

# SOIL AND WATER SCIENCES DEPARTMENT

*Chair:* Matt Whiles

*Graduate Coordinator:* P. Christopher Wilson

Soil and water are vital resources in urban, agricultural, and natural ecosystems. The Soil and Water Sciences Department (SWSD) provides highly visible leadership in teaching, research, and extension/outreach programs as related to improving the productivity of agriculture with environmentally sound management practices, improving water quality, and protecting and conserving natural resources. Our department is one of the few in the nation that offers comprehensive research and educational programs (molecular to landscape level) involving terrestrial, wetland, and aquatic ecosystems. In addition to traditional on-campus educational programs, we use innovative e-technologies to offer educational programs to place-bound students throughout the world.

Our graduates and postdoctoral fellows are well-prepared for future careers in universities, state and federal agencies, and private industry. The Soil and Water Sciences Department offers Master of Science and Doctor of Philosophy degrees in the *Soil and Water Sciences*. Broadly defined emphasis areas for degree programs include:

- biogeochemistry (coastal, landscape, soil, trace metals, and wetlands)
- bioenergy and sustainable technology
- carbon dynamics and ecosystem services
- environmental toxicology
- landscape analysis and modeling
- landscape and soil hydrology
- microbial ecology, molecular biology, bioinformatics
- pedological sciences
- soil quality (natural, agricultural, and urban systems)
- soil physics
- soil, water, and aquifer remediation
- soil, water, and environmental chemistry
- soil, water, and nutrient management
- water quality (natural, agricultural, and urban systems)
- watershed sciences and management
- wetland, aquatic systems, and coastal ecology

Students can work with departmental faculty on the main campus and at Research and Education Centers located throughout the state to custom-design their graduate program.

The department also offers a completely online Master of Science degree (thesis or professional non-thesis option) via distance education for place-bound students interested in environmental sciences or an agroecology concentration (<http://soils.ifas.ufl.edu/sws-online> (<http://soils.ifas.ufl.edu/sws-online/>)). Requirements for the M.S. and Ph.D. degrees are given in the Graduate Degrees (<http://gradcatalog.ufl.edu/content.php?catoid=12&navoid=2748>) section of this catalog. An additional option offered by the Department is a combined bachelor's/master's degree program that allows students to earn a B.S. in Soil and Water Sciences or Interdisciplinary Studies – Environmental Management in Agriculture and Natural Resources and an M.S. Degree within five years. In addition to the MS and PhD degrees, the Department also offers graduate-level certificates in Biodegradation and Remediation, Global Agroecology, Soil Ecosystem Services, Sustainable

Agroecosystems, Sustainable Land Resource and Nutrient Management, and Wetland and Water Resource Management for on-campus and off-campus students via the distance education delivery system (<http://soils.ifas.ufl.edu/academics/degree-certificates.shtml> (<http://soils.ifas.ufl.edu/academics/degree-certificates.shtml/>)). Contact the graduate coordinator for more information.

For more information, please see the program page below and our website: <http://soils.ifas.ufl.edu>.

## Majors

- Soil and Water Sciences (<http://catalog.ufl.edu/graduate/colleges-departments/agricultural-life-sciences/soil-water/soil-water/>)

## Faculty

### Professor

- Alva, Ashok K.
- Daroub, Samira H.
- Grunwald, Sabine
- He, Zhenli
- Jawitz, James W.
- Li, Yuncong
- Mitsch, William
- Morgan, Kelly T.
- Mylavarapu, Rao S.
- Nkedi-Kizza, Peter
- Obreza, Thomas Anthony
- Ogram, Andrew V.
- Rechcigl, John Edward
- Schumann, Arnold Walter
- Whiles, Matthew R.
- Wilson, Patrick Christopher
- Wood, Charles Wesley
- Wright, Alan Lee

### Associate Professor

- Clark, Mark W.
- Gerber, Stefan
- Gu, Binhe
- Inglett, Patrick W.
- Mackowiak, Cheryl
- Silveira, Maria Lucia

### Assistant Professor

- Bacon, Allan
- Bhadha, Jehangir
- Bohlen, Patrick Joseph
- Chauhan, Ashvini
- Deitch, Matthew
- Judy, Jonathan
- Kadyampakeni, Davie Mayeso
- Liao, Hui-Ling
- Lin, Yang
- Lusk, Mary G.

- Maltais Landry, Gabriel
- Meyer, Julie
- Newman, Susan
- Osborne, Todd Z.
- Reisinger, Alexander J.
- Reynolds, Laura
- Sharma, Lakesh Kumar
- Smidt, Samuel John
- Smyth, Ashley R.
- Strauss, Sarah L.

## **Other**

- Enloe, Heather Allen

## **Research Professor**

- Nair, Vimala D.
- Sanchez, Pedro
- Wilkie, Ann Christina

## **Research Assistant Professor**

- Fujimoto, Masanori
- Inglett, Kanika Sharma

## **Senior Lecturer**

- Bonczek, James Lee

## **Graduate Research Professor**

- Reddy, Rameshwer Konda

## **Affiliated Faculty**

- Cohen, Matthew J.  
Professor
- Moore, Kimberly  
Professor
- Nair, Ramachandran P.  
Distinguished Professor