

PHYS 1502L - Fundamentals of Physics Laboratory 2

Fall 2026 Syllabus, Section 01, CRN 40382,

Credit hours: 1

Instructor

Emeka Onyishi

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Public Instructor Information

Instructor Title: Graduate Teaching Assistant

Instructor Professional Qualifications:

Ph.D Candidate, Material Science and Engineering, Youngstown State University

M.S., Electrical Engineering, Youngstown State University, 2020

B.S., Electrical Engineering, Enugu State University of Science and Technology, 2015

Instructor Office Location: Moser Hall 3281

Instructor Office Phone:

Course Description

1502L. Fundamentals of Physics Laboratory 2. Experimental work designed to supplement the PHYS 1501, PHYS 1502 sequence. Three hours per week. Prereq. or concurrent: PHYS 1502. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Physics 2 Lab Manual	Clymer	9781645659433

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

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Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Wed	8/26	Introduction	The Syllabus	Read The Introduction of The Lab Manual
Wed	9/2	Experiment 1	Nominal Resistance and the Multimeter	Read Lab Manual: Experiment 1 Before Class: Experiment 1 Due Before Next Class of Class
Wed	9/9	Experiment 2	Coulomb's Law	Read Lab Manual: Experiment 2 Before Class: Experiment 2 Due Before Next Class of Class
Wed	9/16	Experiment 3	Electrostatic Ballance And Permittivity of Free Space	Read Lab Manual: Experiment 3 Before Class: Experiment 3 Due Before Next Class
Wed	9/23	Experiment 4	The Oscilloscope	Read Lab Manual: Experiment 4 Before Class: Experiment 4 Due Before Next Class
Wed	9/30	Experiment 5	Circuits and Circuit Elements	Read Lab Manual: Experiment 5 Before Class: Experiment 5 Due Before Next Class

Wed	10/7	Experiment 6	Resistor and Capacitor Networks	Read Lab Manual: Experiment 6 Before Class: Experiment 6 Due Before Next Class
Wed	10/14	Experiment 7	Magnetic Fields	Read Lab Manual: Experiment 7 Before Class: Experiment 7 Due Before Next Class
Wed	10/21	Experiment 8	Current Ballance And The Permeability of Free Space	Read Lab Manual: Experiment 8 Before Class: Experiment 8 Due Before Next Class
Wed	10/28	Experiment 9	Optics (The Basics)	Read Lab Manual: Experiment 9 Before Class: Experiment 9 Due Before Next Class
Wed	11/4	Experiment 10	Optics (Image Formation)	Read Lab Manual: Experiment 10 Before Class: Experiment 10 Due Before Next Class
Wed	11/11	Experiment 11	Interference and Diffraction	Read Lab Manual: Experiment 11 Before Class: Experiment 11 Due Before Next Class
Wed	11/18	VETERAN'S DAY	University is Closed	University is Closed
Wed	11/25	THANKSGIVING BREAK	University is Closed	University is Closed
Wed	12/2	Experiment 12	Optical Spectra	Read Lab Manual: Experiment 12 Before Class: Experiment 12 Due Before Next Class
Wed	12/9	FINAL EXAM WEEK - NO LABS	FINAL EXAM WEEK – NO LAB	FINAL EXAM WEEK – NO LAB

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