
PHY 205H1S
The Physics of Everyday Life
JANUARY – APRIL 2011

Course Outline

Welcome to the Physics of Everyday Life! Physics is all around us in our daily lives. This conceptual course looks at the physics behind everyday objects and experiences to learn about the physical basis for our world.

Lecturer: Prof. Kaley Walker

Office: Room MP 712 (North-West corner of the 7th floor of the Burton Tower, Department of Physics, 60 St. George Street)

E-mail: kwalker@atmosp.physics.utoronto.ca
I will try to reply to email inquiries from students within 2 business days (i.e. excluding weekends). *Answers to Frequently Asked Questions are posted on the course website, so please check there before you send me an e-mail.* I will not answer detailed questions about physics problems by e-mail, as these are best addressed by coming to see me (or your T.A.) during our office hours or by appointment.

Office Hours: Mondays and Wednesdays: 3-4 PM and 6-7 PM; some Fridays 1-2 PM (see website)
In addition to these hours, you are invited to contact me by phone or e-mail to arrange an appointment. You may also drop by my office - if I have time I will be happy to answer your questions.

Telephone: 416 978 8218

Course Website: <http://www.atmosp.physics.utoronto.ca/~kwalker/phy205/>

The main page of the website will be used for class announcements.

Course Meeting Times: Lectures for this course are on Mondays and Wednesdays from 2:10 to 3:00 PM (L0101) or 5:10 to 6:00 PM (L0501) in MP 102. The course tutorials will meet once per week on Mondays, Wednesdays or Fridays. You need to register for both the lecture and the tutorial parts of this course. The locations for the tutorials will be announced in class.

Course Objectives and Requirements: In this course, we will study introductory physics concepts using everyday objects and experiences. The range of topics to be covered is listed on the course website on the “Classes” page. The required textbook for the course is *Conceptual Physics Fundamentals* by Paul G. Hewitt, copyright 2008 by Pearson Addison Wesley. Reading assignments will be given from this text to provide you with background to what we will discuss in class. This course is primarily intended as a Science Distribution Requirement course for the Humanities and Social Sciences. There are no university-level prerequisites for this course. High school level ability in algebra and geometry will be needed and you will need a simple pocket calculator.

Tutorials: Throughout the term, the tutorials will be used to divide the class into smaller groups. During these tutorials you will have the opportunity to discuss materials from the course, work on problems like those that will be included on the problem sets and do some hands-on activities.

Marking Scheme:

Final Exam	40%
Two Mid-Term Tests	35%
Problem Sets	15%
Tutorial Worksheets	7%
Class Participation	3%

- On 2 February and 9 March, **Mid-Term Tests** (each 50 minutes long) will be held during class time. Let me know as soon as possible if you have a conflict on either of these days, so I can try to find an alternate time for you to write the test. The **Final Exam** will be two hours long and will be held during the final exam period (sometime between 12 and 29 April). The final exam timetable will be posted on 18 February and the date of the exam will be advertised in class and on the course website. On the tests and exams, both multiple choice and written questions will be used to test your understanding of the course material. You will need to be able to apply your knowledge by solving problems and explaining phenomena. You will be permitted to use a simple pocket calculator and a 5"x3" index card with your own hand-written notes during the tests and the exam.
- Five **Problem Sets** will be due throughout the semester. Your mark will be calculated using the best four of these five assignments. Copies of these assignments will be distributed in class and will also be available from the course website on the "Materials" page. You will be required to solve problems and to provide written answers to explain different concepts. To do this, you may use your text and other resources. However, each student must prepare their final answers to the problem sets individually and must provide all answers and explanations using their own words. Advice and information about writing in Physics can be found on the UoT Writing Centre website (<http://www.writing.utoronto.ca/advice>). *The answers for problem-type questions should be legibly hand-written, not typed.* The format required for each question will be specified on the problem set. The late penalty for problem sets is a reduction in your mark of 10% per day of lateness.
- Your mark for the **Tutorials** will be based on participation in activities during the tutorial sessions and correct completion of tutorial worksheets. This work will be done in small teams of 2-3 students. Each team will submit one sheet for marking (completed in pen) and all students in the team will receive the same mark. Your final mark will be calculated using the best seven tutorial marks.
- **Clickers** will be used to facilitate student participation and classroom discussion by having in-class votes and quizzes. Every student enrolled in PHY205H1S must have their own iclicker (available from the UoT Bookstore) and bring it to each Monday and Wednesday class in MP102. To use your iclicker in class, you need to register your clicker at www.iclicker.com using your UTORid. Class participation marks will be based on your clicker usage. You will obtain full class participation marks by clicking any answer (correct or incorrect) for half or more of the "quizzes" per lecture for at least 16 out of 21 classes. So, you can miss or not participate in up to five lectures without penalty.

Accessibility Needs: The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: disability.services@utoronto.ca or <http://studentlife.utoronto.ca/accessibility>.

A Reminder about University Policy on Postal Addresses and Electronic Mail Accounts: You are required to keep your contact information your ROSI account up to date with current and valid postal and university-issued e-mail addresses. It is your responsibility to monitor this e-mail account. For more information, please refer to <http://www.governingcouncil.utoronto.ca/policies/studentemail.htm>.