

**Introduction to Electronic Circuits and Laboratory**  
**Dept. of Electrical and Computer Engineering**  
**Spring 2017**

**Instructor:** Deog-Kyoon Jeong

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**Class Hours:** Monday, Wednesday 3:30pm-4:45pm

**Class Room:** 301-102

**Course Control Number:** 430.207B 001

**Course Overview**

This course provides basic concepts of semiconductor devices and electronic circuits such as diode, MOSFET and BJT. The objective of this course is understanding of integrated circuits through basic analog amplifiers design.

**Class Web Page:** <http://etl.snu.ac.kr>

**Textbooks and References**

Razavi, Microelectronics, 2<sup>nd</sup> Ed., Wiley and SPICE manual

**Grading**

Midterm Exam I 20%, Midterm Exam II 20%, Final Exam 20%,  
Homework 15%, and Laboratory 25%

**Honor Code**

HWs – zero score on copied HWs, two grades down in final grade

Exams – final grade F on cheating

Design Project – final grade F on plagiarism, falsification, or fabrication

## Course Schedule

<b>Date</b>	<b># of lectures</b>	<b>Chapter</b>
3/6	1	Chapter 1 Introduction to Microelectronics
3/8-3/15	3	Chapter 2 Basic Physics of Semiconductors
3/20-3/27	3	Chapter 3 Diode Models and Circuits
3/29-4/5	3	Chapter 4 Physics of Bipolar Transistors
<b>4/10</b>		<b>(Midterm Exam 1)</b>
4/12-4/24	4	Chapter 5 Bipolar Amplifiers
4/26-5/1 (+ spare)	3	Chapter 6 Physics of MOS Transistors
<b>5/8</b>		<b>(Midterm Exam 2)</b>
5/10-5/17	3	Chapter 7 CMOS Amplifiers
5/22-5/29	3	Chapter 8 Operational Amplifier As A Black Box
5/31-6/7	3	Chapter 16 Digital CMOS Circuits
<b>6/12</b>		<b>(Final Exam)</b>