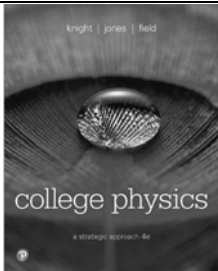


**THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF PHYSICS**

Course #:	PHYS 1403 CRN 22130								
Course Title:	General Physics I								
Credit Hrs:	4.0								
Term:	Spring 2022								
Course Meetings & Location:	2:30 AM – 3:50 PM M&W Undergraduate Learning Center room 220 Lecture notes will also be provided online on Blackboard								
Prerequisite Courses:	-								
Course Fee: (if applicable)	-								
Instructor:	Dr. Felicia S. Manciu								
Office Location:	PSCI 221 B								
Contact Info:	Phone # : (915) 747 8472								
	E-mail address: fsmanciu@utep.edu								
	Fax #: (915) 747 5447								
	Emergency Contact: (915) 747 5715								
Office Hrs:	M and W – 4:00 PM – 5:30 PM Dr. Manciu’s office hours will be online on Blackboard Collaborate Ultra . The main purpose of office hours is to provide additional guidance to students in acquiring analytical skills on problem solving, as well as to answer students’ questions. All students are welcome to attend.								
Textbook(s), Materials:	 <p>Main textbook: <i>College Physics: a Strategic Approach</i> by Author(s): Knight, Randall Jones, Brian Field, Stuart (<i>fourth edition</i>).</p> <p><u>Mastering physics access code, for homework assignments. A code comes with a new textbook or can be purchased online. Registration to masteringphysics.com is REQUIRED</u></p>								
Course Objectives (Learning Outcomes):	<p>The objective of PHYS 1403, which is the first part of a sequence of two algebra-based introductory physics courses, is to provide students with a rigorous description of physical phenomena and to improve students’ problem-solving abilities.</p> <p>We will study the following topics: Motion representation & Vectors, One-Dimensional Kinematics, Vectors & Two-Dimensional Kinematics, Newton’s Laws of Motion, Circular Motion, Gravity, Equilibrium, Momentum, and Work & Energy.</p>								
Grading Policy:	<p>Grades in this course will be based on your scores on two midterm exams, a final exam (comprehensive) laboratory, and homework assignments.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Midterm exams:</td> <td>40% (20% each)</td> </tr> <tr> <td>Final exam:</td> <td>30% (comprehensive)</td> </tr> <tr> <td>Homework</td> <td>20%</td> </tr> <tr> <td>Laboratory</td> <td>10%</td> </tr> </table>	Midterm exams:	40% (20% each)	Final exam:	30% (comprehensive)	Homework	20%	Laboratory	10%
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Final exam:	30% (comprehensive)								
Homework	20%								
Laboratory	10%								

<p>Course Activities/Assignments:</p>	<p>Homework</p> <p>Several homework sets will be assigned. Homework is a key component of this course, as acquiring and improving your analytical skills critically depend on the number and variety of problems you attempt to solve. Due dates for homework will be posted online and also announced in advance in the lecture. Each will consist of few problems based on the course material.</p> <p>It is essential that students become well versed in problem solving methods, which means developing skills to set up a problem, including diagrams and mathematical manipulation to achieve the final answer. A numerical score will be assigned for each homework set based on graded and counted problems. Make sure that you understand the solutions and write them up yourself.</p> <p><u>There is a strong correlation between homework scores and exam scores!</u></p> <p>Homework will be assigned in Mastering Physics:</p> <p style="text-align: center;">ID: manciu77224</p> <p>Registration to this site is required for the class!</p> <p><u>EACH STUDENT WILL NEED HIS OWN REGISTRATION PACKAGE FOR THE HOMEWORK AND EXAMS.</u></p>
<p>Course Activities/Assignments:</p>	<p>Exams</p> <p>Exams will consist of multiple-choice problems very similar to the worked example problems in the text and the assigned homework problems. Exams will be face-to-face during class time.</p> <p>The best way to prepare for the exams is to study the example problems and work out the assigned homework problems regularly. You should work as many additional problems from the text as you can: this is the best way to ensure your understanding of the material.</p> <p><u>First Midterm-exam (Chapters 1-5):</u> after the first five chapters & review. TBA (potentially on March 7th)</p> <p><u>Second Midterm-exam (Chapters 6-10):</u> after the last five chapters & review. TBA (potentially on April 20th)</p> <p><u>Final Exam (cumulative, Chapters 1-10):</u> UTEP's Spring 2022 exams schedule. TBA</p> <p>Final exams must be given at the scheduled time; any/all exceptions must be approved by both the Department Chair and the Dean.</p>
<p>Make-up Policy:</p>	<p>An extension of the due date for the homework as well as the make-up of missing exams will be granted only in extraordinary circumstances.</p>
<p>Attendance and In-Class Participation Policy:</p>	<p>Attendance & in-class participation is strongly encouraged, as being critical for your success in this class. Please arrive on time and be prepared for the day's activities. Please notify me of any extenuating circumstances that may prevent your attendance. In the event of an absence, the student must make up and submit any missed work within one week from the absence.</p>

