

EE 47008 Electrical Energy Extraction

Presentation: You will select a paper on an energy conversion topic and teach your findings to the class in a lecture format, with 15 minutes for your presentation and 10 minutes for questions. Papers will be selected from peer-reviewed technical journals or exceptional conference papers. All papers must be preapproved. The topics are not limited to technologies discussed thus far in the course.

The lecture should utilize ppt, blackboard, and/or overheads in the way you see best to communicate the results. Your lecture should answer the following questions.

1. How does the extraction technology work and what has been accomplished?
2. What is the energy density of the source being tapped?
3. What is the efficiency of the conversion process?
4. How does this technology compare with other technologies?

This assignment will count the same as an exam grade (20%). The grading will be according to the following criteria: (1) your answers to the four questions (if the authors do not provide the answers to questions 2 and 3, then you will make this estimate), (2) your ability to clearly explain the principles, and (3) your responses in the question and answer period.

Before class November 10, 2008, send the pdf of the paper to jsimon@nd.edu and seabaugh.1@nd.edu.

There will be two presentations per class. A logical order will be established once the papers are selected. The dates for the presentations are November 24, December, 1, 3, 5, and 8.