

Laboratory for Introductory Physics for Life Sciences (II) PHY 124 Spring 2017

TABLE OF CONTENTS

[About](#)

[Scope](#)

[Overview](#)

[Calendar](#)

[Reporting Problems](#)

[About](#)

This is the organizational page for the Physics Introductory Labs PHY 124 for Spring 2017.

Instructors

R. Lefferts

Director of UG Laboratory

B. Nielsen

Teaching Assistants

Zhenyue Chen	zhenyue.chen@stonybrook.edu
Peter Jones	peter.jones@stonybrook.edu
Shilin Liu	shilin.liu@stonybrook.edu
Youngshin Kim	youngshin.kim.1@stonybrook.edu
Sahand	
Seifnashri	sahand.seifnashri@stonybrook.edu
Yue Wang	yue.wang.4@stonybrook.edu
Farid Salazar Wong	farid.salazarwong@stonybrook.edu

[Back to Top](#)

Scope

The scope of the introductory labs is to give an understanding of basic experimental methods applied in physical sciences. The experiments performed during the lab sessions are closely related to the topics covered in the lecture.

[Back to Top](#)

Overview

You will perform each week an experiment as indicated in the [Calendar](#) section. You have 1 hr 50 min time to perform each experiment. Each experiment will come with a manual that you can access from this webpage. Your performance in the lab session will be evaluated by your teaching assistant. The evaluation is based on the introduction of your lab report that you have to write up and submit to your TA at the beginning of the session and your performance during the experiment that includes a final written report that will be submitted in the week following the lab experiment. Please refer also to [Lab Reports](#).

Your performance/report will count 100%, of which the introduction is worth up to 10%, toward your grade

on the particular lab experiment.

Your lab report should give the reader a chance to get a picture of the experiment and what you have done without having the lab manual in their hand. You should not copy excerpts from the manual or only refer to passages in the lab manual. The lab report has to have the following format:

- **Title sheet**

Name, lab-section, TA name, partner name(s), name of experiment, date

- **Introduction [10 pts]**

In your own words: briefly describe the experiment, DO NOT copy the lab manual

Describe how to perform the experiment with a short sketch and text

- **Procedure [20 pts]**

Describe briefly what you have done during the session

- **Data sheet [20 pts]**

Include data taken which has been analyzed, clear and neat

Have your TA signed your data sheet before you leave the lab

- **Analysis/Discussion [40 pts]**

Graphs, calculations, uncertainty estimates

- **Conclusion [10 pts]**

Brief summary of results: physics implied by the data

Any caveats or comments

Σ [100 pts]

IMPORTANT: You have to submit your first lab report 48 hours after your lab experiment finished. Please refer to your Teaching Assistant for details. For and after your second experiment you have to submit your lab report the latest at the beginning of the next lab session following the experiment performed.

Penalties for late submission

Any lab report submitted after that deadline will not be considered and receive zero points for the lab experiment.

Your final grade will be an average from your single lab grades scaled by a factor that will be determined at the end of the semester. This final grade will be part of your mothercourse's grade weighted with 20%. This grade will be included in the grade of the mother-course and you receive a combined grade for PHY122 and PHY124 which will be the same for both courses.

You are required to perform each lab experiment by yourself, mostly together with a lab partner. If you need to be absent for a lab experiment you will have to provide written documentation for a significant reason to be absent, e.g., a medical note from your doctor, a written document about jury duty, and similar. You will then have the opportunity to make up the lab experiment in the dedicated make-up week. You have to arrange with your teaching assistant for a make-up session. If you are absent for a non-excusable reason your lab grade for that particular experiment will be Zero (0) points!

[Back to Top](#)

Calendar

The first lab sessions will take place in the week starting from **Monday, January 23**.

For grading policy and methods please refer to:

TBA

The [TENTATIVE until January 23] sequence of Labs in PHY 124 is the following:

Lab 0: January 23 - January 27 [Introduction to the laboratory and Uncertainty, Error & Graphs](#). (Note: the link goes to the PHY123 webpage, but the content is the same)

Lab 1: January 30 - February 03 [The Electric Field](#)

Lab 2: February 06 - February 10 [The Oscilloscope](#)

Lab 3: February 13 - February 17 [DC Circuits](#)

February 20-24: Make-up Lab Week for Labs 1 - 3. No lab classes.

Lab 4: February 27 - March 03 [Magnetic Force 1](#)

Lab 5: March 06 - March 10 [Charge-to-Mass Ratio \(e/m\) of the Electron](#)

March 13 - 17: SPRING BREAK. No lab classes.

Lab 6: March 20 - March 24 [Magnetic Field/Induction](#)

Lab 7: March 27 - March 31 [AC circuits](#)

April 03 - 07: Make-up Lab Week for Labs 4 - 7. No lab classes.

Lab 8: April 10 - April 14 [Optics](#)

Lab 9: April 17 - April 21 [Interference and Diffraction](#)

Lab 10: April 24 - April 28 [Atomic Spectra](#)

May 01 - 05: Make-up Lab Week for Labs 8 - 10.

LABORATORY SCHEDULE & TEACHING ASSISTANTS:

Updated January 22, 2017

Section	When	Where	Teaching Assistant
PHY124 L01	Mo 12:00pm - 1:50pm	A-120	Zhenyue Chen
PHY124 L02	Mo 12:00pm - 1:50pm	A-118	Youngshin Kim
PHY124 L03	Mo 2:30pm-4:20pm	A-120	Zhenyue Chen
PHY124 L04	Mo 2:30pm-4:20pm	A-118	Youngshin Kim
PHY124 L05	Mo 4:30pm-6:20pm	A-120	Sahand Seifnashri
PHY124 L07	Tu 6:00pm - 7:50pm	A-120	Peter Jones
PHY124 L08	Tu 6:00pm - 7:50pm	A-118	Shilin Liu
PHY124 L09	Tu 1:00pm - 2:50pm	A-120	Sahand Seifnashri
PHY124 L10	Tu 1:00pm - 2:50pm	A-118	Farid Salazar Wong
PHY124 L11	We 2:30pm - 4:20pm	A-120	Farid Salazar Wong
PHY124 L12	We 2:30pm - 4:20pm	A-118	Yue Wang
PHY124 L13	We 6:00pm - 7:50pm	A-120	Peter Jones
PHY124 L14	We 6:00pm - 7:50pm	A-118	Shilin Liu
PHY124 L15	Th 1:00pm - 2:50pm	A-120	Richard Lefferts
PHY124 L16	Th 1:00pm - 2:50pm	A-118	Yue Wang

[Back to Top](#)

Reporting Problems

Please report any problem to either, your corresponding lab instructor or Mr. Lefferts.

[Back to Top](#)