PHY 2216 – General Physics Laboratory

Spring 2017

Instructor: Travis Merritt
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Email: tmerritt@vt.edu
Office Hours: By Appointment Only
Lab Portal: www.phys.vt.edu/~labs

Office Hours and Email Policy
If you have questions regarding the lab, I am available to answer those questions either during my office hours or by email. During normal business hours, I will answer emails for two hours a day, typically 8-10 AM, in the order in which those emails are received. You are responsible for all information found in this syllabus and on the lab portal. If the answer to your question can be found in either source, I will respond either “See the syllabus” or “That information can be found on the physics lab portal site.”

Lab Manual (Required)
Laboratory Manual can be purchased from either the University Bookstore on campus or the Tech Bookstore. Be sure that your manual contains Labs 11 - 20, is labeled “Physics 2216,” and has the appropriate year (2016 – 2017) on the cover. You must bring your lab manual to each laboratory session since it contains material that you will submit for grading at the end of each lab session. If your lab manual is unavailable to you for a given week, you must contact Travis Merritt to discuss your options.

No additional equipment is required for PHYS 2216. There is no dress code for the lab and you are not required to purchase lab kits of any kind. The lab team provides you with a computer workstation, lab software, and any necessary sensors or equipment.

Associated Lecture
This Lab course is a companion to the General Physics Lecture course (PHY 2206). The Lab and Lecture courses should be taken concurrently; however, you are not required to do so. The general objective of this lab course is to give you tangible experience with experiments that utilize the theories and laws of Thermodynamics, Optics, Electricity, and Magnetism.
Lab Sessions
The labs meet once a week and each session is 1 hour and 50 minutes in duration. The labs are intended to be completed in this time. No portion of the lab may be completed outside of the lab room. Students will perform each lab in groups of 2-4. The TAs in the room may move students around in the lab room in order to maintain a productive, respectful, and educational atmosphere. At the end of each lab session, you will hand in your entire lab (with pages in sequential order and stapled together) at the end of each session.

The labs are meant to supplement your understanding of lecture material. Though, the content of some labs is not explicitly covered in the lecture. It is essential that you come to lab prepared by referencing the lecture textbook beforehand.

Attendance
There are 10 laboratory sessions scheduled for Spring of 2017. If you are more than 10 minutes late for the lab, then your TA will ask you to leave and come back for a make-up session. (See the section entitled “Lab Make-ups”).

Grading
The lab reports represent 100% of the possible credit for the course. Each lab report is graded out of 100pts and the scores are reported both on your returned lab report and on Canvas. The grade for a missed lab will be recorded as 0.

Your TA is expected to grade a lab report and post that grade on Canvas no later than the following week in which that lab took place. Your graded lab reports should be returned to you in the following session. However, you are responsible for retrieving graded lab reports from your TA. Furthermore, you are responsible for verifying that your Canvas-posted grades match the grades that you received on your returned lab reports.

If you do not receive your graded lab report from your TA within one week of performing the lab, discuss the matter with your TA. If this does not resolve the issue, contact Dr. Merritt by email.

There are 1000 possible points to be earned in the class (10 labs worth 100pts each) and letter grades (assigned to your scores at the end of the semester) are distributed in the following way:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>95.00 % - 100.0 %</td>
</tr>
<tr>
<td>A-</td>
<td>90.00 % - 94.99 %</td>
</tr>
<tr>
<td>B+</td>
<td>85.00 % - 89.99 %</td>
</tr>
<tr>
<td>B</td>
<td>80.00 % - 84.99 %</td>
</tr>
<tr>
<td>B-</td>
<td>75.00 % - 79.99 %</td>
</tr>
<tr>
<td>C+</td>
<td>70.00 % - 74.99 %</td>
</tr>
</tbody>
</table>
C  65.00 % - 69.99 %  
C-  60.00 % - 64.99 %  
D+  55.00 % - 59.99 %  
D   50.00 % - 54.99 %  
D-  45.00 % - 49.99 %  
F   00.00 % - 44.99%

Note that grade divisions are exact and the letter grade you receive is reflective of your score to the hundredths of a percentage point. Any rounding occurs at the thousandth of a percentage point and smaller. It is your responsibility to keep track of your grades throughout the semester. You should keep all returned work in the event that an error occurs in the Canvas grade book.

**THERE IS NO FINAL EXAM FOR PHYS 2216**

**Disputing a Lab Score**

If you believe that your lab report was improperly graded, you must first discuss the matter with your TA. If you are unsatisfied with the outcome of that discussion, you may contact the Instructor directly and set up an appointment. All lab score disputes must be made within 1 week of having received a grade for a given lab. No points will be awarded at the end of the term for lab score disputes.

If a grade on one of your lab reports does not match the grade posted on Canvas, that grade in Canvas can only be changed by presenting the graded lab report to either your TA or Dr. Merritt. The deadline for disputing a missing lab grade is 5 PM on Reading Day.
Lab Make-ups

Schedule of make-up sessions
Make-up sessions are held at the end of the term. The end-of-term make-up sessions are scheduled for the week of April 24th and times that labs regularly meet. These times can be found by visiting the lab portal and following the appropriate links.

Requesting a make-up session
In order to attend a make-up session, you must fill out a make-up request form. This form is available at either the Physics Lab Portal or under the Modules tab on the Canvas page for the 2216 lab course. This form must be filled out correctly and completely in order for your make-up request to be considered. Upon submission of your make-up request, you will receive an automated confirmation e-mail documenting your request. Within 24 hours or on the next business day of this confirmation, you will receive an e-mail from the Instructor indicating that your make-up request has been processed. This e-mail will contain information regarding the Instructor’s decision concerning your make-up request and, if applicable, the time and place in which you will perform your make-up lab.

In addition to your make-up request, you may be required to submit supporting documentation. This documentation must come from official sources such as medical institutions (notes form a doctor), a University Office (such as the Dean of Student’s office), etc. Failure to provide the required documentation in a timely fashion will result in a make-up designation of unexcused (See Make-up credit)

Make-up requests must be submitted within 1 week of your absence, with the exception of the last lab of the semester (Lab 20). For Lab 20, make-up requests must be submitted by 12 PM on April 22nd). Make-up requests that are submitted more than 1 week after your absence are considered only in extreme circumstances, such as hospitalization or other forms of incapacitation. In these cases, your request must be supplemented with supporting documentation.

Make-up credit
Each make-up request will be assessed and given a designation based upon your reason for missing a given lab: Excused, Unexcused, or Denied. You may not make up more than 2 unexcused absences during the end of term make-up sessions.

Excused: If your absence from a given lab is excused, you will be granted the opportunity to make up your lab for full credit.

Unexcused: If your absence is unexcused, you will be granted the opportunity to make up your lab for partial (half) credit.

Denied: Your request may be denied for several reasons:
- Excessive make-up requests
• Submitting the form after 1 week without reasonable justification
• Missing the end of term make-up sessions
• Failure to submit documentation when requested by the Instructor
• Status of your current request is unexcused (for the end of term make-up sessions) and you have already requested and been granted two unexcused make-ups.

**Honor System Policy:**
While partners are expected to share the effort of completing the lab, each student is required to respond to predictions and questions in their own words. Copying off of your lab partner(s) is considered a violation of the Virginia Tech Honor Code and all violations will be prosecuted.

**Special Accommodations**
If you require special accommodations in the lab room, you should contact the Instructor as soon as possible. Documentation will need to be provided from the SSD office. The Instructor will do everything possible to make arrangements so as to accommodate you.