

Mayville State University

PHYS 211L: College Physics I Lab – On-campus

Fall 2025

1 Credit Hour

Course and Instructor Information

Instructor: Dr. Thomas Gonnella - please address me as “Dr. Gonnella”

Contact Information: Office Phone and Location: (701) 788-4807 – Science Building 124

Email: tom.gonnella@mayvillestate.edu

Hours of Availability: My e-mail account is checked quite frequently throughout the workday.

Instruction Mode: Face-to-face

Course Dates: 08/25/25 (course shell opens) to 12/09/25 (lab final)

Meeting Times and/or Location: Tuesdays 2:00-3:50 PM in Science Building 130

Zoom Link: To be established if it becomes necessary.

Required Course Materials and Technologies

Required

This lab course requires a printed lab manual, which can be purchased from the MSU bookstore. You will also need a computer that meets the [MSU technology requirements](#), with Capstone software installed, and access to a scientific calculator.

Recommended

None

Use of Artificial Intelligence in this Course

You will probably not find AI very useful in this course because you are conducting the experiments, not it.

Course Description

This course consists of two hours of laboratory per week, and the assignments will be applicable to the lecture course. The Physics 211L lab is designed to help the students grasp the fundamentals of physics from a hands-on approach enhanced with technology. The lab content encompasses topics involving measurements and error analysis, vectors, motion, forces, static equilibrium, work, energy, momentum, universal gravitation, fluids, and heat.

Pre- and Co-requisites

Students are expected to have a fundamental understanding of Microsoft Excel prior to enrolling in this course. Students should be co-enrolled in PHYS 211 or have already completed it. Students are expected to have successfully completed College Algebra (Math 103) and Trigonometry (MATH 105) prior to enrolling in this course. If these topics were challenging for you, then you should utilize a tutor outside of this class as needed.

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Course Objectives

To successfully complete this course, the learner will be expected to meet the following objectives, as aligned to Composite Science Education Program Approval Standards through North Dakota's Education Standards and Practices Board (ND ESPB):

This course is designed to provide students with a skill set suitable for working in a physics/science laboratory.

Standards Alignment (Composite Science Education Program Approval Standards-ND ESPB):

- 13047.1 Composite Science Major/General Science The composite/general science program requires that environmental science be incorporated within other courses or as a separate course. The composite/general science program requires: 1. Coursework in biology, chemistry, physics, and earth science, including: a. Minimum of twenty-four semester hours in one area, b. Minimum of twelve semester hours in two other areas, c. Minimum of four semester hours in the fourth area, d. Courses must be from those that the institution allows toward graduation in the science major. 2. Study of mathematics through the pre-calculus level (college algebra and above) and statistics

Course Expectations

Instructor/Student Communication

My preferred method of contact is e-mail, and although it is typically sooner, you should expect a response to your e-mails within 48 hours. Although my e-mail responses will typically go to whichever account you initially sent the e-mail from, you are still accountable for all academic communications sent to your Mayville State University e-mail address.

Blackboard Announcements: Course updates and reminders are typically posted as announcements in Blackboard. You are expected to have the notification of announcements turned on in your Blackboard account. If you are not receiving announcements in a timely manner, please contact Robert Davis, the MSU Blackboard Administrator, at robert.davis.4@mayvillestate.edu to get this issue resolved.

Tardiness: Students who show up late for lab are responsible for all course material missed during their partial absence. If a student arrives late for lab, they will have only the time allotted for the quiz to complete it - make-up quizzes will not be provided. If a student is late for a lab period, the instructor reserves the right to deduct up to 100% of the student's submitted work for the lab performed during that lab period.

Absence: Students are responsible for all course material missed during their absence. If you have a conflict with one of the scheduled labs because you are on a team roster for an away game, then you will be provided with a make-up lab period for you and a lab partner who attended the missed lab to complete the lab. Students are allowed to drop one lab, so no other make-up lab reasons need to be considered.

Lab Work: Lab work is typically due before the beginning of the following lab period. Questions regarding the labs will be answered up to 24 hours prior to the beginning of the next lab. The lab work submitted to the

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instructor will be evaluated based on the data compiled, the data analysis performed, and the quality of the answers provided.

Late Work: If the deadline for submitting work has passed, you will lose 5% of the total points possible for each 12-hour period that has passed for up to five calendar days. Any assignment submitted more than five days late will be graded out of 50%.

Evaluation and Grading

Grading Policy: It is my responsibility to post your scores on corrected lab materials within one week of the lab period. It is your responsibility to continuously monitor your academic performance throughout the term in Blackboard.

Grading Scale: A > 90% B > 80% C > 70% D > 60%

Breakdown of Grades: Grades in this course are determined by the performance on the lab experiments submitted.

Labs Reports and other submitted work	80%
Quizzes	10%
Lab Final Exam (12/09 @ 2:00 pm)	10%

Academic Dishonesty: Academic dishonesty will not be tolerated in this lab course. Academic dishonesty in this course may consist of the fabrication of data, allowing someone else to copy your work, and submitting someone else's work as your own.

Enrollment Verification

The U.S. Department of Education requires instructors of courses to provide an activity that will validate student enrollment in this course. The only way to verify that a student has been in this course is if he or she takes an action in Blackboard, such as completing an assignment or taking a quiz. Logging into Blackboard is NOT considered attendance. For this course, students need to simply show up to class the first week. If this activity is not completed, your enrollment in this course will be at risk.

Late Arrivals

If you are adding this course late, make sure to check the Announcements section in the Blackboard course shell for all the announcements that you may have missed prior to your admission into the Blackboard course shell. Your deadlines for this course will remain the same as the deadlines for students who were enrolled on or before the first day of class.

Proctor Notification

There is no need for a proctor in this lab course.

Important Student Information

In the Help & Resources for Students section of the Blackboard Institution Page, you can view and download the Important Student Information document for the current academic year. It includes information about:

- ✓ Land Acknowledgement Statement

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- ✓ Academic Grievance Concerns and Instructor English Proficiency
- ✓ NetTutor - Online Tutoring Program
- ✓ Starfish - Student Success System
- ✓ Students with Documented Disabilities
- ✓ Student Learning Outcomes / Essential Learning Outcomes
- ✓ Academic Honesty
- ✓ Emergency Notification
- ✓ Continuity of Academic Instruction for a Pandemic or Emergency
- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Diversity Statement (Title IX)

Course Timeline/Schedule - Tentative

08/26	Syllabus and start Exp#1
09/02	Finish Exp#1
09/09	Conduct Exp#2 and Exp#3
09/16	Conduct Exp#4
09/23	Conduct Exp#5
09/30	Conduct Exp#6
10/07	Conduct Exp#7
10/14	Conduct Exp#8
10/21	Conduct Exp#9
10/28	Conduct Exp#10
11/04	Conduct Exp#11
11/11	Conduct Exp#12
11/18	Conduct Exp#13
11/25	Conduct Exp#14
12/02	Conduct Exp#15
12/17	One-hour lab final

Important Dates

- Monday, August 25th – the first day of class, the course shell opens in Blackboard
- Thursday, November 14th – last day to withdraw from the term or drop with record