

**UNIVERSITY OF CALGARY
DEPARTMENT OF PHYSICS AND ASTRONOMY
COURSE INFORMATION SHEET**

Lecture/Time/Session(s): **Physics 211/221** L20: MW 14:00-16:45, Room SA 104, Spring 2009
F 14:00-15:50, Room ST 125, Spring 2009

Instructor(s): L01: Dr. H. Ling Office SB 642, Phone: 220-8769 Dr. J. Cooper Office: SB 642, Phone: 220-8769
Office Hours: MW 13:00-14:00 Office Hours: MWF 13:00-14:00
Email: hling@phas.ucalgary.ca Email: jcooper@ucalgary.ca

Main Physics and Astronomy Office: SB 605, 220-5385

2. Prerequisite: Pure Mathematics 30 or Mathematics !! (offered by Continuing Education)

Note: The Faculty of Science policy on pre- and co-requisite checking is outlined on page 201, columns 2 and 3 of the 2008-2009 Calendar. A student may not register in a course unless a grade at least "C" has been obtained in each pre-requisite course; it is the responsibility of students to ensure that their registrations are in order.

3 The University policy on grading and related matters is described on pages 43-63 of the 2008 - 2009 Calendar. In determining the overall grade in the course the following weights will be used:

Tutorials	15%
Mastering Physics assignments	15%
Midterms (2)	40%
Final	30%
Bonus: Classroom clickers	2%

There will be two 90-minute midterms in this course, held in the evenings on Wednesday, June 3 and June 17. There will be a final examination scheduled by the Registrar's Office. A passing grade on the final examination is required in order to pass the course.

4. Missed Components of Term Work. The regulations of the Faculty of Science pertaining to this matter are outlined on page 202, column 1 of the 2008-2009 Calendar. It is the student's responsibility to familiarize himself/herself with these regulations

Textbook: *"Physics for Scientists and Engineers"*, by Randall d. Knight, 2nd Ed. Addison-Wesley

Department Approval: _____ Date: _____

Associate Dean's Approval for out of regular class-time activity: _____ Date: _____

IMPORTANT/SAFEWALK: Campus Security will escort individuals day or night. Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under the heading "Student Misconduct (pages 54-56 for 2008-2009).

FOIP: This course will be conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page.

STUDENT UNION INFORMATION: VP Academic Phone: 220- 3911 Email: suvpaca@ucalgary.ca
SU Faculty Rep. Phone: 220 3913 Email: sciencerep@su.ucalgary.ca

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**Evaluation of Learning Outcomes
and Student Learning Experience
in PHYS 223 and PHYS 211/221
- Information Sheet -**

The Department of Physics and Astronomy has started to modernize the first year physics courses, such as PHYS 223 (Physics 211/221), to provide more efficient instruction for the students, and to make the experience of learning physics more interesting and enjoyable. In order to measure how successful this endeavour is, we need to collect data, for which we need your help. We plan to use statistics obtained from the coursework data (i.e. grades for the various course components, such as midterms, final etc.) in order to determine how well the learning results in this course match the teaching efforts, especially the correlation with the newly designed tutorials/labs (laboratorials). We will also include the short surveys that you complete every week in your laboratorial, and we plan to administer a survey at the end of the course which will ask you about your experience with the course as a whole, comparing different elements of it. We would also like to include some of your comments made on Mastering Physics or in emails to your instructors. The data will only be disseminated in a completely anonymous form. The data will be used to establish statistical correlations, and no data that could be used to identify a single student will be published. The data are kept confidentially, as are all data on grades. The surveys will be kept in a secure location in the Department of Physics and Astronomy, and an electronic version of the data will be stored on a departmental server. We wish to archive the survey data for future use, just as the exam scores are kept permanently. Only the teaching assistants, to whom you hand in your laboratorial work including pre- and post-tests, will see the surveys during the term. The researchers will receive the data when the course is over. The only thing you are asked to do beyond your regular coursework (including the pre- and post-tests) is to fill in the mini-surveys after each laboratorial, and the end-of-term survey. Feedback to your instructors and on Mastering Physics is encouraged. Your participation in this study is voluntary, and will be rewarded with a very small bonus in your course grade. Your instructor will not know if you participate or not until the end of the course. You will receive a small bonus for participation: 0.5% if you complete at least 90% of the mini-surveys, and another 0.5% for completing the end-of-term survey.

We will assume that by returning the survey you indicate your consent to participate. If you choose not to participate, or to discontinue participation at any time, you simply don't fill in the mini-surveys and the end-of-term survey. Your mini-surveys up to that point will still be used in the study. If you do not wish your grades to be included in the statistics, please send an email to Mr. Paul van der Pol, paul@phas.ucalgary.ca. If you do not wish your comments on Mastering Physics (anonymous, of course) or your comments sent by email (also anonymous) to be used for this study, please send an email to Mr. Paul van der Pol. If you have any questions about this research and/or your participation, please contact the leader of the research group, Dr. Rob Thompson, Department of Physics and Astronomy, phone 403-220-5407, email thompson@phas.ucalgary.ca. This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information. The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study. If you wish to make a comment or complaint, or have any questions or concerns, please contact Russell Burrows, Senior Ethics Resource Officer, phone 403-220-3782, rburrows@ucalgary.ca.