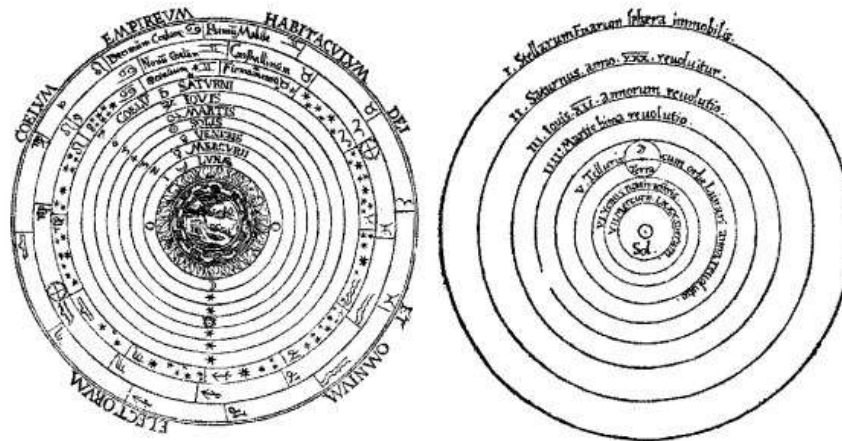

PHIL 2301 A

Introduction to the Philosophy of Science



Winter 2024
Course Outline

I. Admin

Instructor: Gabriele Contessa

Office Hours: Wednesday, 2:05pm–2:55pm or by appointment

Zoom Link to Virtual Office: See Admin section in Brightspace

Zoom Link to Virtual Classroom: See Admin section in Brightspace

E-mail: gabriele_contessa@carleton.ca

Wooclap: app.wooclap.com/MZPPFR

II. Description

Philosophical issues arising out of the attempt to understand the world scientifically. Topics may include: scientific methodology, revolution, observation, explanation, causation, induction, reduction, the difference between natural and social scientific understanding, realism, instrumentalism, constructivism.

III. Prerequisites/Preclusions

A course in philosophy or second-year standing.

IV. Texts

Students are not required to purchase any textbooks or materials for this course. All readings for this course will be accessible through Brightspace.

V. Evaluation

- Final Exam (25%)
- Mid-Term Exam (20%)
- Attendance & Participation (25%)
- Two Quizzes (each worth 15%)

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

VI. Course Policies

Attendance & Participation (A&P). Attendance and participation are crucial to your success in this course. Attendance and participation to in-class polls are required and participation to in-class discussion strongly encouraged to contribute to the discussions. The A&P component of the overall grade will be determined as follows. 50% of the A&P grade is based on **attendance and participation to the in-class polls**, 50% of the A&P grade (and 10% of the overall grade) is based on **correct answers** to polls that are graded. Students who have consistently made valuable contributions to the class discussion throughout the term can receive up to 33% **extra credit** towards their A&P grade at the end of the term. Please note that, when it comes to contributions to the class discussion, quality is much more

important than quantity and that contributions that display familiarity with the readings are particularly welcome.

If circumstances beyond your control (e.g., illness or family emergency) prevent you from attending a meeting, please notify the instructor by email as soon as possible.

If you have registered late for this course, please contact the instructor as soon as possible by email to avoid losing A&P points.

Polls. This course uses Wooclap to poll students and ask questions about the course content. Please make sure to log into Wooclap using the SSO/Institutional log-in option before the beginning of each session. All Wooclap polls will be timed. Failing to answer a poll within the allotted time will result in a zero on that poll. It is your responsibility to ensure that you're logged into Wooclap before each class. No exceptions will be made for missed polls unless this is due to an excused absence. However, your lowest 5 grades on each poll will be automatically dropped.

Exams and Quizzes. All exams and quizzes will be held online on Brightspace. With the exception of the Final Exam (which will be held during the Exam Period), they will be held during class time. Please note that all dates are tentative and they are subject to change.

