

**King Fahd University of Petroleum and Minerals**  
**Department of Electrical Engineering**  
**EE 207: Signals and Systems (141, 1<sup>st</sup> Semester 2014)**

**Text Book:** Signals, Systems, and Transforms, 4<sup>th</sup> Ed. C. L. Phillips, J. M. Parr, and E. A. Riskin, 2008

**Course Instructor**  
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**Office Hours**  
 Sun. & Tue: 10:00-10:50 AM and 12:20-1:00 PM

Wk	Dates	Chapter/Section Titles
1	31 -4 Sep.	<b>Chapter 1: Introduction</b> 1.1: Introduction to Signals & Systems Examples <b>Chapter 2: Continuous-Time Signals and Systems</b> 2.1: Transformation of Continuous-Time Signals
2	7-11 Sep.	2.2: Signal Characteristics 2.3: Common Signals in Engineering 2.4: Singularity Functions
3	14-18 Sep.	2.5: Mathematical Functions for Signals 2.6: Continuous-Time Systems 2.7: Properties of Continuous-Time Systems
4	21-25 Sep. (Tues. 23 Nat. Day) 25 Sep. Start of Hajj Holiday	<b>Chapter 3: Continuous-Time Linear Time-Invariant Systems</b> 3.1: Impulse Representation of Continuous-Time Signals 3.2: Convolution for Continuous-Time LTI Systems
<b>Hajj Holiday</b>		
5	12- 16 Oct.	3.3: Properties of Convolution 3.4: Properties of Continuous-Time LTI Systems <b>Chapter 4: Fourier Series</b> 4.1: Function Approximation
6	19-23 Oct.	4.2: Fourier Series 4.3: Fourier Series and Frequency Spectra
7	26-30 Oct.	4.5: System Analysis 4.6: Fourier Series Transformations <b>Chapter 5: Fourier Transform</b> 5.1: Definition of the Fourier Transform
Tuesday 28 Oct.		Major Exam I ( up to the End of Chapter 4) -- 7-9PM
8	2-6 Nov.	5.2: Properties of the Fourier Transform 5.3: Fourier Transform of common Functions
9	9-13 Nov.	5.5: Applications of the Fourier Transform 5.6: Energy and Power Density Spectra <b>Chapter 6: Applications of the Fourier Transform</b> 6.1: Ideal filters
10	16-20 Nov.	6.3: Concept of Bandwidth <b>Chapter 7: The Laplace Transform</b> 7.1: Definition of Laplace Transforms 7.2: Examples of Laplace transform
11	23-27 Nov.	7.3: Laplace Transforms of Functions 7.4: Laplace Transform Properties 7.6: Response of LTI Systems
Sunday 30 Nov.		Major Exam II ( covered material Ch5 up to the end of 7.6) -- 7-9PM
12	30-4 Dec.	7.7: LTI Systems Characteristics <b>Signal Sampling and Reconstruction</b> 5.4: Sampling of Continuous-Time Signals
13	7-11 Dec.	6.4: Reconstruction of Signals from Sampled Data <b>Chapter 10: Discrete-Time Linear Time-Invariant Systems</b> 10.1: Impulse Representation of Discrete-Time signals 10.2: Convolution for Discrete-Time Systems
14	14-18 Dec.	10.3: Properties of Discrete-Time LTI Systems 10.4: Difference-Equation Models (up to equation 10.48) <b>Chapter 11: The z-Transform</b> 11.1: Definition of z-Transform 11.2: Examples
15	21-25 Dec.	11.3: z-Transforms of common Functions 11.4: z-Transform Properties 11.6: inverse z transform by long division and partial fraction expansion
16	28-29 Dec.	Review

**Grading Policy:**

Class Work (Quizzes 15 %)	Project: 5%
Exam I : 20%	Exam II: 20% Final Exam: 40%

**Notes:**

- The course is fully coordinated.
- Homework assignments will not be collected. Instead, a quiz related to the homework problems is expected every Tuesday on the next week after the homework assignment week. Homework solution will be posted on Blackboard.
- Attendance: Any student who misses more than 8 classes will receive a grade of DN in the course.
- There will be absolutely no make-ups for quizzes or exams.
- Students caught cheating in quizzes, design project, or exams will be given a grade of F in the course and their case will be reported to higher authorities for possible dismissal from KFUPM.