### **ASTR 102 - EXPLORING THE COSMOS**

An introduction to our scientific understanding of the workings of the Universe; from planets to stars to galaxies to cosmology. Intended for non-science students—little Math used.

## Spring 2017 - Syllabus

#### **Professor Julio F. Navarro**

Office: Elliott 402 E-mail: jfn@uvic.ca

Personal Webpage: <a href="http://www.astro.uvic.ca/~jfn">http://www.astro.uvic.ca/~jfn</a>

Course Webpage: <a href="http://www.astro.uvic.ca/~jfn/Astr102.html">http://www.astro.uvic.ca/~jfn/Astr102.html</a>
Office hours: Mondays and Thursdays 10:00am - 11:00am

Class times: Mon-Thurs 13:00-14:20 Bob Wright A104

#### **Textbook**

Astronomy Today 8th Edition by Chaisson & McMillan
\*\*with Mastering Astronomy\*\*

Course will cover topics from Chapters 1-5 and 16-28 Purchasing only those chapters is fine. Reading expected before each class.

You will also need an ASTR 102 Lab Manual!

#### Grading

Assignments: 20%
Midterm Exam: 20%
Lab Section: 20%
Final Exam: 40%

- 1. One weekly assignment, using the Mastering Astronomy software
- 2. Late assignments not accepted
- 3. You must pass the lab section to pass the course. No exceptions.
- 4. Examinations are \*individual\*. No communication-enabled devices (i.e., phones, laptops, tablets, etc) will be accepted during exams.
- 5. Plagiarism: Unacceptable, to say the least. Never copy work from each other, nor cite work from others without proper acknowledgment. Collaboration and discussion are fine, but the work you submit <u>must</u> be your own.

See <a href="http://www.uvic.ca/library/research/citation/plagiarism/">http://www.uvic.ca/library/research/citation/plagiarism/</a> for more information

# **Lecture Schedule**

Lecture	Date	Торіс	Reading
1	Thursday 5 Jan 2017	Our Home	1.1-1.4
2	Monday 9 Jan 2017	Astronomy as Science	2.1-2.4
3	Thursday 12 Jan 2017	Messengers of the Cosmos	3.1-3.3
4	Monday 16 Jan 2017	The Atom's Inner Workings	4.1-4.3
5	Thursday 19 Jan 2017	The Tools of Astronomy	5.2-5.3, 5.5
6	Monday 23 Jan 2017	The Sun	16.1-16.3
7	Thursday 26 Jan 2017	Stars I: Luminosity, Temperature	17.1-17.3
8	Monday 30 Jan 2017	Stars II: Distances, Mass and Other Properties	17.5-17.7
9	Thursday Feb 2 2017	Stellar Evolution: Low Mass Stars	20.1-20.3
10	Monday Feb 6 2017	Stellar Evolution: Massive Stars	20.4-20.6
11	Thursday Feb 9 2017	Supernovae	21
	Monday Feb 13 2017	BC Family Day	No Class!
	Thursday Feb 16 2017	Reading Break	No Class!
12	Monday Feb 20 2017	Neutron Stars and Black Holes	22
13	Thursday Feb 23 2017	Review	
	Monday Feb 27 2017	Mid Term Exam	
14	Thursday March 2 2017	The Milky Way	23.1-23.3
15	Monday March 6 2017	Milky Way Formation and Galactic Centre	23.4, 23.6-23.7
16	Thursday March 9 2017	Galaxies I	24.1-24.3
17	Monday March 13 2017	Galaxy Collisions and Dark Matter	25.1-25.3
18	Thursday March 16 2017	Large Scale Structure	25.5,26.1
19	Monday March 20 2017	Cosmology I	26.2-26.4
20	Thursday March 23 2017	Cosmology II	26.5-26.7
21	Monday March 27 2017	The Early Universe I	27.1-27.3
22	Thursday March 30 2017	The Early Universe II	27.4-27.6
23	Monday April 3 2017	Final Review	