Intro Physics Lab  
Physics 204  
Syllabus Fall 2014

**Professor:** Dr. Josh Peterson  
Email: jpeterson4@uoregon.edu  
Office: Willamette Room 177 (But you will probably find me in the lab room)

*Office Hours: 10 AM – 12 PM Thursday, 10 – 2 PM Friday Or by appointment.*

### Teaching Assistants:

<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>Office</th>
<th>Office hours</th>
<th>Drop in center</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Blaikie</td>
<td>Monday 3 PM</td>
<td>Willamette 76</td>
<td>Thursday 9 – 10 AM</td>
<td>____________</td>
<td><a href="mailto:ablaikie@uoregon.edu">ablaikie@uoregon.edu</a></td>
</tr>
<tr>
<td>Caleb Holt</td>
<td>Monday 7 PM</td>
<td>Willamette 216</td>
<td>Thursday 2:30-3:30 PM</td>
<td>____________</td>
<td><a href="mailto:cholt@uoregon.edu">cholt@uoregon.edu</a></td>
</tr>
<tr>
<td>Robert Rogers</td>
<td>Tuesday 9 AM</td>
<td>Willamette 219</td>
<td>____________</td>
<td>____________</td>
<td><a href="mailto:rdr@uoregon.edu">rdr@uoregon.edu</a></td>
</tr>
<tr>
<td>Brandon Schlomann</td>
<td>Tuesday 12:30 PM</td>
<td>Willamette 220</td>
<td>Thursday 11 -12 AM</td>
<td>____________</td>
<td><a href="mailto:bschloma@uoregon.edu">bschloma@uoregon.edu</a></td>
</tr>
<tr>
<td>Teddy Hay</td>
<td>Tuesday 3 PM</td>
<td>Willamette _________</td>
<td>____________</td>
<td>____________</td>
<td><a href="mailto:Edouardh@uoregon.edu">Edouardh@uoregon.edu</a></td>
</tr>
<tr>
<td>Jordan Palamos</td>
<td>Tuesday 7 PM</td>
<td>Willamette 315</td>
<td>____________</td>
<td>____________</td>
<td><a href="mailto:jpalamos@uoregon.edu">jpalamos@uoregon.edu</a></td>
</tr>
<tr>
<td>William Dumas</td>
<td>Wednesday 3 PM</td>
<td>Willamette 231</td>
<td>____________</td>
<td>____________</td>
<td><a href="mailto:dumas2@uoregon.edu">dumas2@uoregon.edu</a></td>
</tr>
<tr>
<td>Josh Frye</td>
<td>Wednesday 10 AM</td>
<td>Willamette _________</td>
<td>____________</td>
<td>____________</td>
<td><a href="mailto:jfrye@uoregon.edu">jfrye@uoregon.edu</a></td>
</tr>
<tr>
<td>Kevin Walton</td>
<td>Wednesday 3 PM</td>
<td>Willamette 217</td>
<td>Friday 1 – 2 PM</td>
<td>____________</td>
<td><a href="mailto:kwalton@uoregon.edu">kwalton@uoregon.edu</a></td>
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### 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 Breakdown

- **40%** Completion of weekly lab packets
- **20%** Correctness of weekly lab packets
- **5%** Quiz 1 (Kinematics)
- **5%** Quiz 2 (Forces)
- **5%** Quiz 3 (Energy and Momentum)
- **25%** Final Exam (Comprehensive)

#### Grading:

- F < 60
- $60 < D_{\text{minus}} < D < 67 < D_{\text{plus}} < 70$
- $70 < C_{\text{minus}} < C < 77 < C_{\text{plus}} < 80$
- $80 < B_{\text{minus}} < 83 < B < 87 < B_{\text{plus}} < 90$
- $90 < A_{\text{minus}} < 93 < A < 100 < A_{\text{plus}}$

- Each weekly lab packet consists of:
  - Prelab (2 points)
  - Lab activity (4 points)
  - Homework (2 points)
  - This collection of materials will be recorded as one score out of 8 points. (toward the 40%)
- Each lab will be graded for completeness (40%) and selected questions will be graded for correctness (20%).
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
• Write up the lab report and answer homework questions.
• Completed lab packets are due Friday at 2 PM in the homework box.
• Late work will entail a 10% penalty per day it is late

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 labs. The night classes have some open seats.
• If 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.

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

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.
• Bridge the gap between equations on a page and the physical world

Quizzes:
• If you missed a quiz due to an excused absence, an alternate quiz will be given to you. Contact Peterson to arrange a make up quiz time. Unexcused absences will not be allowed to take the quiz.
• Quizzes will be approximately 15 minutes long taken at the start of class. They will be open notes.
• Quizzes will be variations on the lab and homework questions. If you truly understand the lab, the quizzes should not be challenging.

Final Exam:
• Students should not plan on taking the final exam early. Airplane tickets are not a valid excuse. Students wishing to take the exam before the scheduled test date will entail a 25% penalty.
  • PLAN ON TAKING THE TEST AT THE SCHEDULED TIME!!! (Dec 11, at 5 PM )
• You will be allowed to use an equation cheat sheet on the final exam.
  • Start on your equation sheet early. It will help you with the rest of the course.

Lab Course Schedule:
<table>
<thead>
<tr>
<th>Date</th>
<th>Lab activity</th>
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<tbody>
<tr>
<td>Sept, 29 – Oct, 1</td>
<td>Math quiz, getting used to Logger Pro</td>
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<tr>
<td>Oct, 6 – 8</td>
<td>Position, velocity, acceleration, and time</td>
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<tr>
<td>Oct, 13 – 15</td>
<td>Getting used to forces</td>
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<td>Oct, 20 – 22</td>
<td>F = MA and gravity</td>
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<td>Oct, 27 – 29</td>
<td>Gravity</td>
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<td>Nov, 3 – 5</td>
<td>Projectile Motion</td>
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<td>Nov, 10 – 12</td>
<td>Work and energy</td>
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<tr>
<td>Nov, 17 – 19</td>
<td>Conservation of energy/momentum lab</td>
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<tr>
<td>Nov, 24 – 26</td>
<td>Conservation of energy/momentum (take home assignment)</td>
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<tr>
<td>Dec, 1 – 3</td>
<td>Rotation lab</td>
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<tr>
<td>Thursday, Dec 11, 5 PM</td>
<td>Final Exam (comprehensive)</td>
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Tentative schedule, dates may change.