**Workshop: Integrating Sustainability into Environmental Engineering Curriculum**

**Date:** Sunday, June 14, 2015, 2:15 to 5:00 pm

**Motivation:** Sustainability is an important concept to the environmental engineering and science community, and it is of increasing broad interest to academia, industry, and the general public. Hence, given the importance and growing pervasiveness of sustainability, there is an urgent need to discuss the teaching of sustainability and its integration in the environmental engineering undergraduate curriculum. Furthermore, ABET made significant changes to the program criteria for environmental engineering effective 2014–2015 to emphasize sustainability principles. The new text reads, “The curriculum must prepare graduates to…design environmental engineering systems that include considerations of risk, uncertainty, sustainability, life-cycle principles, and environmental impacts.” Thus, there are multiple drivers for integrating the teaching and concepts of sustainability into environmental engineering curriculum.

**Description of Workshop:** This workshop will begin with a brief overview on how sustainability is being taught and integrated into existing environmental engineering and science programs. This presentation will be followed by invited panel with expertise on sustainability and experience in teaching sustainability. The confirmed invited panel are **John Crittenden, Jim Mihelcic,** and **Sue Powers.** The overview presentation and invited speakers will cover the first 40 min of the workshop. Workshop attendees will then be divided into breakout groups focused on course development or department-level curriculum (30 min duration). After discussion in the breakout groups, the groups will report their results to the entire workshop (15 min duration). The workshop will conclude with closing remarks by the workshop organizers. Additional details on the breakout groups are as follows. The course development group will be composed of graduate students and faculty who are new to teaching sustainability and are interested in integrating sustainability concepts into a new or existing course. Workshop attendees in the course development group will be asked to bring the syllabus for the course they plan to revise to include sustainability. The curriculum group will be composed of faculty with experience at the environmental engineering program level and who are interested in integrating sustainability concepts throughout the curriculum. Workshop attendees in the curriculum group will be asked to bring a program outline to highlight the integration of sustainability into their curriculum. The small group discussions will be facilitated by the workshop organizers and the invited speakers. As additional outcomes for this workshop, the organizers intend to write a journal article and collect preliminary data that can be used to pursue education grants. This workshop will be one of the Center for Sustainable Engineering workshops.

**Intended Audience:** Faculty and graduate students who are interested in teaching and curriculum, specifically developing new courses and adding new content to existing courses to incorporate sustainability principles.

**Workshop Organizers:** Treavor Boyer, Department of Environmental Engineering Sciences, University of Florida, thboyer@ufl.edu; Amy Landis, School of Sustainable Engineering and the Built Environment, Arizona State University, Amy.Landis@asu.edu.