1410.004 General Physics I Fall 2025

5:00-6:20pm - Monday and Wednesday

Physics Building Room 104

Instructor: William Mitchell (williammitchell3@my.unt.edu)

Office: Physics Building Room 310

Office Hours: TBD

Textbook: College Physics: A Strategic Approach by Knight, Jones, and Field

Recitation: 4:00-4:50pm Mondays in Sage Hall Room 230

This syllabus may be amended as needed throughout the semester

Course Topics:

There are 17 chapters in the Mechanics portion of this course covering topics including Mathematical Concepts, Kinematics in one and two dimensions, Forces and Newton's Laws, Uniform Circular Motion, Work and Energy, Momentum, Rotational Dynamics, Simple Harmonic Motion, Fluids, Waves and Sound, Linear Superposition, Interference, Heat and Thermodynamics. Due to the amount of material in these chapters, some chapters will not be covered in entirety.

Course Structure:

This course takes place 100% in person. Lectures and recitations will be presented as scheduled and class exams will be scheduled during regular lecture periods. Circumstances may arise requiring one or more recitation periods for a lecture presentation or exam. Homework will be assigned and submitted using Pearson on Canvas. Copies of the lecture PowerPoint in PDF format will be posted to Canvas before the start of lectures. If necessary updated/amended copies of the PowerPoints will be posted to Canvas after lectures.

Course Grading:

Item	Grade %	Grading
Exams	50%	A = 90-100%
Homework	15%	B = 80-89%
Recitation/Class Quizzes	10%	C = 70-79%
Final	25%	D = 60-69%
TOTAL:	100%	F < 59%

Homework:

Graded homework will consist of online homework only using Pearson available through CANVAS. Online HW will be posted, collected, and graded on Canvas via the internet. Each homework set will have a specified due time and date. Details of registering and accessing the homework server are given on Canvas. Please inform the instructor of any problems with accessing or submitting the online homework. Homework problems will be discussed during the recitation.

Lecture/Recitation Attendance:

Due to the class size, attendance will not be taken daily. However, random attendance quizzes (10 pts) will be given in recitation and lecture sections on material covered in the lectures since the last pop quiz (5 points for attendance and 5 points for correct answer). The final course score for quizzes will be calculated as a percentage of the total points earned. Each student is responsible for all material covered in class. These quizzes will be used to determine class attendance. Scores for class attendance will be used as part of the determination for the course grade.

Exams:

Three 80-minute exams will be given during the semester and a 2-hour comprehensive final exam will also be given. The final exam will consist of equal portions from each of the regular exams plus any material covered after the last regular exam. If one (1) regular exam is missed, the final exam will double count as the missed exam grade. A second missed exam will be given a score of zero(0) unless a valid excuse is accepted by the instructor. The grade for the excused second missed exam will be determined by the percentage correct of the problems on the final exam relating to the chapters covered by the missed exam. If more than two exams are missed, grades of zero will be given for the additional exams.

IT IS STRONGLY RECOMMENDED NOT TO MISS AN EXAM UNLESS ABSOLUTELY UNAVOIDABLE!

If an exam is missed (or expected to be missed) the instructor should be informed as soon as possible.

If UNT officially closes during a time when an exam is scheduled, that exam will take place on the next regularly scheduled class lecture period.

UNT athletes, military reservists, first responders and persons with special needs should inform the instructor of any scheduling conflicts with lectures, recitations or exams.

Physics 1410 Fall 2025 Schedule (adjustments probable)			
Week #	Week	Торіс	
	Starting		
Week 1	Aug. 18	Course Introduction/Chapter 1:Math Concepts	
Week 2	Aug. 25	Chapter 2: Kinematics in One Dimension	
Week 3	Sept. 1	Chapter 3: Kinematics in Two Dimensions	
Week 4	Sept. 8	Chapter 4: Forces and Newton's Laws of Motion	
Week 5	Sept. 15	Exam Review and Exam 1 (chapters 1-4)	
Week 6	Sept. 22	Chapter 5: Applying Newton's Laws	
Week 7	Sept. 29	Chapter 6: Circular Motion	
Week 8	Oct. 6	Chapter 7: Rotational Motion	
Week 9	Oct. 13	Exam review and Exam 1 (Chapters 5-7)	
Week 10	Oct. 20	Chapter 8: Equilibrium and Elasticity	
Week 11	Oct. 27	Chapter 9: Momentum	
Week 12	Nov. 3	Chapter 10: Energy and Work	
Week 13	Nov. 10	Chapter 11: Using Energy	
Week 14	Nov. 17	Exam Review and Exam 3 (Chapters 8-11)	
Week 15	Nov. 24	THANKSGIVING BREAK	
Week 16	Dec. 1	Chapter TBD and Final Exam Review	

Disability Accommodations:

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at https://studentaffairs.unt.edu/office-disability-access. . You may also contact ODA by phone at (940) 565-4323.

Academic Dishonesty:

UNT's policy on Academic Dishonesty can be found at: https://policy.unt.edu/sites/default/files/06.003 Student Academic Integrity_0.pdf Drop information is available in the schedule of classes at: http://registrar.unt.edu/registration/schedule-of-classes

Emergency Notifications and Procedures:

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

Attendance Statement:

Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the professor and the instructional team prior to being absent, so you, the professor, and the instructional team can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor and instructional team if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community.

Course Description:

This course is algebra-based physics suitable for life sciences majors and pre-professional students. This course is designed to introduce students to various topics related to the basic principles of mechanics, sound, fluids, and waves, etc.

