PHYS 2320 - Introductory Mechanics  
(CRN: 15087)

Term: Fall 2023  
Lecture: MW 3:00 - 4:20 pm  
Location: Undergraduate Learning Center (UGLC) 220

Prerequisites: MATH 1411

Instructor: Dr. Eunja Kim, PhD  
Office: Physical Science Building 121B  
Email: ekim4@utep.edu  
Office hours: M 4:30-5:30 or by appointment

Lab Coordinator: Karla Carmona  
Office: Physical Science Building 317  
Email: kcarmona@utep.edu

Teaching Assistants:

MLC tutor: Alan Delgado Romo

Grading Policy:
- In-class exams: 30% (2 exams)
- Homework: 20%
- Final: 40%
- Quiz/seminar: 10%
- Lab class: Standalone 1 credit

Grading Scale: A: 90+; B: 80-89; C: 70-79; D: 60-69; F: Below 60

Objectives: This class will cover kinematics and dynamics of particles and rigid bodies using vectors and calculus, conservation of energy and momentum. These concepts are foundational in the physical sciences and many branches of engineering. You will probably continue to apply these concepts in the rest of your college career and in your professional career. Hard-work is expected which will be paid off greatly in the end. In this course, you will learn about (1) several important physical concepts, along with how they are connected to each other and how to use them in the real world; (2) how to setup and solve problems by applying concepts and models learned in class; (3) how to improve logical and critical thinking skills to apply fundamental knowledge from the class to familiar and new situations. This will happen mostly in lecture and in the lab.

Online homework: Mastering Physics, Pearson http://masteringphysics.com

Course name: PHYS 2320 – Introductory Mechanics (CRN: 15087)
Course ID: kim19603
The class will follow the textbook, and homework problems will come from the problems at the end of the chapters, hence access to the mastering physics website is required. Go to https://mlm.pearson.com/enrollment/kim19603.
When you register, please use your name same as the one listed in Blackboard and student ID.

You can download the registration instruction sheet from Blackboard to register.

Exams: There will be 2 in-class exams. Although the material tested on the exams is not cumulative, new concepts in physics are built on previous ones.

Final: The final exam will be a comprehensive exam.

Lab: The lab is independent of the class, but there is synergism. Karla Carmona is the Lab Coordinator (1 Lab per week).

Quiz/seminar: Quiz will be given during workshop/seminar classes. There will be 1 seminar class per week.

Seminar/Workshop

<table>
<thead>
<tr>
<th>CRN</th>
<th>ROOM</th>
<th>DAY</th>
<th>BEGIN</th>
<th>TA Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>15201</td>
<td>UGLC 210</td>
<td>R</td>
<td>8:00</td>
<td>Angel Castro</td>
</tr>
<tr>
<td>15202</td>
<td>LART 306</td>
<td>R</td>
<td>15:00</td>
<td>Josemanuel Avila</td>
</tr>
<tr>
<td>15203</td>
<td>LART 306</td>
<td>R</td>
<td>16:00</td>
<td>Josemanuel Avila</td>
</tr>
<tr>
<td>15205</td>
<td>MAIN 201</td>
<td>F</td>
<td>9:30</td>
<td>Sujit Adhikari</td>
</tr>
</tbody>
</table>
Course overview:

Ch. 1 Concepts of Motion
Ch. 2 Kinematics in One Dimension
Ch. 3 Vectors and Coordinate Systems
Ch. 4 Kinematics in Two Dimensions
Ch. 5 Force and Motion
Ch. 6 Dynamics I: Motion Along a Line
Ch. 7 Newton’s Third Law
Ch. 8 Dynamics II: Motion in a Plane
Ch. 9 Work and Kinetic Energy
Ch. 10 Interactions and Potential Energy
Ch. 11 Impulse and Momentum
Ch. 12 Rotation of a Rigid Body

