

# EE 281 Electrical Circuits

## Fall 2014

**Instructor:** Ozan Keysan  
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**Lecture Hours:** Section 1: Monday 08.40-10.30 (DZ13)  
Thursday 10.40-11.30 (DZ13)

**Office Hour:** Monday 10.40 – 11.30

**Course Webpage** [keysan.me/ee281](http://keysan.me/ee281)

### Course Textbooks:

- Electric Circuits, 8th Ed. James W. Nilsson, Susan A. Riedel, Prentice Hall, 2008. (**Preferred**)
- Electric Circuit Analysis, 3rd Ed. D.E. Johnson, J.R. Johnson, J.L. Hilburn, P.D.Scott, Prentice Hall, 1997.

### Online Sources:

- All About Circuits: [http://www.allaboutcircuits.com/vol\\_1/](http://www.allaboutcircuits.com/vol_1/)
- Lessons in Electric Circuits: <http://www.faq.s.org/docs/electric/>
- MIT Open Courseware: <http://ocw.mit.edu> (Circuits & Electronics)

### Grading: (Tentative)

- 2 Midterm Examinations + Final Examination: 80%
- Laboratory + Homeworks + Attendance: 20%
- To get a passing grade it is necessary to have a minimum 70% attendance, 100% attendance to labs

### Course Outline:(Nilsson & Riedel)

- 1) Basic Concepts (Ch. 1)
- 2) Basic Laws (Ch. 2)
- 3) Resistive Circuits (Ch. 3)
- 4) Methods of Analysis (Ch. 4)
- 5) Circuit Theorems (Ch. 4)
- 6) Operational Amplifiers (Ch. 5)
- 7) Capacitors And Inductors (Ch.6 upto 6.5)
- 8) First Order Circuits (Ch. 7)
- 9) Phasors and Sinusoids (Ch. 9)