



Course Syllabus: General Physics I
College of Science, Mathematics & Engineering
PHYS 1144 Section X20
SPRING 2021 January 11th to April 26th

Contact Information

Instructor: Walid Shihabi
Office hours: MW 1:30 PM – 3:00 PM via zoom (upon student's request)
Other times can be arranged as well, OR
E-mail: walid.shihabi@msutexas.edu

Course Description

This course is designed to introduce the student to the basic concepts of physics. We will cover everything from linear and rotational kinematics to Work and Energy.

Textbook & Instructional Materials

Knight, Jones, & Field, 4th Ed., College Physics : A Strategic Approach, by Pearson. It should come with Access Code to Mastering Physics (use ISBN-10: 0134641493).
If you buy the text without mastering, you need to buy MP access code directly at www.masteringphysics.com .
The course content is available via Desire2Learn (D2L) and the Mastering Physics (MP) website.

Student Handbook

Refer to: [Student Handbook-2018-19](#)

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Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given).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](#)

Academic honesty: https://msutexas.edu/student-life/_assets/files/handbook.pdf

In the lab and homework, cheating or plagiarism will not be tolerated. You may have group work to study. Completing lab report, solving homework or submitting an exam, however, must be your own work in your own words. Any case of cheating, collusion, and plagiarism will lead to a zero credit on the assignment and possible "F" on the course based on your instructor assessment.

Grading

Table 1: Percentage allocated to each assessment:

Assessment	Grade Percentage
Exams (2 at 10% each)	20%
Homework	40%
Labs	20%
Final Exam	20%

Table 2: percentage for final grade:

Grade	Percentage
A	90% and above
B	80% to 89.9%
C	70% to 79.9%
D	60% to 69.9%
F	Less than 60%

Homework

The homework for each chapter is composed of Mastering Physics assignments and discussion board post.

- 1) The Mastering Physics assignments for each chapter will be solved and submitted via the Mastering Physics (MP) website. The MP assignments include textbook-related exercises, video questions, simulation questions, and “dynamic study module” problems. MP assignments constitute 80% of the homework grade.

ALL Mastering Physics assignments are mandatory except for two cases:

- a) “Adaptive follow up” assignments, where after each chapter’s assignment, there is a follow up assignment that allows you to correct your mistakes in the homework. This is optional assignment for extra credit.
- b) Other than the “Adaptive follow up” assignments, all unless it states explicitly in the title of the assignment that it is “optional” or “Extra Credit”

Other than (a) and (b) cases above, all Mastering assignments are mandatory, this includes the dynamic study modules.

- 2) The discussion board posts constitute 20% of the homework grade. They should be posted in the pertinent discussion board forum in D2L. Discussion board’s posts are due 12 hours prior to the pertinent Homework deadline. The purpose of the discussion forum is to collaborate with your classmates in solving the homework problems and to provide feedback to each other. I will be posting the ideal solution to the homework problems at the end of each homework assignment.

You need to post on how you solved one of the problems in the homework assignment.

- a) Do NOT post the answer, just how you went about solving the problem. Here is an example:
 “In problem 6, we are given the magnitude and the sign of an electric charge, we are given an unknown charge, and we are given the distance between the two charges and the force between them. We are asked to calculate the unknown charge. I drew a schematic to visualize the problem and the distances given. we know that the unknown charge experiences an electric force in the downward direction, hence it has the same sign as the known charge (hence the

repulsion). I used Coulomb's law (equation ** on page ** in our text book) to relate the unknown charge to the given electric force, the known charge and the separation distance. Then rearranged the equation to solve for the unknown charge. The answer seems to be reasonable comparing the charge given and the force between them".

- b) Make sure to check your classmates' posts so that you will post about a question that none of them addressed.

If you are the first person to post, you get to select any question ☺. If you are the last to post, most probably you have one or two questions to choose from!

If all the problems are discussed, then reply to two students and discuss/correct the way they solved the problems

Exams and Final Exam

Exams constitute 40% of the course grade. Three online exams are scheduled for this course. The exams are due on the dates listed below. You will have four-day window to submit each exam. The final exam is cumulative.

