

Guidelines for P234, 235, 236 and 237 Laboratories

10/2/03

Some general information:

Lab Instructor: Young-Kee Kim, ykkim@hep.uchicago.edu

Lab Staff: Van Bistrow (KPTC 310, x2-7013, vanb@uchicago.edu)

Mark Chantell (KPTC 209, x2-7012, chantell@hep)

Kate Cleary, KPTC 209, cake@midway

Lab TAs: RUOYU BAO <r-bao@uchicago.edu>,

VLADIMIR ALEXEEVICH BELYI <v-belyi@uchicago.edu>,

JUNG-REN HUANG <jhuang2@uchicago.edu>,

MINJOON PARK <mpark@uchicago.edu>

Lab Location: KPTC, rooms 005, 009.

Lab hours: 1:30pm - 5:20pm

Lab Manual: Available in bookstore

Laboratory Requirements

In order to receive a grade for this course you must perform four experiments and independently write formal lab reports for each. Reports are to be submitted according to the schedule provided below. Substantial penalties will be applied for late reports. Any late reports must be presented directly to the laboratory instructor.

Attendance

The laboratory instructor, the lab staff and TAs will help you get started on each experiment promptly at 1:30 pm, so please be punctual. If you know in advance that you will not be able to attend some of your laboratory sessions, please email the instructor and staff as soon as possible.

Assignments

The experiments will be assigned by the lab instructor. The laboratory manual is available at the bookstore. Please read the relevant portion of laboratory manual in advance of each lab session.

Lab Reports

Although the experiments will be done by groups of students and data will be shared, each student will independently prepare a formal report. The reports should be typed. Lab reports should contain:

- your name and the names of your lab partners and lab TA
- your lab section
- the dates the experiment was performed
- an abstract of what you have done
- a *brief* review of the theory
- *graphs* of your data. The raw data (or a copy of it) should appear in an appendix at the end of the report.

Over, please...

- analysis of the data
- a discussion of statistical and systematic uncertainties. Make use of *Introduction to Error Analysis* by John R. Taylor, for help with error analysis.
- a comparison of your results with literature values
- your conclusions

Deadlines

It is important that each report be submitted by the specified deadline. If you cannot meet the deadline for any reason, notify the instructor and arrange to submit your report IN PERSON. Please let the instructor know ahead of time if there is any problem. The reports should be turned in no later than 2 pm on the due dates shown below. The reports should be placed in the box labeled "P234, 5, 6, 7 Lab Reports" in KPTC 205. The TAs should return you graded reports by your next lab session.

		Experiment dates	Report Due Date
L1	Expt 1:	Fri, 10/3, Mon. 10/6	Mon. 10/13
	Expt 2:	Fri. 10/17, Mon. 10/20	Mon. 10/27
	Expt 3:	Fri: 10/31, Mon. 11/3	Mon. 11/10
	Expt 4:	Fri. 11/14, Mon. 11/17	Mon. 11/24
L2	Expt 1:	Tue. 10/7, Th. 10/9	Th. 10/16
	Expt 2:	Tue. 10/21, Th. 10/23	Th. 10/30
	Expt 3:	Tue. 11/4, Th. 11/6	Th. 11/13
	Expt 4 :	Tue. 11/18, Th. 11/20	Th. 11/27
L3	Expt 1	Fri. 10/10, Mon. 10/13	Mon. 10/20
	Expt 2	Fri. 10/24, Mon. 10/27	Mon. 1/3
	Expt 3	Fri. 11/7, Mon. 11/10	Mon. 11/17
	Expt 4	Fri. 11/21, Mon 11/24	Mon. 12/1
L4	Expt 1	Tues. 10/14, Th. 10/16	Th. 10/23
	Expt 2	Tues. 10/28, Th. 10/30	Th. 11/6
	Expt 3	Tues. 11/11, Th. 11/13	Th. 11/20
	Expt 4	Tues. 11/25, Tues. 12/2 ***!!!	Tue. 12/9