



UNIVERSITY OF CALGARY
FACULTY OF ARTS
Department of Philosophy

PHIL 367 LEC 01
Science and Philosophy
Summer 2020
TR 2:00 PM - 3:15 PM

Course Outline

Instructor Name: Archie Fields III
Email: archie.fieldsiii@ucalgary.ca
Office: <https://ucalgary.zoom.us/j/97983641503>
Office Hours: Thursdays 3:30-4:30, and by appointment

Teaching Assistant Name: Alican Basdemir
Email: alican.basdemir@ucalgary.ca
Office Hours: by appointment only, email to set up a Zoom meeting

Course Description

This course will cover important questions in the philosophy of science, such as: What is science? What differentiates it from pseudoscience, as well as from non-scientific forms of research? Is science objective? What role do values play in science, and what role should they play? How should we understand the ontological status of scientific theories? Do scientific theories provide or aim to provide true descriptions of nature, or are they merely useful tools for manipulating the world?

Prerequisite(s)

None.

Course Objectives/Learning Outcomes

Students will develop the following skills over the course:

- Understand key issues and positions within the philosophy of science
- Read and understand papers on the philosophy of science
- Develop critical thinking skills in engaging with philosophical arguments
- Articulate original defenses and criticisms of philosophical arguments

Course Readings

All readings will be posted to D2L. However, 10 out of 12 of those readings can be found in the following textbook, if you want to purchase a physical copy via your preferred retailer:

Philosophy of Science: The Central Issues (Second Edition). 2012. Martin Curd and J. A. Cover (eds.), 1998, W.W. Norton and Company

Course Units

There are three themed units to this course:

- 1. The Demarcation Problem (Week 1 and 2)**
- 2. Objectivity and Values in Science (Week 3 and 4)**
- 3. Realism and Antirealism (Week 5 and 6)**

The Reading Schedule and Schedule of Assignments for these units are posted to D2L. In addition, you must prepare one discussion question per unit (see Discussion Questions below) and one thinkpiece per unit (see Thinkpieces below). You may not prepare both a discussion question for credit and a thinkpiece for the same Discussion session, so make sure you turn in EITHER A DISCUSSION QUESTION OR A THINKPIECE EVERY THURSDAY of the course.

Course Assessment and Evaluation

Recorded Lectures

Each week, I will release a set of short recorded lectures on the readings for the week. The lectures are intended to help provide a basic understanding of the readings. These lectures will be the basis of the quizzes (see Quizzes below). The basic understanding provided by the lectures will be built upon in the Q&A sessions on Tuesdays from 2:00-3:15 PM and the Discussion sessions held on Thursdays from 2:00-3:15 PM (see Zoom Meetings below for further details).

Zoom Meetings

Every week of the class, beginning June 30 and ending on August 11, there will be two Zoom meetings each week on Tuesday and Thursday. Each meeting will begin at 2:00 PM and last 1 hour and 15 minutes. The Tuesday meetings are Q&A sessions in which students are invited to ask questions about the readings to develop their understanding. The Thursday meetings are Discussion sessions. During these sessions, students will be broken up into randomized discussion groups to critically discuss and evaluate the readings for the week. During the discussion, the instructor and the TA will move from group to group to answer additional questions and facilitate discussion. Students will prepare for these meetings by preparing EITHER a discussion question (see Discussion Questions below) OR by writing a short thinkpiece (see Thinkpieces below) to discuss with their group members. Attending and participating in these meetings is not mandatory, though it is highly encouraged. However, the corresponding Discussion Questions and Thinkpieces intended to prepare you for Thursday Discussion sessions are graded components of the course.

Discussion Questions (15 points)

Students must prepare three discussion questions over the course of the term prior to a Thursday Discussion session. **To get credit for the discussion question, you must post it to the Discussion Forum on D2L BEFORE the discussion begins at 2:00 PM, and the question must be about one or more of the readings assigned that week.** The TA will assess the questions posted on a pass/fail grading scheme. You must prepare a discussion question for each of the three course units (see Course Units above), and you cannot prepare a discussion question for credit on the same week you write and submit a thinkpiece. Each discussion question is worth 5 points of your final grade. A passing question earns 5 points, a failing question earns 0. In the event that your prepared question is graded as failing, you will be allowed to submit a new question for credit once, no later than three days after the grade is posted. If your question is still graded as failing, you will receive 2.5 points for it.

Guidelines for writing the discussion questions:

- The question should be raised in one or two sentences. Additionally, you should also provide a four to six sentence paragraph explaining why you are raising that question.
- The question may be remedial, seeking 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

Thinkpieces (30 points)

Students must write three thinkpieces (each is worth 10 points) over the course of the term on a reading of their choice prior to the Discussion session in which that reading will be discussed. **Thinkpieces must be submitted to the appropriate Dropbox on D2L BEFORE the discussion begins at 2:00 PM.** Each student must write one thinkpiece for each of the three Course Units.

