

AEESP 2009 Workshop

Integrating Sustainability into Environmental Engineering: Design principles and tools to expand your educative capacity

**Sunday July 26th
9:00 to 12:00**

This workshop is designed for engineering educators to build their capacity to integrate sustainability into existing curricula. Our strategy is to equip participants with effective methodologies and tools that can be applied to the learning environments distinctive to their own institutions. These methodologies and tools can be applied to any course.

Workshop participants will:

- be introduced to a methodology for transforming their own material into powerful learning experiences. The methodology is based on D. Fink's Taxonomy of Significant Learning and educational psychology principles for deeper learning.
- be introduced to a public-domain assessment tool that is being used to evaluate an engineer's readiness for addressing a wide variety of ABET Criterion, including sustainability as a design constraint (ABET Criterion 3c).
- receive a complimentary copy of a new textbook that will appear in print prior to the workshop: *Environmental Engineering: Fundamentals, Sustainability, Design* (John Wiley & Sons, 2009) and a copy of curricular design guides, sustainability learning outcomes for an engineering program, an assessment tool, three designed learning activities, and workshop presentation materials.

The workshop is limited to **24** participants for effective group learning activities. The workshop will meet for three hours, broken into two one and a half hour sessions. The workshop format includes an interactive setting that includes group learning activities designed using the Fink taxonomy. Attendees should expect to actively participate in small group discussions and projects at the workshop. Funds are available to support travel and registration for faculty from historically black or hispanic colleges and universities. Please contact Julie Zimmerman (julie.zimmerman@yale.edu) or Qiong (Jane) Zhang (qiong@mtu.edu).

Workshop Organizers:

Julie Beth Zimmerman, Environmental Engineering Program & School of Forestry and Environmental Studies, Yale University

Qiong (Jane) Zhang, Civil & Environmental, University of South Florida

Linda Vanasupa, Materials Engineering, California Polytechnic State University

James R. Mihelcic, Civil & Environmental, University of South Florida

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