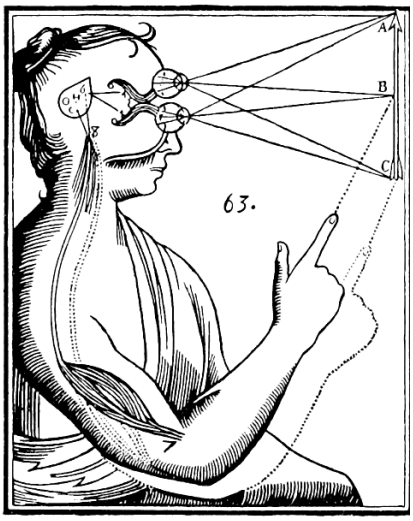
WESTERN UNIVERSITY
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2021-22

PHIL 2050G: Scientific Search for the Mind



Winter Term 2020-2021	**Instructor: Dr. Jackie Sullivan**
Mondays 12:30-1:30 p.m.	**Office Number: 7170 WIRB**
Wednesdays 11:30-1:30 p.m.	**Office Hours: TBA**
UCC-41	**Contact info: jsulli29@uwo.ca**
	Teaching Assistants: TBA

DESCRIPTION

In his treatise *Meditations on First Philosophy* (1641), the French philosopher René Descartes put forward the idea that "minds", in so far 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), early physiology (e.g., Hermann von Helmholtz), psychophysics (e.g., Gustav Fechner), experimental psychology (William Wundt), Gestalt psychology (e.g., Edward Titchener), evolutionary psychology (Charles Darwin on emotions in man and animals), William James' psychology, learning theory and behaviorism (Ivan Pavlov, John Watson and B.F. Skinner) Freudian psychoanalysis, later physiology (e.g., Karl Lashley, Wilder Penfield), developmental psychology (e.g., Alfred Binet & Jean Piaget), artificial intelligence (e.g., Alan Turing), functional neuroanatomy and cognitive neuroscience. We will begin by considering a set of conceptual tools on offer in philosophy of science and philosophy of mind and will then use

these tools to guide our analysis of each of the sciences we will consider.

This course is designed for and should be of interest to students majoring in the humanities and/or the sciences.

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). 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 – this is really a text for background reading.

OBJECTIVES

Students who successfully complete this course will have developed a detailed understanding of a variety of 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.

REQUIREMENTS

Evaluations of performance will be based on 4 writing assignments. The directions for each assignment will be explicit and explain precisely what is required of you. A primary aim of the course is to aide you in developing and improving your writing skills. The ability to write a strong paper will depend on you having done the assigned primary readings for the course and viewing the online lectures. I will pass out questions for these essay assignments at least 3 weeks before each assignment is due. I will provide explicit directions as to how the papers should be structured and explain the grading rubric. I will provide video instructions for each assignment.

(1) Essay 1: (20%): Due September 27, 2021 at 11:55 p.m.
(2) Essay 2: (30%): Due October 20, 2021 at 11:55 p.m.
(3) Essay 3 (Short answer essay): (20%): Due November 10, 2021 at 11:55 p.m.
(4) Essay 4: (30%): Due November 29, 2021 at 11:55 p.m.

All papers are to be submitted via the "Turn It In" link on the OWL course website, to allow us to run each paper through a plagiarism check. Your papers will be returned to you directly and your grades will be posted on OWL.

AUDIT

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

DEPARTMENT OF PHILOSOPHY POLICIES

The **Department of Philosophy Policies** which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at 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.

ACCOMMODATION

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. Documentation shall be submitted, as soon as possible, to the Office of the Dean of the student's Faculty of registration, together with a request for relief specifying the nature of the accommodation being requested.
The UWO Policy on Accommodation for Medical Illness and further information regarding this policy can be found at
http://uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

SELF- REPORTED ABSENCE FORM

Students who experience an unexpected illness or injury or an extenuating circumstance (48 hours or less) that is sufficiently severe to temporarily render them unable to meet academic requirements (e.g., attending lectures or labs, writing tests or midterm exams, completing and submitting assignments, participating in presentations) should self-declare using the online Self-Reported Absence portal. This option should be used in situations where the student expects to resume academic responsibilities within 48 hours or less.
The following conditions are in place for self-reporting of medical or extenuating circumstances:
http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading_322

EVALUATION OF ACADEMIC PERFORMANCE

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade. For 3000- or 4000-level courses in which such a graded assessment is impracticable, the instructor(s) must obtain an exemption from this policy from the Dean and this exemption must be noted on the corresponding course syllabus. In rare instances and at the Dean's discretion, other courses could receive a similar exemption, which also must be noted in the course syllabus.

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.

ACADEMIC 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

PLAGIARISM CHECKING

All required papers may 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.

