

**GEOG7010–Research and Grants for Scientists
(3 credit hours)
Fall, 2017**

**University of Manitoba
Clayton H. Riddell Faculty of Environment, Earth, and Resources
Department of Environment and Geography**

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Course Times:

The course will meet weekly for three hour blocks in a seminar-style learning environment. Specific times will be determined based on student and instructor availability.

Prerequisites:

There is no formal prerequisite for the course, but senior graduate students who plan on pursuing a research-intensive career are best suited to the material. Permission of instructor is required to register.

Course Materials:

There is no required textbook, but seminar materials will be made available to students at online.

Course Outline:

This course has been developed for graduate students on track for careers that will be research intensive. Each week we will meet to discuss and explore various elements of the research exercise, with a focus on grant writing, ethics in research and publishing, and science communication.

Objectives:

By the end of the course the students will be expected to be able to:

- Complete standard research CVs
- Seek out and target applicable funding mechanisms
- Budget research appropriately
- Navigate the various means by which to share raw data
- Understand authorship roles and requirements for publishing
- Complete a full proposal for submission to a granting agency

Subject materials to be presented:

- History and future of research funding
- Ethics in research and publishing
- Grant review panels and how they function
- The history and practice of peer review of scientific literature
- Identifying high quality research
- Formulating and expressing hypotheses

Grading Scheme:

| | |
|---|-------------|
| Assignments and/or Short Quizzes (three in total) | 30% |
| Seminar Participation | 30% |
| Final Grant Application | 40% |
| Total | 100% |

Comments:

Policy regarding late assignments: Every student is required to submit an independent assignment. Failure to submit a report will result in a mark of zero on that assignment; reports submitted late will not be accepted without special permission.

Evaluative Feedback: Will be provided in the form of two assignments prior to the voluntary withdrawal deadline date for this course.

Final Grade: A total mark of less than 50% in the course will result in a grade of **F**. Marks between 50% and 100% will be graded from **D** to **A+** according to the Department of Environment and Geography grading scheme below:

| Letter Grade | Percentage |
|---------------------|-------------------|
| A+ | 90-100 |
| A | 80-89 |
| B+ | 75-79 |
| B | 70-74 |
| C+ | 65-69 |
| C | 60-64 |
| D | 50-59 |
| F | <49.9 |

Academic Dishonesty: Students should acquaint themselves with the University's policy on plagiarism and cheating and examination impersonation (see University of Manitoba General Calendar). The copying of another student's assignment or the submission of the same material for two or more courses is plagiarism. Plagiarism and other forms of cheating are prohibited. The full definition of plagiarism and the possible penalties associated with it are outlined in the General Calendar. If your submitted assignment contains material you have copied from another source (e.g., from a textbook, web page, or from the published literature) you must give proper credit to that source.