

# 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.

## Fall 2017 - Syllabus

### Dr. Kevin Casteels

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Course webpage: <http://coursespaces.uvic.ca>

Personal webpage: <http://web.uvic.ca/~casteels>

Office hours: Monday and Thursdays 5:00pm to 6:00pm

Class times: Monday and Thursday 13:00-14:20 Elliott 167

### Textbook:

Astronomy Today by Chaisson & McMillan, any edition is ok.

- Rental copies of Astronomy Today 9<sup>th</sup> Edition are available in the UVic Book Store.

- **Do NOT purchase Mastering Astronomy. It is NOT needed!**

- Previous editions are fine, but make sure it includes the stars and galaxies chapters. Complete versions are best, if possible.

- Reference copies are available in the McPherson Library.

**Reading expected before each class.** Doing so will increase your understanding of the lectures

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 CourseSpaces webpage.
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 must be your own.

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

## Lecture Schedule

Lecture	Date	Topic	Reading
1	Thurs, Sept 7, 2017	Our Home	1.1-1.4, 1.6
2	Mon, Sept 11, 2017	Astronomy as Science	2.1-2.4, 2.5, 2.7
3	Thurs, Sept 14, 2017	Messengers of the Cosmos	3.1-3.3
4	Mon, Sept 18, 2017	The Atom's Inner Workings	4.1-4.3
5	Thurs, Sept 21, 2017	The Tools of Astronomy	5.2-5.3, 5.5
6	Mon, Sept 25, 2017	The Sun	16.1-16.3
7	Thurs, Sept 28, 2017	Stars I: Luminosity, Temperature	17.1-17.3
8	Mon, Oct 2, 2017	Stars II: Distances, Mass and Other Properties	17.5-17.7
9	Thurs Oct 5, 2017	Stellar Evolution: Low Mass Stars	20.1-20.3
-	Mon, Oct 9, 2017	<b>Thanksgiving Holiday</b>	<b>No Class!</b>
10	Thurs Oct 12, 2017	Stellar Evolution: Massive Stars	20.4-20.6
11	Mon, Oct 16, 2017	Supernovae	21
12	Thurs Oct 19, 2017	Neutron Stars and Black Holes	22
13	Mon, Oct 23, 2017	<b>Mid Term Exam</b>	
14	Thurs Oct 26 , 2017	The Milky Way	23.1-23.3
15	Mon, Oct 30, 2017	Milky Way Formation and Galactic Centre	23.4, 23.6-23.7
16	Thurs, Nov 2, 2017	Galaxies I	24.1-24.3
17	Mon, Nov 6, 2017	Galaxy Collisions and Dark Matter	25.1-25.3
18	Thurs, Nov 9, 2017	Large Scale Structure	25.5,26.1
-	Mon, Nov 13, 2017	<b>Reading break</b>	<b>No Class!</b>
19	Thurs, Nov 16, 2017	Cosmology I	26.2-26.4
20	Mon, Nov 20, 2017	Cosmology II	26.5-26.7
21	Thurs, Nov 23, 2017	The Early Universe I	27.1-27.3
22	Mon, Nov 27, 2017	The Early Universe II	27.4-27.6
23	Thurs, Nov 30, 2017	Final Review	