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# Signals and Systems for Computer Engineers

## CPE260 Spring 2012

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<http://www.egr.unlv.edu/~b1morris/cpe260>

Professor:	Brendan Morris	Class:	TuTh 10:00-11:15
E-mail:	brendan.morris@unlv.edu	Office Hours:	TuWTh 11:30 - 12:30
Office:	SEB 3243	Final:	Tu May 08, 10:10-12:10
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### Textbook

Signals and Systems, A.V. Oppenheim, A.S. Willsky, and S.H. Nawab, 2nd Edition, ISBN: 0-13-814757-4

### Recommended Text

Schaum's Outlines: Signals and Systems, H. Hsu, 2nd Edition, ISBN: 978-0-07-163472-4  
Linear Systems and Signals, B.P. Lathi, 2nd Edition, ISBN: 978-0-19-515833-5

### Grading

Midterm: 35% 02/16, 03/22  
Final: 35% 05/08  
Homework: 30% Weekly

Students may study together in groups but all assignments must be completed individually. Homework will be due in class on the designated date. No late homeworks will be accepted unless prior notification and arrangements are made.

### Catalog Description

Real and complex signals and linear time invariant (LTI) systems. Signal analysis using linear combinations of signals from linear signal spaces. Analysis of LTI systems described by linear constant coefficient differential equation using zero input and zero state responses, homogeneous and particular response, and the Laplace transform.

**Prerequisites:** MATH182: Elementary Calculus II

### Topics

Chapter 1: Signals and Systems  
Chapter 2: Linear Time-Invariant Systems  
Chapter 3: Fourier Series  
Chapter 4: Continuous-Time Fourier Transform  
Chapter 5: Discrete-Time Fourier Transform  
Chapter 6: Time/Frequency Characterization  
Chapter 7: Sampling  
Chapter 8: Communication Systems  
Chapter 9: Laplace Transform  
Chapter 10: Z-Transform

Additional course material not present in the textbook will be distributed to the class when needed. Extra problems can be found in the recommended texts. The Schaum series book has a number of worked problem solutions making it a good investment.

## Course Policies

- There will be no make-up exams or late homework without prior arrangements. If you have 3 final exams on the same day you may ask for a reschedule. This request must come by the last day of late registration.
- Extensions will only be granted for medical emergencies or due to the observance of a religious holiday. The instructor must be notified of the absence prior to the last day of late registration.
- If you have a documented disability that may require assistance, you will need to contact the Disability Resource Center (DRC) for coordination in your academic accommodations. The DRC is located in the Student Services Complex (SSC), Room A-143, phone 702-895-0866. Or visit the DRC website at: <http://drc.unlv.edu/>
- As a university student, it is your responsibility to conduct yourself ethically and with integrity as described in the Academic Misconduct Policy. Cheating and plagiarism will not be tolerated. Any student caught cheating will be given an F grade.  
(<http://studentconduct.unlv.edu/misconduct/policy.html>)