Exam 1: Due Wednesday February 10th
Exam 2: Due on Wednesday March 17th
Final Exam: Due on Monday, April 26th

After you submit an exam to the mastering physics, go to our course page on D2L, click "assessments" tab on the top, select "assignments", then submit your complete work on each problem in the exam to the pertinent folder in the "assignments" area. Read the instructions there.

For each problem's grade to be accepted, student's work should to be submitted. Make sure to submit your exam's work within 1 hour of submitting it on mastering physics.

Extra Credit

Extra credit questions will be provided via the Mastering Physics website, as part of the homework.

NOTE: The exam's grade may not exceed the maximum grade (i.e. if you got 12/10, it will be recorded as 10/10)

In the case of homework, the extra credit may exceed the maximum homework grade (i.e. if you got 22/20, it will be recorded as 22/20- with 2 points extra credit).

Late and Makeup Work

Regarding the Homework assignments, late submissions will incur penalty % per day. Tests can only be made up if you have an excused absence for the entire exam window. Illness counts only if you can provide a doctor's note for the entire exam window. Other than illness, planned absences should be discussed with the instructor at least two weeks beforehand so that make-up plans (if approved) may be arranged. Since the exam is online, you need to convince me the reason you cannot take the assignment within its open window.

I am willing to discuss the following excuses: university sponsored events, scheduled surgery set before the first day of class (documentation required – you do not need to disclose why), funerals for immediate family only (documentation required).

NOTE that each exam has several days window, an excuse absence must include the whole duration of

the exam's window (not just the last day).

Important Dates

Refer to: <https://msutexas.edu/busoffice/wd-schedule.php>

Desire-to-Learn (D2L) and Mastering Physics (MP)

Frequent use of D2L and Mastering Physics is a part of this course. Each student is expected to be familiar with these systems as they provide primary sources of communication regarding expectations, examination materials, assignments, 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 and cc your instructor.

The mastering course code and how to register in mastering physics (MP) is in the "START HERE" area of D2L.

Attendance

While attendance is not directly factored into your grade, you must log into D2L and MP regularly if you want to do well.

Expectations: Students should log into the D2L and go to the content area. Study the power points and the videos while reading the chapter in the textbook and its examples. Solve the "check your understanding" questions in the power points before you check the answer on the next slide.

After you complete the reading, log into mastering physics and take the homework pertinent to that chapter. Make sure to post on the discussion board. Email me if you have questions.

Labs and Lab Attendance:

It is mandatory to enroll in the lab component of this course. You will not pass this course without enrolling in the lab.

you will complete 10 online labs and 2 face to face labs on campus this semester. The TAs will oversee the labs for both questions and grades. Online labs will begin week 3 (week of January 25th). In addition to the 10 online labs, there will be TWO Face to face labs (in-person labs), where you will come to campus to perform two in person labs. There will be a specific schedule for the in-person labs set after the end of the add/drop period of the semester.

To allow for social distancing, there will be only 4 to 5 students in a face to face lab at a time. You will be required to wear a face mask that you bring with you, along with a face shield we provide, and disposable gloves we provide. you will not be allowed in the lab without a mask, face shield and gloves. All lab assignments must be completed during the lab period unless otherwise noted.

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 on specific dates, and personal computer technical difficulties will not be considered reason for the instructor to allow students extra time to submit assignments/ tests.

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!! 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.

Instructor Class Policies

It is important to recognize that the online classroom is in fact a classroom, and certain behaviors are expected when you communicate with both your peers and your instructor. These guidelines for online behavior and interaction are known as netiquette.

When communicating online, you should always:

- Treat instructor with respect, in email or in any other online communication
- Always use your professors' proper title: Dr. or Prof.
- Articulate your posts and emails, and make sure they are well-written and coherent
- Be concise and avoid slang as "wassup?" or abbreviations such as "u" instead of "you"
- Use standard fonts such as Times New Roman and use a size 12 or 14 pt. font
- Avoid using the caps lock feature AS IT CAN BE INTERPRETTED AS YELLING
- Be cautious as tone is sometimes lost in an email or discussion post and your message might be hostile or offensive
- Be careful with personal information (both yours and other's)
- Do not send confidential patient information via e-mail

When you send an email to your instructor, teaching assistant, or classmates, you should:

- Use a descriptive subject line that should include the course title. Keep in mind that your instructor is teaching several different courses.
- Sign your message with your name and return e-mail address

When posting questions on the Discussion Board or via email, you should:

- Ask questions that are on topic and within the scope of the course material
- Be as brief as possible while still making a thorough question.
- Make sure to state what you know and specify clearly the confusion point. Invest some time analyzing the problem in hand. I would like to see how you think. The more specific your question is, the more clear answer you will get.