Academic Integrity Policy:	<p>Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.</p>
Technology Requirements:	<p>While lectures will be delivered face-to-face, part of the course content will be delivered 100% synchronous via the Internet through the Blackboard learning management system (LMS). Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Mozilla Firefox and Google Chrome are the most supported browsers for Blackboard; other browsers may cause complications with the LMS. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.</p> <p>You will need to have or have access to a computer/laptop, scanner, a webcam, and a microphone. You will need to download or update the following software: Microsoft Office, Adobe, Flashplayer, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.</p> <p>If you encounter technical difficulties beyond your scope of troubleshooting, please contact the Help Desk as they are trained specifically in assisting with technological needs of students.</p>
Netiquette :	<p>Always consider audience. Remember that members of the class and the instructor will be reading any postings. Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated. When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.</p> <p>Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).</p>
Scholastic Integrity:	<p>Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or</p>

Scholastic Integrity: (continued)	providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more HOOP: Student Conduct and Discipline .
Disability Statement:	If you have a disability and need accommodations, please contact the Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu . For additional information, please visit the CASS website at www.sa.utep.edu/cass . The student is responsible for presenting to the instructor any accommodation letters and instructions.
Military Statement:	If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact the instructor at the beginning of the semester.

Very Tentative Schedule for the Semester (this may be modified throughout the semester)

Week #	Module	Date		Course Activities/Assignments:
1	Introduction	W	19-Jan	-Professor introduce herself to the students. -Getting familiar with the syllabus. -Material required for the course. -Overview of the course topics: “Kinematics” and “Dynamics” -Students get familiar with their peers. (1.5 hours)
2	Chapter 1: Representing Motion	M	24-Jan	- Lecture on particle model, motion diagram, scalar and vectors, System of International Units (SI), scientific notation, and significant figures (1.5 hours) Homework Chapter 1 Assignment
	Chapter 1: Representing Motion	W	26-Jan	- Lecture on particle model, motion diagram, scalar and vectors, System of International Units (SI), scientific notation, and significant figures (1.5 hours)
	Chapter 2: Motion in One Dimension	M	31-Jan	- Lecture on problem-solving approach, graphical motion, velocity, acceleration, uniform motion, motion with constant acceleration, and free fall motion (1.5 hours)
	Chapter 2: Motion in One Dimension	W	2-Feb	- Lecture on problem-solving approach, graphical motion, velocity, acceleration, uniform motion, motion with constant acceleration, and free fall motion (1.5 hours) Homework Chapter 1 Due Homework Chapter 2 Assignment

