



COURSE PREFIX 2425.003 University Physics I

COURSE SYLLABUS: FALL 2020

INSTRUCTOR INFORMATION

Instructor: **Dr. Bahar Modir**

Office Hours: TBA

University Email Address: bahar.modir@tamuc.edu

Preferred Form of Communication: **Email**

Communication Response Time: 48 hours

COURSE INFORMATION

Textbooks:

Textbook(s) Required: Knight, Physics for Scientists and Engineers, 4rd edition. You have the option of buying MasteringPhysics with etext only (ISBN 9780321753052) or MasteringPhysics with etext and traditional textbook (ISBN 9780321844354).

PHYS 2425 Lab manual, available at the campus bookstore or as an eBook.

Here is the link to purchase the eBook version of this manual. <https://store2.van-griner.com/product/phys2425-redemption-code-ebook/>

Course Description

This is a calculus-based introductory physics course in mechanics. Topics include kinematics, dynamics, momentum, energy, and applications of Newton's Laws.

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.

The syllabus/schedule are subject to change.

Student Learning Outcomes

1. Students will be able to precisely explain and calculate motion using the concepts of position, velocity, and acceleration.
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 momentum and energy to describe a physical situation and calculate the motion of an object using these quantities.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students should be able to use myLeo Online, view videos on YouTube and use Excel.

Instructional Methods

This class is being taught online. The class is a blend of lecture and group problem solving sessions.

The lecture will be online and synchronous on Mondays during the class time, which is at 10:00 am. If you are not able to attend the synchronous lecture, the recorded video of the lecture will be posted to the course shell in myLeo Online for asynchronous view.

On Wednesday and Friday of each week we will have synchronous online group problem solving activities to work on practice problems related to the lecture material of the week. The online group problem solving will occur in breakout rooms. The link to it will be posted as an announcement in the course shell in myLeo Online.

Student Responsibilities or Tips for Success in the Course

A typical rule for college classes is to plan to study or do homework outside of class 3 hours for each credit hour per week. For this class, that would be 12 hours per week. You should read the textbook, and take well-organized handwritten notes during class. Start your homework early. **The most important thing you can do is to ask for help when you need it.** At any point in the semester, if you have any questions, send me an email (bahar.modir@tamuc.edu).

GRADING

Final grades in this course will be based on the following scale:

Grades will be based on three components:

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| | |
|------------------------------------|------|
| Exams | 70 |
| Tutorial homeworks | 15 % |
| Participation in discussion boards | 15 % |

Grading scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

Assessments

Exams: There will be three midterms and a final. The exams will be weighted equally. See the course outline for exam dates. Make-up exams will only be allowed for excused absences. See course policies below for details on excused absences.

Tutorials Homework: ~ 6-8 homework assignments will be assigned throughout the semester. The dropbox for homework submission will become available in the week that the tutorial is due. Late homework will not be accepted.

Participation in Discussion board: Every week there will be a discussion board to participate in it. You are required to make at least one post per week related to the content of the course.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce 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:

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https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

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.

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.

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>

Interaction with Instructor Statement

The best method to reach the instructor is through email. You can send an email to bahar.modir@tamuc.edu with **PHYS 2425 in the subject line**. If you do not receive a response within 48 hours, send a reminder email.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

1. The instructor must be notified by email (bahar.modir@tamuc.edu) about any

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excused missed exam **no later than 24 hours after the missed exam**. Even if you choose to notify the instructor in person, **you must still follow up with email** within 24 hours of the missed exam. If you do not follow this policy, you will not be able to make up missed exams or turn in late work except in extreme circumstances.

2. You are responsible for obtaining notes and class announcements from missed lectures.
3. Excessive absences may result in being dropped from the course.
4. **When emailing the instructor, include the course number in the subject line.**
5. You are expected to check your email at least once a day for class announcements. Emails will be sent to the email addresses you provided to MyLeo.
6. Students should fully participate in class activities.
7. Students are expected to be professional and respectful and take responsibility for their learning. If you find yourself struggling, the instructors are available to provide extra help outside of class.

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).
<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>

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

Academic Integrity

Students at Texas A&M University-Commerce 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](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.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

Texas A&M University-Commerce

Gee Library- Room 162

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

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

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

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce 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 Texas A&M University-Commerce 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.

Harassment Policy

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:

University Title IX Contact: Michele Vieira, 903-886-5025, <mailto:TitleIX@tamuc.edu>

University resource webpages:

<http://www.tamuc.edu/facultyStaffServices/humanResources/title-ix/resources.aspx>

<http://www.tamuc.edu/campuslife/campusServices/universityPoliceDepartment/crimePrevention/sexualAssault.aspx>

University Counseling Center: 903-886-5145,

<http://www.tamuc.edu/campusLife/campusServices/counselingCenter/default.aspx>

Campus police: <mailto:upd@tamuc.edu>, call 911 in emergency situations

External resources:

Crisis center of NorthEast Texas: <http://www.ccnex.org>

Know your IX: <http://knowyourix.org>

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End rape on campus: <http://endrapeoncampus.org>
Clery Center for Security on Campus: <http://clerycenter.org>
Not Alone: <https://www.notalone.gov>

COURSE OUTLINE / CALENDAR

Content schedule

Weeks 1-3 Vectors Momentum
Weeks 4-6 Dynamics Part I
Weeks 7-8 Dynamics Part II
Weeks 9-10 Work and Energy
Weeks 11-12 One dimensional kinematics
Weeks 13-15 Two dimensional kinematics

Exam dates

Exam 1 Fri., 9/25
Exam 2 Fri., 10/23
Exam 3 Fri., 11/20
Final Exam Mon., 12/7

Exam dates are tentative and may be adjusted depending on the pace at which we cover material.

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