

# Phil 150: Philosophy of Cognitive Science

## 4E: Brains, Bodies, and Beyond

---

Professor: Matthew Fulkerson  
email: mfulkerson@ucsd.edu

Location: WLH 2209  
Office: HSS 8073  
Office Hours: Weds 1-2

---

### Course Description:

This course will be a critical examination of a central debate in the cognitive sciences, between the establishment computational/representational views of the mind and its various competitors: ecological, embodied, embedded, enactive, and extended accounts of cognition. This is a fundamental disagreement about the very nature of the mind: to what extent, and in what way, might cognition be “embodied” or “embedded”? Or, can the mind be best explained as computation over symbolic representations? What implications do these views have for cognitive science?

### Course Mechanics:

**Materials:** There is a TritonEd site for the course. All handouts, slides, homework assignments, and supplementary readings (if any) will be made available through this site. It is your responsibility to check this site regularly.

**Lectures and Discussion:** I sometimes lecture with slides. The slides will be used to focus discussion and organize complex material; they are not a substitute for the readings. The slides will be made available on TritonEd a few days after lecture. Students are expected to take careful notes and will be held responsible for the material discussed in class not found on the slides or in the readings. There is no separate time devoted to discussion; please (politely) interrupt at any time with comments or questions.

**Reading Assignments:** Students are expected to read each selection prior to class (preferably more than once). You should take notes while reading, keeping track of questions or issues that arise. You should bring both the reading and the notes/questions to class.

### Grading:

There are five short, focused writing assignments, each tailored to a specific skill in philosophical writing.

Assignments	Value	Due Date
Writing 1	10%	Friday, April 12th
Writing 2	10%	Friday, April 26th
Writing 3	20%	Friday, May 10th
Writing 4	20%	Friday, May 24th
Writing 5	30%	Friday, June 7th
Attendance and Participation	10%	NA

### Course Policies:

To avoid penalties for late assignments, students must provide official documentation explaining why the assignment could not be handed in on time. Late homework without documentation will not be accepted. Late papers without documentation will receive a late penalty of 1/3 letter grade for each day a paper is late, including weekend days (no exceptions). This course adheres to all UCSD standards for academic integrity (<https://academicintegrity.ucsd.edu>).

**Turnitin boilerplate:** Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin for the detection of plagiarism (via the TritonEd interface). All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site.

### Reading Schedule (subject to small changes):

Part 1: The Establishment

- Week 1
  - M (4/1): Introduction, background, format, etc.
  - W (4/3): Gallistel, “Learning and Representation”
  - F: (4/5): Continue with Gallistel
- Week 2:
  - M (4/8): Block, “The Mind as the Software of the Brain”
  - W (4/10): Block, continued; introduce Van Gelder
  - F (4/13): Van Gelder, “What might cognition be, if not computation?”
  - FIRST WRITING ASSIGNMENT DUE
- Week 3:
  - M (4/15): Clark “Whatever Next? Predictive brains, situated agents, and the future of cognitive science”
  - W (4/17): Clark, continued (focus on commentary)
  - F (4/19): **NO CLASS**

Part 2: Ecological Views

- Week 4:  
M (4/22): J.J. Gibson, “A Theory of Direct Visual Perception”  
W (4/24): Turvey and Shaw, “Ecological Foundations of Cognition”  
F (4/26): Orlandi, “Bayesian Perception Is Ecological Perception” SECOND WRITING ASSIGNMENT DUE

Part 3: Embodied and Embedded Views

- Week 5:  
M (4/29): Dreyfus, “Why computers must have bodies in order to be intelligent”  
W (5/1): Dreyfus, continued  
F (5/3): Shapiro, “The Embodied Cognition Research Programme” "
- Week 6:  
M (5/6): Brooks, “Intelligence without Representation”  
W (5/8): Spaulding, “Embodied cognition and theory of mind”  
F (5/10): Discussion Continued, THIRD WRITING ASSIGNMENT DUE

Part 4: The Enactive View

- Week 7:  
M (5/13): Thompson and Cosmelli, Brain in a Vat or Body in a World?: Brainbound versus Enactive Views of Experience  
W (5/15): Colombetti and Thompson, “The Feeling Body: Towards an Enactive Approach to Emotion”  
F (5/17): Continue with Colombetti and Thompson
- Week 8: M (5/20): Noe and O’Regan, “A sensorimotor account of vision and visual consciousness”  
W (5/22): Noe and O’Regan, Continued  
F (5/24): de Vignemont “A mosquito bite against the enactive approach to bodily experiences,” FOURTH WRITING ASSIGNMENT DUE

Part 5: The Extended Mind

- Week 9:  
M (5/27): **NO CLASS MEMORIAL DAY**  
W (5/29): Clark & Chalmers, “The Extended Mind”  
F (5/31): **NO CLASS**
- Week 10:  
M (6/3): Adams & Aizawa, “Defending the Bounds of Cognition”  
W (6/5): Thompson and Stapleton, “Making Sense of Sense-Making: Reflections on Enactive and Extended Mind Theories”  
F (6/7): Final Discussion, Final Exam Prep, FIFTH WRITING ASSIGNMENT DUE