***Please Note: This is a tentative syllabus that may change between now and the time the semester starts in September.**

PHIL 356 A01 - Fall 2025
Philosophy of Science:
Understanding Science as a Human Practice

Instructor: Eric Hochstein
CRN: 12686
Time: Tuesday/Wednesday/Friday from 11:30 am-12:20 pm
Place: TBD
Office Hours (in Clearihue B330)**:** Wednesdays from 3:00-5:00 pm; and by appointment
Email: ehochstein@uvic.ca

We acknowledge and respect the Lək̓ʷəŋən (Songheeș and Xʷsepsəm/Esquimalt) Peoples on whose territory the university stands, and the Lək̓ʷəŋən and W̱SÁNEĆ Peoples whose historical relationships with the land continue to this day.

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?

The purpose of the course is to train students in understanding science first and foremost as a practice that scientists, as humans with particular cognitive limitations and embedded in a society, engage in it. Students are also trained in how to write a philosophy paper, and to express complex ideas in a clear and straightforward manner.

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.

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%.

Policy on assignments, tests, and term papers: Late papers will receive a deduction of 5% per day until handed in. Any exam missed without proof/documentation of illness or family emergency will receive a 0.

Important to Note: It is expected that students will prepare for and attend class regularly. Students are encouraged to consult the instructor with any problems or concerns about the course **early** in the semester.

Grading System:

Percentages	**Letter Grade**	**Grade Point**
90 – 100	A+	9
85 – 89	A	8
80 – 84	A-	7

An A+, A, or A- is earned by work which is technically **superior**, shows mastery of the subject matter, and in the case of an A+ offers original insight and/or goes beyond course expectations. Normally achieved by a minority of students

77 – 79	B+	6
73 – 76	B	5
70 – 72	B-	4

A B+, B, or B- is earned by work that indicates a **good** comprehension of the course material, a good command of the skills needed to work with the course material, and the student's full engagement with the course requirements and activities. A B+ represents a more complex understanding and/or application of the course material.

65 – 69	C+	3
60 – 64	C	2

A C+ or C is earned by work that indicates an **adequate** comprehension of the course material and the skills needed to work with the course material and that indicates the student has met the basic requirements for completing assigned work and/or participating in class activities.

50 – 59	D	1

A D is earned by work that indicates **minimal** command of the course materials and/or minimal participation in class activities that is worthy of course credit toward the degree.

0 – 49	F	0

F is earned by work, which after the completion of course requirements, is **inadequate** and unworthy of course credit towards the degree.

Interpretation of these grade definitions is up to the discretion of the instructor. If you receive a grade during the course that you believe is unfair, please begin by discussing the matter with the instructor (or TA) in a respectful, open-minded manner. Rest assured that if you still believe the grade you received is unfair you can appeal the matter to the chair of the department.

For additional information regarding grades, please see the most recent (September 2021) edition of the Uvic Undergraduate Calendar.

All evaluations of tests and assignments will be calculated according to percentage scores. Letter grades and grade point scores are listed purely for reference.

Final examinations are the property of Uvic and are not returned. They are available for viewing at the Records Office according to Uvic procedures and regulations.

Uvic is committed to providing a safe, supportive learning environment for all members. Further information regarding Uvic policies on human rights, equity, discrimination and harassment are located in the Uvic calendar, but if you have any particular concerns in our course please do not hesitate to contact me.

Tentative Schedule of Readings:

Week 1: Double-Blind Studies, Peer-Review, & Replication
No Readings for This Week

Week 2: Are Scientific Observations Theory Laden?
Readings:

- Kuhn T.S. (1976). "Scientific Revolutions as Changes of World View." In: Harding S.G. (eds) Can Theories be Refuted?

Week 3: Conceptualizing and Re-conceptualizing Phenomena (Part 1)
Readings:

- Schacter, D. & Addis, D. "The ghosts of past and future"
- Schacter, D., Addis, D. & Buckner, R. "Remembering the past to imagine the future: the prospective brain"

Week 4: Conceptualizing and Re-conceptualizing Phenomena (Part 2):
Readings:

- Churchland, P. S. (1988). "Consciousness: What is the Explanandum?" excerpt from *Reduction and the neurobiological basis of consciousness*. In A. J. Marcel & E. Bisiach (Eds.), Consciousness in contemporary science (pp. 273-304). New York, NY, US: Clarendon Press / Oxford University Press.

Week 5: Science and Human Limitations
Mid-term 1
Readings:

- Potochnik, A. (2015). "The Diverse Aims of Science". Studies in History and Philosophy of Science.

Week 6: Can Science Truly be Objective?
Readings:

- Douglas, Heather "The Irreducible Complexity of Objectivity"

Week 7: Values and Science
Readings:

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

Week 8: How The Act of Classification Changes Phenomena
Term Paper Assigned
Readings:

- Murphy, "Deviant Deviance".

Week 9: The Replication Crisis (Part 1)
Mid-Term 2
Readings:

- Everett, J. & Earp, B. (2015). "A tragedy of the (academic) commons: interpreting the replication crisis in psychology as a social dilemma for early-career researchers." Frontiers in Psychology

Week 10: The Replication Crisis (Part 2)
Readings:

- Romero, F. (2018). "Who Should Do Replication Labor?" Advances in Methods and Practices in Psychological Science. 1-22

Week 11: Is Scientific Disagreement Good or Bad?
Readings:

- Miller, B. "When Is Scientific Dissent Epistemically Inappropriate?"

Week 12: Describing Phenomena vs Helping Others
Term Paper Due
Readings:

- Tekin, S. "Against Hyponarrating Grief: Incompatible Research and Treatment Interests in the DSM-5"

Week 13: Spill over and Review
No Readings

Note on Avoidance of Academic Offenses:

All students registered in the course are expected to know what constitutes an academic offence, to avoid committing academic offenses, and to take responsibility for their academic actions. When the commission of an offense is established, it will be acknowledged by disciplinary penalties. If you need help in learning how to avoid academic offenses such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your course instructor for guidance. You can find the university's Policy on Academic Integrity here:

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

If you are seeking editing help, please note that the university has recently adopted a strict view about seeking the help of others for editing. They say (this can be found in the link above):

> 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.

Please note: The use of Artificial Intelligence or Large Language Models (like ChatGPT and others) counts as **plagiarism** for the purposes of writing or editing your assignments and term papers for this course.

Note for students with disabilities:

The Resource Centre for Students with a Disability (http://www.uvic.ca/services/rcsd/) is a fantastic resource that collaborates with all academic departments to help arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with them at the beginning of each academic term.