

# University Physics Laboratory II (Physics 2181)

## Course summary

Physics 2181 is the laboratory class associated with Physics 2180. The lab manual will be posted on Canvas as individual files. They will become available several days before the scheduled lab time. Students are expected to be prepared for the experiments and follow instructions in the laboratory manual. Unless otherwise notified, it is your responsibility to download, print, and read the lab materials before class. You will not be able to print the lab materials during class.

## Schedule

Dates	Lab experiment
1/11 (M) - 1/15 (F)	NO LAB *
1/18 (M)	NO CLASSES - MARTIN LUTHER KING DAY
1/19 (T) - 1/25 (M)	1 - Electrostatics
1/26 (T) - 2/1 (M)	2 - Equipotential lines
2/2 (T) - 2/8 (M)	3 - Current vs. voltage
2/9 (T) - 2/15 (M)	4 - Kirchhoff's rules (Part 1)
2/16 (T) - 2/22 (M)	4 - Kirchhoff's rules (Part 2)
2/23 (T) - 3/1 (M)	5 - Oscilloscope
3/2 (T) - 3/8 (M)	Discussion of Lab Report 4
3/9 (T) - 3/12 (F)	6 - RC circuits (Part 1)
3/15 (M) - 3/19 (F)	NO CLASSES - SPRING BREAK
3/22 (M)	6 - RC circuits (Part 1)
3/23 (T) - 3/29 (M)	6 - RC circuits (Part 2)
3/30 (T) - 4/5 (M)	7 - Charge to mass ratio of electron
4/6 (T) - 4/12 (M)	Discussion of Lab Report 6
4/13 (T) - 4/19 (M)	8 - Magnetic forces & induced emf
4/20 (T) - 4/26 (M)	NO LAB *

\* Other classes still meet these days

## Lab worksheets

While you perform each week's experiment, you will neatly complete a lab worksheet. Unless otherwise noted, all lab worksheets are due at the end of the lab period in which the lab was done. Included in your worksheet grade will be your instructor's evaluation of your participation in the lab. Don't expect full credit if you do not actively participate.

## Formal lab reports

For two labs, you will write formal lab reports **individually**. A separate lab report guide will be posted. You will be expected to spend some time outside class working on formal lab reports.

## Expectations for students participating in a cooperative classroom

Learning in a cooperative environment should be stimulating, demanding, and fair. Because this approach to learning is different from the competitive classroom structure that some other courses are based on, it is important for us to be clear about mutual expectations. Below are the expectations for students in PHY 2181. This set of expectations is intended to maximize the exchange of ideas in an atmosphere of mutual respect while preserving individual ownership of ideas and fairness of work.

- Students are expected to work cooperatively with other members of the class and show respect for ideas and contributions of others.
- When working as part of a group, students should strive to be good contributors to the group, listen to others, not dominate, and recognize the contributions of others.
- Students should ensure that everyone in the group makes a contribution, and recognize that everyone contributes in different ways to a group process.

As part of your grade, you will be asked to sign a statement that you have read and understood the above expectations. Participation will also be an explicit part of your grade for each lab worksheet.

## Late work & missed labs

Due dates for coursework will not be extended except in rare circumstances affecting a large number of students. Coursework submitted late (after the due date) will receive 0 points.

You may only attend the lab section for which you are registered. Arriving more than 15 minutes late to class will count as missing that lab. There are no make-up labs. If you miss a lab for any reason, you will receive a 0 for that lab worksheet. This class meets a limited number of times during the semester, and you are aware of the course schedule when you register for classes. Therefore, you should plan ahead and attend every class.

Of course, everyone experiences unexpected circumstances occasionally, and these may cause you to miss a lab. To accommodate these situations, the lowest lab worksheet score will be dropped at the end of the semester. If you miss a lab designated for one of the formal lab reports, you are still responsible for writing a formal lab report; you may be asked to write a formal lab report for a different lab.

## Grading

The points used to determine your grade are:

Item	Points	Quantity	Total
Lab worksheets	15 each	7*	105
Formal lab reports	40 each	2	80
Signed statement for cooperative classroom	20	1	20

\*The lowest lab worksheet score is dropped.

Your letter grade is determined by the percentage of points you earn out of the maximum number of points for the class according to the grading scale:

A	85% - 100%
B	75% - 85%
C	65% - 75%
D	55% - 65%
F	0% - 55%

Copying another student's lab worksheet or lab report will result in a 0 for that assignment (see the section below on academic dishonesty).

## E-mail

Email will be our most commonly used mean of communication outside of class. Please keep in mind that emails to your professors and TAs are professional correspondence and should be treated as such. Rude or improper emails will not be answered. Please include the course in the subject line of any emails you send to your instructors

("PHY2181" for this class). Please allow your instructor 24 hours to respond to your email. All emailing must be done using your @wayne.edu account or through Canvas.

## Student disabilities

If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. The SDS telephone number is 313-577-1851 or 313-202-4216 for videophone use. Once you have met with your disability specialist, I will be glad to meet with you privately during my office hours to discuss your accommodations. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University. You can learn more about the disability office at [www.studentdisability.wayne.edu](http://www.studentdisability.wayne.edu)[Links to an external site.](#).

## Academic dishonesty -- cheating & plagiarism

Academic misbehavior means any activity that tends to compromise the academic integrity of the institution or subvert the education process. All forms of academic misbehavior are prohibited at Wayne State University, as outlined in the Student Code of Conduct (<http://www.doso.wayne.edu/student-conduct-services.html>[Links to an external site.](#)). Students who commit or assist in committing dishonest acts are subject to downgrading (to a failing grade for the test, paper, or other course-related activity in question, or for the entire course) and/or additional sanctions as described in the Student Code of Conduct.

**Cheating:** Intentionally using or attempting to use, or intentionally providing or attempting to provide, unauthorized materials, information or assistance in any academic exercise. Examples include: (a) copying from another student's test paper; (b) allowing another student to copy from a test paper; (c) using unauthorized material such as a "cheat sheet" during an exam.

**Fabrication:** Intentional and unauthorized falsification of any information or citation. Examples include: (a) citation of information not taken from the source indicated; (b) listing sources in a bibliography not used in a research paper.

**Plagiarism:** To take and use another's words or ideas as one's own. Examples include: (a) failure to use appropriate referencing when using the words or ideas of other persons; (b) altering the language, paraphrasing, omitting, rearranging, or forming new combinations of words in an attempt to make the thoughts of another appear as your own.

Other forms of academic misbehavior include, but are not limited to: (a) unauthorized use of resources, or any attempt to limit another student's access to educational resources, or any attempt to alter equipment so as to lead to an incorrect answer for

subsequent users; (b) enlisting the assistance of a substitute in the taking of examinations; (c) violating course rules as defined in the course syllabus or other written information provided to the student; (d) selling, buying or stealing all or part of an un-administered test or answers to the test; (e) changing or altering a grade on a test or other academic grade records.

In this course, the minimum penalty for the first instance of cheating by a student is a grade of 0 for the work in question (homework assignment, quiz, exam, etc.). This 0 grade may not be dropped or replaced. Repeated instances of cheating will result in a failing grade for the course. For all instances of cheating, the Department of Physics and Astronomy will be notified to ensure that the procedures described in the Student Code of Conduct are followed.