Thinkpieces are short essays, 250-300 words in length, that critically examine and evaluate one of the readings. No “standard essay” introductions or conclusions are needed. The purpose is to raise an issue and critically explore it. Often, this will mean explaining an author’s claim and then critiquing that claim. I will post a couple of example Thinkpieces to D2L. Here are a few suggestions on how to write a thinkpiece:

- Point out a problematic claim that an author makes, and show why it might lead to problems for the author’s view.
- Suggest a potential defense of an author’s claim. For example, you might explain how an author’s claim or argument seems to have a serious problem before explaining how the problem can be dealt with.
- Point out an critically examine a distinction, concept, or argument an author makes by offering a counterexample or a counterargument to that distinction, concept, or argument.

Thinkpieces will be graded according to the Check-plus, Check, Check-minus, or X scheme. This scheme is intended to allow you to get low-pressure feedback on your writing prior to the term paper by awarding maximum points for reasonable effort. Check-plus, Check, and Check-minus grades all provide 10 points toward your final grade. An X grade gives you 0 points, but you are allowed a revision attempt on any thinkpiece that receives an X based on the feedback you are given. This second attempt must be submitted no later than one week after you receive your grade. If your second attempt also receives an X, you will still get 5 points towards your final grade.

Check-plus: Quality of writing and ideas is in the A-range.

Check: Quality of writing and ideas is in the B-range.

Check-minus: Quality of writing and ideas is in the C-range.

X: Quality of writing and ideas is in the D/F range.

Quizzes (30 points)

There will be three quizzes corresponding to each of the three course units. These quizzes are online and will be administered through D2L. Each quiz is worth 10 points of the final grade. Quizzes will include multiple-choice and true-false questions intended to test your basic understanding of the readings. As such, quiz material will be drawn primarily from the recorded lectures. Lectures will be temporarily hidden during the quizzes. **Quizzes will be given on the following Fridays: July 10, July 24, and August 7.** The quizzes will be available to take from Thursday at midnight until midnight on Friday on those days.

After the quiz grades are released on D2L, you will have the opportunity to correct your quizzes for full credit. Up to one week following the release of quiz grades, you may submit a document indicating each question you answered incorrectly, offering the correct answer and providing a brief (2-4 sentence) explanation of why that is the correct answer. Please put all of your corrections in a single document, and email them directly to me at archie.fieldsiii@ucalgary.ca.

Term Paper (25 points)

Each student will submit a term paper on the topic of their choice **to the appropriate Dropbox on D2L, due by 11:59 PM on Tuesday, August 18**. The paper should be 1700-2000 words, or approximately 5-6 double-spaced pages with 12-point font. Topics will be provided in advance. In place of the regular Q&A session on Tuesday, August 11, a writing workshop will be held to assist students in drafting and revising their paper. Feedback on this paper will be provided only by request. Such feedback should be requested no later than two days after the paper grades are posted to D2L.

Final Grades

Final grades in the course will be given according to the following scheme, based on how many points you have earned out of 100:

A+: 99-100
A: 93-98.9
A-: 90-92.9
B+: 88-89.9
B: 83-87.9
B-: 80-82.9
C+: 78-79.9
C: 73-77.9
C-: 70-72.9
D+: 68-69.9
D: 63-67.9
F: fewer than 63 points

Course Policies

Late Work

Work submitted late will be penalized by 10% for each day (or fraction thereof) it is late. So, a thinkpiece submitted an hour late on the correct due date that receives a Check (or Check-plus/minus) grade will be worth only 9 points instead of 10. That same thinkpiece submitted the next day at 3:00 PM would be worth only 8 points. Revisions, such as exam corrections or rewritten thinkpieces/discussion questions, may not be turned in late at all.

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.

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.

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. Instructors may request that evidence in the form of documentation be provided. 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. For information on possible forms of documentation, including statutory declarations, please see ucalgary.ca/pubs/calendar/current/m-1.html

Student Support and Resources

Full details and information about the following resources can be found at 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 for contact details and information regarding common academic concerns.

For questions specific to the philosophy program, please visit phil.ucalgary.ca. Further academic guidance is available by contacting David Dick (Undergraduate Program Director dgdick@ucalgary.ca) or Jeremy Fantl (Honours Advisor jfantl@ucalgary.ca). If you have questions regarding registration, please email Rebecca Lesser (Undergraduate Program Administrator 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 (one-on-one appointments, drop-in support and writing workshops). For more information, and other services offered by the Student Success Centre, please visit ucalgary.ca/ssc.

Online Resources and Electronic Devices

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

The instructor reserves the right to establish specific course policies regarding the use of electronic devices. If permitted, the use of devices must be exclusively for instructional purposes, and without disruption to the instructor or fellow students. Devices should be set to silent mode during lectures. Audio or video recording of lectures is not permitted without the written permission of the instructor. Students violating this policy are subject to discipline under the University of Calgary's Non-Academic Misconduct policy.

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/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. 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.pdf) and requirements of the copyright act (laws-lois.justice.gc.ca/eng/acts/C-42/index.html).