

1. **Course:** ASPH 621, High Energy Astrophysics Winter 2016

Instructor: Dr. Denis Leahy | SB529 | (403) 220.7192 | leahy@ucalgary.ca | Office Hours: MW 15:00-15:50.

Lecture Sections: L01 | MWF 12:00 am - 12:50 am | SA 245

Course Website: d2l.ucalgary.ca

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

2. **Calendar Course Description:** Interaction of high energy particles with matter, propagation and origin of cosmic rays; structure of white dwarfs and neutron stars; the physics of jets and the accretion process onto compact objects; supernovae and supernova remnants; active galactic nuclei.
3. **Grading:** The University policy on grading and related matters is described 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:

In-class quizzes: 10% (weekly- see note A)

Assignments: 40% (biweekly- see note B)

Project: 10% (see note C)

Final Examination: 40% (To be scheduled by the Registrar)

All class work will be graded numerically (e.g. 7/10) which can directly be converted to percent. The final course mark will be calculated as a percent then converted to a grade using the following scale:

>= 95 %	A +	>= 79 %	B +	>= 62 %	C +	>= 45 %	D +
>= 90 %	A	>= 72 %	B	>= 56 %	C	>= 40 %	D
>= 85 %	A -	>= 67 %	B -	>= 50 %	C -	< 40 %	F

Note A: Quizzes will normally be held on Monday of each week starting January 18th and ending Apr.11. The detailed schedule is posted on the D2L course website.

Note B: There will be approximately six assignments, one due every two weeks. The detailed schedule is posted on the D2L course website.

Note C: The detailed project description is posted on the D2L course website.

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. **Course Materials:** *"Introduction to High Energy Astrophysics"*, Rosswog & Bruggen, Cambridge University Press
6. **Examination Policy:** For all quizzes, tests, and examinations a calculator is allowed. In some cases the quiz, test or examination will also be open book or a formula sheet (prepared by the student) will be allowed: if so, the instructor will notify students in advance. Students should also read the Calendar, [Section G](#), on Examinations.
7. **Writing across the curriculum statement:** In this course, the quality of the student's writing in quizzes, tests and examinations will be a factor in their evaluation. See also [Section E.2](#) of the University Calendar.

8. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) **Academic 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 fulfil 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. Michael Wieser, by email (mwieser@ucalgary.ca) or by phone (403.220.3641).
- (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 (FOIPP). 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.

Department Approval _____ Date _____