



Course Syllabus: UNIVERSITY PHYSICS 1: PHYS 1624

McCoy College of Science, Math and Engineering

Section 101

Fall 2026

Contact Information

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Course Description

This course is designed in such a way that the students get a basic but thorough introduction to the concepts and principles of physics. This will enable them to build up their skills and help them in the other higher level physics courses.

Textbook & Instructional Materials

Physics for Scientists and Engineers-A Scientific Approach, Randall D. Knight.:
The e-text should be accessible through your D2L course webpage.

Topics to be covered in class:

Newton's Laws, conservation Laws and Applications of Newtonian Mechanics

- Concepts of Motion
- Kinematics in 1-D
- Vectors and Coordinate Systems
- Kinematics in 2-D
- Forces and Motion
- Dynamics 1
- Newton's 3rd Law
- Dynamics 2
- Work and Kinetic Energy
- Interactions and Potential Energy
- Impulse and Momentum

- Rotation of a Rigid Body
- Newton's Theory of Gravity
- Fluids and Elasticity

Oscillations and Waves

- Oscillations
- Traveling Waves
- Superposition

Thermodynamics

- Macroscopic Description of Matter
- Work, Heat and the First Law of Thermodynamics
- The Micro and Macro Connection
- Heat Engines and Refrigerators

Study Hours and Tutoring Assistance

The library has tutors available. Please contact the library

Student Handbook

Refer to: [Student Handbook](#)

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

[Office of Student Conduct](#)

Moffett Library

Moffett Library provides resources and services to support student's studies and assignments, including books, peer-reviewed journals, databases, and multimedia materials accessible both on campus and remotely. The library offers media equipment checkout, reservable study rooms, and research assistance from librarians to help students effectively find, evaluate, and use information. Get started on this [Moffett Library webpage](#) to explore these resources and learn how to best utilize the library.

Grading

Course Grade – The assignments, tests and final exam will be graded by assigning a maximum of 5 points to each question. Each assignment will have 5-6 questions. Each test will have 5-6 questions. The final exam will have 6-10 questions. The total points of the assignments, tests and final exam will then be adjusted based on the points allocated to each of the above based on the distribution mentioned below in Table 1. Each lab will be worth 100 points each. At the end of the semester, the average of all the labs will be taken and the total points will be adjusted based on the distribution as mentioned in Table 1. There will be one class presentation and it will be worth 5 points. The total points will be adjusted based on the distribution mentioned in Table 1.

Table 1: Points allocated to each assignment

Graded Content	Points
Assignment1	10
Assignment 2	10
Test 1	15
Test 2	15
Presentation	5
Lab	20
Final Exam	25
Total Points	100

Table 2: Total points for final grade.

Grade	Points
A	90 to 100
B	80 to 89
C	70 to 79
D	60 to 69
F	Less than 60

Assignment and Test Rules

- Assignment 1, Assignment 2 and the Presentation must be done in the assigned groups. The information about the groups will be given in class and uploaded on d2l.
- Any assignment which is not done as part of the group will receive a zero.
- Every member of the group must be satisfied with every member's contribution.
- Test 1 and Test 2 must be done individually without any collaboration.
- Final exam must be done individually without any collaboration. Failing to turn in the final exam will result in failing the course.

Projects Required

As we progress through the semester, these will appear on the Course Schedule in more detail.

Mid-Term Exam

Test 1 and Test 2 will count as mid-term exams. These will be take-home but individual work. You are free to use any resource available, but you must not discuss with any human. Feel free to take help from your dog or cat or any other non-human friend or non-human family member.

Final Exam

Final exam will be comprehensive and will consist of 6-10 questions. The date of the final exam is mentioned on the [Academic Calendar](#). This will be take-home but individual work. You are free to use any resource available, but you must not discuss with any human. Feel free to take help from your dog or cat or any other non-human friend or non-human family member.

Extra Credit

Extra credit work may be offered based on the discussions in class and emailed. It is the responsibility of the student to follow up.

Late Work

Penalty for late work is 10% of the total grade each day.

Make Up Work/Tests

Make-up work will be discussed in class and will be uploaded on d2l.

Important Dates

- Last day for term schedule changes: Check date on [Academic Calendar](#).
- Deadline to file for graduation: Check date on [Academic Calendar](#).
- Last Day to drop with a grade of "W:". Check date on [Academic Calendar](#).
- Refer to: [Drops, Withdrawals & Void](#)

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into [D2L](#) through the MSU Homepage. If you

experience difficulties, please contact the technicians listed for the program or contact your instructor.