The exams include a mix of multiple-choice questions and open-ended questions. Since different students require different levels of feedback on open-ended questions and since the most efficient way of providing feedback that is tailored to the needs of each student is by discussing those questions together, I only provide a minimal level of feedback on open-ended questions. If you would like to receive feedback, please come to see me during office hours. Students who receive a low grade on their open-ended questions are strongly encouraged to see me during office hours. If you receive a temporary 50% grade on your open-ended question accompanied by the feedback "Please see me during office hours," you must come to see me during office hours within two weeks to discuss your exam with me or your temporary 50% will turn into a permanent 50%.

Please note that some quiz questions and some exam questions might require you to show your work. You will have to do so by submitting a photo of your work in the Assignment section on Brightspace. The photo needs to be submitted before the end of the exam/quiz time. Please note that students who fail to show their work for a question that requires it will receive 0% on that question and that students whose work does not support their answer or includes mistakes will receive a reduced credit on that question.

If circumstances beyond your control prevent you from taking an exam/quiz, please contact me as soon as possible by email.

Academic Integrity. You are responsible for ensuring that you understand the nature of academic offenses (such as plagiarism and unauthorized collaboration), as defined in the [Undergraduate Calendar](#), and to avoid both committing them and aiding or abetting academic offenses perpetrated by other students. Please be aware that I am bound to report any suspected academic offense directly to the Office of the Dean.

The University Senate defines plagiarism as "*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own.*" This can include: reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source; submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else; using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment; using another's data or research findings; failing to acknowledge sources through the use of proper citations when using another's works and/or failing to use quotation marks; handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs." Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F"

for the course.

Copyright. Carleton University is committed to compliance in all copyright matters. Noncompliance is a violation of the Canadian Copyright Act. In addition to any actions that might be taken by any copyright owner or its licensing agent, the University will take steps against any breach of this policy. In Canada, copyright for a work is given automatically to the creator of the work. The work does not need to be marked or declared as copyrighted in order to be copyrighted. The majority of works in Canada are copyrighted. It is important for students to understand and respect copyright. Copyright determines your usage rights for a particular work, which includes textbooks, web pages, videos and images, both electronic and hard copy. Students may not photocopy entire or major portions of books or other works, even if it is only for their personal use. Fair dealing makes some allowances for copying small portions of works. See Carleton's Fair Dealing Policy for more information. If journal articles or portions of works are available through the library, either as hard copies or electronically, students may make a single copy for their personal use. Students may not distribute copies of works that are under copyright. For more information, please see the Carleton's Fair Dealing Policy and the library's copyright website: www.library.carleton.ca/copyright.

VII. Course Calendar

<i>Unit</i>	<i>Readings</i>	<i>Dates</i>
Unit 0: Logic	---	Jan 8–Jan 15
Unit 1: Inductivism	David Hume, <i>An Enquiry Concerning Human Understanding</i> (Section IV: ‘Sceptical Doubts Concerning the Operations of the Understanding’)	Jan 17
	Nelson Goodman, ‘The New Riddle of Induction’ (skip §3!)	Jan 22
Unit 2: Deductivism	Karl Popper, ‘Conjectural Knowledge’ Karl Popper, ‘Science: Conjectures and Refutations’	Jan 24
	<i>No Class!</i>	Jan 29
	<i>Quiz 1</i>	Jan 31
	Pierre Duhem, ‘Physical Theory and Experiment’ W. V. Quine, ‘Two Dogmas of Empiricism’ (§6 only!)	Feb 5–12
	<i>Midterm</i>	Feb 14
Unit 3: Pessimism	Thomas Kuhn, ‘The Resolution of Revolutions’	Feb 26–28

Unit 4: Probabilism	Michael Strevens 'Notes on Bayesian Confirmation Theory', §§1–6.	Mar 5
	Michael Strevens 'Notes on Bayesian Confirmation Theory', §§7–11.	Mar 7
	---	Mar 12
	Quiz 2	Mar 14
Unit 5: Explanation	Carl Hempel, 'The Thesis of Structural Identity'	Mar 19
	---	Mar 21
Unit 6: Realism	Bas van Fraasen, 'Extracts from <i>The Scientific Image</i> '	Mar 26
	---	Mar 28
Unit 7: Values	Heather Douglas 'Inductive Risk and Values in Science'	Apr 2
	---	Apr 4

*Please note that the course calendar is provisional and subject to change.
Please check this Course Outline regularly for updates.*

Department of Philosophy and Carleton University Policies (Fall/Winter 2024-25)

Assignments:

Please follow your professor's instructions on how assignments will be handled electronically. There will be NO hard copies placed in the essay box this coming year.

