soil Science Specialist
   3.5% Hispanic
Challenge

While there is a need for soil scientists, soil science programs and courses disappearing

Replaced with Environmental Science Programs with less soil science course hours
Challenge

Example:
University of California Riverside

No longer degree offered in Soil Science, but rather Environmental Science
Challenge

Student graduating with BS in Environmental Science from UCR requires an additional 6-12 hours of soils courses for GS5 470 Series!

Often courses that are offered every other year........
Soil Online

http://academic.rcc.edu/soil/

Three year project USDA CSREES HSI funded
USDA CSREES Proposal Number: 2008-02162

Five online Soil Science Courses
Riverside City College (2 courses)
UC-Riverside (3 courses)
Soil Online

http://academic.rcc.edu/soil/

Cost?
Riverside City College - $20 per credit unit

UC-Riverside – around $450 per course

(depends on number enrolled)
Courses

Fall 2009 – Offered through RCC

Bio 14 – Introduction to Soil Science - Lecture
Bio 15 - Introduction to Soil Science - Laboratory

Fall 2010 – Offered through UCR

Introduction to Soil Science
Upper Division Lecture

Fall 2011 – Offered through UCR

Soil Physics
Upper Division Lecture
Soil Online

Faculty
Dr. Ron Reuter – Oregon State University

Dr. Jamie Whiteford – Ventura College

Dr. Sharon Walker – UC-Riverside
Soil Online

Dr. Ron Reuter

RCC Lower Division Course
Bio 15 – Introduction to Soil Science Laboratory (3 semester hours)

A laboratory course focuses on the basis of soil science, physical and biogeochemical properties, and interpretation for use and management. Perspectives range from agricultural, wildlands, watershed, and environmental impact.
Soil Online

Dr. Ron Reuter

Proven success at OSU online degree programs in Natural Resources, General Agriculture, and Environmental Science

Soil Online

Dr. Jamie Whiteford

RCC Lower Division Course
Bio 14 – Introduction to Soil Science Lecture (3 semester hours)

An introduction to physical properties and classification of soils, physical and chemical properties of soil that governs soil reactions and interactions, nutrient regeneration, and management principles in relation to air, water, nutrients and organic matter.
Soil Online

Dr. Sharon Walker
UC- Riverside

Fall 2011 Soil Physics
Topics include physical properties of soils and methods of evaluation. Emphasis is on movement of water, heat, gasses, and chemicals through soil. This course will be offered through UCR.
Online Courses

All online students required to shadow USDA NRCS, FS, or ARS employee for one day.
For Students

13 outstanding students who complete an online course will be offered a 1-week paid internship ($1000 stipend) with a USDA agency to provide them an experiential learning opportunity and formal mentoring.
Soil Online

http://academic.rcc.edu/soil/

Please visit the website and register for updates and announcements and registration details

If you would like to offer time for students or would like interns

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Riverside Graphics Lab
http://academic.rcc.edu/soil/

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Thank You!

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