



**PHIL 367 Lec 01**  
**Science and Philosophy**  
Fall Term 2020

**COURSE OUTLINE**

**Instructor Name:** Marc Ereshefsky

**Email:** ereshefs@ucalgary.ca

**Office Hours:** MW 11:15 am – 12:00 noon via Zoom (for Zoom link, see D2L under 'Content')

**Teaching Assistant Name:** Archie Fields III

**Email:** archie.fieldsiii@ucalgary.ca

**COURSE DELIVERY INFORMATION**

Lectures and discussions will occur synchronously via Zoom MW 3:30 – 4:45 pm. Zoom links will be posted on D2L under 'Content'.

**PREREQUISITE(S)**

There are no prerequisites for this course.

**COURSE INFORMATION**

We will discuss four important questions in the philosophy science. What makes a theory a scientific theory? What is scientific objectivity? What does science tell us about human nature? Are scientific theories true?

**COURSE OBJECTIVES/LEARNING OUTCOMES**

- Knowledge of various philosophical perspectives on the nature of science.
- Ability to critically interpret and analyze complex philosophical sources.
- Ability to engage in constructive oral and written argumentation.

**READINGS MATERIALS**

You will read a number of articles and chapters in the philosophy of science for this course. Links and references for those articles and chapters will be posted on D2L under 'Content'. Please use the sources provided for this course and not other versions of the articles and chapters. Page numbers will be given in class and page numbers will be cited in your papers. We should literally be on the same page.

**TOPICS AND READINGS**

What is Science?

1. "Science: Conjectures and Refutations" – Popper
2. "Why Astrology is a Pseudoscience" – Thagard

What makes Science Objective?

1. "Objectivity, Value Judgment, and Theory" – Kuhn
2. "Values and Objectivity" – Longino
3. "Gender and the Biological Sciences" – Okruhlik

Science and Human Nature

1. "On Human Nature" – Hull
2. "Animalism and the Persistence of Human Organisms" – Dupré

Are Scientific Theories True?

1. "The Ontological Status of Theoretical Entities" – Maxwell
  2. "Arguments Concerning Scientific Realism" – van Fraassen
  3. "Experimentation and Scientific Realism" – Hacking
- Details concerning where to obtain the readings will be posted on D2L under 'Content'.

**COURSE ASSESSMENT AND EVALUATION**

- Four quizzes and two papers are required for this course. More details about these will be given as the course progresses.
- Here is the schedule for when quizzes will be given and when papers will be due, as well as their point values. Quizzes will be on Wednesdays; papers will be due Fridays.

September 23	Quiz 1	100 points
October 7	Quiz 2	100 points
October 23	Paper 1	250 points
November 4	Quiz 3	100 points
November 25	Quiz 4	100 points
December 11	Paper 2	350 points

- There is no registrar scheduled exam
- Quizzes will be given through D2L
- Papers will be submitted to the dropbox on D2L
- No single quiz or paper is required to pass the course
- No make-up quizzes will be given or late papers accepted without an appropriate excuse. Please talk to Marc as soon as you can if you have a problem meeting deadlines.
- Final grades will be awarded as follows.

960-1000 = A+	800-839 = B	680-699 = C-
900-959 = A	780-799 = B	640-679 = D+
880-899 = A-	740-779 = C+	600-639 = D
840-879 = B+	700-739 = C	below 600 = F

**D2L AND EMAIL**

Class information will be posted on D2L. You'll be sent class announcements through your UCalgary email account, please check that account.

**CITATION AND BIBLIOGRAPHY INSTRUCTIONS**

For your papers, please follow these instructions for citing sources and constructing your bibliography.

- If you are citing one of our class readings, please cite the versions referred to on D2L.
- You can cite other authors beyond our course readings, but that is not required.
- Whenever you quote someone, provide the source and page numbers from that source. Here's an example: Dr. Black writes, "all kittens are incredibly cute" (1993, p. 46). '(1993, p. 46)' refers to the article or book and page number where Dr. Black says that. Place detailed information about the article or book in your bibliography.
- Whenever you attribute a view or idea to a person, provide the source and page number where that claim is made. Here's an example: Dr. White likes kittens, but argues that puppies are far cuter (1994, p. 333).
- Use the following method for listing articles, books, and websites in your bibliography.

- Smith, D. (1997) "A Theory of Cats," *Philosophy of Science* 44: 60-88.
- Smith, D. (1998) *A New Theory of Cats*, Blackwell Publishers.
- Smith, D. (1992) "A Theory of Great Cats," in J. Armstrong (ed.) *An Anthology on Theories of Great Cats*, Oxford University Press, 60-88.
- Canto, P. (2006) "A Theoretical Discussion of Cats." <http://ohiou.edu/CatTheory>.

