

ECE130B Signal Analysis & Processing

BY PROF. SHIVKUMAR CHANDRASEKARAN

Winter 2009 Handout

- **Class Web-site:** All homeworks, handouts and announcements will be posted here. Check frequently.
http://www.ece.ucsb.edu/courses/ECE130/130B_W09Shiv/
- **Lecture Hours:** Mondays, Wednesdays & Fridays, Phelps 3505, 11 a.m. — 11:50 a.m.
- **Text book (required):** *Signals and Systems* (2nd edition), by Alan V. Oppenheim and Alan S. Willsky.
- **Discussion Sessions:** Every student must register for one of the discussion sessions. These are an integral part of the course and should not be skipped.
- **Homework:** Homework will be posted every week on the class web-site. Any errors discovered in the homework will be corrected immediately and posted on the web-site. So check frequently.
- **Office Hours:** My office hours will be held in Eng. I room 3109 on Tuesdays from 1 p.m. to 3 p.m.. You can also meet me by appointment. You can contact me at 893-7542 or by email at shiv@ece.ucsb.edu. Please do *not* use email to hold a conversation with me. Email is not a good means of contacting me in case of an emergency either.
- **TAs Office Hours:**
 - Farshad Ramezan Poursafaei (farshad@umail.ucsb.edu): Fridays 9 a.m. — 11 a.m.
 - Kumar Viswanatha (kumar@umail.ucsb.edu): Thursdays 12 p.m. — 2 p.m.
- **Exam Schedule:**

Exam	Date	Location	Time
Midterm	February 20	Phelp 3505	11 a.m. — 11:50 a.m.
Final	March 20	Phelp 3505	12 p.m. — 3 p.m.
- **Exams:** Programmable or graphing calculators are not permitted in any exam. Only a basic scientific calculator can be used. Prior to each exam you will be advised about the tables of transforms that you will be allowed to use.
- **Grading:** Homework: 20%; Midterm: 35%; Final: 45%. This weighting is not final. The class will be graded on a curve. The letter grade assigned to the average will depend on the performance of the class.
- **Syllabus:** We will cover the following topics:
 - Discrete signals & systems
 - Discrete convolution
 - Solution of constant-coefficient linear difference equations
 - The z -transform
 - Discrete-time Fourier transform
 - Sampling
 - Discrete Fourier series