**COURSE SYLLABUS AND SCHEDULE**

| Week | Dates | Topics | Chapter |
|---|---|---|---|
| 1 | 1/21, 1/23 | **Semiconductor Fundamentals:** introduction, carrier modeling | 1 & 2 |
| 2 | 1/28, 1/30 | … carrier properties, distributions, and concentrations | 2 |
| 3 | 2/4,2/6^ | ... carrier action | 3 |
| 4 | 2/11, 2/13 | **Metal-Semiconductor Contacts and Schottky Diodes** | 14 |
| 5 | 2/18, 2/20 | **pn Junction Diode:** electrostatics | 5 |
| 6 | 2/25, 2/27^ | ... *I-V* characteristics | 6 |
| 7 | 3/4, 3/6 | ... junction capacitance, transient response | 7 & 8 |
| 8 | 3/11, 3/13^ | **Bipolar Junction Transistor:** structure and operation | 10 |
| 9 | 3/18, 3/20 | ... BJT static characteristics | 11 |
| | | *(Spring Recess 3/24-3/28)* | |
| 10 | 4/1, 4/3^ | ... BJT dynamic performance | 12 |
| 11 | 4/8,4/10 | **Metal-Oxide-Semiconductor Capacitor** | (Reader) |
| 12 | 4/15,4/17^ | **MOS Field-Effect Transistor:** structure and operation | (Reader) |
| 13 | 4/22,4/24* | … *I-V* characteristics | (Reader) |
| 14 | 4/29,5/1 | ... performance limitations | (Reader) |
| 15 | 5/6, 5/8^ | … Advanced transistor structures | (Reader) |
| 16 | 5/13 | Review | |

**FINAL EXAM:** Friday 5/23, 12:30-3:30 PM

*Design Project Due

^Quiz date