

SUCCEED is pleased to offer the following workshops, free of charge, to the Engineering Education Community. For more information see page 5.

Teaching Effectiveness

Student-Centered Approach to Teaching

Abstract: The goal of this workshop is to provide faculty with tools and practice using them to unleash the potential of these resources.

Teaching tools that will be covered include learning objectives, lecturing, questioning, multimedia (chalkboard, transparencies, handouts, videotapes, websites, computer software, etc.), out-of-class activities, active learning, use of real world examples and exercises, and rewards. Learning assessment tools to be covered include classroom assessment techniques, tests, grading rubrics, standardized exams, and portfolios. Most of the workshop time will be devoted to exercises that will provide practice using the teaching and assessment tools.

Length: 2 hours

Instructor: Dr. Keith Schimmel, Associate Professor of Chemical Engineering, NC A&T State University

Effective Teaching With Technology

Abstract: This workshop is targeted to those creating/using technology for instructional purposes.

Workshop content includes how students' learning styles and faculty teaching styles can be enhanced and blended through technology. The workshop shows examples and traits of effective web sites, discusses tracking student usage with technology, describes methods and techniques to employ when beginning to think about creating or using technology for assisting learning, and the workshop can include a brief "how-to" session with some software. This workshop is not designed to teach specific software, but rather to address those issues that faculty or site creators must consider when either using

technology or developing technology for the web.

Length: 2 hours or full day

Instructor: Dr. Nelson Baker, Associate Professor of Civil and Environmental Engineering, Georgia Tech

Active Classroom Learning with Multimedia

Abstract: The motto of the workshop, which reflects extensive research on technology in education, is: "Select first the best methods for learning and teaching and then the technologies to support those methods." The organization of this interactive workshop parallels that of a typical class period: (1) We start with a warm-up problem to engage the learner; (2) follow with brief presentations interspersed with cooperative group activities; (3) and close with an assessment of the day's lesson and activities. The workshop includes: (1) Kolb's 4-stage experiential learning cycle linked with Gardner's multiple intelligences and examples of inductive and deductive learning; (2) multimedia learning modules with emphasis on learning strategies; and (3) guidelines for courseware development.

Length: 2 or 3 hours

Instructor: Dr. Siegfried Holzer, Alumni Distinguished Professor of Civil and Environmental Engineering, Virginia Tech

Developing Quality Technology-Based Materials

Abstract: This workshop is targeted to engineering faculty and graduate students who are interested in developing technology-based materials and using them to enrich and enhance student learning. The presenter will discuss how faculty can identify goals for the use of technology and tailor their materials development efforts to produce appropriate products. Traits of the effective use of technology in the learning environment will be described in order to help the developer understand the expected audience and how they might focus in on learning needs. Several examples

of best practices will be given.

Length: 3 hours

Instructor: Dr. Joe Tront, Professor of Electrical and Computer Engineering, Virginia Tech

Curriculum Development

Freshman Engineering Programs

Abstract: This workshop can be tailored to variety of purposes. It can range from an overview of a variety of approaches to freshman engineering programs to a more in-depth discussion of best practices of a particular approach or set of approaches. The instructor is able to provide contact information for practitioners of different approaches in order to facilitate their implementation at a new site, and given sufficient notice, may be able to arrange for appropriate co-presenters.

Length: Varies

Instructor: Dr. Matthew W. Ohland, Assistant Professor of General Engineering, Clemson University

Multidisciplinary Design Seminar

Abstract: This one hour seminar will include a review of SUCCEED best practices in multidisciplinary design, a summary of experience with a faculty reward (mini-grant) system, and a discussion of emerging college-wide paths to institutionalization.

Length: 1 hour

Instructor: Dr. David Ollis, Distinguished Professor of Chemical Engineering, North Carolina State University

Multidisciplinary Design Workshop

Abstract: This workshop will include a review of SUCCEED best practices in multidisciplinary design, a summary of experience with a faculty reward (mini-grant) system, and a discussion of emerging college-wide paths to institutionalization. In addition, this workshop will include a detailed review and analysis of three distinct multidisciplinary course structures and will