

# Electronics II

Department of Electrical Engineering  
Amirkabir University of Technology (Tehran Polytechnic)

Instructor: Dr. Mohammad Yavari  
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## Topics:

1. Introduction to Electronics and Review of Bipolar and MOS Devices
2. Building Blocks of Integrated-Circuit Amplifiers
3. Differential and Multistage Amplifiers
4. Low Frequency Response of Amplifiers
5. Feedback
6. Output Stages and Power Amplifiers
7. Operational Amplifier Circuits and Applications
8. Voltage Regulators

## References:

1. A. Sedra and K. Smith, *Microelectronic Circuits*, 7<sup>th</sup> Edition, Oxford University Press, 2015. (Main text)
2. B. Razavi, *Fundamentals of Microelectronics*, John Wiley & Sons, Second Edition, 2014.
3. Class Notes.

## Prerequisites

Electronics I

## Grading:

Homeworks: 10%  
Spice Projects: 10%  
First Midterm: 25%  
Second Midterm: 25%  
Final: 30%