## Course Objectives (Learning Outcomes):

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.

We will study the following topics/chapters: One-Dimensional Kinematics, Vectors in Physics, Two-Dimensional Kinematics, Force and Newton’s Laws of Motion, Circular Motion, Orbits, and Gravity, Rotational Kinematics, Rotational Dynamics, Mechanical Equilibrium, Momentum, Work and Energy, Energy Conservation, Elasticity and Oscillations (if time permits).
### Grading Policy:

Grades in this course will be based on your scores on two midterm exams, a final exam, laboratory, and homework assignments. Two attempts will be allowed for each of the exams. Best of the two scores will be taken for the final grade. All the classes and exams are in-person.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Midterm exams:</strong></td>
<td>40% (20% each)</td>
<td></td>
</tr>
<tr>
<td><strong>Final exam:</strong></td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td><strong>Laboratory</strong></td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td><strong>Homework:</strong></td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

### Course Activities/Assignments:

**Home work**

It is essential that students become well versed in problem solving methods, which means developing the writing 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.

Feel free to form study groups with your classmates and seek help from any lecture instructor during his or her office hours as you attempt to solve the problems. Make sure that you understand the solutions and write them up yourself. **There is a strong correlation between homework scores and exam scores!**

The textbook is bundled together with the online registration package for masteringphysics.com

**EACH STUDENT WILL NEED HIS OWN REGISTRATION PACKAGE FOR THE HOMEWORK.**

The online homework will be announced in advance in the lecture (approximately every week). Each will consist of few problems based on the course material.

**Exams**

Exams will consist of problems very similar to the worked example problems in the text and the assigned homework problems. Exams will be strictly closed-book. You should bring with you a pocket calculator to work out the answers to numerical problems: **make sure the battery is charged!**

No cell phones allowed in the exams!

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.

### Make-up Policy:

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.

### Attendance Policy:

Attendance is mandatory.
Follow UTEP guidelines for COVID-19 related instructions.

It is strongly encouraged to get vaccinated, sanitized, and wear masks. If you are sick with Covid-19 related symptoms, follow UTEP and CDC guidelines.

**COVID-19 PRECAUTIONS**

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID-19 testing.
The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit epstrong.org

**Course Resources: Where you can go for assistance**

**UTEP provides a variety of student services and support:**

**Technology Resources**
- **Help Desk:** Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

**Academic Resources**
- **UTEP Library:** Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- **University Writing Center (UWC):** Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- **Math Tutoring Center (MaRCS):** Ask a tutor for help and explore other available math resources.
- **History Tutoring Center (HTC):** Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- **RefWorks:** A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

**Individual Resources**
- **Military Student Success Center:** Assists personnel in any branch of service to reach their educational goals.
- **Center for Accommodations and Support Services:** Assists students with ADA-related accommodations for coursework, housing, and internships.
- **Counseling and Psychological Services:** Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

The statement is below:

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID 19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the
first week of classes. For more information about the current rates, testing, and vaccinations, please visit epstrong.org