

In the Name of God



دانشگاه شهید چمران اهواز
Shahid Chamran University of Ahvaz

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Fundamentals of Electrical Engineering (3 Credits)

Spring 2020 (1398-99)

Instructor	Hossein Farzin, PhD
Office	Second Floor, Electrical Engineering Department
Contact	Farzin.hossein@gmail.com, farzin@scu.ac.ir
Text Book	Hayt, William Hart, Jack Ellsworth Kemmerly, and Steven M. Durbin. <i>Engineering Circuit Analysis</i> . McGraw-Hill, 8 th Edition, 2011.
Reference Books	Smith, Ralph J., and Richard C. Dorf. <i>Circuits, Devices and Systems</i> . John Wiley & Sons, 2009. Nilsson, James W., and Susan Riedel. <i>Electric Circuits</i> . Prentice Hall Press, 2010.
Course Objective	Introducing the fundamentals of electrical engineering for undergraduate students of materials science and engineering
Topics	Preliminaries
	Analysis of Resistive Circuits
	Analysis of Sinusoidal AC Circuits
	Introduction to Three-Phase Systems
	Transformers
	Introduction to Electric Machines
Introduction to Electronics	
Grading	
Homework + Quiz	4 points
Mid-Term Exam	7 points
Final Exam	9 points
Class Activity	Bonus Points
Total	20 points