Time: Wed., 6:30-8:40 PM  
Classroom: Olin Life Sciences Rm 129

Instructor: Dr. K. Lindeman, Shepard Bldg. Rm 007  
Email: lindeman@fit.edu

Office Hours: Tue: 1330-1630, Wed: 1530-1700, Thu:1100-1600 or by appointment.

Requirements: Junior or senior level; instructor approval is required.

Course Description: This 3-credit course is a project-focused class for advanced undergraduates seeking to apply sustainability practices within their specific areas of interest. This is the capstone course for the Undergraduate Minor in Sustainability. Students from any college are eligible - whether minoring in Sustainability or not.

Projects: Readings, lectures, and breakout groups will assist building of specific projects. The catalog description states: Requires the design, production and presentation of an individual or group project on improving the sustainable operation of some aspect of the Florida Tech main campus, Florida Tech satellite location, or another approved location. In certain circumstances, projects can be report-based: e.g., a detailed triple bottom line accounting analyses or a thorough sustainability audit of a local organization or business.

Textbook and Reference Materials: Textbook: Steffen, A. (ed.) 2011. Worldchanging: A User’s Guide for the 21st Century. As a project-focused course on student-specific interests (potentially from five different colleges on campus), we use diverse readings that include technical journal articles, corporate, government, and NGO reports. Examples of above include:
- UEC. 1999. Neighborhood Sustainability Indicators Guidebook
Websites specific to sustainability projects exist for many fields and these will also assist student projects.

Selected references will be posted on the ANGEL Class website and/or made available on reserve in the Evans Library. Another useful and growing resource is the FIT Sustainability Research Guide at: http://libguides.lib.fit.edu/sustainability This resource has many pdfs and web links for important sustainability resources - collated by topic.

Student Learning Outcomes:  By course completion, students should have the ability to:
• explain the conceptual history and emerging issues involving sustainability capital
• detail the applications of current sustainability principles in one’s field
• apply interdisciplinary approaches to sustainability problems outside of one’s field
• design a substantive applied sustainability project
• explain and critically review incentive categories and major certification programs
• quantify sustainability practices utilizing technical indicators
• analyze common sustainability issues from multiple perspectives
• complete final production of an applied sustainability project
• communicate sustainability information to technical and popular audiences
Class Schedule – Applied Sustainability

Wk 1
• Sustainability Concepts/Terms; Systems and Scales; Project Discussions*

Wk 2
• Project Development Basics; Imbedded BMPs; Adaptive Project Management

Wk 3
• University Sustainability Initiatives: F.I.T., State, National, Global

Wk 4
• University Sustainability Initiatives: F.I.T. - system by system

Wk 5
• Demand-Side Sustainability Incentives; Certification and Accreditation Processes

Wk 6
• Off-Campus Sustainability: Business, Community, Government

Wk 7
• Class Project Design Forum – Within Projects

Wk 8
• Midterm Assessment; Project Execution

Wk 9
• Spring Break

Wk 10
• Class Project Design Updates and Indicator Evaluations

Wk 11
• Class Project Design Forum – Among Projects

Wk 12
• Communicating Sustainability Advances; Merging Education & Inspiration

Wk 13
• Project Evals and Real-world Adaptive Management

Wk 14
• Class Presentations: Final Projects

Wk 15
• Class Presentations: Final Projects

Wk 16
• Class Presentations: Final Projects; Review

Wk 17  Finals Week
• Final assessment: Wed, May 1 2030-2230

* Breakout groups involving individual & group projects will occur in almost every class.
Grading:
30% Tests and Homework
25% Project Outline and Update Reports
30% Final Project Evaluation and Performance
15% Classroom Participation & Attendance**

** Since there are only 16 class meetings, attendance is very important and will significantly impact the final grade if problematic. Please contact the instructor early and consistently if there are issues involving attendance.