

ES1001.03 Electric Power Generation: Energy Choices and Environmental Consequences

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R 3:00-3:50pm (14 weekly 50-min. sessions: 1/12-4/20)

Course Description

This seminar will focus on current and potential approaches to meeting our national electric power needs within the context of existing and potential future demands and contributions, both within the U.S. and globally. School of Engineering and other Vanderbilt experts will participate in the presentations

Seminar topics will include major energy sectors and sources, nuclear power, coal and natural gas, global climate change, wind power, solar power, and hydroelectric power, and risk analysis and risk perception,

The Seminar will feature a tour of the Vanderbilt University Power Plant that has converted to natural gas exclusively. This tour is always a highlight of the Seminar.

The Seminar will also feature team projects that will give the students the opportunity to research and prepare presentations on an electric power generation approach of their choice.

Evaluation

The team project will constitute 40% of the grade. Class attendance and participation will make up the remaining 60%.

Required Reading

No required text. Lecture presentations will be posted on Blackboard.