Course Information Sheet

Staff: Professor: Tsu-Jae King Liu (tking@eecs.berkeley.edu, 643-9251)
Teaching Assistants: Eudean Sun (eudeansun@berkeley.edu)
Wai Son (“Wilson”) Ko (wk668@berkeley.edu)
Sun Chen (sun_chen@berkeley.edu)
Jonathan Ellithorpe (jde@berkeley.edu)
Kevin Wang (kevinwang@berkeley.edu)
Alan Wu (alan_wu@ berkeley.edu)

Lectures (106 Stanley): Tuesdays, Thursdays 3:40 PM to 5:00PM

Discussion Sections (beginning on Wednesday 9/5):
Section 101 (247 Cory): Mondays, 3-4PM; Jonathan Ellithorpe
Section 102 (289 Cory): Wednesdays 9-10AM; Eudean Sun
Section 103 (5 Evans): Fridays 11AM-12PM; Kevin Wang

Students are encouraged to ask relevant questions in class, and to regularly attend a discussion section. The TA’s will review important concepts covered in the lectures and work through sample problems during the discussion sections.

Office Hours:
Tsu-Jae Liu: Tuesdays 12-1PM in 212 Cory; Thursdays 12-1PM in 567 Cory
Eudean Sun (197 Cory): Mondays 2-3PM
Jonathan Ellithorpe (197 Cory): Mondays 4-5PM
Kevin Wang (197 Cory): Fridays 10-11AM

Laboratory Sections (beginning on Tuesday 9/4):
Section 12 (353 Cory): Wednesdays 9AM-12PM; Wilson Ko
Section 13 (353 Cory): Tuesdays 8-11AM; Alan Wu
Section 14 (353 Cory): Mondays 3-6PM; Wilson Ko
Section 15 (353 Cory): Wednesdays 3-6PM; Chen Sun

Students must sign up for one lab section outside 353 Cory by 5PM Friday 8/31, and regularly attend this lab section. All of the lab assignments – along with helpful tutorials -- are posted online at http://www-inst.eecs.berkeley.edu/~ee105/fa07/labs.cgi. Each pre-lab assignment is due at the beginning of the corresponding lab session. Post-lab assignments are due at the beginning of the following lab section. Although students will be allowed to work in pairs during the lab sessions, each student must individually turn in his/her own pre-lab and post-lab assignments.

Objective:
To provide a basic understanding of semiconductor devices and analog integrated circuits.
**Prerequisite:**
- EECS 40: KVL and KCL, Thevenin and Norton equivalent circuits, impedance, frequency response (Bode plots), semiconductor basics, simple pn-junction diode and MOSFET theory and circuit applications, analog vs. digital signals.

**Relation to Other Courses:**
EE105 is a prerequisite for EE113 (Power Electronics) and EE140 (Linear Integrated Circuits). It is also helpful (but not required) for EE141 (Introduction to Digital Integrated Circuits).


**Homework:**
Weekly assignments will be posted online on Tuesdays, and will be due one week afterward (at the beginning of class). Late homework will not be accepted.

Students are encouraged to discuss homework problems with other students in the class, the TA’s, and/or Prof. Liu. However, the work which you submit for grading must be your own.

**Midterms:**
Two midterms (80 minutes each) will be given in class. These are intended to gauge the student's understanding of the basic concepts covered in the course, and hence will not require extensive numerical calculations (*i.e.* calculators should not be needed). **All exams will be closed book.**

**Final Exam:**
The final exam will be closed book, with 6 pages of notes allowed. Students will need to bring a calculator. The final exam will be given on **Thursday 12/20 from 12:30-3:30 PM.** **No early final exam will be offered.**

**Grading:**
The numerical score on which the course grade will be based is derived as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Lab</td>
<td>15%</td>
</tr>
<tr>
<td>Midterms</td>
<td>15% each</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
</tr>
</tbody>
</table>

Letter grades will be assigned based **approximately** on the following scale:

- 98-100: A+
- 88-98: A
- 85-88: A-
- 83-85: B+
- 73-83: B
- 70-73: B-
- 68-70: C+
- 58-68: C
- 55-58: C-
- 45-55: D
- <45: F

**Course Accommodations:**
Students may request accommodation of religious creed, disabilities, and other special circumstances. Please make an appointment with Prof. Liu to discuss your request, so that she can plan accordingly in advance.

**Classroom Etiquette:**
- Arrive in class on time!
- Bring your own copy of the lecture notes (posted online by 7AM on the day of the lecture).
- Turn off cell phones, pagers, MP3 players, etc.
- No distracting conversations -- relevant questions are encouraged