Foundations of Physics Lab  
Physics 290  
Syllabus Fall 2013

Professor: Dr. Josh Peterson  
Email: jpfeterson4@uoregon.edu  
Office: Willamette Room 45  
Office Hours: Monday 14:00 – 15:00   Wednesday 13:00 – 14:00  
Tuesday 13:00 – 14:00   Or by appointment or when you see me.

Teaching assistants:
Savannah Logan  
Email: slogan@uoregon.edu  
Office: Willamette 218  
Office Hours: TBA  
Drop in center hours: Friday 9 - 10  
Michael Dillard  
Email: mdillard@uoregon.edu  
Office: Willamette 219  
Office hours: TBA  
Drop in center hours: Tuesday, 9-10

UTA: Nathan Wilson  
npw@uoregon.edu  
Office: Willamette 112 A

More Stuff:
- Lecture Class Room: Willamette 110 (Tuesday 10:00 – 11:00)  
- Lab Class Room: Willamette 17  
  Logan: Thursday 10:00-11:50   Dillard: Thursday 12:00-13:50  
  Logan: Thursday 14:00-15:50   Dillard: Thursday 17:00-18:50  
- TextBook: See Blackboard for weekly lab handouts.  
  Course webpage: blackboard.uoregon.edu  
  Course information will be posted weekly, make sure you can see the blackboard page!!!  
  Upcoming lab information will be posted by Tuesday morning.  
- This course is the laboratory complement to McMorran’s Physics 251 lecture.

Resources for confused students:
- Use your instructor and TA’s. You are paying us to teach you. Ask us questions if you are confused.  
- Physics drop in center: Willamette 147. Check schedule on door for hours.  
- Your textbook  
- Your classmates

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.

Lecture Routine:
- Discuss problems with the previous lab.  
- Discuss upcoming lab.  
- See the equipment  
- Work example problems  
- Bridge the gap between equations on a page and the physical world
The Lab Daily Routine:

- Print the lab from blackboard before class
- Turn in prelab at the start of class
  
  The reason it is called prelab is because it is done before you walk into the lab
  
  Late Prelabs will not be accepted
- Do the lab
  
  Work in groups (ideally three people)
- Write up the lab report and answer questions.
  
  Completed lab reports are due at 4 PM Friday
  
  Turn in to Homework box, (Near Willamette Room 009)

Grading:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Component</th>
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<tbody>
<tr>
<td>A</td>
<td>90 -100%</td>
<td>15% Prelab</td>
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<tr>
<td>B</td>
<td>80-90%</td>
<td>60% Lab reports and questions:</td>
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<tr>
<td>C</td>
<td>70-80%</td>
<td>25% Final exam</td>
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<tr>
<td>D</td>
<td>60-70%</td>
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<td>F</td>
<td>0-60%</td>
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Lab Course Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab activity</th>
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<tbody>
<tr>
<td>Oct - 3</td>
<td>Intro &amp; Maple seed study</td>
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<tr>
<td>Oct - 10</td>
<td>1d &amp; 2d kinematics #1</td>
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<tr>
<td>Oct - 17</td>
<td>1d &amp; 2d kinematics #2</td>
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<td>Oct - 24</td>
<td>Newton's Laws #1</td>
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<tr>
<td>Oct - 31</td>
<td>Newton's Laws #2</td>
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<tr>
<td>Nov - 7</td>
<td>Work/Energy/Momentum #1</td>
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<tr>
<td>Nov - 14</td>
<td>Work/Energy/Momentum #2</td>
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<td>Nov - 21</td>
<td>Work/Energy/Momentum #3</td>
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<td>Nov - 28</td>
<td>Out of classroom experiment (Thanksgiving week)</td>
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<td>Dec - 5</td>
<td>TBA</td>
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<tr>
<td>Final Exam</td>
<td>8:00 Mon, Dec – 9</td>
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The Bold Print:

You must complete all laboratory work to pass the course. If you are absent you must schedule make-up work. If it is an absence because of illness/injury or other legitimate reason you may make-up the work without penalty. Any other make-up work that is accepted will entail a late-penalty. Note that for the 290 labs an absence begins 10 minutes after the official start time as measured by the instructor on-duty. If you are later than this you will be required to depart and schedule a make-up session.

Disabilities:

I’m fully committed to help each and every student perform to the best of their ability in this lab. The “accessible education center” (http://aec.uoregon.edu) exists to help students achieve the access to educational resources. If you anticipate needing special consideration or accommodation in phys290 please contact me immediately so we may discuss your situation.