



OWENS
COMMUNITY COLLEGE

**Course Syllabus
SEMESTER**

School of Science, Technology, Engineering, and Mathematics

Course Name:	General Physics I - Laboratory
Course & Section Number:	PHY201-BXX
Meeting Day(s) & Time(s):	
Credits:	5
Contact Hours:	3
Text:	Owens Lab manual 7th ed.
Instructor's Name:*	
Office Hours & Location:	
OCC Phone:	
OCC Email:**	
Additional Contact Information:	

Catalog description:

This algebra and trigonometry-based course covers mechanics, heat and thermodynamics. A weekly laboratory session supplements the lectures. This course can fulfill the natural science requirement in the Associate of Arts and Associate of Science degree programs. Students retaking this course must repeat both the laboratory and lecture.

Prerequisite/Corequisites:

MTH173 or MTH175 or MTH180

Course Materials:

- *PHY201 General Physics I Laboratory Manual*, 7th edition, Owens Community College, 2020.
- *College Physics with Web-Assign Access*, 12th Edition; Serway, Raymond; Cengage Learning, 2025.
- Scientific calculator
- Graph paper
- Owens CC Laboratory Report cover sheets

*If a **print book, e-book, or access code** is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called “Find Books” on the course schedule for each course section. See the example below.*

OER and Owens Community College Library Resources (Open Educational Resources are free online materials for instructor and student use. Some OER material may be available in print in the Owens Community College Library.)

Inclusive Access (I.A.) Materials are included in the cost of the course to save students money through lower negotiated rates with publishers. Courses containing I.A. materials will have it noted on the online class schedule. If your course includes I.A. digital materials, you will receive an email with subject line, “Your inclusive Access Materials,” and it will include any codes or digital links.

The email will come to your Owens Community College email from the Owens e-Campus Bookstore on the first day of class, if not before. Be sure to check your spam (junk email) if you do not find it in your inbox. If the email is not in your inbox or spam folder, contact your instructor immediately. You may also see a folder at the top of your course labelled “Course Materials by eCampus.” This folder will contain any needed codes or links to needed materials.

If the I.A. materials also include a printed book or are in print form, the item will be shipped to your address of record automatically based on your enrollment in the course. Please note that some courses do not include printed materials in I.A. and those materials would need to be purchased separately using the link on the course schedule. When you access the Find Books link you will see which items in a course are included in I.A.

What You Will Learn in the Course

Course Objectives:

This laboratory is associated with the lecture portion of PHY201. Students should be able to demonstrate comprehension of: significant figures and measurement, motion analysis, acceleration due to gravity, projectile motion, concurrent forces, rotational equilibrium, coefficient of friction, conservation of energy, conservation of momentum, moments of inertia, Archimedes’ principle, thermal expansion, and specific heat of metals.

Student Learning Outcomes:

Upon completion of this course the student should be able to demonstrate good understanding of the following:

Outcome	Where Assessed
Measurements	Lab report, Test 1
Motion Analysis	Lab report, Test 1
Acceleration Due to Gravity	Lab report, Test 1
Projectile Motion	Lab report, Test 1
Equilibrium of Concurrent Forces	Lab report, Test 1
Coefficient of Friction	Lab report, Test 1
Conservation of Energy	Lab report, Test 1
Conservation of Momentum	Lab report, Test 2
Ballistic Pendulum	Lab report, Test 2
Centripetal Forces	Lab report, Test 2
Equilibrium of Rigid Bodies	Lab report, Test 2
Moment of Inertia	Lab report, Test 2
Archimedes' Principle	Lab report, Test 2

Institutional General Education Competencies:

As a student at Owens Community College, you will take General Education courses as part of your degree program. While specific to the General Education courses, will be reinforced in many of your degree program major courses and may be measured in your capstone course(s) and others as identified.

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 151) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

Students can find more information on campus resources, student support, student life, and security at this [link](#).

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's [Student Code of Conduct](#), which includes academic honesty, encompassing plagiarism. See the [Board Policy](#) for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's [Anti-Discrimination and Harassment Policy](#) and the College's [Title IX Policy/Sexual Misconduct Procedures and Guidelines](#). The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu. The policy may be found on the Owens website: [3358:11-2-63 Accommodation for a Student Absence for the Observance of Religious Beliefs and Practices Policy](#)

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: This course requires you to complete various assignments that assess your understanding and application of the course content. You are expected to do your own work and cite any sources you use properly. You are not allowed to use any artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to complete any part of your assignments. Any attempt to use these tools will be considered academic misconduct and will be dealt with according to the Owens Community College academic integrity policy. Students are expected to complete all work independently and without the assistance of AI-generated content. If you have any questions about what constitutes acceptable use of AI tools, please consult with the instructor *before* submitting your work.

Student Responsibilities & Instructor Expectations

Reports

There will be 13 laboratory reports worth 20 points each assigned in the course. The lowest report grade will be dropped. The remaining 12 report grades will be totaled along with points from 2 exams to determine the final point total.

A report will be assigned for each experiment. See the attached weekly schedule. The report format will be based on the guide found in the laboratory manual and a grading rubric that will be distributed.

Assignments are due when indicated by the instructor. Late assignments will receive a 10% grade deduction for each day late. Any assignment over 1 week late will receive a zero (0%) grade. Laboratory assignments will not be accepted at the Life and Natural Sciences Department offices.

- * You will not receive any points for any of the work from a missed laboratory session.
- * You are ONLY permitted to attend the laboratory section in which you are registered.
- * There are no make-up laboratory sessions.

