Instructor

Dr. Jim Clarage, Robertson Hall, room 109
Phone: 713-525-6879
Email: claragj@stthom.edu
(Please put the course name in the Subject line of your emails, e.g., “Gen Phys I Lab”, and note I do not read email on Sundays or late at night)

Office hours
M/W/F: 9:30am -11am
Tues: 10am - 12:30pm
Other times by appointment.

Text and supplies
- Text / Manual: The lab manual for the course, with instructions for all experiments, will be posted on Blackboard.
- Lab notebook: You should purchase a lab notebooks to use in lab. It should contain blank bound pages, ie., not loose-leaf or spiral.
- Shoes: You must wear closed toe shoes in lab.
- Calculator.

Course Description
Physics 1111/1112 is the Laboratory to accompany the General Physics I/II lecture courses.
Physics 2111/2112 is the Laboratory to accompany the University Physics I/II lecture courses.
Although the laboratory and lecture courses may be taken independently the lecture course is a prerequisite or co-requisite for the laboratory. Ten experiments are performed after an introductory lab session. The course concludes with a final practical examination.

Course Objectives
Each student is to become familiar with procedures and methods of laboratory experiments including the setup and calibration of equipment, the collection and analysis of data by hand and by computer. Each student is to become proficient in reporting of experimental procedures and results, and be able to produce a typed formal report on experiments.
Note: The University Physics [2111] level can expect to employ more advanced analysis.

Blackboard
Blackboard (http://gregory.stthom.edu) will be used to post grades, assignments, announcements, and many of the quizzes. All tech questions/problems (e.g., your account, password, browser problems, etc) should go to the university Help Desk: ithelpdesk@stthom.edu or (713) 525-6000.

Grading
Your final semester grade will be based 75% on the weekly laboratory work and 25% on the final practical exam. More specifically,
65% laboratory work (mini lab reports, lab participation)
10% quizzes
25% final exam

The letter grade for the course is based up these course percentages:
A (94-100), A- (90-93), B+ (87-89), B (84-86), B- (80-83), C+ (77-79), C (74-76), C- (70-73), D+ (67-69), D (60-66), F (0-59)

NOTE: students who earn a "C" or lower on any assignments must visit the Tutorial Services Center and/or ust.askonline.net for assistance.

Lab notebooks

These are not graded, but are a good idea. Your lab notebooks are the authentic records of your experiments. You may also use this record on your final exam!

Mini Lab Reports:

The Mini Lab Report contains all raw data, and the calculations of final experimental results. Fill out the lab sheets during the lab or develop your own template in the form of excel tables during class. Attach additional pages to show sample calculations, answers to questions, graphs and a short analysis and conclusion (how do experimental and expected results agree, error sources, how you could improve the results). Before leaving lab you must “Check Out” by having the instructor sign your raw data. The report is DUE: 24 hours after each lab.

Quizzes

Quizzes are given at the beginning of the class period to assess your preparation and reading of the material on the experiment as described in the Laboratory Manual. You are not allowed to use the Lab Manual during the quizzes; however you may use handwritten notes in your Lab Notebook.

Attendance

“The University expects all students to be regular and punctual in class attendance. Frequent unexplained absences may result in a student being administratively withdrawn from the course or in a grade reduction or failing grade, at the discretion of the faculty member” (Page 67 Undergraduate Catalog 2007-2009). Every experiment must be done and the report/notebook submitted. A missed lab can only be “made up” under conditions agreed to with the instructor; which the student must initiate the week of the missed lab by contacting the instructor (in person, email or phone). Failure to complete a lab will result in zero for that experiment.

Accessibility and Accommodations

If you have a documented disability that will impact your work in this class, please contact Counseling and Disability Services Office in Crooker Center. This office can be reached at (713) 525-6953 or 2169.

Academic Honesty

All students are subject to the university’s Policy on Academic Dishonesty and the UST Student Handbook. This extends to any quizzes taken online via Blackboard.
Breakage Fee:
Lab equipment and glassware (e.g., lenses, prisms…) are not covered by the “lab fee” of the University. If you break any equipment/glassware during an experiment you will be expected to pay for its replacement. So please work carefully.

Lab Safety:
Shoes: You must wear closed toe shoes in lab.
Backpacks: must be placed against the wall.
No food or drink (exception: water in backpack)
Cell phones: for both safety and pedagogy, cell phones may not be used in lab (you may store phones in your backpack or pocket). If you need to take an emergency phone call, ask the instructor for permission to leave lab.
Failure to comply with any of these safety regulations can result in points being deducted from the grade for your lab sheet or lab report for that day.
Class Schedule (note: experiments are not necessarily sequential with their numbers in lab manual)

<table>
<thead>
<tr>
<th>Week of</th>
<th>Lab</th>
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<tbody>
<tr>
<td>24-Aug</td>
<td>Introduction to Data Collection and Analysis.</td>
</tr>
<tr>
<td>31-Aug</td>
<td>Kinematics and graph matching</td>
</tr>
<tr>
<td>7-Sep</td>
<td>Acceleration of a Freely Falling Body</td>
</tr>
<tr>
<td>14-Sep</td>
<td>Projectile motion, and video analysis</td>
</tr>
<tr>
<td>21-Sep</td>
<td>Equilibrium of a Particle and Addition of Vectors</td>
</tr>
<tr>
<td>28-Sep</td>
<td>Friction</td>
</tr>
<tr>
<td>5-Oct</td>
<td>Linear Momentum, and conservation</td>
</tr>
<tr>
<td>12-Oct</td>
<td>Mid-semester break, No labs</td>
</tr>
<tr>
<td>19-Oct</td>
<td>Projectiles and Mechanical Energy</td>
</tr>
<tr>
<td>26-Oct</td>
<td>Conservation of Angular Momentum</td>
</tr>
<tr>
<td>2-Nov</td>
<td>Archimedes Principle (or Eureka and the King's Crown)</td>
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<tr>
<td>9-Nov</td>
<td>Make-up labs for documented absences</td>
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<tr>
<td>16-Nov</td>
<td>Review for Final exam</td>
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<tr>
<td>23-Nov</td>
<td>Thanksgiving week, No labs</td>
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<tr>
<td>30-Nov</td>
<td>Final Exam. During our last regular class</td>
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<tr>
<td>7-Dec</td>
<td>Last day classes (Mon Dec 7) No labs</td>
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The instructor reserves the right to make reasonable changes to the syllabus during the course. In this event any necessary changes will be posted online and announced during class.