## THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF GEOGRAPHY **GEOGRAPHY 2090a (Space Exploration)** Fall 2015 COURSE DESCRIPTION

This course concerns the exploration of 'outer' space, past, present and future, and looks at many ways in which space exploration interacts with our lives and our culture. We will look at space as a place, as a newly accessible part of the domain of human activity. In ancient times Geography was the study of different lands, territories which could be reached only after undertaking a voyage. Now we can look to new lands, new continents far away, but within reach of our senses, our robots and we ourselves, if we choose to make the journey. We will look at these new places as geographers, studying their physical characteristics, their resources and hazards, and the ways we can interact with them: scientifically, politically, economically, legally, artistically, or just as interested spectators. Many of my attitudes to this subject are expressed in Carl Sagan's book Pale Blue Dot - not a text for this course, but well worth reading.

It is important to note that this is not an astronomy or planetary science class. We will look at topics related to these fields, but not in great detail.

The objective of this course is to demonstrate the wide range of human activity now associated with space, including connections to all our lives. The many links from lecture pages serve in place of a text book. Students are expected to spend time browsing among these links. It is impossible to read everything, but the lectures indicate the more important topics to be looked at. Students are expected to attend all classes, and to be suitably prepared for the in-class tests. Preparation for classes should include having read through the lecture page for that week before class.

**INSTRUCTOR:** Dr. Philip J. Stooke, room 2425 SSC Phone: 661-2111 ext. 85022 (**please, NO MESSAGES here - if I do not answer, send an email**)

INSTRUCTOR OFFICE HOURS: Monday to Thursday, each day, 11:00 to 12:00 in the MAP AND DATA CENTRE, Weldon Library, or by appointment, or just drop by my office (SSC-2425) any time (best days - Tuesday to Thursday). **NOTE:** Because those office hours are held in the Weldon Library, you cannot reach me on my office phone during those times.

e-mail: <u>pjstooke@uwo.ca</u> website: <u>publish.uwo.ca/~pjstooke</u>

Return to Department of Geography

#### We have three Teaching Assistants:

Daniel Bednar, email: <u>dbednar@uwo.ca</u> Ian Pritchard, email: <u>ipritcha@uwo.ca</u> Jeremy Grimstead, email: <u>jgrimste@uwo.ca</u>

They will not be teaching, but will help administer class tests, mark them and arrange for test pickup afterwards.

#### CLASSES: (held in UCC-146)

Tuesdays 8.30 - 9.30 Thursdays, 8.30 - 10.30

#### **READINGS:**

There is no textbook for this course. Readings are online, linked via the course website.

#### **EVALUATION:**

The final mark is the sum of marks for two in-class tests and a final project in two parts. In the middle of the term a first stage of the project (the Mini-Project) will be submitted and marked, giving a chance for feedback at that stage. At the end of term the finshed project will be handed in. There will not be a final examination after classes end.

In-class tests: 40 % Mini-Project: 20 % Term project, final: 40 %

Marks will be assigned or adjusted in such a way that the class average will meet the expected level of 75%.

So... to get a high mark in this course, you must do well on both the tests and the project. Only a very few students with truly exceptional work can expect to get marks in the 90 % range.

The tests will involve the ability to remember details from class notes and web readings. That type of study is easier if it is done gradually over the term, not by studying all night just before the test! Students who do less well at memory-work will have a chance to redress that in the final project, which will favour other qualities such as research skills, critical thinking, imagination, systematic study and careful presentation.

The tests will be held in class as indicated in the schedule. If tests are missed, whether due to illness or any other factor, they must be made up during the remainder of the term on a schedule agreed by the student and instructor. Students are directed to the University's Policy on Accommodation for Medical illness (see below under **Support Services**) for additional information.

Electronic Devices: No electronic devices will be allowed during tests and examinations.

### ACCESSIBILITY:

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at <u>http://www.sdc.uwo.ca/ssd/index.html</u> for any specific question regarding an accommodation.

#### **PLAGIARISM:**

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf

All work you hand in must be your own. Any offence will trigger the procedure outlined on the linked website.

**PREREQUISITES:** It is the student's responsibility to ensure that prerequisite courses have been passed prior to registration in any course. Students without the necessary prerequisites for a course **must** request special permission from the instructor to take the course.

**Regulation:** 

"Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites."

Program or degree questions? Refer to Department of Geography.

SUPPORT SERVICES FOR STUDENTS: Registrar's Services Student Development Services

For medical accommodations please visit <u>http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_medical.pdf</u> for additional information.

Mental Health: If you or someone you know is experiencing distress, there are several resources at the university to assist. Please visit this site for more information on mental health resources: <a href="http://www.uwo.ca/uwocom/mentalhealth/">http://www.uwo.ca/uwocom/mentalhealth/</a>

# Schedule for this term

(September to December 2015) (subject to minor modifications)

Week	Dates	Торіс
1	Sep. 10 - 11	Introduction to the course.
2	Sep. 14 - 18	History - early years: Sputnik, Apollo and Zond.
3	Sep. 21 - 25	History - Apollo on the Moon.
4	Sep. 28 - Oct. 2	History - Shuttle, Mir, Space Station.
5	Oct. 5 - 9	Geography of the solar system. <b>THURSDAY: Test 1 (only history) (20%)</b>
6	Oct. 12 - 16	Robotic exploration of space.
7	Oct. 19 - 23	Robotic exploration of space (continued). <b>THURSDAY:</b> <b>Hand in Mini-Project (20%)</b>
8	Oct. 26 - 30 NOTE: Study break - no Thursday class.	Space in our lives, space business, space law.
9	Nov. 2 - 6	Space commercialization: a new era
10	Nov. 9 - 13	Life in Space. <b>THURSDAY: Test 2</b> ('Solar System' to 'Space Commercialization' and current events) (20%) ( 'Life in Space' NOT on test)
11	Nov. 16 - 20	UFOs and SETI.
12	Nov. 23 - 27	Current Planetary Exploration.
13	Nov. 30 - Dec. 4	Where do we go from here? Conclusion.
14	Dec. 7 - 9 NOTE: no Thursday class.	Evaluation. Hand in Term Project Final Report (40%) DURING THE LAST CLASS!!!