

**ECE277B, Winter 2010**  
**Advanced Semiconductor Devices II**

Course code 18390  
Graduate Course, 3 units

**Professor & Class Schedule**

Peter Burke  
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Office: EG 2232  
Lect. M/W 3:30-4:50 P.M. ET 201  
Office hours M/W 2-3:30 P.M.

**Textbook:**

*Fundamentals of III-V Devices: HBTs, MESFETs, and HFETs/HEMTs*  
William Liu, Wiley (1999), ISBN 0-471-29700-3

Additional readings will be assigned during class, and the lecture notes will be available at the copy center sometime during 1<sup>st</sup> week of classes.

**Grade:**

30% Midterm 1, 30% Midterm 2, 10% End-of-term presentation (P/F), 30% Final Exam  
(Mon, March 15, 2010, 4-6 PM)

**Course Outline**

1. Review of basic semiconductor physics
2. Two-terminal devices
3. HBT DC properties
4. HBT high frequency properties
5. FET DC properties
6. FET high frequency properties