Evaluation:

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Deferrals for Term Work:

If students are unable to complete term work because of illness or other circumstances beyond their control, they should contact their course instructor no later than *three working days* of the due date. Normally, any deferred term work will be completed by the last day of the term. Term work cannot be deferred by the Registrar.

Deferrals for Final Exams:

Students are expected to be available for the duration of a course including the examination period. Occasionally, students encounter circumstances beyond their control where they may not be able to write a final examination or submit a take-home examination. Examples of this would be a serious illness or the death of a family member. If you miss a final examination and/or fail to submit a take-home examination by the due date, you may apply for a deferral no later than *three working days* after the original due date (as per the University Regulations in [Section 4.3 of the Undergraduate Calendar](#)). Visit the [Registrar's Office](#) for further information.

Plagiarism:

It is the responsibility of each student to understand the meaning of 'plagiarism' as defined in the Undergraduate or Graduate Calendars, and to avoid both committing plagiarism and aiding or abetting plagiarism by other students. ([Section 10.1 of the Undergraduate Calendar Academic Regulations](#))

Academic Accommodation:

You may need special arrangements to meet your academic obligations during the term:

- *Pregnancy or religious obligation:* write to your professor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the [EDC](#) website.
- *Academic accommodations for students with disabilities:* The [Paul Menton Centre](#) for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class test or exam requiring accommodation. After requesting accommodation from PMC, meet with your professor to ensure accommodation arrangements are made.
- *Survivors of Sexual Violence:* As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per [Carleton's Sexual Violence Policy](#).
- *Accommodation for [Student Activities](#):* Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

Important Dates:

- Sept. 4 Classes start.
- Sept. 17 Last day for registration and course changes for fall term and fall/winter (two-term) courses.
- Sept. 30 Last day for entire fee adjustment when withdrawing from fall term or two-term courses. Withdrawals after this date will result in a permanent notation of WDN on the official transcript.
- Oct. 14 Statutory holiday. University closed.
- Oct. 21-25 Fall Break – no classes.

- Nov. 22 Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade, before the official examination period.
- Dec. 6 Last day of fall term classes. **Classes follow a Monday schedule.** Last day for academic withdrawal from fall term courses. Last day for handing in term work and the last day that can be specified by a course instructor as a due date for term work for a fall term course.
- Dec. 9-21 Final examinations for fall term courses and mid-term examinations in two-term courses. Examinations are normally held all seven days of the week.
- Dec. 21 All take-home examinations are due.
- Jan. 6 Classes begin.
- Jan. 17 Last day for registration and course changes in the winter term.
- Jan. 31 Last day for a full fee adjustment when withdrawing from winter term courses or from the winter portion of two-term courses. Withdrawals after this date will result in a permanent notation of WDN on the official transcript.
- Feb. 17 Statutory holiday. University closed.
- Feb. 17-21 Winter Break – no classes.
- Mar. 15 Last day for academic withdrawal from fall/winter and winter courses.
- Mar. 25 Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade, in winter term or fall/winter courses before the official examination period.
- Apr. 8 Last day of two-term and winter term classes. Last day for handing in term work and the last day that can be specified by a course instructor as a due date for two-term and for winter term courses.
- Apr. 9-10 No classes or examinations take place.
- Apr. 11-26 Final examinations for winter term and two-term courses. Examinations are normally held all seven days of the week.
- Apr. 18 Statutory holiday. University closed.
- Apr. 26 All take-home examinations are due.

Addresses:

Department of Philosophy:
www.carleton.ca/philosophy
520-2110

Registrar's Office:
www.carleton.ca/registrar
520-3500

Academic Advising Centre:
www.carleton.ca/academicadvising
520-7850

Writing Services:
<http://www.carleton.ca/csas/writing-services/>
520-3822

MacOdrum Library
<http://www.library.carleton.ca/>
520-2735