

UNIVERSITY OF CALGARY
DEPARTMENT OF PHYSICS and ASTRONOMY
COURSE OUTLINE

1. **Phys 599**

Lecture Sections:

No formal lectures

Instructor: Barry Sanders, SB303, 403-210-8462, sandersb@ucalgary.ca,

Office Hours: by appointment – email Lucia Wang at wangl@ucalgary.ca to arrange a time

Course websites, or Blackboard course name, if applicable: <http://webapps3.ucalgary.ca/~dppvan/phys598/2009-2010/>

2. **PREREQUISITES:** (as in Calendar entry for course) Permission of Head of Department

3. **GRADING:** The University policy on grading and related matters is described in sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Introductory essay	10%
First presentation	10%
Interim report	15%
Final report	40%
Final presentation	25%

Percentage grades are given for all elements of term work. The introductory essay, first presentation and interim report are graded by the course convener, and the final report and final presentation are graded by a team comprising the convener and supervisors of student projects.

4. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in section 3.6: <http://www.ucalgary.ca/pubs/calendar/current/sc-3-6.html>. It is the student's responsibility to familiarize himself/herself with these regulations. See also <http://www.ucalgary.ca/pubs/calendar/current/e-3.html>.

Department Approval



Date

Oct 1 / 10

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

Date:

5. **OTHER IMPORTANT INFORMATION FOR STUDENTS:**

(a) **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 K. Student Misconduct (<http://www.ucalgary.ca/pubs/calendar/current/k.html>) to inform yourself of definitions, processes and penalties

(b) **ACADEMIC ACCOMMODATION POLICY.** Students with documentable disabilities are referred to the following links:
Calendar entry on students with disabilities: <http://www.ucalgary.ca/pubs/calendar/current/b-1.html>
Disability Resource Centre: <http://www.ucalgary.ca/drc/>

(c) **SAFEWALK:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

(d) **FREEDOM OF INFORMATION AND PRIVACY:** This course will be conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOI/PPA). 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.** For more information see also <http://www.ucalgary.ca/secretariat/privacy>.

(e) **STUDENTS UNION INFORMATION:** VP Academic Phone: 220-3911 Email: suvpaca@ucalgary.ca.
SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca Website <http://www.su.ucalgary.ca/home/contact.html>.
Student Ombudsman: <http://www.su.ucalgary.ca/services/student-services/student-rights.html>

Course Syllabus

- The introductory essay explains the topic of investigation and includes a comprehensive background to the topic, motivation for this investigation, and a representative literature survey. The essay should be five pages in length, be clearly written in prose (no bullet points or numbered lists), and be pitched at the level of fellow undergraduate students. Referencing must be provided within the essay similar to the referencing typical in published scientific papers. The references must be in the style of some journal: identify a preferred journal and strictly follow that journal's style guide. The essay should be five pages in length double space in 12 point font including title, author name, tables, figures, and bibliography.
- The 1st presentation will be on the main content of the introductory essay and be pitched at the level of fellow undergraduate students. The presentation is strictly seven minutes long (a grade penalty applies for running overtime) plus three minutes for questions. Grading will be equally based on content (background, motivation, logical flow, investigation plan) and on delivery (clear slides that are fully readable at a distance, use of props, eye contact with the audience, pace and volume of speaking, enthusiasm, avoidance of fillers such as "um", confidence, effectiveness at answering questions).
- The interim report should be five pages long and summarizes progress on the project to date and discusses what still needs to be done plus highlights the challenges and obstacles to completing the project in full on time. If applicable, relevant data, plots, figures, schematics, computer programs, and photographs should be appended to the report and discussed in the report with references to these appendices. The report will be graded on presentation of technical knowledge at a level appropriate for a senior undergraduate physics or astronomy audience, demonstration of significant progress, appreciation of the challenges ahead and plans to address the challenges, and fluency of the writing.
- The final report will be up to 25 pages in length, not including appendices. The report should be in the style of a journal article with section headings, for example I. Introduction, II. Background, III. Methods, IV. Results, V. Conclusions, VI. Acknowledgements. The report will be graded on presentation (including equations, figures, tables, and captions), logical flow, results, discussion, and referencing and bibliography.
- The final presentation is strictly fifteen minutes long (a grade penalty applies for running overtime) plus five minutes for questions, and the presentation will be graded by the same principles that apply for the 1st presentation.