

PHIL 356 A01 - Spring 2024
Philosophy of Science:
Understanding Science as a Human Practice

Instructor: Eric Hochstein

CRN: 22543

Time: Tuesday/Wednesday/Friday from 11:30-12:20 pm

Place: David Strong Building, Room C108

Office Hours (in Clearihue B330): Wednesdays from 3:00-5:00 pm; and by appointment

Email: ehochstein@uvic.ca

Description: People often talk about science in the abstract, as a single unified enterprise that operates independently of the scientists that engage in it (e.g. “Science is true whether you believe it or not”, or “science proves that smoking causes cancer”). This tendency can make it easy for people to overlook the fact that science is, at its core, a human practice. Science is a set of methodologies, practices, and tools developed by humans to understand and make sense of the world (these include: setting up experimental protocols, engaging in the peer review process, carrying out replications, applying for grants, etc). In this course, we will examine the human and social dimension of science. If science is developed by humans, for human ends, then how do physiological and social facts about us influence, limit and structure the development of science? What sorts of problems do they create, and how can we overcome them?

Structure: The course comprises three lectures (50min) per week, the contents of which will be based on the course readings. The course will proceed primarily through lectures and discussions. Readings for the class will all be uploaded onto the course website.

Intellectual property of materials on the LMS website: Please note that all assignments for this course and all materials posted to the LMS website are the intellectual property of myself and the University of Victoria. Do not circulate this material or post it to note-sharing sites without my permission. Posting course materials to note-sharing sites or otherwise circulating course materials without the permission of your instructor violates the Policy on Academic Integrity (https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk_0xsM_V?bc=true&bcCurrent=08%20-%20Policy%20on%20Academic%20Integrity&bcGroup=Undergraduate%20Academic%20Regulations&bcItemType=policies). Any evidence you are circulating materials without permission will be referred to the Chair of the Philosophy Department for investigation.

Evaluation: The course will be graded as follows:

- 2 mid-terms, worth 15% and 25%
- A term paper 25% (3-10 double-spaced pages);
- A final examination worth 35%.

An editor is an individual or service, other than the instructor or supervisory committee, who manipulates, revises, corrects or alters a student's written or non-written work.

The use of an editor, whether paid or unpaid, is prohibited unless the instructor grants explicit written authorization. The instructor should specify the extent of editing that is being authorized.

Review by fellow students and tutoring that do not include editing are normally permitted. In addition to consulting with their instructors, students are encouraged to seek review of and feedback on their work that prompts them to evaluate the work and make changes themselves.

Tentative Schedule of Readings:

Week 1 (Jan 9, Jan 10 & Jan 12): Double-Blind Studies, Peer-Review, & Replication

No Classes

Week 8 (Feb 27, Feb 28 & Mar 1): Values and Science

Term Paper Assigned: March 1

Readings:

- Longino, H. "Beyond "Bad Science": Skeptical Reflections on the Value-Freedom of Scientific Inquiry"

Week 9 (Mar 5, Mar 6 & Mar 8): How the Act of Classification Can Change Phenomena

Mid-Term 2: March 8

Readings:

- Murphy, D. "Deviant Deviance".

Week 10 (Mar 12, Mar 13 & Mar 15): The Replication Crisis

Readings:

- Romero, F. "Who Should Do Replication Labor?"

Week 11 (Mar 19): When is Scientific Disagreement Good or Bad?

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