4	Chapter 2: Motion in One Dimension	M	7-Feb	- Lecture on problem-solving approach, graphical motion, velocity, acceleration, uniform motion, motion with constant acceleration, and free fall motion (1.5 hours)
	Chapter 3: Vectors and Motion in Two Dimensions	W	9-Feb	- Lecture on projectile motion, circular motion, vectors and components, the acceleration vector, motion on a ramp, and relative motion (1.5 hours)
5	Chapter 3: Vectors and Motion in Two Dimensions	M	14-Feb	- Lecture on projectile motion, circular motion, vectors and components, the acceleration vector, motion on a ramp, and relative motion (1.5 hours) Homework Chapter 2 Due Homework Chapter 3 Assignment
	Chapter 3: Vectors and Motion in Two Dimensions	W	16-Feb	- Lecture on projectile motion, circular motion, vectors and components, the acceleration vector, motion on a ramp, and relative motion (1.5 hours)
6	Chapter 4: Forces and Newton's Laws of Motion	M	21-Feb	- Lecture on Newton's laws, types of forces, and free-body diagram (1.5 hours) Homework Chapter 3 Due Homework Chapter 4 Assignment
	Chapter 5: Applying Newton's Laws	W	23-Feb	- Lecture on applications of Newton's laws (1.5 hours) Homework Chapter 5 Assignment
7	Chapter 5: Applying Newton's Laws	M	28-Feb	- Lecture on applications of Newton's laws (1.5 hours)
	Review Midterm Exam	W	2-Mar	-Overview of concepts learned – preparation for the upcoming Midterm Exam (1.5 hours) Homework Chapters 4 and 5 Due
8	EXAM	M	7-Mar	Midterm Exam on concepts learned on Chapters 1 – 5 (1.5 hours)
		W	9-Mar	Review of midterm exam correct solutions (1.5 hours)
9	14-18 Mar			Spring break – UTEP closed
10	Chapter 6: Circular Motion, Orbits, and Gravity	M	21-Mar	- Lecture on problem-solving skills for uniform circular motion, planetary gravity, apparent weight and weightlessness, and orbital motion (1.5 hours) Homework Chapter 6 Assignment
	Chapter 6: Circular Motion, Orbits, and Gravity	W	23-Mar	- Lecture on problem-solving skills for uniform circular motion, planetary gravity, apparent weight and weightlessness, and orbital motion (1.5 hours)
11	Chapter 7: Rotational	M	28-Mar	- Lecture on rolling motion and Newton's second law for rotational motion, which includes concepts of angular displacement, angular velocity, angular acceleration, and torque (1.5 hours)

	Motion			Homework Chapter 6 Due Homework Chapter 7 Assignment
	Chapter 7: Rotational Motion	W	30-Mar	- Lecture on rolling motion and Newton's second law for rotational motion, which includes concepts of angular displacement, angular velocity, angular acceleration, and torque (1.5 hours)
12	Chapter 8: Equilibrium and Elasticity	M	4-Apr	- Lecture on static equilibrium, springs and Hooke's law (1.5 hours) Homework Chapter 7 Due Homework Chapter 8 Assignment
	Chapter 8: Equilibrium and Elasticity	W	6-Apr	- Lecture on static equilibrium, springs and Hooke's law (1.5 hours)
13	Chapter 9: Momentum	M	11-Apr	- Lecture on conservation laws, conservation of linear momentum, conservation of angular momentum, and problem-solving skills (1.5 hours) Homework Chapter 8 Due Homework Chapter 9 Assignment
	Chapter 9: Momentum	W	13-Apr	- Lecture on conservation laws, conservation of linear momentum, conservation of angular momentum, and problem-solving skills (1.5 hours)
14	Review Midterm Exam	M	18-Apr	- Overview of concepts learned – preparation for the upcoming Midterm Exam (1.5 hours) Homework Chapters 9 Due
	EXAM	W	20-Apr	- Midterm Exam on concepts learned on Chapters 6 – 9 (1.5 hours)
15	Chapter 10: Energy and Work	M	25-Apr	- Lecture on basic energy model, conservation of energy, and problem-solving skills on energy transfer and conservation of energy (1.5 hours) Homework Chapter 10 Assignment
	Chapter 10: Energy and Work	W	27-Apr	- Lecture on basic energy model, conservation of energy, and problem-solving skills on energy transfer and conservation of energy (1.5 hours)
16	REVIEW	M	2-May	Overview of concepts learned – preparation for the upcoming Final Exam (1.5 hours) Homework Chapters 10 Due
	Finals Week			

COVID 19 Accommodations:

Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. Students who are considered high risk according to CDC guidelines and/or those who live with individuals who are considered high risk may contact [Center for Accommodations and Support Services](#) (CASS) to discuss temporary accommodations for on-campus courses and activities.

COVID-19 Precautions:

You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at [screening.utep.edu](#). If you know of anyone who should report any of these three criteria, you should encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to COVIDaction@utep.edu.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website ([screening.utep.edu](#)) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection. Wear face coverings when in common areas of campus or when others are present. You must wear a face covering over your nose and mouth at all times in this class. If you choose not to wear a face covering, you may not enter the classroom. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 *Health and Safety* and Section 1.2.2.5 *Disruptions* in the UTEP Handbook of Operating Procedures.

Please note that if COVID-19 conditions deteriorate in the City of El Paso, all course and lab activities may be transitioned to remote delivery.