PHYSICS 209

General Physics I

MWF, 2:00-3:15pm, Main Campus Davison Hall 106

Dr. Rakitha S. Beminiwattha
rakithab@latech.edu
Office EA-210
Office Hours: MTWRF 9:00-11:00am
(318) 257-2435

Physics Teaches You to Think and Puts Your Math to Use!

Course Description: A study of the fundamental principles of physics and their applications to mechanics, thermodynamics, and waves. An algebra and trigonometry based problem solving course. Students are expected to apply fundamental concepts of physics to solve problems they encounter in everyday life as they explore the following topics.

1. Mechanics: Motion and forces producing motion
2. Dynamics: Motion of bodies under the action of forces
3. Fluid Dynamics: Introduction to liquids and gases in motion
4. Intro. Thermodynamics: Temperature, Heat and Ideal gases

Please see the tentative schedule of the class at the end of the this document.

Prerequisite(s): MATH 112
Credit Hours: 3

Text: Physics, 10th Edition
Authors: Cutnell and Johnson; ISBN: 978-1118651896

Grading Policy:

• Homeworks - 25%
• Exams - 75%
  – There will be three exams but the lowest grade exam will be dropped. The highest grade will count 50% and second highest grade will count 25%.
  – See tentative schedule for the exams dates. Dates may change but will be notified earlier about any changes.
  – Exams will be closed book but you are allowed to bring 1 page handwritten note to the exam. Printouts and pictures are not allowed
Grading Scale: A : >= 88, B : 75 - 87, C: 60 - 74, D: 50 - 59, F <= 49

Academic Honor Code Summary: In accordance with the Academic Honor Code as stated in the university catalog, student must pledge: Being a student of higher standard, I pledge to embody the principles of academic integrity. Please visit http://www.latech.edu/documents/honor-code.pdf for more information

Attendance: Attendance will be recorded for all the classes. For every consecutive 3 classes missed, your contribution to final grade from homework will be reduced by 10%. For every 6 classes missed, your contribution to final grade from homework will be reduced by 20%. Contact me if you have questions regarding attendance policy.

Homeworks: Homeworks are given every week via the WILEYPLUS on-line service. Homeworks are due week from the date given. Please submit on time or lose 50% of points for late submission. All homeworks are to be submitted online. Please follow the instructions given in the following page and register yourself to submit homeworks. https://edugen.wileyplus.com/edugen/class/cls548904/

Students with Disabilities: Students needing testing or classroom accommodations based on a disability are encouraged to discuss these needs with the instructor as soon as possible. An accommodations meme is available at the Office of Disability Services (http://www.latech.edu/ods)

Emergency Notification System: Students are encouraged to enroll and update their contact information in the Emergency Notification System. This will ensure that you will receive important texts and voice alerts in an event of a campus emergency. Please visit http://www.latech.edu/administration/ens.php

Course Outline: The weekly coverage might change as it depends on the progress of the class. Therefore exam dates may shift and will be notified in advance. However, you must keep up with the reading assignments.

Tentative Schedule

<table>
<thead>
<tr>
<th>Week/Date</th>
<th>Unit</th>
<th>Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week1/Nov 30</td>
<td>Introduction (Ch1)</td>
<td></td>
</tr>
<tr>
<td>Week2/Dec 7</td>
<td>Kinematics (Ch2 &amp; 3)</td>
<td></td>
</tr>
<tr>
<td>Week3/Dec 14</td>
<td>Newton’s Law (Ch4)</td>
<td>exam 1 (Ch 1 - 3)</td>
</tr>
<tr>
<td>Week4/Jan 4</td>
<td>Circular Motion (Ch5)</td>
<td></td>
</tr>
<tr>
<td>Week5/Jan 11</td>
<td>Rotational Kinematics (Ch8)</td>
<td></td>
</tr>
<tr>
<td>Week6/Jan 18</td>
<td>Work &amp; Energy (Ch6)</td>
<td></td>
</tr>
<tr>
<td>Week7/Jan 25</td>
<td>Impulse &amp; Momentum (Ch7)</td>
<td>exam 2 (Ch 4 - 8)</td>
</tr>
<tr>
<td>Week8/Feb 1</td>
<td>Fluids (Ch11)</td>
<td></td>
</tr>
<tr>
<td>Week9/Feb 8</td>
<td>Temperature and Heat(Ch 12)</td>
<td></td>
</tr>
<tr>
<td>Week10/Feb 15</td>
<td>Ideal Gases (Ch 13)</td>
<td></td>
</tr>
<tr>
<td>Week11/Feb 22</td>
<td>exam 3</td>
<td>exam 3 (Ch 11 - 13)</td>
</tr>
</tbody>
</table>