

**UNIVERSITY OF CALGARY
DEPARTMENT OF PHYSICS AND ASTRONOMY
COURSE INFORMATION SHEET**

1. Astronomy 207: Introduction to Astronomy I – The Cosmos

Lecture/Time/Session(s): Room SB 148 Saturdays, 800 – 1150 pm, WINTER 2011

Instructor: Dr. Ian Lovatt

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

Office Hours: Sat 12:00 p.m. – 1:00 p. m. SB 148

2. Prerequisite: not open to students with credit in Astronomy 205, 213, or Astrophysics 213.

Note: The Faculty of Science policy on pre- and co-requisite checking is outlined on page 203, columns 2 and 3 of the 2009-2010 Calendar. A student may not register in a course unless a grade at least "C" has been obtained in each pre-requisite course; it is the responsibility of students to ensure that their registrations are in order.

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:

Final Exam (2 hours)	40% (to be scheduled by the Registrar)
In-class test	25%
Observing Exercises (5)	20%
Take-home Quizzes (2)	15%

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: <http://www.ucalgary.ca/pubs/calendar/current/sc-3-6.html>. It is the student's responsibility to familiarize himself/herself with these regulations. See also <http://www.ucalgary.ca/pubs/calendar/current/e-3.html>.

5. Textbook: *"The Cosmic Perspective,"* 5th Edition, Bennett et al, Pearson Publ. (vol. I if available)

6. EXAMINATION POLICY: Students are encouraged to read the Calendar, Section G, on Examinations: <http://www.ucalgary.ca/pubs/calendar/current/g.html>.

Department Approval: _____ Date: _____

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

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 K. Student Misconduct (<http://www.ucalgary.ca/pubs/calendar/current/k.html>) 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 at <http://www.ucalgary.ca/emergencyplan/assemblypoints>.
- (c) **ACADEMIC ACCOMMODATION POLICY.** Students with documentable disabilities are referred to the following links:
Calendar entry on students with disabilities: <http://www.ucalgary.ca/pubs/calendar/current/b-1.html>
Disability Resource Centre: <http://www.ucalgary.ca/drc/>

- (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 will be 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:** suypaca@ucalgary.ca.
SU Faculty Rep. **Phone:** 220-3913 **Email:** sciencerep@su.ucalgary.ca Website <http://www.su.ucalgary.ca/home/contact.html>.
Student Ombudsman: <http://www.su.ucalgary.ca/services/student-services/student-rights.html>
- (i) **INTERNET and ELECTRONIC COMMUNICATION DEVICE Information.** You can assume that in all classes that you attend, **your cell phone should be turned off.** 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.

Observing Exercises:

The instructions for the five (5) observing exercises will be posted on Blackboard. Complete these exercises with partners (no more than 3 to a group!) Submit each assignment with the names of all the partners, either in class or in the ASTR 207 mailbox in ST basement.

The due dates are:	1.	Parallax	January 29
	2.	The Diameter of the Sun	February 5
	3.	The Masses of Jupiter and Saturn	February 12
	4.	Jupiter's Rotational Period	March 5
	5.	Northern Stars	March 26

The written instructions and the data sheets are on Blackboard.

Take-home Quizzes:

Each assignment consists of multiple-choice questions and short-answer questions. Answer the assignments with partners (no more than 3 to a group!). Submit these answers in class, or in the ASTR 207 mailbox in ST basement.

The due dates are:	1.	Take-home Quiz #1	February 12
	2.	Take-home Quiz #2	March 26

I will post the solutions on Blackboard, and I will return the marked assignments the following week.

Additional Information on Exams:

All tests and exams are closed-book. Calculators are allowed on all test and exams. The final exam date and time will be scheduled by the Registrar's Office.

Further Information on Course Structure:

The course stresses conceptual understanding without mathematical derivation. Science, however, is quantitative, and we describe the Universe mathematically: consequently, the course will involve some arithmetic.

Tentative Schedule of Lectures

	Topic	Text Chapter
January 15	Apparent Motions (the Sun, stars, the Moon, the planets)	2
January 22	Ptolemy, Copernicus, Galileo, Brahe, Kepler, Newton	3, 4
January 29	The Sun, Light OBSERVING EXERCISE #1: PARALLAX	5, 14
February 5	The Sun, Light OBSERVING EXERCISE #2: THE SUN'S DIAMETER	5, 14
February 12	Earth, Moon TAKE-HOME QUIZ #1 DUE OBSERVING EXERCISE #3: JOVIAN MASSES	9, 10
February 19	NO CLASS (READING BREAK)	
February 26	NO CLASS (READING BREAK)	
March 5	Telescopes OBSERVING EXERCISE #4: JUPITER'S ROTATIONAL PERIOD	6
MARCH 12	TEST (8:00 – 8:50) Formation of Planetary Systems	7, 8
March 19	Mercury, Venus, Mars	9, 10
March 26	The Jovian Planets, Some Satellites TAKE-HOME QUIZ #1 DUE OBSERVING EXERCISE #5: NORTERN STARS	11
April 2	Asteroids, Kuiper Belt, Other Planetary Systems	12, 13
April 16	FINAL EXAM (2 hours)	

NOTE 1: This is a tentative schedule. I may make small changes when necessary. I may not cover all these topics. You are responsible for the material I cover in class, and for material I explicitly tell you to read.

NOTE 2: This course has some flexibility: if you are interested in a particular topic, let me know and I will try to work that subject into the course.

NOTE 3: This course stresses conceptual understanding without mathematical derivation. Science, however, is quantitative, and we describe the Universe mathematically: consequently, this course will involve some arithmetic.