

WESTERN UNIVERSITY
Department of Philosophy
Undergraduate Course Outline 2025-26

PHILOSOP 2050F
Scientific Search for the Mind

INSTRUCTOR INFORMATION

Information including instructor contact details and course location can be found on the course Owl BrightSpace: <https://westernu.brightspace.com/>

PREREQUISITE CHECKING

No prerequisites

[Student Responsibility for Course Selection](#)

COURSE DESCRIPTION

In his treatise *Meditations on First Philosophy* (1641), the French philosopher René Descartes put forward the idea that “minds”, insofar as they are *thinking* things, differ from physical bodies, which do not think. Descartes’ claim that the mind and body are separate substances—a view referred to as “substance dualism”—prompted philosophers and scientists to wonder: *How can minds be studied scientifically if they are not a part of the physical world?*

In this course, we will consider a variety of different answers to this question by critically evaluating areas of philosophy and science that have emerged historically to understand the nature of the mind and its place in the physical world. We will begin by considering Cartesian dualism and the mechanical philosophy. The sciences that will be then be the focus of our analysis include: phrenology & localization theory (e.g., Francis Gall, Pierre Flourens, Paul Broca, Carl Wernicke, Karl Lashley, Wilder Penfield, & Brenda Milner), early physiology (e.g., Hermann von Helmholtz), psychophysics (e.g., Gustav Fechner), experimental psychology (William Wundt), Gestalt psychology (e.g., Edward Titchener), William James’ psychology, Behaviorism (Ivan Pavlov, John Watson and B.F. Skinner) Freudian psychoanalysis, and artificial intelligence (e.g., Alan Turing).

This course is a history and philosophy of the mind-brain sciences course that is meant to develop a critical understanding of the assumptions, educational background and training, methodological commitments, and values of a subset of philosophers and scientists who have historically sought to answer these questions. The course is designed for and should be of interest to students majoring in the humanities and/or the sciences and is aimed at helping you develop critical thinking skills that are important for any major or profession.

LEARNING OUTCOMES

Students who successfully complete this course will have developed a detailed understanding of a variety of philosophical and scientific approaches to studying and understanding the mind, the ability to critically evaluate these approaches, and the capacity to formulate and defend their own positions with respect to such approaches.

TEXTS

This course requires that you read primary readings written by philosophers and scientists. Primary readings for the course are available as pdfs on Owl under the “Resources” folder (“Online Readings”).

It also will be helpful for you to do background reading from a secondary source book that situates the philosophical and scientific approaches to understanding and investigating the mind-brain that we will consider in a broader historical context. Thus, I am also assigning readings from the following textbook (wherever you see an F&R on the schedule, that indicates a reading from this book). These readings are optional but strongly encouraged. This is a great book and presents the ideas of the philosophers and scientists we will consider in an engaging way:

Fancher, Raymond E. & Rutherford, Alexandra (2017). *Pioneers of Psychology*, 5th Edition. W.W. Norton & Company. **Designated on schedule by F&R –The cost of this textbook is USD 138.75 or \$55.95 (e-book) <https://wwnorton.com/books/9780393283549>

In some cases, only readings from the Fancher and Rutherford text will be assigned.

METHOD OF EVALUATION

1. **Exam 1 (Oct 9)**: (30%) – This in-person exam will include a combination of multiple choice/true-false, short answer and short essay questions. The focus of this exam is the first section of the course on Descartes & Localization Theory. You will have the full class time to complete this exam.
2. **Exam 2 (Oct 30)**: (25%) This in-person exam will include a combination of multiple choice/true-false, short answer and short essay questions. The focus of this exam is the second section of the course on Psychology as a Science. You will have the full class time to complete this exam.
3. **Final Paper Outline (Nov 13)**: (15%) You are required to hand in an outline for your final paper. Instructions and a grading rubric for this outline will be provided on the first day of class. This outline is due at 11:59 p.m. on Nov 13, 2025. It is worth 50 points. The penalty for handing in this assignment late is 2.5 points per day.
4. **Final Paper (Dec 9)**: (30%) You are required to write a final paper for this course. The paper is to be 2000-2500 words in length. The paper is due on the last day of the course. This is the last day assignments can be handed in for credit. The ability to write a strong paper depends crucially on you having done the assigned readings for the course and regularly attending the course. Instructions for the paper and a grading rubric will be provided on the first day of class.

