

## Course Info: ECS 120, Theory of Computation, Fall 2009

**Lectures:** MWF, 10:00a – 10:50a, 212 Veihmeyer.      **Discussion:** W, 4:10p – 5p, 212 Wellman.

**Instructor:** Vladimir Filkov,      Office: 3023 Kemper Hall,  
[filkov@cs.ucdavis.edu](mailto:filkov@cs.ucdavis.edu),      Office Hours: M, 1-2pm; R, 1:30-3pm.

**TA:** Victor Missirian,      Office: 55 Kemper Hall,  
[vmissirian@ucdavis.edu](mailto:vmissirian@ucdavis.edu),      Office Hours: T, 12-2pm.

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

**Other Material:** Web page (lecture schedule and announcements):

<http://www.cs.ucdavis.edu/~filkov/classes/120-F09>.

Discussion groups: **ucd.class.ecs120** (for instructor), **ucd.class.ecs120.d** (for everyone).

**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 things you should take a course like MAT 108 first.

**Grading:**

Weekly problem sets	25 %
a midterm	30 %
and a final	45 %

The **midterm** will be in class on **Monday, October 26**. The **final** will be on **Thursday, December 10, 3:30pm-5:30pm** in **212 Veihmeyer**. At the exams, in addition to your own internal memory, only a page of notes will be allowed for recollection. **To pass the class you must pass the final exam.**

**Assignments** will be handed out approximately each week. Your solutions will be due in about a week, in the homework box for the class in Kemper 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. The assigned problems will 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 more carefully and clearly, as you may lose points if your proof is unreadable, even if correct. If you think your solutions have been mis-graded contact the TA within a week.

**Collaboration** while solving 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. They can be recognized. Note that we will be very serious about academic dishonesty in this class.

**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.

**If You're Sick** We have been warned that a significant H1N1 flu outbreak is likely, peaking around two or three weeks into the term. If you do get sick, please do not come to class. You should wait until 24 hours after your fever has ended before coming back to class. If you still have a cough, please try to sit away from other students and use proper "cough hygiene". If you come to class while obviously ill, I may ask you to leave, as a simple courtesy to others. If you have to miss lectures make sure you get the lecture notes from someone; if you miss an exam or homework deadline I'll need to see a doctor's note.