Attendance

- Although attendance is not a part of the grading scheme but participation in class is, so classes should be attended regularly if the student wants to get a good grade. There may be short surprise quizzes during the lectures (not more than 5 in a semester) to test the learning of a student and the grades of these quizzes may be a part of the participation grade. The participation points cannot be made up (not even by excused absences)
- Students may lose participation points for coming late to class.
- In case of an absence from class, a student may make up an assignment and/or a test grade if the student has an excused absence. An excused absence should always accompany a document or note from an authorized individual or group. Some excused absences include University sponsored events (showing a document or note from authorized university personnel), illness (showing a doctor's note), demise of a family member. It is always better to inform the instructor before-hand in case of a legitimate and planned absence.

Online Computer Requirements

Taking an online class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. ****Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.*** Computers are available on campus in various areas of the buildings as well as the Academic Success Center. ****Your computer being down is not an excuse for missing a deadline!!*** There are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and resource limitations however they are able to help you get connected to our online services. For help, log into [D2L](#).

Recording Classes

****Recording classes is generally prohibited without the professor's explicit permission.*** Such recordings, when permitted, are for personal use only and may not be uploaded to the internet or otherwise shared, transmitted, or published without the professor's prior consent. Some faculty may not permit

recordings of their classes. When it is feasible and appropriate, students may record classes to accommodate disabilities under the Americans With Disabilities Act, with prior approval of Disability Support Services. Such recordings may not be uploaded to the internet or otherwise shared, transmitted, or published.

Instructor Class Policies

- Questions regarding grades of assignments and exams will be entertained only within a week of receiving the graded assignments and graded exams back from the instructor.
- Labs will start 2 weeks after the lectures start. All lab assignments should be completed during the lab timings unless informed otherwise by the teaching assistant or instructor. In case a student cannot attend the assigned lab section due to a documented absence, the student should discuss this with the teaching assistant and/or the instructor and make up the lab.
- Students are expected to read the chapters to be covered on a particular day prior to coming to class. The instructor will inform the students about what will be covered in a future class and it is the student's responsibility to read before coming to class.
- The "FINAL CALCULATED GRADE" and the "FINAL ADJUSTED GRADE" will remain the same and there will be no rounding up of the final grades.

Change of Schedule

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

Refund and Repayment Policy

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exist in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified

persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Student Wellness Center, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to [Disability Support Services](#).

Emergency Aid Resources for Basic Needs

Unexpected life circumstances can affect anyone. If you are experiencing challenges meeting basic needs—such as housing, utilities, food, transportation, healthcare, technology, textbooks or other life necessities, resources may be available to help. Visit the [Student Emergency Support and Resources webpage](#) to learn more, and explore emergency support opportunities through MSU and how to access them. For additional information, please contact the Office of Student Affairs: Clark Student Center #108, (940) 397-7500, student.affairs@mstuexas.edu.

College Policies

Campus Carry Rules/Policies

Refer to: [Campus Carry Rules and Policies](#)

Smoking/Tobacco Policy

Midwestern State University seeks to provide a safe, healthy, pleasant environment for its faculty, staff, and students. To this end, the use of tobacco products, including smoke and smokeless tobacco, and the advertising, sale, free distribution, and discarding of tobacco products shall be prohibited in all indoor and outdoor facilities and in all university vehicles. The policy extends to faculty, staff, students, vendors, guests, and visitors.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes has prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit [Campus Carry](#).

Active Shooter

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit [MSUReady – Active Shooter](#). Students are encouraged to watch the video entitled “Run. Hide. Fight.” which may be electronically accessed via the University police department’s webpage: ["Run. Hide. Fight."](#)

Grade Appeal Process

Update as needed. Students who wish to appeal a grade should consult the Midwestern State University [MSU Catalog](#)

***Notice:** Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

Course Schedule:

Week or Module	Activities/Assignments/Exams	Due Date
Week 1 9/18 to 9/24	Physics concepts and solved examples based on the chapter/s	N/A
Week 2 9/25 to 10/6	Physics concepts and solved examples based on the chapter/s	N/A
Week 3 10/7 to 10/13	We will continue doing the physics concepts and solved examples and continue in the following weeks too.	N/A