There is absolutely NO provision for any EXTRA CREDIT to be given beyond the designated points for each laboratory activity.

Report Guidelines

Objective

- * A succinct objective should be given.
- * The objective should be stated in your own words and not copied directly from the laboratory manual.

Procedure

- * Equipment used and the data type obtained from the equipment should be given (e.g. “The Vernier calipers were used to measure the diameter and height of a metallic cylinder.”).
- * Explanations of the plots made from the data should also be given (e.g. A plot of frequency vs. $1/L_{eff}$ was made) in this section

Data and Calculations

- * Recorded data should reflect the precision of instrumentation used.
- * One example of each type of calculation should be shown. This example should include a general formula (Ex. $A=L \times W$) and a worked example using numeric values obtained in the experiment.
- * Calculations should include correct significant figures and units. Points will be given for correct calculations and data readings
- * Graphs should include axes labels and a title. Points will be deducted for incorrect scaling of axes, not using the full graph space available, and incorrectly drawn best-fit lines or tangent lines.

Analysis and Conclusion

- * The objective should be restated along with significant results of the experiment.
- * Error sources should be stated along with their effect on measured results and calculated values.
- * Post-laboratory questions in the manual should be completed at the end of the experiment.

List of Symbols

- * The list of symbols should encompass any symbols used throughout the experiment (excluding units).

Exams

Two exams will be scheduled worth 45 points each. Exam questions will be comprised of material from the experiments, lectures and manual.

- * Exam 1 will cover Activities 1-7
- * Exam 2 will cover Activities 8-13
- * Open books or open notes are NOT permitted for the exams

Contact your instructor immediately if you miss a scheduled exam.

A student missing an exam chooses one of the following options:

- Take a DIFFERENTLY FORMATTED makeup exam on date assigned by instructor.
- Not take the exam and receive 0 points.

A student missing Exam 1 has one week from the date of the missed exam to make up the exam.

A student missing Exam 2 has two days from the date of the missed exam to make up the exam.

Each exam can only be taken once.

Phones and other electronic communicating devices must be in silent mode during class. Unauthorized use of a phone, e-watch or tablet is not permitted during an exam. Use of these devices could result in forfeiture of exam points.

Course Rules

Attendance

Attendance is taken at each laboratory session. If you are more than 30 minutes late for a laboratory you will not be permitted to attend that session. During the first 30 minutes your instructor covers the basic information necessary to successfully complete the laboratory, mandatory safety issues, precautions and location of needed materials. After the session has begun, for safety purposes, your instructor needs to be working with all students, not covering the information for those students who are late. Therefore, if you are more than 30 minutes late, you will not be permitted to attend the laboratory and will be counted absent. You are encouraged to obtain missed information from other students in the laboratory. You will not be permitted to submit laboratory assignments for sessions in which you have been counted absent.

To achieve success in this course, laboratory attendance is critically important.

- * You will not receive any points for any of the work from a missed laboratory session.
- * You are ONLY permitted to attend the laboratory section in which you are registered.

- * There are no make-up laboratory sessions.

Safety

- * Eating, drinking and smoking are not permitted in the laboratory.
- * You must be registered for the laboratory section which you are attending. Non-registered persons are not permitted in the laboratory.
- * Appropriate apparel is required in the laboratory at all times, including; cotton shirts, jeans, proper foot covering, proper shoes, etc.
- * Loose clothing, shorts, sandals, open-toed shoes are not permitted.
- * Full covering laboratory aprons are available as needed.
- * More about apparel will be discussed at the first laboratory meeting.
- * Safety goggles **MUST BE WORN** while experiments are being conducted. The laboratory instructor will announce when goggles may be removed. The appropriate eyewear must be splash goggles, which are provided to each student. NO impact glasses are to be worn at any time.

Student Responsibilities

- * Read the laboratory assignment and appropriate lecture material prior to each laboratory session. It is recommended that a laboratory notebook be kept to record observations, experimental results and instructor notes.
- * Be on time and use the full laboratory period.
- * Ask questions and participate in each activity.
- * Turn in all work as assigned.
- * **CLEAN UP:** Be certain that your area of the laboratory table is properly cleaned after use. Wash and return all glassware and other instruments to the proper areas. Check the sink to be sure that it is clear of all glassware and trash.

Activities

Activity 1	Measurements
Activity 2	Motion Analysis
Activity 3	Acceleration Due to Gravity
Activity 4	Projectile Motion
Activity 5	Equilibrium of Concurrent Forces
Activity 6	Coefficient of Friction
Activity 7	Exam 1, Conservation of Energy
Activity 8	Conservation of Momentum
Activity 9	Ballistic Pendulum
Activity 10	Centripetal Forces
Activity 11	Equilibrium of Rigid Bodies
Activity 12	Moments of Inertia (Rotational Forces and Energy)
Activity 13	Archimedes' Principle, Exam 2

How Grades are Determined and Major Assignments

Grading

The grade will be based on reports and exams.

12 reports (20 points each)	240 points
Exam 1	45 points
Exam 2	45 points
Total	330 points

IMPORTANT: You must earn no less than 198 points (60%) out of the 330 total possible laboratory points to pass the entire course. If you do not earn at least 198 laboratory points, you will receive an (F) letter grade for the entire course.

Tentative Class Assignments:

Activity 1: DATE
Activity 2: DATE
Activity 3: DATE
Activity 4: DATE
Activity 5: DATE
Activity 6: DATE
Activity 7: DATE
Activity 8: DATE
Activity 9: DATE
Activity 10: DATE
Activity 11: DATE
Activity 12: DATE
Activity 13: DATE

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.