



UNIVERSITY OF CALGARY
FACULTY OF ARTS
Department of Philosophy

PHIL 367 Lec 01
Science and Philosophy
Fall Term 2022

COURSE OUTLINE

Lectures: MWF 1 – 1:50 pm, MS 211

Instructor: Marc Ereshefsky

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Office Phone number: (403) 220-3162

Office: Social Sciences 1204

Office Hours: Wednesday 5 – 5:45 pm, Friday 2:10 – 2:50 pm, & by appointment in person in Marc's office. Or you can meet with Marc during office hours via Zoom. The Zoom link for office hours is in the Office Hours Zoom link information document in the Content Folder of D2L.

COURSE INFORMATION

We will discuss four 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?

PREREQUISITE(S)

There are no prerequisites for this course.

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 approximately 10 articles and chapters for this course. Links and references for those articles and chapters are posted on D2L in the Content Folder. Please use the sources provided for this course and no other versions of the articles and chapters. Page numbers will be given in class and page numbers should be cited in your papers. We need to be using the same sources with the same page numbers so we can talk and write about the same pages of our sources.

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
3. "Skeptical Reflections on Human Nature" – Sterelny

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
4. "The Natural Ontological Attitude" – Fine

COURSE ASSESSMENT AND EVALUATION

You need write 5 written preparations, 2 papers, and 2 quizzes in this course.

Written Preparations

- Five written preparations are required. Each preparation should contain a one-sentence question from a reading we are discussing in class. In a different paragraph, provide six to eight sentences explaining why you are raising the question and context of the question.
- Samples of written preparations can be found on D2L.
- The question may be remedial and seek an account of an important claim or argument in the reading that you could not follow. Or the question could be more critical in nature, alluding to a weakness in the paper. Or the question could be probing, identifying an issue that is raised by the reading or a possible implication of the reading.
- Each written preparation must be handed in before we start discussing an article in class. Please submit written preparations to the appropriate D2L dropboxes. No preparations will be accepted after we start discussing an article. So, you must submit your written before the class session we discuss the reading that your written preparation is about.
- Written preparations need to be double-spaced.
- We may only read 9 articles in the class. So you should start writing and submitting your written preparations right away.
- You can hand in more than five written preparations. For each additional preparation beyond 5, your lowest grade for a preparation will be replaced with a higher additional preparation grade.

Quizzes

- Quizzes will be given through D2L during regularly scheduled class times. Questions on quizzes will be drawn from our class readings and class discussion.

Papers

- Paper topics and detailed instructions will be given two weeks before a paper is due. Topics will draw from class readings and class discussion. Rubrics and tips for writing these papers will be given during the term. Please submit papers to the appropriate D2L dropboxes.

Here is the schedule for when quizzes are given, and when papers and written preparations are due, as well as their point values.

Written Preparations	Due before we discuss a reading	5 X 3 points
Quiz 1	Wednesday, October 12	10 points
Paper 1	Saturday, October 29	25 points
Quiz 2	Wednesday, November 23	15 points
Paper 2	Saturday, December 10	35 points

- There is no registrar scheduled exam
- No single quiz, paper, or written preparation is required to pass the course. Your course grade will be determined on the assignments that you have completed.
- 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 a deadline.
- Final grades will be awarded as follows.

96-100 = A+	80-83 = B	68-69 = C-
90-95 = A	78-79 = B-	64-67 = D+
88-89 = A-	74-77 = C+	60-63 = D
84-87 = B+	70-73 = C	below 60 = F

D2L AND EMAIL

Class information will be posted on D2L. You'll be sent class announcements through your U Calgary email account. Please check that account.

CITATION AND BIBLIOGRAPHY INSTRUCTIONS

For your papers, please follow these instructions for citing sources and constructing your bibliography. Or you can use MLA or Chicago styles for citation.

- 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 in the main body of your paper. 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. Then 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/legal-services/sites/default/files/teams/1/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/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.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/current-students/student-services

- 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 <https://arts.ucalgary.ca/current-students/undergraduate/academic-advising> for contact details and information regarding common academic concerns.

For questions specific to the philosophy program, please visit arts.ucalgary.ca/philosophy. Further academic guidance is available by contacting Jeremy Fantl (Undergraduate Program Director ifantl@ucalgary.ca) or David Dick (Honours Advisor dgdick@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/student-services/student-success.

Responsible Use of D2L

Important information and communication about this course will be posted on D2L (Desire2Learn), UCalgary's online learning management system. Visit <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

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.

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/legal-services/sites/default/files/teams/1/Policies-Intellectual-Property-Policy.pdf

The University of Calgary is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act, as outlined at <https://www.ucalgary.ca/legal-services/access-information-privacy>. 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 (<https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Acceptable-Use-of-Material-Protected-by-Copyright-Policy.pdf>) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>).