

Phil 341: Philosophy of Science

Instructor: Dr. Oran Magal

General Information

Term: Fall 2013, 3 credits

Lectures: Tuesday, Thursday, and Friday, 11:35-12:25, Leacock 14

Office hours: T / R / F, 12:30-13:30, Leacock 922

Instructor email: oran.magal@mcgill.ca

Course outline

It is sometimes said that we live in a scientific age. 'Science' is a major force in shaping our lives and the societies in which we live, which makes it particularly valuable to pursue an understanding of what science is and what its methods are, as well as to evaluate claims often made on its behalf for a special kind of objectivity and unique standing with respect to politics and policy.

The focus of the course is on recent & contemporary philosophy of science. A detailed syllabus and schedule of readings and assignments will be available on the course website; topics to be discussed include:

- Brief historical background
- The 'demarcation problem': what ought we to call scientific?
- The problem of induction
- The nature of scientific explanation
- Frameworks, research programmes, and 'paradigm shifts'
- Sociology of science and science as a 'social construct'
- Feminist epistemology in the philosophy of science

Course requirements

1. Reading the assigned material prior to each class.
2. Submitting two short papers and a longer final paper. There will be multiple options for paper topics; additionally, there will be an option to choose one's own

- topic for the final paper, with instructor's permission. (There will be no midterm or final exam.) **Note:** papers will be graded on content as well as clarity.
3. Papers may not be submitted late except for medical reasons or personal issues of serious nature.

Required readings

The main textbook will be available at The Word bookstore (469 Milton St.):

Peter Godfrey-Smith, *Theory and Reality: An Introduction to the Philosophy of Science* (University of Chicago Press, 2003).

Additional required reading: Thomas Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, any edition would be fine). Copies should be available at The Word, as well.

Further readings will be provided through the course website.

McGill Policy on academic integrity and submitting work in French and English

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue)

Personal note from instructor:

Please do feel comfortable (not just 'permitted') to submit work in either language, I have no difficulty with accepting and grading papers in French.