

University of North Texas at Dallas
Fall 2016
SYLLABUS

PHYS 1410 Section 001, General Physics 1, 3 Hrs	
Department of Life and Health Sciences Division of Liberal Arts and Life Sciences	
Instructor Name:	James Lee Ph.D. , Dr. Ananya Debnath
Office Location:	
Office Phone:	
Email Address:	James.Lee@untdallas.edu , ananya.debnath@untdallas.edu
Office Hours: T 6:50-7:50 p.m. , T 4.00-5.00 pm. DAL2 304	
Virtual Office Hours: Anytime online	
Classroom Location: DAL2, Room 304 for Lecture, DAL2, Room 248 for Laboratory Exercises I	
Class Meeting Days & Times: TR 5:30-6:50 PM for Lecture, R 7:00-9:50pm for Laboratory Exercises	
Course Catalog Description:	Non-Calculus based physics sequence suitable for life sciences majors and pre-professional students. Principles and applications of mechanics, sound and heat.
Prerequisites:	Proficiency in algebra and trigonometry.
Co-requisites:	None.
Required Text: Knight, Jones & Field : College Physics, A Strategic Approach (3 rd edition) ; Addison Wesley (Pearson)	
Recommended Text and References:	
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm
Course Goals or Overview:	
The goal of this course is to provide students with understanding of basic physics concepts and laws.	
Learning Objectives/Outcomes: At the end of this course, the student will	
1	Demonstrate good understanding of physics concepts <ul style="list-style-type: none"> • Be able to accurately define basic physics concepts and laws. • Have a solid understanding of the relationship between the mathematical representations and the associated physical concepts and principles • Demonstrate the ability to use those physics law and concepts in solving problems. • Demonstrate the ability to combine concepts in solving multiple-step problems.

2	<ul style="list-style-type: none"> • Students should develop effective problem-solving skills • Satisfactorily solve standard textbook problem • Develop the ability to solve multi-step or multi-concept problems
3	Develop student cognitive attitudes: <ul style="list-style-type: none"> • See physics as a coherent framework of ideas that can be used to understand the world around us. • See what they are learning in the classroom as useful and strongly connected to the real world • Have the laboratory skills for the analysis of physical systems including data and error analysis, instrumentation statistics and dimensional analysis.
4	<ul style="list-style-type: none"> • Have appropriate oral and written communication skills to explain their work to people from a wide variety of backgrounds.

Course Outline

This schedule is subject to change by the instructor

Date	Lecture	Lab
8/23	Course Introduction Chapter 1 : Representing Motion	
8/25	Chapter 2 : Motion in One Dimension	Lab Safety
8/30	Chapter 3 : Vectors and Motion in 2-D	
9/1	Chapter 4 : Forces and Newton's Laws	Measurement Skills
9/6	Chapter 5 : Applying Newton's Laws	
9/8	Chapter 5 : Applying Newton's Laws	Vector Addition
9/13	Test 1	
9/15	Chapter 6 : Circular Motion, Orbits, and Gravity	Free-Fall
9/20	Chapter 7 : Rotational Motion	
9/22	Chapter 7 : Rotational Motion	Simple Machines
9/27	Chapter 8 : Equilibrium and Elasticity	
9/29	Chapter 8 : Equilibrium and Elasticity	Ballistic Pendulum and Projectile Motion
10/4	Chapter 9 : Momentum	
10/6	Chapter 9 : Momentum	Uniform Circular Motion
10/11	Chapter 10 : Energy and Work	
10/13	Chapter 10 : Energy and Work	Torque, Center of Gravity
10/18	Test 2	
10/20	Chapter 11 : Using Energy	Simple Harmonic Motion
10/25	Chapter 11 : Using Energy	
10/27	Chapter 11 : Using Energy	Expansion of Solids
11/1	Chapter 12 : Thermal Properties of Matter	
11/3	Chapter 13 : Fluids	Archimedes' Principle
11/8	Chapter 13 : Fluids	
11/10	Chapter 14 : Oscillations	No Lab
11/15	Chapter 14 : Oscillations	

11/17	Chapter 15 : Traveling Waves and Sound	Speed of Sound
11/22	Chapter 15 : Traveling Waves and Sound	
11/24	Thanksgiving Holiday	
11/29	Chapter 16 : Superposition and Standing Waves	No Lab
12/1	Chapter 16 : Superposition and Standing Waves	Standing Waves
12/6	Chapter 16 : Superposition and Standing Waves	No Lab
12/8	Final Review	
12/13	Final Exam (5:30 -7:30 p.m.)	

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Examinations

- There will be two tests and one comprehensive final exam.
- Exams are closed book.
- Use of a student supplied calculator is permitted. No cell phone is allowed.
- There are no makeup exams.

Assignments – designed to supplement and reinforce course material.

- Homework is online.

Laboratory Exercises

Each week, starting with the second week of classes, there is a lab that illustrates the material covered in lectures. You are responsible to read information from the lab manual and complete the Pre-lab assignment prior to the lab. There are no makeup labs.

Grading Matrix:

Instrument	Total
Homework	10%
Quiz	5%
Laboratory	20%
Exam 1	20%
Exam 2	20%
Final Examination	25%
Total:	100

Grade Determination:

A = 90% or better

B=80-89%

C = 70 - 79 %

D=60-69 %

F = less than 60%

University Policies and Procedures Students with Disabilities (ADA Compliance)

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students with documented disabilities are responsible for

informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive For more information you may visit the Student Life Office Suite 200 Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at LINT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught I am very interested in the feedback I get from students as I work to continually improve my teaching I consider the SETE to be an important part of your participation in this class.

Assignment Policy:

Homework assignments are due at the beginning of class

Exam Policy;

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook)

Academic Integrity:

Academic integrity is a hallmark of higher education You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e.,cheating or plagiarism) will be handled in accordance with the University's policies and procedures Refer to the Student Code of Academic Integrity at <http://www.unt.edu/untdallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Fundinci/7.002%20Code%20of%20Academic%20Integrity.pdf> for complete provisions of this code. In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call LINT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information so they will receive this information automatically.

Attendance and Participation Policy

The University attendance policy is in effect for this course Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student

coordinate with a student colleague to obtain a copy of the class notes if they are absent

Diversity/Tolerance Policy

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.