PHYS 1501L - Fundamentals of Physics Laboratory 1

Fall 2026 Syllabus, Section 04, CRN 40380,

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: 330-647-1961

Course Description

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

Course Readings

Group	Title	Author	ISBN
Required	Physics 1 Lab Manual	Clymer	9781645659426

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
Thu	8/27	Experiment 1	Introduction and First Day Lecture Uncertainty, Measurements, Analysis	Read Lab Manual: Experiment 1 Before Class Read and Review the "UNCERTAINTY PACKET" Experiment 1 Worksheets 1-5 Due by End of Class
Thu	9/3	No Class		
Thu	9/10	Experiment 2	Free-Fall (Method #1)	Experiment 1 Worksheets 6-7 Due at Beginning of Class Read Lab Manual: Experiment 2 Before Class Pre-lab: Experiment 2 Due Before Class
Thu	9/17	Experiment 3	Free-Fall (Method #2)	Group Report: Experiment 2 Due at Beginning of Class Read Lab Manual: Experiment 3 Before Class Pre-lab: Experiment 3 Due Before Class

Thu	9/24	Experiment 4	Two-Dimensional Motion	Read Lab Manual: Experiment 4 Before Class Pre-lab: Experiment 4 Due Before Class
Thu	10/1	Experiment 5	Forces	Individual Report: Experiment 3 Due at Beginning of Class Group Report: Experiment 4 Due at Beginning of Class Read Lab Manual: Experiment 5 Before Class Pre-lab: Experiment 5 Due Before Class
Thu	10/8	Experiment 6	Friction	Group Packet: Experiment 5 Due at Beginning of Class Read Lab Manual: Experiment 6 Before Class Pre-lab: Experiment 6 Due Before Class
Thu	10/15	Experiment 7	Uniform Circular Motion	Group Report: Experiment 6 Due at Beginning of Class Read Lab Manual: Experiment 7 Before Class Pre-lab: Experiment 7 Due Before Class
Thu	10/22	Experiment 8	Inelastic Collisions	Group Report: Experiment 7 Due at Beginning of Class Read Lab Manual: Experiment 8 Before Class Pre-lab: Experiment 8 Due Before Class
Thu	10/29	Experiment 9	Rotational Inertia	Group Report: Experiment 8 Due at Beginning of Class Read Lab Manual: Experiment 9 Before Class Pre-lab: Experiment 9 Due Before Class
Thu	11/5	Experiment 10	Oscillations/Simple Harmonic Motion	Group Packet: Experiment 9 Due at Beginning of Class Read Lab Manual: Experiment 10 Before Class Pre-lab: Exeriment 10 Due Before Class
Thu	11/12	Experiment 11	Standing Waves on a String	Individual Report: Experiment 10 Due at Beginning of Class Read Lab Manual: Experiment 11 Before Class Pre-lab: Experiment 11 Due Before Class
Thu	11/19	Experiment 12	Standing Waves in Air	Group Report: Experiment 11 Due at Beginning of Class Read Lab Manual: Experiment 12 Before Class Pre-lab: Experiment 12 Due Before Class Group Packet: Experiment 12 Due at End of Class
Thu	11/26	Make-Ups	Attendance Required If Any Labs Were Missed	
Thu	12/3	No Class		

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.