Physics 231: non-calculus introductory physics

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1248 BPS (helproom)
Or by appointment

PHY 231 home:
http://www.nscl.msu.edu/~zegers/phy231.html
Lectures & Notes

- 8:00-8:50 am (Mon. Wed. Fri.) section 001
- Lecture notes are available before the lecture without solutions to problems and after the lecture with solutions
- Notes in PDF format
- Overview equation sheet is available: you can use this as a guide for making your own equation sheet for the exams
Learning center

- TA’s will be in the learning center (BPS 1248).
- Schedule to be announced soon
- Extra Credit opportunity (1%): group work in the learning center.
Homework

- LON-CAPA on-line homework system
- Assignments are somewhat unique to each student
- Set 0 is just for practice: it is not graded
- Set 1 is due Wed 9/7
- HW generally due on Wednesday 11 pm
- Problems in lon-capa have a chat box to communicate with each other: copying answers or just plugging in numbers in equations that you do not understand is detrimental to your final results.
<table>
<thead>
<tr>
<th>Grade</th>
<th>%</th>
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<tbody>
<tr>
<td>4</td>
<td>&gt;92</td>
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<tr>
<td>3.5</td>
<td>84-92</td>
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<tr>
<td>3.0</td>
<td>76-84</td>
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<tr>
<td>2.5</td>
<td>68-76</td>
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<td>2.0</td>
<td>60-68</td>
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<td>1.5</td>
<td>52-60</td>
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<tr>
<td>1.0</td>
<td>44-52</td>
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<table>
<thead>
<tr>
<th>Type</th>
<th>Max %</th>
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<tbody>
<tr>
<td>Midterms (2)</td>
<td>20% each</td>
</tr>
<tr>
<td>Final</td>
<td>40% points</td>
</tr>
<tr>
<td>Homework</td>
<td>20% points</td>
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<tr>
<td>Clicker quizzes</td>
<td>5% (extra credit)</td>
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<tr>
<td>Group work</td>
<td>1% (extra credit)</td>
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<tr>
<td>Total</td>
<td>106%</td>
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- Quiz points based on 75% of maximum quiz score
- Homework points based on 90% of the maximum homework score
In-class QUIZZES

- quiz points: 2 if answer correct
  1 if answer incorrect
- make sure to be on time, quizzes are often, but not always, at the beginning of class. It is possible to have more than one quiz in a lecture.
- clickers are used throughout the lectures, but I will announce if a question counts as an extra-credit quiz.
- You have to register your clicker at http://www.iclicker.com/registration/

AS SOON AS POSSIBLE!!
Please check if your previous registration is still valid!

PHY 231
extra credit group work (1%)

- details found on the website
- requires working together with a group on homework problems in the learning center (BPS 1248)
- You have to sign up prior to Sept 9.
(midterm) exams

- Exams are closed-book
- You can bring your own equation sheets
  - midterm (2): one double sided letter size sheet
  - final: 3 double sided letter size sheets (keep the ones from the midterms)
- Make-up for midterms: only with permission and for appropriate reasons. As a rule make-ups are given before the regular exam times
textbook

Essential College physics, Volume 1
by Andrew Rex and Richard Wolfson
Publisher: Addison Wesley

We will follow (mostly) the order of the book
Study suggestions

1. Before doing the homework, make a 1-2 page review of the relevant chapter (use lecture notes and/or textbook).

2. The overview should contain key conceptual points, basic definitions and equations.

3. Use the overview to do the LON-CAPA homework. Update the overview where necessary (e.g. if you miss info to solve a problem).

4. Keep up with the lectures.

5. By the time the exams come, you’ll already have a good overview that you can use to study and review.

6. Revisit LON-CAPA problems and practice more (review lecture/textbook etc).
...continued

- When you feel you understand the material well, make your equation sheet.
- Use the equation sheet to practice old exams/problems. Update sheet where necessary.
- Revise and Continue practicing most problematic areas.
- If you tend to make many small mistakes (unit conversions, units, math: make space on your equation sheet for those).
DON'T...

o...use LON-CAPA postings by others before you have given a problem a **genuine** try yourself first. If you have to look very often for what others do to solve the homework, it means you do not understand the material well.

o...try to memorize LON-CAPA problems; it is unlikely you will get problems in exams that are exactly like the homework.

o...base your whole studies on LON-CAPA. Bring variation in your studies and practice other questions

o...wait until the last weeks of the semester to ask for help if you don't do well but work hard.

o...cheat in exams/quizzes (use only your own clicker)
DO...

o...read the syllabus
o...go to the helproom if you get stuck.

o...go to the helproom for questions other than the homework
o...work together, but remember that in exams you are on your own

o...ask me for help if you work hard and still do not perform well on the exams (the earlier the better)

o...ask any question you like; the only stupid question is the question you do not ask.

o...call me 'Remco’, instead of Dr./Prof. Zegers
finally

- To contact me, use email or talk to me after class (I might still ask you to send an email), only use phone in emergencies.
- To avoid having your email end up in my spam folder:
  - Use your msu email (not yahoo, gmail etc etc)
  - Use an identifying subject for email.
- I try to answer as soon as possible. If you have not heard back from me after 2-3 days, please resend or talk to me after class.