

**Lecture 3: Device Models II (bipolar & MOS)**

- **Announcements:**
- HW#1 is online
- Discussion sections start next week
  - ↳ Problem: Monday is Labor Day
  - ↳ Will determine what to do about this via Piazza
- Slots will be added to 240a to allow all on the waitlist to get in
  - ↳ If you don't get in, then move lab sections
- -----
- **Lecture Topics:**
- ↳ Review (fast)
- ↳ Bipolar Junction Transistor Modeling
  - Basic Structure & Physics
  - Large Signal Models
  - DC Operating Point
  - Small Signal Models
  - Frequency Shaping Elements
  - Layout
  - Unity Gain Frequency
- ↳ MOS Transistor Modeling
  - Basic Structure & Physics
  - Large Signal Models
  - Threshold Voltage
  - Small Signal Models
  - Frequency Shaping Elements
  - Layout and Inclusion of Parasitics
- -----
- **Last Time:** Reviewing BJT's and DC biasing using the handout
- Continue with this ...

