



## PHYS 2425.01W, University Physics I

### COURSE SYLLABUS: Summer 2025

#### INSTRUCTOR INFORMATION

**Instructor:** Dr. Blake Head

**Office Location:** STC 340

**Office Hours:** TBA, will be hosted via Zoom

**University Email Address:** thomas.head@tamuc.edu

**Preferred Form of Communication:** E-mail

**Communication Response Time:** I will do my best to respond to your e-mails as soon as possible, definitely within 24 hours.

#### COURSE INFORMATION

##### Materials – Textbooks, Readings, Supplementary Readings

A free textbook: W. Moebs, S.J. Ling, and J. Sanny, *University Physics Volume 1*, Open Stax, Available freely online at <https://openstax.org/details/books/university-physics-volume-1>

A free nontraditional textbook: S.A. Hill, *How Things Move, Why Things Move*, Available freely online at <http://howwhy.sahill.us/>

In lieu of a course packet or lab manual, all class activities are digital and can be found in D2L or linked in D2L. Many activities are in the form of Google Docs. You should be able to work off of a laptop/tablet/etc. during class (class laptops are available).

***However, sometimes the internet in our classroom is not great, so you might want to download or print activities before class.***

*The syllabus/schedule are subject to change.*

## **Course Description**

This is a calculus-based introductory physics course in mechanics. Topics include momentum, dynamics, energy, and kinematics.

## **University Catalog Description**

Calculus based physics course in mechanics for science, mathematics and engineering students. Prerequisites: You must be currently enrolled in Calculus I or have previously taken Calculus I.

## **Student Learning Outcomes**

1. Students will be able use momentum to describe a physical situation and calculate the motion of an object using these quantities.
2. Students will be able to represent the forces on an object in a physical situation and calculate the resulting motion using Newton's Laws.
3. Students will be able use energy to describe a physical situation and calculate the motion of an object using these quantities.
4. Students will be able to precisely explain and calculate motion using the concepts of position, velocity, and acceleration

## **COURSE REQUIREMENTS**

### **Minimal Technical Skills Needed**

Students should be able to use D2L (myLeo Online), view videos on YouTube, use a calculator, use Excel and/or a graphing calculator or app, convert work to a pdf, take screenshots, use a variety of online communication methods such as Zoom, Discord, D2L, and email.

### **Perusall**

In the online format of this course, we will be using "Perusall" in order to facilitate communal learning. You must make an account at [www.perusall.com](http://www.perusall.com) and use my course code HEAD-22H2U.

### **Instructional Methods**

This course is an asynchronous online class. This means there is no formal meeting time or lecture component. You will determine your own pace through the course material. The positive side to this is that it offers a lot of freedom for how quickly you'd like to move through material. The downside is that it offers a lot of freedom. You must manage your time well!

The course content is separated into two main categories: Group Work and Individual Work. Each week, I will make available a certain number of group assignments that must be completed by Sunday of that week. The number of assignments may fluctuate

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slightly each week, but you should expect to be completing 3-4 Group assignments and 3-4 Individual assignments per week.

Group assignments will typically be completed via Perusall. This website allows you to be grouped with other students and collectively work an assignment by commenting on certain questions and on each other's work. In this way I'm hoping to preserve some of the flipped classroom aspects of the regular semester course. This is where the majority of the learning will happen in this class. The instructor will join your conversations to clarify things or ask leading questions.

Individual assignments are assignments to be completed on your own. These will generally be a single, short question that covers one main concept. During the normal semester, these are due at the start of every class, so these are frequent!

## **Student Responsibilities or Tips for Success in the Course**

Since you make your own schedule in this course, it is important that you set aside a fixed time every day to ensure your assignments are being completed. Do your best to complete at least 1 assignment per day and don't save them all until the last minute!

## **GRADING**

We will be utilizing a Standards Based grading system in this course. In simple terms, your performance in this class will be assessed based on a set of standards that I'm hoping for you to achieve throughout this course. This is counter to more traditional grading systems, where each assignment is given a single numerical score. Instead, I will provide feedback on each of your assignments. Using this feedback, you will have the opportunity to revise your work and resubmit. Remember, college is about learning, so as long as you are making the effort to learn, that is what is most important.

