Welcome to CIS 130, Machine Models. The class meets MWF from 9:30-10:40 in Physical Sciences room 114. My office is E2 room 345B. My E-mail is dph@soe, and my office hours will be after class Wednesdays (11-12) and by appointment.

Text: Automata Theory, Languages, and Computation (3rd edition) by Hopcroft, Motwani, and Ullman. We will be using the Gradiance software that comes with the text.

TA: Ricardo Menchaca-Mendez

Discussion Sections: The discussion sections will meet starting September 27.

- Mondays 12:30-1:40 in Baskin Engineering 169
- Thursdays 6:00-7:10pm in Baskin Engineering 169
- Fridays 11:00-12:10 in Baskin Engineering 169

Course Work: This course will have weekly problem sets (generally due at the start of class), homework through the Gradiance system, a midterm, and a final. To pass the class, you must both pass the final and have a passing overall score.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homeworks (written and Gradiance)</td>
<td>30%</td>
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<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final</td>
<td>40%</td>
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The final exam will be given in the lecture room at the scheduled exam time: Wednesday Dec. 8 from 8am until 11am. The tentative midterm date is Friday November 5.

Written homework assignments will be done in groups of 2 or 3 students and each group should turn in a single set of solutions with all member's names and email accounts. All members of the group must attempt each problem and fully understand the group’s solution. It is inappropriate to simply split up the assigned problems among the group members. All help from outside the group (from the web, books other than text, or people other than the TA or instructor) must be clearly acknowledged. Presenting others work as your own is dishonest and is called plagiarism. Academic dishonesty on any assignment is grounds for not passing the class and will be reported, see the campus policies at http://www.ucsc.edu/academics/academic_integrity/undergraduate_students

The Gradiance on-line homework is to be done individually, see the class web page for more information.

Resources: All students are responsible for information on class eCommons page and the SOE class web page.

Prerequisite: Successful completion of CMPS 101 is a prerequisite for enrollment in the class.

Syllabus: We will be covering (most) of the material in chapters 1-9 of the text in order. The major topics are:

1. Review of discrete mathematics and induction (about 2 lectures)
2. Finite Automata and Regular Languages (about 9 lectures)
3. Pushdown automata and context free Grammars (about 8 lectures)
4. Turing Machines and undecidability (about 10 lectures)

If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me during my office hours or by appointment within the first two weeks of the quarter. Contact DRC by phone at 831-459-2089, or by email at drc@ucsc.edu for more information.