

EE20102 Basic Circuit Theory

Fall 2015

Instructor: Prof. Seong-Jin Kim, School of Electrical and Computer Engineering
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Classroom: EB2 T101

Class hours: 10:30~11:45am on Monday and Wednesday

Office hours: 1:00~2:30pm on Monday

Textbook: James W. Nilsson and Susan A. Riedel, Electric Circuits, 10th ed

Grading: Attendance 10%, Homework 20%, Midterm Exam 30%, Final Exam 40%

Tentative Course Schedule

- Week 1: Circuit Variables and Circuit Elements (Ch 1, 2)
- Week 2: Simple Resistive Circuits (Ch 3)
- Week 3: Techniques of Circuit Analysis (Ch 4)
- Week 4: Techniques of Circuit Analysis (Ch 4)
- Week 5: The Operational Amplifier (Ch 5)
- Week 6: Inductance, Capacitance, and Mutual Inductance (Ch 6)
- Week 7: Response of First-Order RL and RC Circuits (Ch 7)
- Week 8: Midterm Exam
- Week 9: Natural and Step Responses of RLC Circuits (Ch 8)
- Week 10: Sinusoidal Steady-State Analysis (Ch 9)
- Week 11: Sinusoidal Steady-State Analysis (Ch 9)
- Week 12: Sinusoidal Steady-State Power Calculations (Ch 10)
- Week 13: Introduction to the Laplace Transform (Ch 12)
- Week 14: The Laplace Transform in Circuit Analysis (Ch 13)
- Week 15: Introduction to Frequency Selective Circuits (Ch 14)
- Week 16: Final Exam