

ISEN 440  
Sustainability Practicum

(co-listed Civ Env 395 – Sustainability Practicum  
PPTY TORT 616 SEC 1 Practicum: Sustainability Solutions)

Instructors: Kimberly Gray, Professor, Civil & Environmental Engineering  
David Dana, Professor, Law School

**Course Description:** This is a project-based course in which multidisciplinary teams of graduate students will tackle real problems related to the challenges associated with the transition to a sustainable economy and society. Projects are sponsored by industry, corporate, and small business partners and will cover topics such as the development of policy and business strategies for carbon management, energy and water audits for sustainable buildings, finding profit in resource recovery, etc. Teams will be tailored to the requirements and needs of the project, but will typically be made up of students from law, business, engineering, science, and social science as appropriate. Enrollment requires permission of the instructors.

No text books or common course materials – everything tailored to project and will be obtained by students in context of completing projects.

**Grading:**     **20% - class participation, progress reporting**  
                  **40% - Final project presentation**  
                  **40% - Final project report**

**Year 1 projects:** Four projects have been identified:

1. DuPont – Investigate decision making process to determine when nanomaterials and products warrant closer EH&S testing; compare to dominant regulatory approach which relies on definition of “new” material.
2. Farr & Assoc. – Study mechanism to modify local zoning codes to reduce barriers to sustainable architecture and incorporate C-management into local comprehensive planning.
3. Earthwise Environmental Inc. – conduct energy & water audits of existing medical building, identify savings, calculate ROI.
4. Federal Reserve Bank – Develop sustainable resource recovery/product from 310 tons of shredded currency annually.

## **Syllabus**

Week 1 – Introduction, Project overview, team organization

Week 2 – Meet with project sponsors, identify information needs

Week 3 – Project proposal presentation

Week 4 – Speaker

Week 5 – Progress reports – half of projects

Week 6 – Progress reports – remaining half

Week 7 – Progress reports

Week 8 – Progress reports

Week 9 - Final presentations

Week 10 – Final Reports due