

EES 405 Sustainable Energy Analysis

Spring 2007 Online

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Future Catalog Description: *Sustainable Energy Analysis*. This course uses existing computer simulation tools to develop and test computer models that predict the performance of conventional buildings, high performance buildings, passive solar buildings, and renewable energy systems.

Texts: Energy Its Use and the Environment, Roger A. Hinrichs and Merlin Kleinbach, 3rd Edition, Brooks/Cole and Mastering Energy-10

Tentative Outline:

Project Due Date	Topic
January 26, 2007	<i>Simple Building Analysis</i>
February 2, 2007	<i>Effect of Building Mass</i>
February 9, 2007	<i>Introduction to Energy Plus</i>
February 16, 2007	<i>Introduction to Design Builder</i>
February 23, 2007	<i>Evaluating Residential Building Performance</i>
March 2, 2007	<i>Improving Window Design</i>
March 9, 2007	<i>Passive Solar Heating in New England</i>
March 16, 2007	<i>Take Home Exam Due</i>
March 23, 2007	<i>Introduction to Energy 10</i>
March 30, 2007	<i>Designing PV Systems</i>
April 6, 2007	<i>Designing Solar DHW Systems</i>
April 13, 2007	<i>Introduction to Homer</i>
April 20, 2007	<i>Optimizing Renewable Energy Systems</i>
April 27, 2007	<i>Project – Phase 1</i>
May 4, 2007	<i>Project – Phase 2</i>
May 18, 2007	<i>Project Due</i>

Grading:

Mid-Term Exam (20): This take-home exam is due on March 13

Assignments (40): Assignments are due each week.

Class Project (40): A project will be defined in early February.

Extra Credit: You may earn up to **10 extra-credit** points by attending specific regional lectures, short-courses, or workshops and writing brief reports. I will notify you of these extra-credit opportunities throughout the semester.

Other Important Information:

Students with Disabilities: Students with disabilities who may need accommodations for this course are encouraged to contact the Office of AccessAbility Services at 465-5573. Your instructor is unable to make such accommodations until he receives written notification and instructions from this office.

Cheating and Plagiarism: The following material is taken from the “Statement on Campus Rights and Responsibilities” which is found on page 67 of the ECSU Student Handbook.

A student using other than approved materials when taking a test or who gives or receives information during an examination is guilty of cheating.

Plagiarism is presenting the work of others as one’s own. The “work of others” includes any work bought or borrowed from another student as well as work copied from a book, magazine, newspaper, or other medium.

Complicity in another’s act of plagiarism is itself an act of plagiarism.

These acts are considered academic violations and are covered by the Statement on Campus Rights and Responsibilities.

Discovery of cheating or plagiarism could lead to the maximum sanction of course failure and expulsion from school.