

King Saud University
College of Engineering
Department of Electrical Engineering
EE212 - Electric Circuits

First Semester 1439-1440 H

Instructor: Dr. Usama Khaled

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Text Book: “*Introduction to Electric Circuits*”, Richard C. Dorf and James A. Svoboda, Wiley, 9th Ed, 2014, including Wiley plus Learning Management System.

Topics and Sections Covered

1. *Analysis of Circuits having Dependent Sources (4 lectures)*
Sections 2.7, 3.8, 4.4, 4.7, 5.3, 5.4, 5.5 and 5.6 of the text book.
2. *Operational Amplifiers (Chapter 6) (3 lectures)*
Sections 6.1, 6.2, 6.3, 6.4 and 6.5 of the text book.
3. *Energy Storage Elements (Chapter 7) (2 lecture)*
Sections 7.2, 7.3, 7.5 and 7.6 of the text book.
4. *The Complete Response of RL and RC Circuits (Chapter 8) (4 lectures)*
Sections 8.1, 8.2, 8.3, 8.4, and 8.6 of the text book.
5. *The Complete Response of Circuits with Two Energy Storage Elements (Chapter 9) (3 lectures)* From section 9.1, up to section 9.8 of the text book.
6. *Coupled Inductors Circuits (2 lectures)*
Section 11.9 (Chapter 11).
7. *Frequency Response of Resonant Circuits (2 lectures)*
Sections 13.4 (Chapter 13) of the text book.
8. *The Laplace Transform (Chapter 14) (2 lectures)*
Section 14.7 and 14.8 of the text book.
9. *Filter Circuits (Chapter 16) (3 lectures)*
Sections 16.1, 16.2, 16.3 and 16.4 of the text book.
10. *Two Port Circuits (Chapter 17) (3 lectures)*
Sections 17.1 up to 17.6 of the text book.

Grading:

Midterm-1 Exam	22%	Monday, 29-10-2018	6.15pm
Midterm-2 Exam	22%	Monday, 03-12-2018	6.15pm
Home works	10%		
Tutorials	6%		
Final Exam	40 %		

Attendance Policy: Any student who is absent for more than 25% of lectures and tutorials will not be allowed to appear in the final exam and this policy will be strictly enforced without any exceptions.

Programmable Calculators and Mobiles are not allowed in Exams & Quizzes