## Philosophy 477 Philosophy of Psychology

**MWF 11:00 – 11:50** 137 Armory

Instructor:	Jonathan Livengood
Office:	403 Gregory Hall
Office Hours:	Wednesdays 10:30 – 11:30 AM
Email:	jlive@illinois.edu
Required Texts: Optional Text:	None The Routledge Companion to Philosophy of Psychology, Edited by Symons and Calvo

## **Course Overview and Objectives**

Philosophy of psychology covers a large range of issues having to do with the study of cognition, mental representation, perception, consciousness, adaptive behavior, and the methods used to investigate psychological phenomena.

In this course, we will be concerned with several interrelated foundational, conceptual, and methodological issues in psychology, including the goals of psychology, the relationship between psychology and neuroscience, the nature of (psychological) mechanism and explanation, the significance of measurement, the use and misuse of probability and statistics in studying human cognition, and the replication crisis.

Upon successful completion of the course, students will be able to sketch (at least in rough outline) some important historical developments in psychology and some of the challenges psychology faces, describe the debate between symbolists and connectionists with respect to cognitive architecture and explain its relationship to philosophical debates between empiricists and rationalists, describe computational functionalism and some criticisms of it, attack or defend the claim that psychology is an autonomous science, describe the replication crisis and critically evaluate some suggestions for resolving it, and much else.

## **Course Requirements and Grading**

Undergraduates may earn an A in the course by attending every class meeting and submitting a question prompted by the assigned readings at the beginning of each class meeting. Alternatively, undergraduate grades will be determined by taking the arithmetic mean of their scores on three in-class exams. Each exam will consist of 3 essay-style

questions drawn at random from a list of 10 possible questions that I will provide one week before the exam period. Exams will be graded on a 100 point scale, and the mean of the three scores will be used to assign a letter grade according to the scheme: 0-59 F, 60-62 D-, 63-66 D, 67-69 D+, 70-72 C-, 73-76 C, 77-79 C+, 80-82 B-, 83-86 B, 87-89 B+, 90-92 A-, 93-97 A, 98-100 A+.

In addition to exams, graduate students will be **required** to submit a question prompted by the assigned readings at the beginning of each class meeting. The questions will be collected and normed to a 100 point scale based on completion rate. Graduate students will also be **required** to write a short term paper (3,000 words or less), which will be graded on a 100 point scale. The course grade will then be determined by taking the mean or median, whichever is greater, over the five assessments, with the letter grade determined according to the same scheme as for the undergraduates.

Attendance & Participation: Students are expected to join class sessions regularly and to contribute to discussions; however, attendance is not mandatory. For purposes of the attendance A, absences will be treated in accordance with the requirements of the Student Code Article 1, Part 5 (<u>https://studentcode.illinois.edu/article1/part5/1-501/</u>). I will excuse reasonable absences. If possible, let me know in advance. For information about absence letters, see <u>https://odos.illinois.edu/resources/students/absence-letters</u>

## **Class Schedule**

This is the schedule of readings and class events. Each set of readings should be done by *the date it appears on the list*.

Dates	Readings
Mon., Aug. 26	Berezow "Why Psychology Isn't Science"
Wed., Aug. 28	Hatfield "Rationalist roots of modern psychology"
Fri., Aug. 30	Martin "Empiricist roots of modern psychology"
Mon., Sep. 2	Labor Day! No Class!
Wed., Sep. 4	Kim "Early experimental psychology" Kant "Metaphysical Foundations of Science"
Fri., Sep. 6	Watson "Psychology as the Behaviorist Views It"
Mon., Sep. 9	Braddon-Mitchell "Behaviourism"
Wed., Sep. 11	Garnham "Cognitivism"

Fri., Sep. 13	Chomsky "Empiricism and Rationalism"
Mon., Sep. 16	Turing "Computing machinery and intelligence"
Wed., Sep. 18	Polger "Computational functionalism" Putnam "The Nature of Mental States"
Fri., Sep. 20	Marr "The philosophy and the approach" Fodor "Special sciences, or the disunity of the …"
Mon., Sep. 23	Churchland "Functionalism at Forty"
Wed., Sep. 25	Piccinini "The Mind as Neural Software?"
Fri., Sep. 27	First Exam!
Mon., Sep. 30	Craver "Levels of mechanism"
Wed., Oct. 2	Piccinini & Craver "Integrating Psychology and"
Fri., Oct. 4	Stinson "Mechanisms in Psychology"
Mon., Oct. 7	Weiskopf "Integrative Modeling and the Role"
Wed., Oct. 9	Bantegnie "Psychology and Neuroscience"
Fri., Oct. 11	Durso "Releasing Their Ink"
Mon., Oct. 14	Sharkey & Sharkey "Connectionism"
Wed., Oct. 16	Fodor & Pylyshyn "Connectionism" §§1-2
Fri., Oct. 18	Fodor & Pylyshyn "Connectionism" §§3-4
Mon., Oct. 21	Buckner "Deep Learning"
Wed., Oct. 23	Buckner "Black Boxes or Unflattering Mirrors?"
Fri., Oct. 25	Schneider "The Language of Thought" Lake & Baroni "Human-like Systematic …"
Mon., Oct. 28	Markman "Representation and the brain" Harnad "The Symbol Grounding Problem"
Wed., Oct. 30	Clarke & Beck "Border Disputes"

Fri., Nov. 1	Second Exam!
Mon., Nov. 4	Angner "Is it possible to measure happiness?"
Wed., Nov. 6	Ramsey "Truth and probability" §3
Fri., Nov. 8	Ramsey "Truth and probability" §3, Again
Mon., Nov. 11	Coyle "The Psychometrics and Neuroscience of $g$ " Sternberg "A History of Research Part 2" van der Maas "Intelligence is What"
Wed., Nov. 13	Spearman "General Intelligence" §§I, IV, V.4-5
Fri., Nov. 15	Herrnstein and Murray <i>The Bell Curve</i> Wahlsten "The Malleability of Intelligence is …" Nickerson "Developing Intelligence through Instruction" Grigorenko and Burenkova "Genetic Bases of …"
Mon., Nov. 18	Neisser et al. "Intelligence: Knowns and Unknowns"
Wed., Nov. 20	Walrath et al. "Factor-Analytic Models of Intelligence" Carroll "Theoretical and Technical Issues"
Fri., Nov. 22	Glymour "Social Statistics and Genuine Inquiry"
Mon., Nov. 25	Thanksgiving Break – No Class!!
Wed., Nov. 27	Thanksgiving Break – No Class!!
Fri., Nov. 29	Thanksgiving Break – No Class!!
Mon., Dec. 2	Baker "Is there a reproducibility crisis?" Open Science Collab "Estimating the …" Begley & Ellis "Raise Standards for …"
Wed., Dec. 4	Nosek et al. "Replicability, Robustness, and"
Fri., Dec. 6	Meehl "Why Summaries of", pp. 195-219
Mon., Dec. 9	Gigerenzer "Mindless Statistics" Hoekstra et al. "Robust Misinterpretation"
Wed., Dec. 11	Third Exam!