# Astronomy 102

Dr. Sara Ellison

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Office hours:

Tuesday, Thursday 1.30-2.20 pm

### Website and text book

Lectures and assignments available on internet at http://www.astro.uvic.ca/~sara/A102.html

Other useful information such as dates of quizes, assignments etc. as well news during the course

All assignments are already posted.

Text book: Foundations of Astronomy, by Michael Seeds available in book store, plus a few copies on reserve at the library. Current edition is 11th. Older editions OK (newer than at least 8th edition recommended).

### Course outline

- The scale of the universe
- Atoms and starlight the tools of the trade
- The Sun its nature, cycles and energy source
- Stars properties, classification and observational techniques
- The interstellar medium stellar nurseries
- Star formation
- Stellar evolution the path to red giants
- Star death white dwarfs, supernovae and gamma ray bursts
- Black holes and neutron stars
- Our Galaxy the Milky Way
- Other galaxies formation, supermassive black holes and quasars
- Cosmology the Big Bang, cosmic expansion and dark matter

#### Assessment

5 assignments given out on a Tuesday collected in class on the following Tuesday (see website for dates). Count 15%

5 in-class quizzes on a Thursday (see website for schedule). Count 25%.

No make-up quizzes, no late assignments.

Labs count 20%, but you must pass the lab to pass the course.

End of term exam in class, August 17, counts 40%.

### More on labs

Labs happen in room SCI A111. You have to sign up for a lab section separately from the course - make sure you're signed up to one!

Lab manual (and report book) is available in the book store.

First lab is on July 11. The visual lab is on July 19, so it will run late. Dress warm.

For any questions about labs, see Russ Robb (<u>robb@uvic.ca</u>), SCI A115, 721-7750.

## Grading

Grading follows the standard Uvic system:

## How to get the most from this course

We will be (mostly) following the order of chapters in the textbook. Read the chapter ahead of the lecture (see course website for approx lecture dates).

Print out the online lecture notes and bring to class. Make additional notes during the class.

Try the example questions in real-time on your calculators to make sure you can reproduce the solutions.

Check where you lost marks on assignments and quizes.

Keep up to date with your study - exam immediately follows last class.