Energy, Technology, and Society

Instructor: Prof. Daniel Prober, Becton 417
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Class meetings:
There will be an optional homework discussion section at times to be announced.

The technology and use of energy. Impacts on the environment, climate, security, and economy. Application of scientific reasoning and quantitative analysis. Intended for non-science majors with good backgrounds in math and science. Enrollment limited to 24.

QR, SC

Seminar
Note: There are no prerequisites; high-school science background is needed.

This course is intended for non-science majors.
This course emphasizes the technology, use and impacts of energy on the environment, climate, security and economy. In addition, we will be discussing policy and ethical issues related to energy use. This course is ideal for any student interested in economics, political science, international relations, or business fields with an interest in the environment, energy generation/use, or climate issues. Throughout this course you will be exposed to all plausible forms of alternative energy and asked to think critically about their viability, practicality, and the ways in which they impact society and the environment. We will become familiar with specific energy facilities at Yale via field trips.

The course will meet twice per week in seminar format mainly with lectures and discussions led by the instructor.

Required text:

Group Project/Presentation: Before the middle of the term students will be divided into teams to complete a report and presentation to the class on a topic related to an energy technology related policy issue of your choice.
Yale subjects covered in the course:

(clockwise) - the Yale Peabody Museum; Kroon Hall - home of the Yale School of Forestry and Environmental Studies - the most energy efficient building on campus; the Yale Power plant, a major contributor to Yale carbon reduction plans, and the large solar photovoltaic facility on Yale’s new West campus our greenest renewable power source. These are covered in the course. The design of Yale’s extensive archival and preservation facilities is an important current topic, and one in which Yale has leadership.

Discussion of the Yale Carbon-charge project, and the Yale-owned wind farm in Maine will also be included, for both renewable energy and carbon-reduction issues.