

**How to Take EE 656:
Electrothermal Transport in Semiconductors
M.S. Lundstrom, Purdue University Fall 2015**

This course will be taught in a “different” format. It is laid out in a way that it could be taken in a self-paced format without an instructor. (Hopefully, those who register for credit at Purdue and attend the class sessions will gain some added benefit.) Each week has a reading assignment, and most topics are also covered in online lectures from previous lectures. Class sessions will be used to present short lectures that cover the same material. There should also be some time to work problems and to discuss the homework. A weekly quiz is provided, so that you can be sure that you understood the key points.

Working homework problems is essential for understanding a course like this, but homework will not be graded. The homework problems are designed to emphasize the key concepts that you should become familiar with. Complete solutions will be posted on the course web page and discussed in class. Homework will be assigned weekly.

Frequent exams will test your understanding of the material, so it will be important to keep up. If you understand the homework problems, you should do well on the exams. Five in-class exams will be given – one every three weeks or so.

MATLAB assignments and a final project will test your ability to use the concepts discussed in class.

How to take this course:

- Sun. Start the assigned reading for the week.
- Mon. View the first online lecture assigned for the week.
Begin the HW assigned for the week and the MATLAB assignment if there is one.
- Tues. Attend class and participate (ask questions).
View the second online lecture assigned for the week.
Continue working on HW.
- Wed. Complete the assigned reading for the week.
View the final online lecture assigned for the week.
Continue working on HW
- Thurs. Attend class and participate (ask questions).
Continue working on the HW.
Read or view the reference materials listed for the week.
- Fri. Test your understanding of the week’s material by taking the quiz and reviewing the solutions.
Complete HW for the week and review the solutions.
Use the online forum to ask at least one question per week.
- Sat. Submit the MATLAB assignment by 12 noon and then enjoy the rest of the day off!

Experience is showing me that this format is a more effective way of learning than the traditional format, but it will take your active participation, and you can expect some fine-tuning by me to make it work well.