

King Saud University
College of Engineering
Electrical Engineering Department

EE 301 - Signals and Systems
 First Semester 1437/38 H

Instructor: Dr. Majid Altamimi, **Office:** 2C14, **Email:** mtamimi@ksu.edu.sa

Course Pre-requisite: EE 212

Textbooks: 1- “*Signals and Systems*” by A. V. Oppenheim, A. S. Willsky, and S. H. Nawab, Prentice Hall, 1997.

2- “*Signals and Systems*” by C.-T. Chen, 3rd Ed., Oxford University Press, NY, 2004.

Course Materials: We be available on KSU-LMS system.

Office Hours: Sunday/Tuesday/Thursday 9-10 AM.

Course Outline

Reference from text	Deliverables	Week
1.0, 1.3-1.5	Introduction to signals and systems	1
1.2	CT, DT and digital signals, basic operations on signals	2
1.2	Classifications of signals	3
1.5-1.7	Introductions to systems; assignment 1	4
2.0-2.1	LTI systems and DT convolution	5
2.2-2.3	LTI systems and CT convolution	6
2.4	Difference/ Differential Equations for LTI systems	7 Exam1
Lecture notes	Correlation analysis; assignment 2	8
3.0-3.12	Fourier Series of periodic signals (CT and DT)	9
4.0-4.2, 5.0-5.2	Fourier Transform (CT and DT)	10
4.3-4.8, 5.3-5.9, 7.0-7.3	Properties of Fourier Transform, Sampling, Applications	11 Exam2
9.0-9.10	Laplace Transform, applications in system design	12, 13
10.0-10.3	Introduction to Z-transform, General Review	14

Evaluation:

- 10 % Home works/ Attendance/Quizzes
- 10 % Tutorial
- 20 % First mid-term Exam
- 20 % Second mid-term Exam
- 40 % Final Exam