

EET 1501 - Circuit Theory 1

Fall 2026 Syllabus, Section 01, CRN 40816,

Credit hours: 3

Instructor

Jason Zapka

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Public Instructor Information

Instructor Title: Associate Professor

Instructor Professional Qualifications: M.S., Electrical Engineering, Youngstown State University, 2010; B.E., Electrical Engineering, Youngstown State University, 1998

Instructor Office Location: Moser Hall Room 4104

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Course Description

1501. Circuit Theory 1. Theoretical analysis of DC electrical circuits including units conversions, current voltage, power, Ohms Law, Kirchhoffs Laws, network theorems, capacitance, magnetic circuits, inductance and transient analysis of RL and RC circuits. Prereq.: C or better in either MATH 1513, or in either MATH 1510 or MATH 1510C and in either MATH 1511 or MATH 1511C. Coreq.: EET 1501L. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Principles of Electric Circuits: Conventional Current Version	Floyd & Buchla	9780134879482

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Mon	8/24	Chapter 1	Quantities & Units	
Wed	8/26	Chapter 2	Voltage, Current, Resistance	
Mon	8/31	Chapter 3	Ohm's Law	
Wed	9/2	Chapter 4	Energy and Power	Due 9/6 at 11:59pm: Homework #1 Quiz #1
Mon	9/7	Labor Day - No Class		
Wed	9/9	Chapter 5	Series Circuits	Due 9/13 at 11:59pm: Homework #2 Quiz #2
Mon	9/14	Chapter 5	Series Circuits	
Wed	9/16	Exam #1	Chapters 1 - 5	Due 9/16 at 3:30pm: Exam #1 Due 9/20 at 11:59pm: Homework #3 Quiz #3
Mon	9/21	Chapter 6	Parallel Circuits	
Wed	9/23	Chapter 6	Parallel Circuits	
Mon	9/28	Chapter 7	Series-Parallel Circuits	



Wed	9/30	Chapter 7	Series-Parallel Circuits	Due 10/4 at 11:59pm: Homework #4 Quiz #4
Mon	10/5	Chapter 8	Circuit Theorems	
Wed	10/7	Chapter 8	Circuit Theorems	Due 10/11 at 11:59pm: Homework #5 Quiz #5
Mon	10/12	Chapter 8	Circuit Theorems	
Wed	10/14	Review	Chapters 6 - 8	Due 10/18 at 11:59pm: Homework #6 Quiz #6
Mon	10/19	Exam #2	Chapters 6 - 8	Due 10/19 at 3:30pm: Exam #2
Wed	10/21	Chapter 9	Branch, Loop and Node Analysis	
Mon	10/26	Chapter 9	Branch, Loop and Node Analysis	
Wed	10/28	Chapter 9	Branch, Loop and Node Analysis	
Mon	11/2	Chapter 10	Magnetism & Electromagnetism	
Wed	11/4	Chapter 10	Magnetism & Electromagnetism	
Mon	11/9	Chapter 12	Capacitors	Due 11/8 at 11:59pm: Homework #7 Quiz #7
Wed	11/11	Veteran's Day - No Class		
Mon	11/16	Chapter 12 & 13	Capacitors & Inductors	Due 11/15 at 11:59pm: Homework #8 Quiz #8
Wed	11/18	Chapter 13	Inductors	
Mon	11/23	Exam #3	Chapters 9 - 10 & 12 - 13	Due 11/22 at 11:59pm: Homework #9 Due 11/23 at 3:30pm: Exam #3
Wed	11/25	No Class - Thanksgiving Break		
Mon	11/30		Review Exam #3	
Wed	12/2		Final Exam Review	
Mon	12/7	Final Exam		Due 12/7 at 3:01pm: Final Exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.