Example of BAD question: "I have no idea how to solve problem 2" Example of good

question: "I see that the speed, and time values are given in problem 2, but I do not know what equation should I use to solve for the acceleration".

Change of Schedule

Refer to: <https://msutexas.edu/busoffice/wd-schedule.php>

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) exists 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 Clark Student Center, Room 168, (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.

College Policies

Campus Carry Rules/Policies:

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

Smoking/Tobacco Policy:

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designated- smoking areas at each location.

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.

Grade Appeal Process

Update as needed. Students who wish to appeal a grade should consult the Midwestern State University <https://catalog.msutexas.edu/index.php>

Notice

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

Course Schedule

Notice

Changes in this schedule may be made at the discretion of the instructor.

Course Schedule

Each Homework is composed of Mastering Physics (**MP**) assignments, Discussion board (**Db**) post and online Labs. Check the “Homework” section in this syllabus for details. Mastering assignments and Labs are due 11:59 PM while Discussion board’s post is due 11:59 am. Note that the Discussion board’s post is due 12 hours prior to the Mastering Physics assignment.

There will be two on-campus labs scheduled during the semester. The dates of the labs will be announced after the day of add/drop.

Ch or week	Activities/Assignments/Exams	Due Date
Chapter 1	Instructor’s power point, book Chapter 1, “check your understanding” questions, videos. Mastering Physics (MP) and Discussion board (Db) homework (H.W).	Due Friday 1/15.
Chapter 2	Instructor’s power point, book Chapter 2, “check your understanding” questions, videos, MP & Db H.W.	Due Friday 1/22
Chapter 3	Instructor’s power point, book Chapter 3, “check your understanding” questions, videos, MP & Db H.W. online Lab 1	Due Friday 1/29
Chapter 4	Instructor’s power point, book Chapter 4, “check your understanding” questions, videos, MP & Db H.W. online Lab 2	Due Friday 2/5
Exam 1 preparation and review (chapters 1-4). Exam 1 is due Wednesday February 10 th online. online Lab 3 is due Friday 2/12		
Chapter 5	Instructor’s power point, book Chapter 5, “check your understanding” questions, videos, MP & Db H.W. online Lab 4	Due Friday 2/19
Chapter 6	Instructor’s power point, book Chapter 6, “check your understanding” questions, videos, MP & Db H.W. online Lab 5	Due Friday 2/26
Chapter 7	Instructor’s power point, book Chapter 7, “check your understanding” questions, videos, MP & Db H.W. online Lab 6	Due Friday 3/5
Chapter 8	Instructor’s power point, book Chapter 8, “check your understanding” questions, videos, MP & Db H.W. online Lab 7	Due Friday 3/12
Exam 2 preparation and review (chapters 5-8). Exam 2 is due Wednesday March 17 th online. online Lab 8 is due Friday 3/19		
Chapter 9	Instructor’s power point, book Chapter 9, “check your understanding” questions, videos, MP & Db H.W. online Lab 9	Due Friday 3/26
Chapter 10	Instructor’s power point, book Chapter 10, “check your understanding” questions, videos, MP & Db H.W. online Lab 10	Due Friday 4/9
Chapter 13	Instructor’s power point, book Chapter 13, “check your understanding” questions, videos, MP & Db H.W.	Due Friday 4/16
Final Exam preparation (chapters 1-10 and 13 review). Final Exam is due online Monday, April 26 th		

The Mastering and Discussion assignments have 24-hour grace period. This is the reason the deadline on Mastering are set on Saturdays. The Labs, however, have NO Grace period.

Topics to be Covered:

Kinematics in One and Two or Three Dimensions
Dynamics and Newton’s Laws of Motion

Friction and Circular Motion

Gravitation

Work and Energy

Conservation of Energy

Linear Momentum

Rotational Motion and Angular Momentum

If time permits, we will also discuss:

Fluids

Oscillations

Sound

Basic Thermodynamics