Instructor and T.A. Information

Instructor: Tan Dinh  
Office: STC 3038  
Office Phone: (519) 888-4567 x37186  
Email: tndinh@uwaterloo.ca  
Office Hours: I keep an open door policy, although mornings are generally more reliable. Booking an appointment by e-mail is recommended.

Teaching Assistants
Your lab section will have an assigned TA. You should obtain your TA’s contact information at the first laboratory session, and/or check LEARN. Contact your TA directly with any questions regarding your specific laboratory sessions, reports or grades. For all other inquiries, including those noted below under “Attendance Policy”, contact the Head TA:

TA: Yverick Rangom  
Email: Use LEARN

Course Description
This lab course is designed to provide a direct experience with the physical phenomena studied in the PHY 112 course. You will use standard physical instruments, combined with systematic methods of data collection and analysis and the clear, accurate reporting of results to demonstrate and clarify the theory used in the experiments. Students will perform and write a report on 5 experiments during their scheduled lab periods. Each experiment is designed to test a certain theoretical expectation. The experiments are as follows:

Experiment 1: Reflection and Refraction  
Experiment 2: Simple Harmonic Motion on a Linear Air Track  
Experiment 3: Standing Waves on a wire  
Experiment 4: Kirchoff’s Rules and Capacitor Charging and Discharging  
Experiment 5: Thin Lenses

You must check your Quest schedule or the lab manual for the exact date of each experiment for the specific section in which you are registered.

Required Text
Physics 112L Laboratory Manual (Spring 2015), available at the UW Bookstore. The lab manual contains detailed information about this course, the schedule, lab procedures and report templates specific to each experiment.
<table>
<thead>
<tr>
<th>Assessment</th>
<th>Date of Evaluation (if known)</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment 1</td>
<td>Check Schedule in manual</td>
<td>15%</td>
</tr>
<tr>
<td>Experiment 2</td>
<td>Check Schedule in manual</td>
<td>15%</td>
</tr>
<tr>
<td>Experiment 3</td>
<td>Check Schedule in manual</td>
<td>15%</td>
</tr>
<tr>
<td>Experiment 4</td>
<td>Check Schedule in manual</td>
<td>15%</td>
</tr>
<tr>
<td>Experiment 5</td>
<td>Check Schedule in manual</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>To be announced</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>---</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The 5 lab reports account for 75% of the final grade. All report grades are normalised to take account of variations in marking style and difficulty between TAs. In practical terms, this means that all 30 sections will have the same average at the end of the adjustment. This means that if your section’s lab grade average is lower than the overall average, your report grades will be adjusted up, and similarly down for above average section grades. We do not know the specific details until all the grades are complete and entered; therefore, an extremely “hard” marker or an extremely “easy” marker will affect your ability to gauge your overall performance in the course. Talk to your TA, the Head TA or Course Instructor if you have concerns.

There will be a final exam in this course (date scheduled by the Office of the Registrar, announced mid-term), consisting of 25 multiple choice questions worth a combined total of 25% of your final grade.

**Lab Reports**

Lab reports are to be written and handed in by the end of the laboratory section. A complete report shall include a written discussion and a statement of conclusions in addition to the report template provided in the manual for each experiment. Each lab is normally performed in a group of two, with no more than one group of three in each section. There are no permanent or assigned lab partners.

Raw data and measurements shall be obtained and shared as a group, but all other aspects of the lab report must be your work and your work only. It is OK to discuss the lab and analysis with your partner but you must not copy or reproduce each other’s work (except for raw data). See below under “Academic Integrity”.

Under no circumstances are reports to be taken home before they are graded.

Graded reports are normally returned at the next laboratory section. Special arrangements for pickup will be announced by your TA later in the term for your final lab (#5) report.

**Attendance Policy**

You must attend your registered lab section times. The only exception to this is if you have received explicit permission to attend an alternate section. Such permission may only be granted for legitimate reasons (including, for example, verified illness, family emergencies, varsity travel). Midterm exams are not acceptable reasons to be granted permission, since this is a pre-scheduled class meet time. If you have a conflicting test or midterm exam, you should contact that course’s instructor to make alternative arrangements. If you miss a lab unexpectedly, you must make all reasonable attempts to contact the Head TA as soon as possible. Failure to do so may result in a mark penalty or a missed lab.

**To request a one-time change to another lab time:** contact the Head TA only. Your request must include: your full name, student ID number, registered section number, details of the reason for absence or expected absence, and a list of lab section times that do not conflict with your course schedule. Supporting information may be requested (for example, a verification of illness form from Health Services, travel booking confirmation, a letter of support from a varsity coach), but you should be proactive and submit any supporting information with your request, if possible. Missed labs will result in a grade of zero for that particular lab.
Academic Integrity
In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. See the UWaterloo Academic Integrity Webpage (https://uwaterloo.ca/academic-integrity/) and the Arts Academic Integrity Office Webpage (http://arts.uwaterloo.ca/current-undergraduates/academic-responsibility) for more information.

Discipline
A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the undergraduate associate dean.

For information on categories of offenses and types of penalties, students should refer to Policy 71, Student Discipline (http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For typical penalties check Guidelines for the Assessment of Penalties (http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm).

Grievance
A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4 (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70). When in doubt please be certain to contact the department’s administrative assistant who will provide further assistance.

Appeals
A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals (http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm).

Note for Students with Disabilities
The AccessAbility Services (AAS), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AAS at the beginning of each academic term.