

UNIVERSITY OF CALGARY  
DEPARTMENT OF PHYSICS AND ASTRONOMY  
COURSE OUTLINE

**1. Course:** ASPH 509, High Energy Astrophysics and Cosmology

Lecture Sections:

L01: MWF 8:00-8:50 EEEL151. Instructor D. Leahy. Office SB529. Tel. No. 403-220-7192. e-mail address leahy@ucalgary.ca. Office Hours: MW 16:00-16:50.

Course website: Desire 2 Learn (D2L) W2014ASPH509L01

Departmental Office SB605, telephone number 220-5385 e-mail contact address office@phas.ucalgary.ca

**2. Prerequisites:** Prerequisite(s): Astrophysics 213, Physics 325, 381, and one of Mathematics 349 or Applied Mathematics 307. (URL <http://www.ucalgary.ca/pubs/calendar/current/astrophysics.html#3439>)

**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)
In-class tests	45%	(biweekly- see note B)
Final Examination	45%	(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:

95-100% A+; 90-94.9% A; 84-89.9% A-; 78-83.9% B+; 72-77.9% B; 66-71.9% B-;  
60-65.9% C+; 54-59.9% C; 48-53.9% C-; 42-47.9% D+; 36-41.9% D; <36 F

Note A: Quizzes will normally be held on Monday of each week starting Jan.13 and ending Apr.11. The detailed schedule is posted on the D2L course website. Of the 12 quizzes, the best 10 will be used to compute the quiz total grade.

Note B: Tests will normally be held on Friday of every other week: i.e. Jan. 17, 31, Feb. 14, Mar. 7, 31, Apr. 4. Of the 6 tests, the best 5 will be used to compute the test total grade.

**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:** (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 (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. For more information see also <http://www.ucalgary.ca/secretariat/privacy>.

**(f) Student Union Information:** [VP Academic](#) Phone: 220-3911 Email: [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca).  
SU Faculty Rep. Phone: 220-3913 Email: [sciencerep@su.ucalgary.ca](mailto: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.

**The following signature lines should be added to the course outline as appropriate**

Department Approval \_\_\_\_\_ Date \_\_\_\_\_

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

Associate Dean's Approval for Alternate final examination arrangements: \_\_\_\_\_ Date: \_\_\_\_\_