DEPARTMENT OF PHILOSOPHY POLICIES

The Department of Philosophy policies that govern the conduct, standards, and expectations for student participation in Philosophy courses are available in the Undergraduate section of the Department of Philosophy website <http://uwo.ca/philosophy/undergraduate/policies.html> . It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus ignorance of these policies cannot be used as grounds of appeal.

AUDIT

Students wishing to audit the course should consult with the instructor prior to or during the first week of classes.

ELECTRONIC DEVICES

Electronic devices of any kind (including calculators, cell phones and smart watches) are not permitted on texts and exams.

STATEMENT ON THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (AI)

In this course, the use of AI (automatic translation tools, grammar checkers, ChatGPT...) is prohibited. If unauthorized AI use is suspected, the instructor will ask for **research notes, rough drafts, essay outlines**, and other materials used in **preparing assignments**. Students are expected to **retain** these materials until after final grades have been entered. In the unlikely event of concerns being raised about the authenticity of any assignment, students may be asked to produce these materials; an inability to do so may weigh heavily against them.

POLICY ON ACADEMIC CONSIDERATION

Please consult the University's **Policy on Academic Consideration** for Undergraduate Students in First Entry Programs, for information about your rights and responsibilities as an undergraduate student at Western. A pdf of the policy is available here:

https://uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf

ACADEMIC ACCOMMODATION AND ACCESSIBLE EDUCATION

Academic Accommodation is "a means of adjusting the academic activities associated with a course or program of student in order to permit students with disabilities to participate in those activities at the University and to fulfill the essential requirements of a course or program."

<https://www.uwo.ca/univsec/pdf/academicpolicies/appeals/Academic%20Accommodationdisabilities.pdf>. Students with disabilities are encouraged to register with Accessible Education at the earliest opportunity. "Accessible Education plays a central role in Western's efforts to ensure that its academic programs are accessible for all students"

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<http://academicsupport.uwo.ca/accessibleeducation/index.html>

SPECIAL EXAMINATIONS

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate

supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates. These dates as well as other important information about examinations and academic standing can be found [here](#).

ACADEMIC CONSIDERATION

Students may request academic consideration in cases of extenuating circumstances – that is, personal circumstances beyond the student’s control that have a substantial but temporary impact on the student’s ability to meet essential academic requirements.

1. Requests for academic consideration are made to the Academic Advising office of Faculty in which the student is registered.
2. Requests for academic consideration include the following components:
 - a. Self-attestation signed by the student;
 - b. Indication of the course(s) and assessment(s) relevant to the request;
 - c. Supporting documentation as relevant

Requests without supporting documentation are limited to one per term per course.

Documentation for medical illness, when required, includes the completion of a [Western Student Medical Certificate \(SMC\)](#) or, where that is not possible, equivalent documentation, by a health care practitioner. Requests linked to examinations scheduled by the Office of the Registrar during official examination periods as well as practice laboratory and performance tests typically scheduled in the last week of term always require formal supporting documentation.

Policy on Academic Consideration – Undergraduate Students in First Entry Programs

RELIGIOUS ACCOMMODATION

Western’s Policy on Accommodation for Religious Holidays can be found here:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf.

In the case of mid-term tests, notification is to be “given in writing to the instructor as early as possible, but not later than **one week** prior to the writing of the test”.

COURSE ASSIGNMENT

The last day of scheduled classes in any course will be the last day on which course assignments will be accepted for credit in a course. Instructors will be required to return assignments to students as promptly as possible with reasonable explanations of the instructor's assessment of the assignment.

