96.245 Physics III Lab (Spring 2015)

COURSE POLICY

(Please fill in the information immediately below and keep these pages for reference.)

Course Section Info.  Section number _______ / meeting time ______________________________

Lab Instructor ________________________

Office/Email _________________________

Faculty Supervisor ________________________

Office/Email _________________________

Corequisite Course  95.245 Physical Properties of Matter

Course Coordinator  Dr. Mittler (Olney 137, tel. 978.934.3775, email Arthur_Mittler@uml.edu)

Required Materials
a) laboratory manual – PHYSICS Laboratory Experiments, revised 8th ed. by Pullen, Mittler & Schier (McGraw-Hill)
b) scientific calculator
c) metric ruler (15 to 30 cm long, preferably transparent)d) protractor
e) curve-drawing aid (ex. french curve)
f) UML Physics Lab Notebook (for recording notes and graph paper)

Room  See posted notices on lab doors (Olney 103 - 110) and on website listed below.

Attendance  Required for all six lab sessions.

Absences  There will be NO MAKEUPS due to the restrictions of the academic calendar.

Restrictions  No consumption of any FOOD or DRINKS is allowed in the laboratories.

Assistance  Please contact your laboratory section instructor for assistance in the course.

Information  Notices concerning the physics service laboratory courses will be posted in the display cases opposite Olney 111 and on the lab room doors.

Schedules:  http://faculty.uml.edu/Arthur_Mittler/Teaching/96.245.aspx

Rooms:  http://faculty.uml.edu/Arthur_Mittler/Teaching/Teaching.aspx
(click on Announcements)

Academic Conduct  You are responsible for appropriate academic conduct. Please refer to the university's academic integrity policy at:

http://www.uml.edu/Catalog/Undergraduate/Policies/Academic-Integrity.aspx
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COURSE REQUIREMENTS

Pre-lab Assignment

Your instructor will give you a pre-lab assignment for experiments 2-6. This will consist of either an assignment to be completed before coming to laboratory or a pre-lab quiz on the experiment to be performed (given at the beginning of the lab session).

Laboratory Report

A) Cover Page  This page must contain only the following information:

Your Name
Course Number and Section Number
Instructor’s Name
Title of Experiment
Date Experiment was Performed
Partner’s Name

B) Lab Manual Pages  (This part consists of all the pages in the lab manual referring to the experiment except data tables which will be included in part C.)

C) Results and Analysis  (This section consists of your results and analysis, summarizing the outcomes of your experiment. Generally, most of the numerical analysis will be done in completing the data tables. You must submit a signed data sheet by your instructor. Include in this section all data tables, graphs, and sample calculations. Briefly describe how you obtained your results. Results must be reported with units and uncertainties. Include all the analysis described in the lab manual plus any additional analysis that you are able to determine from your results. Your analysis should refer to the diagrams, data tables, and graphs that represent your data and results.)

D) Discussion  (This section should contain a discussion of your results in terms of the experiment’s objectives, a discussion of the estimated experimental uncertainties, and the answers to any questions given in the manual. Label answers to the questions.)

<<All sections (A-D) listed above must be stapled together to form the lab report.>>

Note: Word processing (double-spaced) of all reports is required, however figures, diagrams, equations, and calculations may be done by hand. All reports are due at the beginning of the next meeting of your section that immediately follows the one in which the experiment was performed. Your lab instructor will give you information on details of handing in the last experiment.
Your course grade will be based on the average of your best 5 experiments. Each experiment will carry equal weight.

Your grade for Exp. #1 will be based on the lab report

Your grade for Exp. # 2-6 will be based 10 % on the pre-lab assignment and 90 % on the lab report.

Grades from all lab sections taught by the same instructor will be “normalized” to ‘85 per cent’ at the end of the semester. The following table will be used to obtain approximate course letter grades from the normalized scores.

<table>
<thead>
<tr>
<th>percent</th>
<th>grade</th>
</tr>
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<tbody>
<tr>
<td>94 or higher</td>
<td>A</td>
</tr>
<tr>
<td>91-93</td>
<td>A–</td>
</tr>
<tr>
<td>88-90</td>
<td>B+</td>
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<td>83-87</td>
<td>B</td>
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<td>80-82</td>
<td>B–</td>
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<td>77-79</td>
<td>C+</td>
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<td>72-76</td>
<td>C</td>
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<tr>
<td>68-71</td>
<td>C–</td>
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<tr>
<td>60-67</td>
<td>D</td>
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<tr>
<td>less than 60</td>
<td>F</td>
</tr>
</tbody>
</table>

Late reports must be placed in the box outside of Olney 113. They will be date-stamped at 5:00 p.m. of the day received. Your instructor may assign a penalty of up to 10 % per day for late reports. The minimum report grade, however, will be 40 % if you have completed the experiment obtaining satisfactory data, and you have turned in a data sheet signed by your instructor.