UNIVERSITY OF CALGARY
DEPARTMENT OF PHYSICS AND ASTRONOMY
COURSE INFORMATION SHEET

Astronomy 209: Introduction to Astronomy II – The Cosmos

Lecture/Time/Session(s): Room ST 148 Tuesday, Thursday, 2:00 – 3:15 pm, Winter 2013

1. Instructor: Dr. Ian Lovatt

Email: ilovatt@mtroyal.ca (**NOT** the U of C address!)
Office Hours: Tuesday 3:30 – 4:30 pm room TBA
Main Physics and Astronomy Office: SB 605, 220-5385

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 in the CURRENT 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 The University policy on grading and related matters is described in the CURRENT Calendar. In determining the overall grade in the course the following weights will be used:

Final Exam (2 hours)	40%
Test 1 in class, Thurs Feb 14	20%
Test 2 in class, Thurs Mar 28	20%
assignments (3)	20%

4. Missed Components of Term Work. The regulations of the Faculty of Science pertaining to this matter are outlined in the CURRENT Calendar. It is the student's responsibility to familiarize himself/herself with these regulations.

Textbook: ***"Astronomy Today; vol. II (Stars and Galaxies),"***, 7th Edition, Chaisson and McMillan, Pearson Publ., 2011

Department Approval: _____ Date: Jan 7/13

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

IMPORTANT/SAFEWALK: Campus Security will escort individuals day or night. Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

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 the heading "Student Misconduct (pages 49-53 for 2009-2010).

FOIP: This course will be 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.

STUDENT UNION INFORMATION: VP Academic **Phone**: 220- 3911 **Email**: suvpaca@ucalgary.ca
SU Faculty Rep. **Phone:** 220 3913 **Email:** sciencerep@su.ucalgary.ca

IL/lh
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Tests:
There will be two in-class tests, consisting of multiple-choice questions.

Assignments:
Each quiz consists of multiple-choice questions, posted on MASTERING ASTRONOMY.
The due dates are:

1.	Assignment #1	Tuesday February 5
2.	Assignment #2	Thursday March 14
3.	Assignment #3	Tuesday April 16

Additional Information on Tests and Exams:
All tests and exams are closed-book. Calculators are allowed; cell phones are not.

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

Date	Topic	Text Chapter Chaisson &McMillan, 7th ed.
January 8, 10, 15	Ptolemy, Copernicus, Brahe, Galileo, Newton	1, 2
January 17, 22, 24, 29, 31	light, the Sun	3, 4, 16
February 5	properties of stars **ASSIGNMENT #1**	17
February 7, 12	properties of stars	17
Thursday February 14	**TEST #1**	
February 18 – 22	**READING WEEK (NO CLASSES)**	
February 26	properties of stars	17
February 28 March 5, 7, 12	evolution of stars	19 – 22
March 14	galaxies **ASSIGNEMENT #2**	23 – 25
March 19	galaxies	23 – 25
March 21, 26	cosmology	26, 27
Thursday March 28	**TEST #2**	
April 4	cosmology	26, 27
April 9, 11	telescopes	5
April 16	telescopes **ASSIGNMENT #3**	5
April 19 – 30	final exam period	

NOTE: The above is a wish-list. We may not have time to cover all of these topics. You are responsible for

- **material I cover in class, and**
- **material I EXPLICITLY tell you to read on your own.**

COURSE SYLLABUS

- Part 1 - Introduction & Coordinate Systems (ch 1, 2, & 7)
- Part 2 -The EM Spectrum & Photometric Concepts (ch 4)
- Part 3 -Telescopes & Detectors (ch 3)
- Part 4 - Radiation Mechanisms (ch 5 & 15)
- Part 5 -The Sun & Stars (ch 8,10 & 12)
- Part 6 - Celestial Mechanics (ch 6 or a 1st yr physics text)
- Part 7 - Star Formation & Stellar Evolution (ch 11 & 15)

Conversion between course percentage and letter grades:

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