Tentative Course Schedule:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Ch. 1 (8/28/23; 8/30/23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>Ch. 2 (9/4/23; 9/6/23/22)</td>
</tr>
<tr>
<td>Week 3</td>
<td>Ch. 3 (9/11/23; 9/13/23)</td>
</tr>
<tr>
<td>Week 4</td>
<td>Ch. 4 (9/18/23; 9/20/23)</td>
</tr>
<tr>
<td>Week 5</td>
<td>Ch. 4 (9/25/23); Exam 1 (9/27/23)</td>
</tr>
<tr>
<td>Week 6</td>
<td>Ch. 5 (10/2/23; 10/4/23)</td>
</tr>
<tr>
<td>Week 7</td>
<td>Ch. 6 (10/9/23; 10/11/23)</td>
</tr>
<tr>
<td>Week 8</td>
<td>Ch. 7 (10/16/23; 10/18/23)</td>
</tr>
<tr>
<td>Week 9</td>
<td>Ch. 7 (10/23/23; 10/25/23)</td>
</tr>
<tr>
<td>Week 10</td>
<td>Ch. 8 (10/30/23); Exam 2 (11/1/23)</td>
</tr>
<tr>
<td>Week 11</td>
<td>Ch. 9 (11/6/23; 11/8/23)</td>
</tr>
<tr>
<td>Week 12</td>
<td>Ch. 10 (11/13/23; 11/15/23)</td>
</tr>
<tr>
<td>Week 13</td>
<td>Ch. 10 (11/20/23; 11/22/23)</td>
</tr>
<tr>
<td>Week 14</td>
<td>Ch. 11 (11/27/23; 11/29/23)</td>
</tr>
<tr>
<td>Week 15</td>
<td>Ch. 12 (12/4/23; 12/6/23)</td>
</tr>
<tr>
<td>Week 16</td>
<td>Final Week</td>
</tr>
</tbody>
</table>

Military statement: Students being called for military duties need to contact the instructor as soon as possible.

Classroom Policies

- Cell phones are not allowed during class time, unless it is an emergency. Laptops are not to be used all the time, but only as needed.
- Punctuality – coming to class on time – is expected. This is part of the professional behavior you will need to demonstrate if you wish to be successful in your field.
- Missed classes – if you are sick, have transportation troubles, or a family emergency, please make use of the Blackboard, Mastering Physics, and your classmates to find out what you missed. You are responsible for what you have missed.
**Missed Exam**
Make up exams will ONLY be considered if you have a signed letter from your medical doctor or other appropriate authority. These letters must be verifiable. Contact information must be provided and when the appropriate individual is contacted, they will need to be able to corroborate the absence. If the letter cannot be verified, the case will be turned over to the Dean of Students as being suspected of Academic Dishonesty.

**Students with Disabilities**
If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at https://www.utep.edu/student-affairs/cass/. Accommodations might include but are not limited to note takers, readers, or extended time on exams and assignments. Please take care of this as soon as possible and before the first exam.

**UTEP Policies on Academic Dishonesty**
If an instructor suspects a student of cheating, he/she is to collect evidence that he/she believes indicates this (e.g. exams, student work, etc). This evidence is then turned over to the Assistant Dean of Students (ADS). The student will receive an incomplete on whatever piece of work is under consideration. No other actions will be taken by the instructor until the case is closed: no discussion, no accusation, and no different treatment. The student is encouraged to continue participating in the class. The ADS will consider the evidence provided and then contact the accused student (and possibly peers) and investigate the allegations. The ADS will then make a decision as to whether cheating occurred and determine what the consequences will be. The instructor will be consulted by the ADS as to whether the results of the investigation are acceptable to him/her. If acceptable, the instructor will simply carry out the consequences sent to both the student in question and the instructor in a formal letter from the Dean of Students. While the seriousness of the identified dishonest actions determines the nature of the consequences, possible consequences include: a counted “zero” on the piece of work, a letter grade reduction, or being placed on academic probation. Students have the right to appeal a decision and participate in a formal public hearing.