

UNIVERSITY OF CALGARY
DEPARTMENT OF PHYSICS and ASTRONOMY
COURSE OUTLINE

1 Course: **Physics 605, Advanced Data Analysis**

Website: Blackboard F2013PHYS605L01

Lecture/Time/Session(s): L01: TuTh 12:30-13:45, ST 063, Fall 2013

Instructor(s): Dr. Brian Jackel

Office: SB 627, Phone: 403-220-4271

E-mail: brian.jackel@ucalgary.ca

Office Hours: M 14:00-16:00

Physics and Astronomy Office: SB 605, 403-220-5385

2. <http://www.ucalgary.com/pubs/calendar/current/physics.html#6071>

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:

Assignments	55%	Grading Scheme:	80%-100% = A- to A+
Project	40%		70%-79% = B- to B+
Participation	5%		60%-69% = C- to C+
			50%-59% = D to D+
			<50% = F

There is no final exam in this course.

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.

11. **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 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) **Academic Accommodation Policy:** Students with documentable disabilities are referred to the following links:
[Calendar entry on students with disabilities and Student Accessibility Services.](#)

(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: sciencerep@su.ucalgary.ca
Student Ombudsman

(i) **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.

Course Syllabus

Methods of extraction of significant information from experimental data degraded by noise.
Parametric and non-parametric statistical methods, curve fitting.
Spectral analysis, filtering, sampling, convolution and deconvolution techniques.

