

**Class:** MWF 9:00-9:50 K 203  
**Lab:** Th: 5-8pm Kirk 215  
**Instructor:** Godi Fischer, Professor, K 214 e-mail: fischer@ele.uri.edu  
**Office Hours** Mo: 2:00-4:00, W: 2:00-4:00

**Lab Instructor:** Michael Platek, Kirk 214 e-mail: platek@ele.uri.edu

**Text:** Ben G. Streetman and Sanjay K. Banerjee: Solid-State Electronic Devices.  
Pearson/Prentice Hall, 6<sup>th</sup> Edition, 2006, ISBN 0-13-149726-X.

**Syllabus:**

1. Introduction
2. Properties of Crystals (Ch. 1)
3. Concepts of Quantum Mechanics (Ch. 2)
4. Energy Bands in Crystals (Ch. 3)
5. Carrier Transport in Semiconductors (Ch. 4)
6. Semiconductor Junctions (Ch. 5)
7. Field-Effect Transistors (Ch. 6)
8. Bipolar Junction Transistors (Ch. 7)
9. Optoelectronic Devices (Ch. 8)

**Exams:**

1. **F 2-22-08**, 50 min., 2-page summary
2. **F 4-04-08**, 50 min., 3-page summary
3. **Final**, 3 hours, 4-page summary

**Grading:** The final grade will be computed as a weighted average of the two intermediate exams (17.5% each), the quizzes (10%) the final exam (30%) and the lab performance (25%).

**Note:**

To pass the course, student must take all exams, participate in all labs and **complete** all individual lab assignments.