

Course Syllabus

Course Information

Title	Signals and Systems
Number	CE/EE/TE 3302
Section	0U1
Semester	Summer 2016
Days, Times, and Locations	Tues & Thurs 03:00 pm – 05:15pm, GR 4.301
Website	eLearning

Instructor Contact Information

Name	Soudeh A. Khoubrouy, PhD
Email Address	sa.khoubrouy@utdallas.edu
Office Location	BSB 13.530
Office Hours	Check eLearning

Course Pre-requisites and Co-requisites, and/or Other Restrictions

Co-requisite: EE/CE/TE 3102 Signals and Systems Laboratory
Pre-requisite: ENGR 3300

Course Description

In this course, fundamentals of continuous and discrete-time signal processing are introduced. Linear system analysis including convolution, impulse response, Fourier series, Fourier transform, sampling, and z-transform will be covered.

Student Learning Objectives/Outcomes

After completing this course, students are expected to be able to:

- Apply the convolution theorem for continuous time signals
 - Evaluate the Fourier Series of periodic signals
 - Determine the Fourier Transform of energy signals
 - Make use of Fourier Transform Properties
 - Analyze a discrete time LTI system using discrete linear convolution
 - Use z-transform for analyzing discrete time signals and systems
 - Convert a continuous time signal to the discrete time domain and reconstruct it using the sampling theorem
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Required Textbooks and Materials

S. Soliman & M. Srinath, *Continuous and Discrete Signals and Systems*, 2nd edition. Prentice- Hall ISBN 0-13-518473-8

Additional references:

- A.V. Oppenheim et al., “*Signals & Systems*,” 2nd Edition, Prentice Hall, 1997.
- J.H. McClellan et al., “*Signal Processing First*,” Prentice Hall, 2003.
- C.L. Phillips et al., “*Signals, Systems and Transforms*,” 3rd Edition, Prentice Hall, 2003.

Assignments & Academic Calendar

Homework: Weekly assignments will be posted on eLearning. Working through these assignments will help you do well in quizzes and exams. You are encouraged to work and learn in groups in doing the homework problems but you need to submit each set of assignments individually and mention the name(s) of your team-mate(s) if there is any.

Quizzes: The quizzes must be individual efforts.

Exams: There are two mid-term exams and a comprehensive in-class final exam. The exams must be individual efforts.

Students have one week to review graded homework, quizzes, exams or projects with the professor for any possible grading corrections. After one week no changes will be allowed.

Tentative Schedule

Dates	Topics	
May 24, 26, 31	Chapter 1	Continuous Time (CT) Signals
June 2, 7, 9	Chapter 2	CT Systems
TBA	Exam 1	
June 14, 16, 21	Chapter 3	Fourier Series
June 23, 28, 30, July 5, 7, 12	Chapter 4	Fourier Transforms
TBA	Exam 2	
July 14, 19, 21	Chapter 6	Discrete Time (DT) Signals and Systems
July 26, 28, August 2, 4	Chapter 8	Z-Transform
TBA	Exam 3	

Grading Policy

Homework	10%
Quizzes	15%
Minimum(Exam 1, Exam 2, Exam 3)	15%
Median(Exam 1, Exam 2, Exam 3)	25%
Maximum(Exam 1, Exam 2, Exam 3)	35%

Final grades will be assigned according to the following scale:
100-90 A; 89-80 B; 79-70 C; 69-60 D and below 60 F.

Course & Instructor Policies

On time class attendance is expected. Quizzes (which may not be announced ahead of time) and exams represent your attendance in the class. Being absent in a quiz or exam you will lose the whole credit for that activity.

Using cell phones is not allowed during class or exam.

No make-up quizzes will be given.

No make-up exams will be given except for proven extenuating circumstances.

No late assignment will be accepted without prior authorization.

Students have one week after a graded exam or assignment is returned to discuss any possible grading corrections with the professor. After one week no changes will be allowed.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.