

UNIVERSITY OF CALGARY
DEPARTMENT OF Physics & Astronomy
COURSE OUTLINE

1. **Course:** ASPH503, The Interstellar Medium

Lecture Sections: L01: MWF, 15:00-15:50, ST 055

Instructor: R. Plume

Office: SB531

Tel. No. 220-6909

Email: plume@ras.ucalgary.ca

Office Hours: Tu, Wed 10am -11am

Course website: http://www.ism.ucalgary.ca/Star_Formation/ASPH503/ASPH503.html

2. **Prerequisites:** *Astrophysics 213, Physics 325, 381, and one of Mathematics 349 or Applied Mathematics 307.*

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:

[Example:	Assignments (4-5)	50%
	Midterm test	20% (Friday Nov 1)
	Final Examination	30% (To be scheduled by the Registrar)

Grading Scheme: 95 - 100% A+, 90 - 94.9% A, 85 - 89.9% A-, 80 - 84.9% B+, 75 - 79.9% B, 70 - 74.9% B-, 65 - 69.9% C+, 60 - 64.9% C, 55 - 59.9% C-, 50 - 54.9% D+, 45 - 49.9% D, 0 - 44.9% 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:** None

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:** *"Physics & Chemistry of the Interstellar Medium", Sun Kwok.*

Online Course Components: None

7. **Examination Policy:** [Statement regarding aids allowed on tests and examinations (e.g., calculator, open book, etc.)] Students should also read the Calendar, Section G, on Examinations.

8. **Approved Mandatory and Optional Course Supplemental Fees:** None

9. **Writing across the curriculum statement:** Not applicable

10. **Human studies statement:** Not applicable

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 (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>.
- (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

- 1) Overview of the ISM
- 2) Physical Parameters and Processes in the ISM
- 3) Atomic & Molecular Structure and Formation
- 4) Radiative Transfer and Molecular Astrophysics
- 5) Interstellar Dust Grains
- 6) HII Regions