Welcome to Physics 180

Physics 180: Fundamentals of Physics

Instructor: Dr. Mehdi Ghiassi-Nejad
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- **Meets**: Mondays, Tuesdays, Thursdays and Fridays (9:30-10:45 am)
- **Discussion Sessions**: Tuesdays and Thursdays (11:00 am-12:00 pm)

*All sessions will be online and live*

Textbook: *Halliday and Resnick, Fundamentals of Physics, 10th edition Chapters 1-15*

Course Description

This is a one-semester course, which gives an overview of Vectors, Kinematics, Dynamics, Energy, Linear and Angular momentum, Gravitation, Oscillation and Wave Mechanics.

Communication

I will use the email system built into Canvas as the official form of communication for this class. All information, changes to the schedule and other notices will be sent by means of Canvas’s email. You can email me by means of Canvas or regular email.

Pre and Co-requisites

Calculus at the level of Math 115 or equivalent is a prerequisite for Phys. 180.
Goals of the course

The goal of Physics 180 is to provide a very good knowledge in physics in such a way that students are ready to continue in science and engineering majors and for medical schools. It also provides strong foundation for students to think like a physicist.

Course requirements and student evaluation

- A. Students must attend all lectures and discussion sections. Class participation is considered part of grades.
- B. Text messaging in class is not allowed.
- C. Students should be prepared to discuss assigned readings and homework problems.
- D. Homework problems will be assigned (see homework section). Assignments and solutions will be posted on Canvas. No late homework will be accepted.
- E. There will be three test. The third test has two parts and replaces the final. First part is written and the second part is oral.

Student Evaluation

- Class participation 10%
- Quiz 5%
- Participation in discussions 5%
- Homework Assignments 20%
- Exams 60%

Important dates

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<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Test 1</td>
<td>06/15/2021</td>
<td>15%</td>
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<tr>
<td>Test 2</td>
<td>06/25/2021</td>
<td>15%</td>
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<tr>
<td>Final (written)</td>
<td>07/08/2021</td>
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<tr>
<td>Final (Oral)</td>
<td>07/09/2021</td>
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Tentative Calendar

- week 1 Vectors, Kinematics Chapters 3,2,4
- week 2 Dynamics Chapters 5,6
- week 3 Work, Energy and Momentum Chapters 7,8,9
- week 4 Rotation, Torque and Angular Momentum Chapters 10,11
- Week 5 Gravitations, Oscillations and Waves Chapter 13,15