

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

Second Semester 1439-1440H

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Textbook: "**Introduction to Electric Circuits**", Richard C. Dorf and James A. Svoboda, Wiley, 9th edition (with WileyPlus).

Chapters and Sections Covered

1. *Analysis of Circuits having Dependent Sources* (Chapters 2, 3, 4, and 5) 4 lectures
Sections 2.7, 3.8, 4.4, 4.7, 5.3, 5.4, 5.5 and 5.6.
2. *Operational Amplifiers* (Chapter 6) 3 lectures.
Sections 6.1, 6.2, 6.3, 6.4 and 6.5.
3. *Energy Storage Elements* (Chapter 7) 2 lectures.
Sections 7.2, 7.3, 7.5 and 7.6.
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.
5. *The Complete Response of Circuits with Two Energy Storage Elements* (Chapter 9) 3 lectures.
Sections 9.1 to 9.8.
6. *Coupled Inductors Circuits* (Chapter 11) 2 lectures.
Section 11.9.
7. *Frequency Response* (Chapter 13) 3 lectures.
Sections 13.1, 13.2, and 13.4.
8. *The Laplace Transform* (Chapter 14) 1 lecture.
Sections 14.7 and 14.8.
9. *Filter Circuits* (Chapter 16) 2 lectures.
Sections 16.1, 16.2, and 16.3.
10. *Two Port Circuits* (Chapter 17) 3 lectures.
Sections 17.1, 17.2, 17.3, 17.4, 17.5, and 17.6.

Grading:

Midterm Exam-1	22%	Tuesday, 14-6-1440 (19-02-2019) 6:30 pm
Midterm Exam-2	22%	Tuesday, 26-7-1440 (2-4-2019) 6:30 pm
Home works	10%	(WileyPlus)
Tutorials	6%	(WileyPlus)
Final Exam	40 %	

Programmable calculators and mobiles are not allowed in exams.