

Please note: This is a Tentative Syllabus. It may change between now and the start of the Fall 2026 semester.

PHIL 356 A01 - Fall 2026

Philosophy of Science

Instructor: Eric Hochstein

CRN: 12686

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

Place: COR B111

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

Email: ehochstein@uvic.ca

We acknowledge and respect the Lək'wəṇən (Songhees and Xwsepsəm/Esquimalt) Peoples on whose territory the university stands, and the Lək'wəṇən 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. This tendency can make it easy to overlook the fact that science is, at its core, a human practice. Science is a set of methodologies, practices, and tools developed by us to understand and make sense of the world. In this course, we will examine philosophical questions surrounding science as a human practice. 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% (3-11 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. Please note, the use of LLMs or AI for term paper writing or editing is strictly forbidden for the purposes of this course.

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
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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
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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:

September 9 & 11: Introduction and Basics

No Readings for This Week

September 15, 16 & 18: Scientific Realism vs Scientific Anti-Realism (Part 1)

Readings:

- Okasha, “Realism & Anti-Realism”
- Hacking, I. “What is Scientific Realism?”

September 22, 23 & 25: Scientific Realism vs Scientific Anti-Realism (Part 2)

Class Cancelled Sept 23 & 25

Readings:

Van Fraassen, B. “Arguments Concerning Scientific Realism”

September 29 & Oct 2: Are Scientific Observations Theory Laden?

Class cancelled on September 30th (National Day for Truth and Reconciliation)

Readings:

- Kuhn, T. “Scientific Revolutions as Changes of World View.”

Oct 6, 7 & 9: Understanding the Relationship Between Science and Objectivity

Oct 6: Mid-term 1

Readings:

- Douglas, Heather “The Irreducible Complexity of Objectivity”

October 13, 14 & 16: Idealization and Abstraction in Science

Readings:

- Potochnik, A. “The Diverse Aims of Science”

October 20, 21 & 23: Can Science Be Value Free?

Readings:

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

October 27, 28 & 30: Reductionism vs. Antireductionism (Part 1)

Oct 27: Term Paper Assigned

Readings:

- Churchlands, “Intertheoretic Reduction: A Neuroscientist's Field Guide”

November 3, 4 & 6: Reductionism vs. Antireductionism (Part 2)

Oct 6: Mid-Term 2

Readings:

- Fodor, J. “Special Sciences”

November 13: Replication Crisis in Science (Part 1)

Class cancelled on November 10 & 11 (Reading Break)

Readings:

- Frias-Navarro, D., Pascual-Llobell, J., Pascual-Soler, M., Perezgonzalez, J., & Berrios-Riquelme, J. (2020). Replication crisis or an opportunity to improve scientific production?. *European Journal of Education*, 55(4), 618-631.

November 17, 18 & 20: Replication Crisis in Science (Part 2)

Readings:

- Romero, F. “Who Should Do Replication Labor?”

November 24, 25 & 27: How Do We Balance Issues of Free Speech, with People Making Deceptive or Misleading Claims About Science?

Nov 27: Term Paper Due

Readings:

- McKinnon, C. (2016) “Should we tolerate climate denial?”

December 1, 2 & 4: 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.

IMPORTANT: Chat GPT and similar technologies are not permitted for this course. Plagiarism and other forms of cheating will not be tolerated. It is each student's responsibility to know the University's regulations in this regard. The Policy on Academic Integrity is published in [the University Calendar](#). You can also consult the [Libraries' plagiarism guide](#) or the [Tri-Faculty Standards for Professional Behavior for Students](#), which draws together a number of existing UVic policies in one place for ease of reference. Professionalism is expected from all students enrolled in courses in the Faculty of Humanities. As part of professionalism, students, faculty and staff are expected to be familiar with University policies, including the Tri-Faculty Standards.

This course is governed by UVic's policies on student behaviour and adheres to its commitment to [Creating a respectful, inclusive and productive learning environment](#). All members of our class—myself, our T.A., and all students—have the right to experience and the responsibility to help create such an environment. Professionalism is expected from all students enrolled in courses in the Tri-Faculty; these [standards for professional behaviour](#) apply to interactions both in person and online. Please see also information on University expectations regarding [Student Conduct](#) and policies regarding

Note for students with disabilities:

The Centre for Accessible Learning (<https://www.uvic.ca/services/cal/>) 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.

Additional Student Resources:

1. [UVic Learn Anywhere](#). UVic Learn Anywhere is the primary learning resource for students. It offers many learning workshops and resources to help students with academics and learning strategies.
2. [Library resources](#). Information for students wishing to use the UVic library.
3. [Indigenous student services](#)
4. [Academic Skills Centre](#)
5. [Learning Strategist Program](#)
6. [Academic Concession Regulations](#)
7. [Academic Concessions and Accommodations](#)
8. Academic accommodation & access for students with disabilities – [Policy AC1205](#)
9. [Student wellness](#) resources.
10. [Ombudsperson](#). A resource to help resolve disputes or complaints.
11. Other [student groups and resources](#).

University Statements and Policies

1. University Calendar – “[Information for all students](#)”
2. [Creating a respectful, inclusive and productive learning environment](#)
3. [Accommodation of Religious Observance](#)
4. [Student Conduct and Non-Academic Student Misconduct](#)
5. [Accessibility](#)
6. [Equity, Diversity, and Inclusion](#)
7. [Equity and Human Rights](#)
8. [Sexualized Violence Prevention and Response](#)
9. [Discrimination and Harassment Policy](#)