Your grade will be entirely determined by *Individual Assignments* and *Group Assignments*. *Individual Assignments* completed independently, and as the name implies. *Group Assignments* will be posted to Perusall, where you and your group will work together to complete the assigned activity. You MUST turn your work in on time. I don't accept late work outside of extenuating circumstances! It is okay, however, if your first attempt simply says something like, "I think this has something to do with X, but I feel really lost." That will allow you to submit revisions. There must be evidence that you made a legitimate attempt.

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On each *Individual Assignment*, you will receive 1 of 3 overall marks:

Label	What it means
Accepted	This work is completed for the most part correctly. Any errors are fairly minor. You are done!
Revise	You have attempted the work, but there are some things you need to work on learning better. You should revise your assignment.
No credit	You either submitted nothing, accidentally submitted the wrong assignment, or submitted work that is barely started.

**You should expect most of your assignments first attempts to be marked *Revise*. This is not a bad thing and you should not feel discouraged! In a real job (even mine!) things nearly always need to be revised once or twice. My goal is to have you learn this stuff, so I will hold you to a high standard to support that learning process.**

If your work comes back *Revise*, that means you have one week to revise it. You have unlimited revision attempts, but you always need to complete your next revision **within 1 week** of when I last sent you feedback. Any submissions after this week will not be accepted and your grade will be locked in.

- You must complete your revisions **individually** because these are how I see how much you can do on your own.
- You **must** include in your revision what you went back and changed / fixed, and provide some explanation of why it is important.
- You can meet with me during office hours (Zoom) to discuss feedback as well as e-mail me.

Each assignment comes with associated learning goals. These are where grade calculations come from, and this is where you will get more concrete feedback on how much you have learned and what you still need to work on.

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For each learning goal/standard associated with an individual assignment, you will be given one of three marks:

Label	What it means
Exceptional - 3	You've mastered this outcome! You have demonstrated good working knowledge of a concept and have shown that you truly understand what is going on.
Satisfactory - 2.4	You've done a good job with this outcome, there are still a small thing or two you could still improve, but overall a good job.
Minimum - 1.8	You've gotten the basics down, but you might still be a little ways away from having an excellent grasp on something. You also might have missed something important.
Standard not met - 0	Either I'm having trouble understanding what you've said / done, or you are quite far off the mark. This often can point to something important missed in class or a fundamental misunderstanding of a topic.

These learning goals are where grade numbers will actually come from. We have a spreadsheet (linked in our D2L course page) that will do the calculations for you. Ideally, you will be filling this out as we go along in class, that way you always know how you are doing in class.

Exceptional correspond to a 3, Satisfactory to a 2, Minimum to a 1, and Standard not Met to a 0. We'll average together all of your work for a standard together, so you'll have a number for each standard, and we'll average all the standard numbers together to get an overall number that indicates what letter grade you would get. Letter grades correspond to the following ranges:

A	2.7-3.0
B	2.4-2.7
C	2.1-2.4
D	1.8-2.1
F	0-1.8

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## ATTENDANCE POLICY

This is an asynchronous course, and thus has no attendance policy.

## TECHNOLOGY REQUIREMENTS

### LMS

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

Zoom Video Conferencing Tool

[https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom\\_Account.aspx?source=universalmenu](https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu)

### Perusall

Use the link below to create an account and use the course code HEAD-22H2U to join the class.

<https://www.perusall.com/>

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

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## **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

## **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

### **Course Specific Procedures/Policies**

#### **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

### **University Specific Procedures**

#### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

#### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

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## **Academic Integrity**

Students at East Texas A&M University are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)  
[Undergraduate Student Academic Dishonesty Form](#)

[http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/  
rulesProcedures/documents/  
13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf)

[Graduate Student Academic Dishonesty Form](#)

[http://www.tamuc.edu/academics/graduateschool/faculty/  
GraduateStudentAcademicDishonestyFormold.pdf](http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf)

[http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/  
rulesProcedures/13students/undergraduates/  
13.99.99.R0.03UndergraduateAcademicDishonesty.pdf](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf)

## **Students with Disabilities-- ADA Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

### **Office of Student Disability Resources and Services**

East Texas A&M University

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

[http://www.tamuc.edu/campusLife/campusServices/  
studentDisabilityResourcesAndServices/](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

## **Nondiscrimination Notice**

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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## **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url: <http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

## **East Texas A&M Supports Students' Mental Health**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

## **AI use policy**

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

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13.99.99.R0.03 Undergraduate Academic Dishonesty  
13.99.99.R0.10 Graduate Student Academic Dishonesty

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