The first entry is for an article, the second for a book, the third for a chapter in an edited book, and the fourth for a website.

## **IMPORTANT DEPARTMENTAL, FACULTY AND UNIVERSITY INFORMATION**

### **Academic Accommodations**

It is the student's responsibility to request academic accommodations according to the University policies and procedures. The student accommodation policy can be found at [ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf](http://ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf).

Students needing an Accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: [ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities.pdf](http://ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities.pdf). Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to their instructor.

### **Absence or Missed Course Assessments**

Students who are absent from class assessments (tests, participation activities, or other assignments) should inform their instructors as soon as possible. If the reason provided for the absence is acceptable, instructors may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test.

### **Student Support and Resources**

Full details and information about the following resources can be found at [ucalgary.ca/Registrar/registration/course-outlines](http://ucalgary.ca/Registrar/registration/course-outlines)

- Wellness and Mental Health Resources
- Student Success Centre
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk

### **Academic Advising**

If you are a student in the Faculty of Arts, you can speak to an academic advisor in the Arts Students' Centre about course planning, course selection, registration, program progression and more. Visit the Faculty of Arts website at [arts.ucalgary.ca/advising](http://arts.ucalgary.ca/advising) for contact details and information regarding common academic concerns.

For questions specific to the philosophy program, please visit [phil.ucalgary.ca](http://phil.ucalgary.ca). Further academic guidance is available by contacting David Dick (Undergraduate Program Director [dgdick@ucalgary.ca](mailto:dgdick@ucalgary.ca)) or Jeremy Fantl (Honours Advisor [jfantl@ucalgary.ca](mailto:jfantl@ucalgary.ca)). If you have questions regarding registration, please email Rebecca Lesser (Undergraduate Program Administrator [phildept@ucalgary.ca](mailto:phildept@ucalgary.ca)).

### **Writing Assessment and Support**

The assessment of all written assignments—and, to a lesser extent, written exam responses—is based in part on writing skills. This includes correctness (grammar, punctuation, sentence structure, etc.), as well as general clarity and organization. Research papers must include a thorough and accurate citation of sources. Students are also encouraged to use Writing Support Services for assistance. For more information, and other services offered by the Student Success Centre, please visit [ucalgary.ca/ssc](https://ucalgary.ca/ssc).

### **Required Technology**

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Broadband internet connection.

Most current laptops will have a built-in webcam, speaker and microphone.

### **Responsible Use of D2L**

Important information and communication about this course will be posted on D2L (Desire2Learn), UCalgary's online learning management system. Visit [ucalgary.service-now.com/it](https://ucalgary.service-now.com/it) for how-to information and technical assistance.

All users of D2L are bound by the guidelines on the responsible use of D2L posted here: <https://elearn.ucalgary.ca/commitment-to-the-responsible-use-of-d2l/>. The instructor may establish additional specific course policies for D2L, Zoom, and any other technologies used to support remote learning. Instructional materials, including audio or video recordings of lectures, may not be posted outside of the course D2L site. Students violating this policy are subject to discipline under the [University of Calgary's Non-Academic Misconduct policy](#).

### **Media Recording**

Please refer to the following statement on media recording of students: [https://elearn.ucalgary.ca/wp-content/uploads/2020/05/Media-Recording-in-Learning-Environments-OSP\\_FINAL.pdf](https://elearn.ucalgary.ca/wp-content/uploads/2020/05/Media-Recording-in-Learning-Environments-OSP_FINAL.pdf)

### **Academic Misconduct/Honesty**

Cheating or plagiarism on any assignment or examination is as an extremely serious academic offense, the penalty for which will be an F on the assignment or an F in the course, and possibly a disciplinary sanction such as probation, suspension, or expulsion. For information on academic misconduct and its consequences, please see the University of Calgary Calendar at [ucalgary.ca/pubs/calendar/current/k.html](https://ucalgary.ca/pubs/calendar/current/k.html).

Intellectual honesty requires that your work include adequate referencing to sources. Plagiarism occurs when you do not acknowledge or correctly reference your sources. If you have questions about referencing, please consult your instructor.

### **University Policies**

The Instructor Intellectual Property Policy is available at [ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf](https://ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf)

The University of Calgary is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act, as outlined at [ucalgary.ca/legalservices/foip](https://ucalgary.ca/legalservices/foip). The instructor (or TA) must

return graded assignments *directly* to the student UNLESS written permission to do otherwise has been provided.

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright ([ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf](http://ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf)) and requirements of the copyright act ([laws-lois.justice.gc.ca/eng/acts/C-42/index.html](http://laws-lois.justice.gc.ca/eng/acts/C-42/index.html)).