Course Prerequisites or other restrictions:

There are no required prerequisites for this course. However, in order to be successful in this course you will need to:

- Have proficiency in college algebra and trigonometry.
- Network with others and utilize tact when offered differing perspectives.
- Make the commitment to spend at least 10 hours a week reading the assignments, completing homework assignments, and participating in lecture and recitation sessions

Communications Expectations:

Announcements

Notifications from the instructor regarding this course will be made via "Announcements" in Canvas. All registered students should receive an email message that an announcement has been posted in Canvas. Since these announcements will provide important information regarding the class such as changes in due dates, ways to resolve problems, or hints for success it is strongly advised that you should regularly check for outstanding announcements. Contacting the instructor should be done via email (see following).

<u>Email</u>

I will generally respond to emails to my UNT email address (williammitchell3@my.unt) within 24 hours unless it's the weekend, in which case I will respond no later than Monday. IMPORTANT: For any emails you send make sure to include PHYS 1410 in the subject of the email. This will help me prioritize your email so I can get back to you quickly.

Tutoring:

Tutors will be available in person in the Physics Instructional Center (PIC) located on the 2nd floor of Hickory Hall to assist you throughout the course of the semester – tutoring schedules can be found at https://physics.unt.edu/pic. The recitation instructor will also be available at selected days/times to assist with questions.

Classroom Etiquette:

- If you arrive late, sit in the closest seat to the entry door so that class disturbance is minimized. After class, notify the instructor that you were late.
- If you must leave early, inform the instructor prior to the class and sit close to an exit door.
- Once the lecture has begun, walking between the instructor and the class is strongly discouraged.

Technical Assistance:

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UNT Help Desk: http://www.unt.edu/helpdesk/index.htm

Email: helpdesk@unt.edu

Phone: 940-565-2324

In Person: Sage Hall, Room 130 Walk-In Availability: 8am-9pm

UIT Help Desk Telephone Availability:

- Sunday: noon-midnight

- Monday-Thursday: 8am-midnight

Friday: 8am-8pmSaturday: 9am-5pm

Laptop Checkout: 8am-7pm

For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Student Support Services:

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- Student Health and Wellness Center (https://studentaffairs.unt.edu/student-healthand-wellness-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-andtestingservices)
- UNT Care Team (https://studentaffairs.unt.edu/care)
- UNT Psychiatric Services (https://studentaffairs.unt.edu/student-health-andwellnesscenter/services/psychiatry)
- Individual Counseling (https://studentaffairs.unt.edu/counseling-and-testingservices/services/individual-counseling)

Other student support services offered by UNT include

- Registrar (https://registrar.unt.edu/registration)
- Financial Aid (https://financialaid.unt.edu/)
- Student Legal Services (https://studentaffairs.unt.edu/student-legal-services)
- Career Center (https://studentaffairs.unt.edu/career-center)
- Multicultural Center (https://edo.unt.edu/multicultural-center)
- Counseling and Testing Services (https://studentaffairs.unt.edu/counseling-andtesting-services)
- Pride Alliance (https://edo.unt.edu/pridealliance)
- UNT Food Pantry (https://deanofstudents.unt.edu/resources/food-pantry)

Academic Support Services

- Academic Resource Center (https://clear.unt.edu/canvas/student-resources)
- Academic Success Center (https://success.unt.edu/asc)
- UNT Libraries (https://library.unt.edu/)
- Writing Lab (http://writingcenter.unt.edu/)
- MathLab (<u>https://math.unt.edu/mathlab</u>)

Assignment Policy:

The University is committed to providing a reliable online course system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and contact the UNT Student Help Desk: helpdesk@unt.edu or 940.565.2324 and obtain a ticket number. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

Late Work:

Unless otherwise notified, all assignments are due by 11:59 PM of the date listed on the assignment. Since the homework grade is determined as a percentage of the total number of homework points assigned, the due date for homework assignments can only be extended by the instructor under special circumstances. There are circumstances for which extensions may occur for the entire class. All work turned in after the deadline will have a maximum value of 80% of the original points. If for any reason you know that you will miss an exam, you must notify your instructor prior to the exam. If you unexpectedly miss an exam, notify the instructor within 24 hours after the exam has concluded in order to get an opportunity to have it excused.

Syllabus Change Policy:

Circumstances may require changes to the syllabus, but these changes will be announced by the instructor, and an updated syllabus uploaded to the syllabus module in Canvas. These changes usually consist of modifications to the schedule of lectures or exams.

Academic Integrity Policy:

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. [Insert specific sanction or academic penalty for specific academic integrity violation.]

ODA Policy:

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at http://www.unt.edu/oda. You may also contact ODA by phone at (940) 565-4323.

Retention of Student Records:

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior:

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classrooms, labs, discussion groups, field trips, etc. See UNT's Code of Student Conduct:

https://policy.unt.edu/sites/default/files/07.012_CodeOfStudConduct.Final8_.19_0.pdf.

Access to Information - Eagle Connect

Students access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail Eagle Connect (https://it.unt.edu/eagleconnect).

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the Electronic Code of Federal Regulations website (http://www.ecfr.gov/). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on campus experience integral to the completion of this course. If such an on-campus activity is required, it is the student's responsibility to do the following: (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course. (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose. Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses. See UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses (https://policy.unt.edu/policy/07-002).

Use of Student Work

A student owns the copyright for all work (e.g. software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student's permission unless all of the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- Use of the work does not affect any potential profits from the work.
- The student is not identified.
- The work is identified as student work.