SUPPORT SERVICES

Registrarial Services http://www.registrar.uwo.ca
Student Support Services https://student.uwo.ca/psp/heprdweb/?cmd=login
Services provided by the USC http://westernusc.ca/services/
Student Development Centre http://www.sdc.uwo.ca/

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ 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.

Tentative Schedule of Classes

(Subject to change during course of term)

DATE	TOPIC
Sept 8 (W)	Course Introduction & Overview • Essay 1 topics posted online
Sept 13 (M)	Cartesian Dualism • Descartes, excerpts from *Meditations on First Philosophy* – Read only Meditation 2 (Owl) • F&R, pp. 59- top of p. 65; bottom of p. 68-73
Sept 15 (W)	Descartes' Mechanical Philosophy • Descartes, *Treatise on Man* (Owl) [read entire essay] • F&R, pp. 65- 68
Sept 20 (M)	Empiricism, the Scientific Revolution and Conceptual Tools for Understanding Inquiry in the Mind-Brain Sciences • No readings due
Sept 22 (W)	Phrenology and Early Localization theory – Part 1 Gall & Flourens • Gall, F, Vimont, Broussais. Excerpts from *On the Functions of the Cerebellum* (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. • Flourens, P. Excerpts from *Phrenology Examined* (Owl) read pp. 34-35, 40, 76-80, 85-88 of his book • F&R, pp. 99-109
Sept 27 (M) ******Essay 1 due**	Phrenology and Early Localization theory – Part 2 • Broca, P. *Remarks on the Seat of Articulate Language, Followed by an Observation of Aphemia* (Owl) • F&R, pp. 109-115
Sept 29 (W)	Phrenology and Early Localization theory – Part 3 • Wernicke, C. *Recent Works on Aphasia* (Owl) • F&R, pp. 115-117 Localizing Memory: Karl Lashley • F&R, pp. 117-121 pp. 8-14 from the Lashley book that is online
Oct 4 (M)	Localizing the Sensory Homunculus & Memory Functions: Wilder Penfield • F&R, pp. 121-125
Oct 6 (W)	Localizing Memory Functions: Brenda Milner • F&R, pp. 125-129 • Scoville, W. and Milner, B. (1957) "Loss of Recent Memory After Bilateral Hippocampal Lesions" (Owl)
Oct 11 (M)	Thanksgiving - No class
Oct 13 (W)	Immanuel Kant's perspective on scientific study of the mind • F&R, pp. 135-140

Tentative Schedule of Classes (cont'd)

(Subject to change during course of term)

DATE	TOPIC
Oct 18 (M)	Hermann Helmholtz on mechanisms in psychology • F&R, pp. 140-145 "Of Frogs and men" reading on Helmholtz (OWL)
Oct 20 (W) ******Essay 2 Due**	Hermann Helmholtz on vision • F&R pp. 145-151 Gustav Fechner & Psychophysics • F&R, pp. 154 -161
Oct 25 (M)	Gestalt psychology • F&R, pp. 161-167
Oct 27 (W)	Experimental psychology – Wilhelm Wundt • F&R, pp. 173-193 • Excerpts from *Lectures on Human and Animal Psychology* – Lecture II & XVI only [OWL]
Nov 1-Nov 5	Reading week
Nov 8 (M)	William James & American Psychology • F&R, pp. 279-296; 308-312 • Excerpts from James' *Principles of Psychology* [Owl]
Nov 10 (W) ******Essay 3 Due**	Psychology as the Science of Behavior: Ivan Pavlov & John Broadus Watson • F&R, pp. 317-343 • Pavlov, Excerpts from *Conditioned Reflexes* [Owl] • Excerpts from Watson's *Behaviorism* [Owl]
Nov 15 (M)	Edward Lee Thorndike • F&R, pp. 308-312 B.F. Skinner & Criticisms of Behaviorism • F&R, pp. 343-355 Excerpts from Skinner's *Science and Human Behavior* [OWL]
Nov 17 (W)	Early thinking about mental illness—Hysteria & Hypnotism, Mesmer & Charcot • F&R, Chapter 10, pp. 361-367, pp. 374-377 Early Freudian Theory F&R, pp. 414-419
Nov 22 (M)	Freudian Metapsychological theory (cont'd) • F&R, pp. 419-429 Excerpts from Freud's *An Outline of Psychoanalysis*
Nov 24 (W)	The Cognitive Revolution - Minds and Machines • F&R, pp. 533-553 • Alan Turing, "Computing Machinery and Intelligence" [OWL] • John Searle, "Can Computers Think?" [OWL]
Nov 29 (M) ******Essay 4 Due**	Binet and Intelligence Testing F&R, pp. 493-512
Dec 1 (W)	Course conclusion