King Saud University College of Computer & Info Sciences Computer Engineering Department Semester II, 1441H (Spring 2020) CEN543 (Female): Digital Signal Processing 3 Credits

Course Outlines

Week	Dates (Hijri)	Topic
1	24/5/1441H	Registration
2	1/6/1441H	Chapter 2: Discrete-Time Signals and Systems
3	8/6	Chapter 2: Discrete-Time Signals and Systems
4	15/6	Chapter 3: Z-Transform
5	22/6	Chapter 3: Z-Transform
6	29/6	Chapter 4: Sampling of Continuous-Time Signals
7	6/7/1441H	Chapter 4: Sampling of Continuous-Time Signals
Exam I	1/7/1441H	Tuesday Feb. 25, 2020
8	13/7	Chapter 5: Transform Analysis of LTI Systems
9	20/7	Chapter 6: Structures for Discrete-Time Systems
10	27/7	Chapter 7: Filter Design Techniques
11	5/8/1441H	Chapter 8: Discrete Fourier Transform
12	12/8	Chapter 8: Discrete Fourier Transform
13	19/8	Chapter 9: Fast Fourier Transform
Exam II	14/8/1441H	Tuesday April. 7, 2020
14	26/8	Advanced Topics
15	3/9/144H	General courses final exams- April 26, 2020
16	10/9	Final exams start: May 3, 2020

Textbooks:

- 1. "Discrete-Time Signal Processing," A. Oppenheim and R. Schafer, 3rd Edition, Prentice-Hall 2009.
- 2. "Digital Signal Processing: Fundamentals and Applications", 3rd Edition, Lizhe Tan and Jean Jiang, 2019, AP, Elsevier.

References:

- 1. "Digital Signal Processing: Fundamentals and Applications," Li Tan, Elsevier 2008.
- 2. "Digital Signal Processing," A. Oppenheim and R. Schafer, Prentice-Hall 1975.
- 3. "Signals and Systems," A. Oppenhiem and A. Willsky, 2nd Edition, Prentice-Hall 1997.
- 4. "Discrete-Time Processing of Speech Signals," J. Deller, J. Hansen, and J. Proakis, IEEE Press 2000.

Grading:

Exam I 20%
Exam II 20%
Assignments 20%
Final 40%

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