- **Course:** Computational Models
- **Time & Place:** Monday, Wednesday and Friday 11:00am-12:10pm, Engineering 2, Room 192.
- **Discussion Sections:**
  - tbd
  - tbd
- **Instructor:** Delbert D. Bailey; office: E2 249B; e-mail: dbailey@cse.ucsc.edu
- **Teaching Assistant:** Josh Whittemore, email: jwhitt@cse.ucsc.edu
- **Office Hours:**
  - Bailey: Mondays 12:15pm-1:30pm, Thursdays 5:00-6:15pm, E2 249B.
  - Whittemore: tbd
- **Goal:** To cover most of the material contained in Chapters 0, 1, 2 and 3.
- **Syllabus:** The following is a tentative syllabus for the course:
  - Overview
  - Tools: Mathematical Objects and Proof Techniques
  - Deterministic Finite Automata
  - Non-deterministic Finite Automata
  - Rabin-Scott Theorem
  - Regular Languages and Regular Expressions
  - Kleene's Theorem
  - Non-regular Languages
  - Pumping Lemma
  - Myhill Nerode Theorem
  - Minimizing States
  - Push Down Automata
  - Context-free Grammars and Languages
  - Normal forms
  - Non-context-free languages
  - Pumping Lemma for context-free languages
  - Turing Machines and Recursively Enumerable Languages
  - Church-Turing Thesis
- **Evaluation:** The course work will be weighted as follows:
  - Final Examination 40%
  - One Midterm Examination 30%
  - Four in-class Quizzes (20 minute each) 20%
  - Seven Homework Assignments 10%
- **Examination and Quiz Schedule:**
  
  Quiz 1:  Friday,  January 14, 2005,  11:00am-11:20am.
  Quiz 2:  Friday,  January 28, 2005,  11:00am-11:20am.
  Midterm:  Monday,  February 7, 2005,  11:00am-12:10pm.
  Quiz 3:  Friday,  February 18, 2005,  11:00am-11:20am.
  Quiz 4:  Friday,  March 4, 2005,  11:00am-11:20am.
  Final:  Wednesday,  March 16, 2005,  4:00pm-7:00pm.

  The examination and quiz schedule is fixed. In particular, requests for changes in the schedule will not be accommodated; if you have conflicts with this schedule, please do not enroll in the class. Also, no time extension will be given for late arrivals on quiz day or examination day.

- **Academic Integrity:** No form of academic dishonesty will be tolerated. Incidents of academic dishonesty will be reported according to UCSC's policy on academic integrity, the full text of which can be found at http://osas.ucsc.edu/avcue/integrity. Specifically, if you are caught submitting work as your own in this class, that is not solely your own, or assisting others in doing so, a formal written report will be sent to your Department, the School of Engineering, and to your Provost and academic preceptor. Furthermore you will get a failing grade for the course and the incident will be noted in your evaluation.

- **Miscellanea**
  
  - All homework assignments are to be handed in at the beginning of Class on Mondays.
  - Solutions to homework problems will be presented in the discussion sections. They will not be posted.
  - Attendance at discussion sections is required.
  - We will distribute solutions to the problems in the quizzes and in the midterm examination, after the grading has been completed.
  - We will not distribute or post “sample” examination problems or “sample” quiz problems.
  - The class has a newsgroup, which is accessible from the class webpages. We will occasionally post announcements and reminders there, but we will not answer questions to homework problems on the newsgroup. The time and place to ask such questions and have them answered are the discussion sections and the office hours.

- **Other interesting textbooks, NOT required:**
  