



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE
DEPARTMENT OF PHYSICS AND ASTRONOMY
COURSE OUTLINE

1. **Course:** PHYS 598A Honours Research Thesis Fall 2017

Instructor: Dr. Andrew Yau | SB 623 | (403) 220.8825 | yau@ucalgary.ca | TBA

Lecture Sections: N/A

Course Website: d2l.ucalgary.ca

Departmental Office: SB 605, 403-220-5385, phasugrd@ucalgary.ca

2. **Prerequisites:** Consent of the Department
3. **Grading:** The University policy on grading and related matters is described sections in [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: 5%
First Presentation: 10%
Interim Report: 10%
Final Report: 50%
Final Presentation: 25%

Percentage to letter grade conversion scale:

> = 95 %	A +	> = 80 %	B +	> = 65 %	C +	> = 50 %	D +
> = 90 %	A	> = 75 %	B	> = 60 %	C	> = 45 %	D
> = 85 %	A -	> = 70 %	B -	> = 55 %	C -	< 45 %	F

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](#). It is the student's responsibility to familiarize himself/herself with these regulations. See also [Section E.6](#) of the University Calendar.
5. **Scheduled out-of-class activities:** Dates and times of approved class activities held outside of class hours.

1st Presentation - Thursday, September 28, 2017 (Time to be determined)
Final Presentation - Thursday, April 5, 2018 (Date subject to final approval; time to be determined)

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. **Course Materials:** *The Craft of Scientific Presentations*, Michael Alley, Springer-Verlag 2003
The Craft of Scientific Writing, 3rd Ed, Michael Alley, Springer-Verlag 1996

Online Course Components: Not applicable.

7. **Examination Policy:** Students should read the Calendar, [Section G](#), on Examinations.
8. **Approved Mandatory and Optional Course Supplemental Fees:** None
9. **Writing across the curriculum statement:** In this course, the quality of the student's writing in reports will be a factor in the evaluation of those reports. See also [Section E.2](#) of the University Calendar.
10. **Human studies statement:** Students in the course will not be expected to participate as subjects or researchers. See also [Section E.5](#) of the University Calendar.

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

- (a) **Misconduct:** 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 [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties.
- (b) **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- (c) **Student Accommodations:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf. Students needing an Accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of the Department of Physics and Astronomy, Dr. David Feder, by email (dfeder@ucalgary.ca) or by phone (403.220.3638).
- (d) **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.
- (e) **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPPA). 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>.
- (f) **Student Union Information:** [VP Academic](#) Phone: 220-3911 Email: suvpaca@ucalgary.ca.
SU Faculty Rep: Phone: 220-3913
Email: science1@su.ucalgary.ca, science2@su.ucalgary.ca and science3@su.ucalgary.ca
Student Ombuds Office: 403 220-6420
Email: ombuds@ucalgary.ca; <http://ucalgary.ca/provost/students/ombuds>
- (g) **Internet and Electronic Device Information:** You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless

specifically permitted by the instructor. If you violate this policy, you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

- (h) **U.S.R.I.:** At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

12. OTHER COURSE RELATED INFORMATION:

(a) **Course Description**

Each student will be assigned a project in consultation with a supervisor. Written reports and oral presentations are required.

(b) **Course Learning Outcomes**

1. Developed good generic research skills
2. Developed good project planning and project and time management skills
3. Acquired necessary skills to communicate scientific information verbally effectively
4. Acquired necessary skills to communicate written scientific information effectively
5. Acquired necessary ethical skills in ethical research
6. Acquired strong skills in interactions and presentations

(c) **Course Learning Incomes**

Students taking PHYS 598 are expected to have prior knowledge in Quantum Mechanics, Statistical Mechanics, and Electromagnetic Theory, covered in PHYS 443, 449 and 455, respectively, and in the background physics and methodology of the proposed project.

(d) **Syllabus**

N/A

(e) **Lab Schedule**

N/A

Department Approval _____ Date _____