SCHOLASTIC OFFENCES

Scholastic offences are taken seriously, and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web

site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Statement on the use of plagiarism-checking software

All required papers will be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Computer-marked multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

ACADEMIC ADVISING

Your Home Faculty's Academic Advising Office will support or refer whenever you have an issue that is affecting your studies, including information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters. Do not hesitate to reach out to them if you are struggling and unsure where to go for help. Contact info for all Faculties is here:

https://registrar.uwo.ca/faculty_academic_counselling.html

MENTAL HEALTH SUPPORT

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help. Immediate help in the event of a crisis can be had by phoning 519.661.3030 (during class hours) or 519.433.2023 after class hours and on weekends (24/7 availability).

GENDER-BASED AND SEXUAL VIOLENCE

Western University [is committed to reducing incidents of gender-based and sexual violence](#) (GBSV) and providing compassionate support to anyone who is going through or has gone through these traumatic events. If you are experiencing or have experienced GBSV (either recently or in the past), you will find information about support services for survivors, including emergency contacts at the following website:

https://www.uwo.ca/health/student_support/survivor_support/get-help.html. To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Tentative Schedule of Classes

DATE	TOPIC
Sept 4 (Th)	Course Introduction & Overview
Sept 9 (T)	Cartesian Dualism <ul style="list-style-type: none"> • Descartes, excerpts from <i>Meditations on First Philosophy</i> – Read only Meditation 2 (Owl) • F&R, pp. 59- top of p. 65; bottom of p. 68-73
Sept 11 (Th)	Descartes' Mechanical Philosophy <ul style="list-style-type: none"> • Descartes, <i>Treatise on Man</i> (Owl) [read entire essay] • F&R, pp. 65- 68
Sept 16 (T)	Quiz on Descartes Phrenology and Early Localization theory – Gall <ul style="list-style-type: none"> • Gall, F, Vimont, Broussais. Excerpts from <i>On the Functions of the Cerebellum</i> (Owl) Please read XV (the word INTRODUCTION appears at the top) – XX, and XXXI-XXXIII. The main aim is to give you a flavour for the claims made by phrenologists. The pages from XX-XXX, demonstrate that Gall did have extensive knowledge of the brain's anatomical organization. You are not required to read these intermediary pages, though.
Sept 18 (Th)	Phrenology and Early Localization theory –Flourens & start Broca

	<ul style="list-style-type: none"> • Flourens, P. Excerpts from <i>Phrenology Examined</i> (Owl) read pp. 34-35, 40, 76-80, 85-88 of his book • F&R, pp. 99-109 (Flourens) • Broca, P. <i>Remarks on the Seat of Articulate Language, Followed by an Observation of Aphemia</i> (Owl) • F&R, pp. 109-115 (Broca)
Sept 23 (T)	Phrenology and Early Localization theory <ul style="list-style-type: none"> • Broca, P. <i>Remarks on the Seat of Articulate Language, Followed by an Observation of Aphemia</i> (Owl)
Sept 25 (Th)	Phrenology and Early Localization theory – Wernicke & Lashley <ul style="list-style-type: none"> • Wernicke, C. <i>Recent Works on Aphasia</i> (Owl) • F&R, pp. 115-117 Localizing Memory: Karl Lashley <ul style="list-style-type: none"> • F&R, pp. 117-121
Sept 30 (T)	No Class – National Day for Truth and Reconciliation
Oct 2 (Th)	Localizing Memory: Karl Lashley <ul style="list-style-type: none"> • F&R, pp. 117-121 • pp. 8-14 from the Lashley book that is online Localizing the Sensory Homunculus & Memory Functions: Wilder Penfield <ul style="list-style-type: none"> • F&R, pp. 121-125 Localizing Memory Functions: Brenda Milner <ul style="list-style-type: none"> • F&R, pp. 125-129 • Scoville, W. and Milner, B. (1957) “Loss of Recent Memory After Bilateral Hippocampal Lesions” (Owl)

