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ENERGY STAR®, a U.S. Environmental Protection Agency program, helps us all save money and protect our environment through energy efficient products and practices. For more information, visit www.energystar.gov.

Add ENERGY STAR® to Your Course Catalog And give students practical experience with building energy efficiency.

Available now, the new ENERGY STAR college-level course, *Introduction to Commercial Building Energy Efficiency Through EPA's ENERGY STAR Program*, gives your students practical, hands-on experience with commercial building energy efficiency. Use materials from the U.S. Environmental Protection Agency (EPA) to add this offering to your course catalog in time for next term's class registration. This course was piloted in Spring 2010 through a partnership with Omaha Public Power District and Metropolitan Community College of Omaha, NE. EPA is making it available to all interested colleges, universities, schools, associations, and organizations. Give your students the skills and experience to succeed in a green job—bring energy efficiency to your classroom today!

What is this college course?

A free-of-charge, off-the-shelf package from EPA that can be added to your course catalog to give your students an edge in the rapidly expanding green workforce. Backed by ENERGY STAR, the nation's flagship energy efficiency program, this course package has everything you need to bring commercial building energy efficiency to the classroom—the box to the right describes the materials available.

What Does it Cover?

The course introduces students to the benefits of and barriers to commercial building energy efficiency through an in-depth look at EPA's ENERGY STAR program for commercial buildings. It includes a class project in which students apply their knowledge learned in the classroom to assess the energy efficiency of a local community building and identify potential energy efficiency measures to implement. By adding or removing content, the course may be structured as a quarter, semester, or trimester offering, or you can select one or a few lessons to create a short course or workshop.

Why Energy Efficiency?

The energy used in the buildings where we work, play, and learn is responsible for nearly half of our national emissions of greenhouse gases that contribute to global climate change. Energy efficiency is not just good for the environment, it's also good for the bottom line—ENERGY STAR labeled office buildings cost 50 cents less per square foot to operate and have higher occupancy rates and increased asset value. Thirty percent of *Fortune* 500 companies, eight of the 10 largest U.S. healthcare systems, several major league baseball teams, and numerous environmental leaders nationwide are partnering with ENERGY STAR to cut utility bills and reduce their carbon footprint through energy efficiency. Understanding building performance and how to make energy efficiency improvements is a valuable and marketable skill for your students in any economic climate.

Where Do I Start?

To add this course to your school's catalog in time for next term's registration, download the course outline, course description, and syllabus with reading list from www.energystar.gov/highered today. To request the full set of materials, including lecture plans and presentations, please contact Caterina Hatcher, ENERGY STAR National Manager for the Public Sector, at hatcher.caterina@epa.gov.

Course Materials Available:

- 1. Course outline.** Featuring an overview of the course, its objectives, and the reading list, tailor this outline for your course approval process.
- 2. Course description.** Use the course description for your school's course catalog.
- 3. Syllabus with reading list.** Refer to the course syllabus and reading list, which are ready to hand out to students, to learn more about the structure of the course, readings, student objectives, and review questions.
- 4. Lecture plans.** These plans provide a suggested schedule for each class and break down weekly activities.
- 5. Lecture presentations.** Use these multimedia presentations as the basis for weekly lectures.



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Introduction to Commercial Building Energy Efficiency Through EPA's ENERGY STAR Program

COURSE DESCRIPTION:

This course is designed to introduce students to the benefits of and barriers to commercial building energy efficiency through an in-depth look into EPA's ENERGY STAR program. Topics will include, but are not limited to: current trends in commercial building energy efficiency, transforming the market with ENERGY STAR, ENERGY STAR Guidelines for Energy Management, rating building energy efficiency with Portfolio Manager, best energy efficiency practices, engaging employees in energy conservation, and tracking energy savings and greenhouse gas emissions reductions over time. This course will include hands-on learning opportunities such as measuring the energy use of an actual building and identifying energy efficiency opportunities.

COURSE RATIONALE:

Students will learn how eliminating energy waste can help improve the profitability and/or fiscal responsibility of an organization and how this relates to skills they can bring to their current or future workplace.

UNIT TOPICS:

- 1: How Does Eliminating Energy Waste through Energy Efficiency Fit into Sustainability, Green Building, Climate Change, Clean Air and More?
- 2: Transforming the US Economy to be More Energy Efficient—A Broad Look
- 3: Market Transformation and the Role of the ENERGY STAR Program
- 4: Benchmarking Buildings and Prioritizing Improvements within a Portfolio of Buildings
- 5: Determining Financial Value and Funding Methods for Building Energy Efficiency Improvement
- 6: Mid-term Student Project Progress Presentation
- 7: Integrated Approach to Improving Energy Efficiency of a Building and Applying this to a Portfolio of Buildings
- 8: Role of Energy Services Companies and Performance Contracting
- 9: Role of Building Occupants to Improve and Maintain Energy Efficiency
- 10: Bringing Energy Efficiency to Scale with ENERGY STAR—Role of Federal Agencies, States, Local Governments, and Utilities
- 11: Energy Efficiency and the Future—Final Presentation and Discussion of Current Events