COURSE INFORMATION
Philosophers tend to think that the acceptance or rejection of scientific hypotheses should be based solely on empirical adequacy and such virtues as simplicity and generality. Scientific hypotheses should not be accepted or rejected on the basis of personal, social, or ethical values. This approach to science is called the 'Value Free Ideal' (VFI). In the last 30 years, many philosophers have challenged the VFI and have argued that values do and should affect a scientist’s acceptance or rejection of hypotheses. In this seminar, we will look at arguments against the VFI. The main focus of the seminar will be on two questions. If non-epistemic value considerations should affect the selection of scientific hypotheses, when do such values legitimately (versus illegitimately) affect the selection of hypotheses? What do we do if epistemic considerations conflict with social or ethical values when we select hypotheses? Much of the literature on science and values focuses on hypotheses rather than scientific classifications. This seminar will also study how values should affect scientific classifications.

PREREQUISITE(S)
Two previous courses in Philosophy, one of which must be 201, 395, 421, 423, 461, 463, 467, 481 or 483 and one of which must be at the 400 level, or higher.

COURSE OBJECTIVES/LEARNING OUTCOMES
• Deep knowledge of a central area of philosophical inquiry – philosophy of science.
• Ability to identify and articulate questions for discussion and investigation.
• Ability to critically digest, interpret, and analyze complex sources.
• Ability to write a convincing argument that takes adequate account of alternative positions.
• Ability to engage in constructive, respectful, oral, and written argumentation.
• Ability to use feedback about one’s work to improve one’s arguments and writings.

REQUIRED READINGS
The course readings will be contemporary articles from professional philosophy journals. A reading list with bibliographic details will be distributed to the class.

COURSE ASSESSMENT AND EVALUATION
Written Preparations for Readings
In weeks 2 thru 12 of the seminar we will discuss assigned readings. To enhance our discussion, a written preparation will be due at the start of those class meetings. Your written preparation will
develop a question for that week’s reading that will provide a basis for discussion. Your written preparation should have the following three parts.

1. A single sentence statement of your question (this should be a question that ends with a question mark).
2. An exposition of your question and background to your question that: identifies the pages, passages, or arguments in the reading in which your question arises; explains the context of the reading in which your question arises; and, provides some ideas concerning how one might answer that question.
3. An explanation concerning why you think this question is worth discussing.

Please organize your written preparation into three parts labeled as follows:

(1) Question
(2) Exposition
(3) Significance

Your written preparation should be between 200 – 300 words in length.

The question of your written preparation may be remedial; for example, it might ask for a clarification of an important claim, concept, or argument in the reading. Or your question could be more critical in nature, alluding to a weakness in the reading. Or your question could be probing, identifying an issue that is raised by the reading or a possible implication of the reading. Identifying and developing good research questions is an important and challenging part of doing philosophy. Some questions are more researchable than others. Your weekly task is to develop questions that will provide a basis for engaging seminar discussions and possibly a starting point for fruitful philosophical investigation.

**Topic Identification**
Students are required to submit a report of the topic area they plan to research and write a paper on for this seminar. You should both describe the topic and explain why it would be a promising topic area to work on. This part of your report should be approximately 300 words in length. On a separate page of your report, provide a bibliography of at least three sources.

**Research Proposal**
Students are required to submit a research proposal of approximately 1,200 words (not including references) that presents their research plan. Your proposal should identify your research question or problem, explain why it is important, and explain how you intend to address it. You should organize your proposal in two parts. The first part should explain and motivate the focus of your research by answering these questions: (i) What is the general topic area? (ii) What are the main views on the topic? (iii) What question or problem in this topic area will be the focus of your attention? The second part of the proposal should contain a section-by-section outline of how you plan to construct your research paper. Dedicate a paragraph describing each section of the proposed paper. This outline will serve as your research plan. It is just a tentative plan. At least 800 words of your proposal should be devoted to the first part of the proposal. Your proposal must include at least three references.

**Research Paper**
The word maximum is 3,500 words (including footnotes, excluding references and any diagram notation). Please provide a word count when you submit your research paper.

**Participation**
The success of the seminar strongly depends on class discussion. Every student should participate in class discussion. This does not mean that you need to enter the discussion at every class meeting. Students should contribute in at least half of our class meetings. The more voices heard in class, the better the discussion. You may feel like you have nothing to contribute, but even pointing out that you are confused about something in the reading or discussion is a contribution.
### Due Dates and Grading

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<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Points</th>
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<tr>
<td>11 Written Preparations</td>
<td>Beginning of each class</td>
<td>3 points each, lowest mark dropped</td>
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<tr>
<td>Topic Identification</td>
<td>Friday, Oct. 25</td>
<td>10 points</td>
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<tr>
<td>Research Proposal</td>
<td>Tuesday, Nov. 12</td>
<td>15 points</td>
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<tr>
<td>Research Paper</td>
<td>Tuesday, Dec. 10</td>
<td>40 points</td>
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<td>Participation</td>
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Final grades will be awarded as follows

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<th>Percentage Range</th>
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<tr>
<td>96-100</td>
<td>A+</td>
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<td>90-95</td>
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<td>below 45</td>
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- No Registrar scheduled final exam will be given.
- The submission of all assignments is required to pass the course.
- No late assignments will be accepted without an appropriate excuse.
- All assignments must be submitted as hard copies and formatted according to the style citation requirements below.

### Style and Citation Requirements

All written work for this course should adhere to the style, citation, and formatting requirements of the journal *Philosophy of Science*. Those requirements can be found at [https://www.journals.uchicago.edu/journals/phos/instruct](https://www.journals.uchicago.edu/journals/phos/instruct).

### 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/access/accommodations/policy](https://ucalgary.ca/access/accommodations/policy).

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](https://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](https://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](https://ucalgary.ca/Registrar/registration/course-outlines)

- Wellness and Mental Health Resources
- Student Success Centre
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 dg@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).