ECS 120: Theory of Computation, Fall 2007
Course Information

Lectures: MWF, 12:10pm – 1pm, 147 Olson. **Discussion Section:** W, 4:10pm – 5pm, 176 Chemistry.

Instructor: Vladimir Filkov, filkov@cs.ucdavis.edu
Office: 3023 Kemper Hall
Phone: (530) 752-8393 Office Hours (tentative): M, 1:30pm—3:00pm; R, 10:30am—noon.

Teaching Assistant: Sophie Engle, engle@cs.ucdavis.edu
Office: 53 Kemper Hall Office Hours: TBA

Text: Michael Sipser, *Introduction to the Theory of Computation*, Course Technology, Second Edition, 2005.

Other Course Material:
Web page and announcements: http://www.cs.ucdavis.edu/~filkov/classes/120-F07, class web page

Discussion groups: **ucd.class.ecs120** – this is for me and the TA to communicate things to you.
ucd.class.ecs120.d – this is for you to discuss the class. Don't post solutions!

Prerequisites: ECS 20, or an equivalent, MAT 108 recommended. Mathematical maturity is essential for this course, as you will be required to understand and produce proofs of mathematical statements. If you don't feel comfortable with proving thins you should take a course like MAT 108 first.

Grading:		
	Weekly problem sets	25 %,
	a midterm	30 %,
	quizzes	5 %,
	and a final	40 %.

The **midterm** will be in class on **Wednesday, October 31.** The **final** will be on **Friday, December 14, 8-10am** in **147 Olson**. At the exams, in addition to your own internal memory, only a page of notes will be allowed for recollection. There will be two quizzes, each 20 minutes long. It is possible that one of the quizzes will not be counted in the final grade. There will be no make-up quizzes. **To pass the class you must pass the final exam.**

Assignments
A problem set will be assigned each week. Your solutions will be due in a week at the beginning of class, or in Kemper Hall, room 2131. The precise schedule will be announced in class. A subset of the assigned problems may be chosen for grading. Late homework will not be accepted, but the lowest scoring one may be dropped.

You can expect the assigned problems to be challenging. The material in this course can only be learned by putting an honest effort in trying to solve each of the problems. You will not do well on the exams if you don't do the homework problems. The submitted solutions should be clearly written and understandable. Once you have a correct proof try to write it out (i.e. present it) more carefully and clearly, as you may loose points if your proof is unreadable, even if correct. If you think your solutions have been mis-graded contact the TA within a week of the homework return date.

Collaboration
Collaboration while discussing problems is encouraged. If you do discuss any of the problems with anyone make sure you acknowledge him/her/them. But, write up your assignments on your own even if you have discussed the problems with someone else. Some homework questions will have been used in previous years (either by me or by another professor). Do not consult old problem set solutions for this class. Have in mind that old solutions can be recognized.

How to do well in this course
Do not get behind and try to have fun! Each lecture in this course builds on the previous ones. It is paramount to do the assigned reading before each class and work on the problems in a timely fashion. Although this material can be challenging if you work hard it can also be very rewarding.