Intro Physics Lab
Physics 204
Syllabus Summer 2015

Professor: Dr. Josh Peterson
Email: jipers@uoregon.edu
Office: Willamette Room 177 (But you will probably find me in the lab room)
Office Hours: 11 AM – 1 PM Monday, Wednesday, Thursday Or by appointment.

Graduate Teaching Assistants:
Name: Jonathan Mackrory
Office: Willamette 272
Office hours: 12 – 1 Tuesday, Friday
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Undergraduate Teaching Assistants:
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Class periods: 1 - 3:20, 3:30 - 5:50, 6:00 – 8:20

More Stuff:
TextBook: “RealTime Physics, Active Learning Laboratories, Module 1 Mechanics”, Author Sokoloff
• Supplemental Handouts: See Blackboard for weekly lab handouts
• This course is the laboratory complement to Physics 201 lecture.

Grading:
F < 60
60 < D < 67 < D plus < 70
70 < C < 77 < C plus < 80
80 < B < 87 < B plus < 90
90 < A < 97 < A plus

Students getting less than 50% on the final exam will fail the course regardless of the score calculated via the points breakdown.

Grading Breakdown
• 30% Completion of daily lab packets
• 40% Correctness of daily homework
• 30% Final Exam

• Each daily lab packet is worth 14 points
  • 6 points for completion of lab
  • 8 points for correctness of homework

• Breakdown of completion points:
  • Each lab activity consists of the following:
    • Prelab (1 point)
    • Lab activity (3 points)
    • Checkpoints (1 point)
    • Cleanup (1 point)
  • Failure to turn in any one of these documents will result in lost points

• Breakdown of homework correctness points:
  • At the end of lab you will be given a homework assignment.
  • The assignment will test your understanding of the material that you should have learned in lab.
  • The assignment is given to you at the end of class, so that you are forced to learn all aspects of the lab and not just what is on the homework assignment.
  • It is your responsibility to learn the material in lab.

• Condition 1: The lowest lab score will be dropped.

• Condition 2: Students getting less than 50% on the final exam will fail the course regardless of the score calculated via the points breakdown.

• Condition 3: At least 50% of the final exam will be problems you have already seen, (with slight modifications).
Lab Course Schedule:

<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Lab activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. M</td>
<td>June 22</td>
<td>Math quiz, Exploring position, velocity, acceleration</td>
</tr>
<tr>
<td>2. W</td>
<td>June 24</td>
<td>Position, velocity, acceleration, and time (Selected textbook activities, Lab 1 &amp; 2)</td>
</tr>
<tr>
<td>R</td>
<td>June 25</td>
<td>NO CLASS (PETERSON IS OUT OF TOWN)</td>
</tr>
<tr>
<td>3. M</td>
<td>June 29</td>
<td>Going away and coming back (Selected textbook activities, Lab 2, 6, non-workbook)</td>
</tr>
<tr>
<td>4. W</td>
<td>July 1</td>
<td>Newton’s Second Law (Selected textbook activities, Lab 3, 5)</td>
</tr>
<tr>
<td>5. R</td>
<td>July 2</td>
<td>Atwood’s Machine (Non-workbook activity)</td>
</tr>
<tr>
<td>6. M</td>
<td>July 6</td>
<td>Projectile Motion (Non-workbook activity)</td>
</tr>
<tr>
<td>7. W</td>
<td>July 8</td>
<td>Work and energy (Textbook activities, Lab 11)</td>
</tr>
<tr>
<td>8. R</td>
<td>July 9</td>
<td>Conservation of energy (Textbook activities, Lab 12, non-workbook)</td>
</tr>
<tr>
<td>9. M</td>
<td>July 13</td>
<td>Conservation of momentum (non-workbook)</td>
</tr>
<tr>
<td>10 W</td>
<td>July 15</td>
<td>Rotation lab (non-workbook)</td>
</tr>
<tr>
<td>R</td>
<td>July 16</td>
<td>Final Exam (comprehensive)</td>
</tr>
</tbody>
</table>

The Lab Daily Routine:

- Print the lab from blackboard before class
- Complete the prelab before the start of class
- Your instructor will periodically check your prelab for completeness
  - Incomplete prelabs will not be accepted
- Do (and understand) the lab
- Get and do the homework assignment
- Completed lab packets are due at the start of the following class period.
- Late work will entail a 1 point penalty per class period it is late (on 14 point scale)

Course Objectives:

- Explore the basic principles of the introductory physics course in a laboratory setting.
- Devise experiments to obtain useful quantities for solving problems.
- Practice extracting data from graphs and instruments.
- Practice thinking critically and quantitatively about the world around us.
- Practice doing math in a practical setting

Final Exam:

- You will be allowed to use an equation cheat sheet on the final exam. (you make your own sheet)
  - One sheet, both sides, 8.5 x 11”
- Students should plan on taking the final exam during the final day of class (July 16)
  - DO NOT PLAN ON TAKING THE EXAM EARLY.
- List of things that are valid excuses with valid documentation for taking the exam at a different time
  - Death in family
  - Severe Illness
- List of things that are not valid excuses for taking the exam at a different time.
  - Airplane tickets
  - Non-medical family things (graduation, family reunion, vacation, wedding, etc.)
  - Special testing needs
  - Work related issues
  - Personal issues
  - Other incidental things
- Students wishing to take the exam at a time other than the scheduled test date will entail a 25% penalty on their exam score.

Attendance Policy:

- If you know that you are going to miss a lab, contact Peterson beforehand. It is easiest for you and me, if you simply come to a different section of the lab. The night class has some open seats.
- If you can not make it to another section of the class, contact Peterson to arrange a make up time.
- Make up labs must be completed within 1 week of the missed class.
- The lowest lab score will be dropped.

Disabilities:

- I’m fully committed to help each and every student perform to the best of their ability in this class.
- For students with special testing needs, a secondary quiet classroom will be available for you to take your test.
- Contact Peterson if this is not a suitable solution to your needs and we will work something out.