King Saud University
College of Engineering
Electrical Engineering Department

EE 301 - Signals & Systems Analysis
2nd Semester 2020/2021 (1441/42)

Instructor: Dr. Mubashir Alam
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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 Material: Will be provided through KSU LMS

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,	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
Lec. notes	Correlation analysis,	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	14

Evaluation:

10 % Home works/ Attendance/Class Quizzes/Tutorial
25 % First mid-term Exam (6^{th} or 7^{th} week)
25 % Second mid-term Exam (11^{th} or 12^{th} week)
40 % Final Exam

Office Hours: Sunday/Tuesday : 10:00-11:00 am, Online

Attendance policy: Every student should attend at least 75% of all lectures.