DATE	TOPIC
Oct 7 (T)	Localizing Memory Functions: Finish Scoville & Milner
Oct 9 (Th)	Exam 1 – In class
Oct 14 (T)	Immanuel Kant’s perspective on scientific study of the mind <ul style="list-style-type: none"> • F&R, pp. 135-140
Oct 16 (Th)	Hermann Helmholtz on mechanisms in psychology <ul style="list-style-type: none"> • F&R, pp. 140-145 • “Of Frogs and men” reading on Helmholtz (OWL) Hermann Helmholtz on vision <ul style="list-style-type: none"> • F&R pp. 145-151 • Some selections from Helmholtz’s “On the Relation of Optics to Painting”
Oct 21 (T)	Gustav Fechner & Psychophysics <ul style="list-style-type: none"> • F&R, pp. 154 -161 Gestalt psychology <ul style="list-style-type: none"> • F&R, pp. 161-167

Oct 23 (Th)	<p>Review Exam 1</p> <p>Experimental psychology – Wilhelm Wundt</p> <ul style="list-style-type: none"> • F&R, pp. 173-193 • Excerpts from <i>Lectures on Human and Animal Psychology</i> – Lecture II & XVI only [OWL] • Excerpts from <i>Lectures on Human and Animal Psychology</i> – Lecture II & XVI only [OWL]
Oct 28 (T)	<p>William James & American Psychology (online lecture)</p> <ul style="list-style-type: none"> • F&R, pp. 279-296; 308-312 • Excerpts from James' <i>Principles of Psychology</i> [Owl]
Oct 30 (Th)	***Exam 2 – Can Psychology be a Science?
Nov 3-7	Fall Reading Week
Nov 11 (T)	<p>Review exam 2</p> <p>Early thinking about mental illness—Hysteria & Hypnotism, Mesmer & Charcot</p> <ul style="list-style-type: none"> • F&R, Chapter 10, pp. 361-367, pp. 374-377
Nov 13 (Th)	<p>Freudian Theory</p> <ul style="list-style-type: none"> • F&R, pp. 414-419 • F&R, pp. 419-429 • Excerpts from Freud's <i>An Outline of Psychoanalysis</i> • Popper's critique of Freud <p>Popper reading Parts I-II, pp. 1-10</p>
Nov 18 (T)	Review instructions for final paper
Nov 20 (Th)	<p>Psychology as the Science of Behavior:</p> <p>Ivan Pavlov & John Broadus Watson</p> <ul style="list-style-type: none"> • F&R, pp. 317-343 • Pavlov, Excerpts from <i>Conditioned Reflexes</i> [Owl] • Excerpts from Watson's <i>Behaviorism</i> [Owl]
Nov 25 (T)	<p>Edward Lee Thorndike</p> <ul style="list-style-type: none"> • F&R, pp. 308-312 <p>B.F. Skinner & Criticisms of Behaviorism</p> <ul style="list-style-type: none"> • F&R, pp. 343-355 • Excerpts from Skinner's <i>Science and Human Behavior</i> [OWL]
Nov 27 (Th)	<p>The Cognitive Revolution - Minds and Machines</p> <ul style="list-style-type: none"> • F&R, pp. 533-553 <p>Alan Turing, "Computing Machinery and Intelligence" [OWL]</p>
Dec 2 (T)	Opportunity to discuss final paper
Dec 4 (Th)	<p>Operationalizing Intelligence</p> <ul style="list-style-type: none"> • Galton & early intelligence testing [lecture will cover some of the material from F&R Chapter 7-- 243-274]

	<ul style="list-style-type: none">• Binet & Intelligence testing<ul style="list-style-type: none">• F&R, pp. 493-512 Excerpts on construct validity, Cronbach & Meehl (OWL)
Dec 9 (T)	Course conclusion – **** Final papers due ***