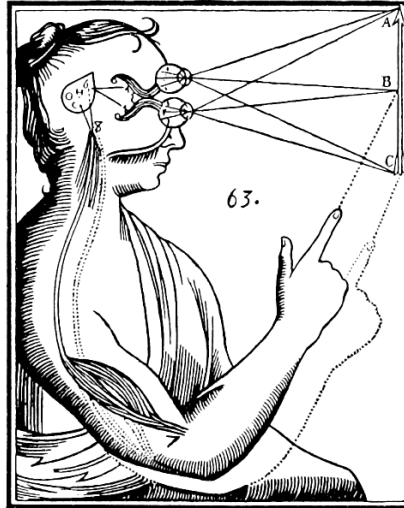


THE UNIVERSITY OF WESTERN ONTARIO
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2018-19

PHIL2050F: The Scientific Search for the Mind



Fall Term 2018
Tues. 9:30-11:30 a.m.; Thurs. 10:30-11:30 a.m.
Location: AHB 1B08

Instructor: Jacqueline Sullivan
Office: Rotman Institute, 7170 WIRB
Office Hours:
jsulli29@uwo.ca

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 as well as the empiricism of John Locke. 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), intelligence testing (Francis Galton), 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), cognitive psychology (Ulrich Neisser), 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.

TEXTS

- (1) Fancher, Raymond E. & Rutherford, Alexandra (2017). *Pioneers of Psychology*, 5th Edition. W.W. Norton & Company.
- (2) Additional readings are available as pdfs on Owl under the “Resources” folder (“Online Readings”).

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

Attendance & Participation:	20%
You can miss up to 4 class sessions without penalty	
Exam1 (November 1 in class):	25%
Exam 2 (December 6 in class):	25%
Paper (8-10 pages):	30%

Late papers are penalized at 5% per day, including weekends up to a maximum of 50% penalty. All papers are to be submitted via the “Turn It In” link on the OWL course website.

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.

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

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

(This schedule is subject to change during course of term; Page numbers of reading assignments will change as a newer edition of Fancher and Rutherford's book will be used in Fall 2018)

September 6 (Th) – Course Introduction & Overview

September 11 (T) – Descartes' Dualism
F&R, pp. 36-49
Descartes, excerpts from *Meditations on First Philosophy* (Owl)

September 13 (Th) – Descartes' Mechanical Philosophy
F&R, pp. 15-35
Descartes, *Treatise on Man* (Owl)

September 18 (T) – John Locke's empiricism
F&R, pp. 51-68
Locke, excerpts from *An Essay Concerning Human Understanding* (Owl)

September 20 (Th) – Some conceptual/analytic tools for evaluating scientific inquiry and reasoning
Excerpts from Mill, Kuhn and Popper

September 25 (T) – Phrenology and Early Localization theory (Gall, Flourens, Broca, Wernicke)
F&R, pp. 95-118
Gall, F, Vimont, Broussais. Excerpts from *On the Functions of the Cerebellum* (Owl)
Flourens, Excerpts from *Phrenology Examined* (Owl)
Broca, P. *Remarks on the Seat of Articulate Language, Followed by an Observation of Aphemia* (Owl)
Wernicke, C. Excerpts from *Recent Works on Aphasia* (Owl)

September 27 (Th) – Localizing Memory – Karl Lashley
F&R, pp. 118-127
Excerpts from "Studies of cerebral function in learning"

October 2 (T) – Localizing Memory: Wilder Penfield to Brenda Milner
F&R pp. 127-137
Excerpts from Scoville, W. and Milner, B. (1957) "Loss of Recent Memory After Bilateral Hippocampal Lesions"
Paper topics for term paper posted online

October 4 (Th) – Early Physiology of Sensation and Perception (Helmholtz)
F&R, pp. 139-162
Excerpts from Helmholtz's "On the relation of optics to painting"

Tentative Schedule of Classes (cont'd)
(Subject to change during course of term)

October 9-12 - FALL READING WEEK (No classes)

October 16 (T) – Psychophysics & Gestalt Psychology
F&R, pp. 163-171; F&R, pp. 172-184
Excerpts from Fechner's *Elements of Psychophysics* [to be added on Owl]

October 18 (Th) – Review Session for Exam 1

October 23 (T) – **Exam 1 (in-class)**

October 25 (Th) – Experimental psychology - Wundt
F&R, pp. 189-226
Excerpts from *Lectures on Human and Animal Psychology*
[LINK on google books:
https://books.google.ca/books?id=7lDXAwAAQBAJ&printsec=frontcover&dq=Wilhelm+Wundt&hl=en&sa=X&ved=0ahUKEwj7Jjdp_3OAhUk24MKHZbuD5cQ6AEIPjAG#v=onepage&q=Wilhelm%20Wundt&f=false]

October 30 (T) – William James and Edward Lee Thorndike
F&R, pp. 305-345
Excerpts from James' *Principles of Psychology* [to be added on Owl]

November 1 (Th) - Galton and Measurement of Mind
F&R 269-302

November 6 (T) – Psychology as the Science of Behavior: Pavlov & Watson
F&R, pp. 347-360; F&R, pp. 360-379
Pavlov, Excerpts from *Conditioned Reflexes*
Excerpts from Watson's *Behaviorism*

November 8 (Th) – Psychology as the Science of Human Behavior: Skinner and Operant Conditioning
F&R pp. 379- 399
Excerpts from Skinner's *Science and Human Behavior*

November 13 (T) – – The Cognitive Revolution
Minds and Machines
F&R, pp. 603-635

Tentative Schedule of Classes (cont'd)
(Subject to change during course of term)

November 15 (Th) History and Philosophy of Psychiatry – Hippocrates, Mesmer, Charcot
F&R, pp. 401-424

November 20 (T) – Freudian Psychoanalytic theory – Part 1
F&R, pp. 455-488
Excerpts from Freud's *An Outline of Psychoanalysis*

November 22 (Th) – Freudian Psychoanalytic theory – Part 2
F&R, pp. 488-503
Excerpts from Freud's *An Outline of Psychoanalysis*

November 27 (T) – Developmental Psychology
Binet and Intelligence Testing
F&R, pp. 563-584
Jean Piaget and the psychology of the child
F&R, pp. 585-601

November 29 (Th) Review for Exam 2

December 4 (T) – Exam 2

December 6 (Th) – Course Conclusion
Term papers due