Course Guide

PHIL 10174 Topics in Mind and Cognition

Course Organiser: Dr. Mazviita Chirimuuta (m.chirimuuta@ed.ac.uk)

Co-Teacher: Dr. Tillmann Vierkant (t.vierkant@ed.ac.uk)

- Office hours: by appointment with the lecturer running your tutorials

Course Secretary

- UG: Ann-Marie Cowe (philinfo@ed.ac.uk)

-----------------------------------------------------------------------------------------------------------------------------

Department of Philosophy
School of Philosophy, Psychology and Language Sciences
University of Edinburgh
1. Course Topic and Objectives

This course is an introduction to the philosophy of neuroscience. We will focus on the topic of explanation in neuroscience: what does it mean to say that a scientific theory or model has explained how the brain works, and how can neuroscientific research lead to explanations of mental states and processes, including consciousness?

By the end of the course you should be able to:

1. Understand the basic concepts of various philosophical accounts of neuroscientific explanation.
2. Give informed assessments of claims made about the relevance of neuroscientific results to the explanation of psychological phenomena.
3. Analyze the strengths and weaknesses of different philosophical theories of explanation.

2. Assessment Structure

- Midterm essay: limit 1500 Words (35%)
- Final essay: limit 2500 Words (60%)
- Participation: 5%

Deadlines
- Midterm: Thursday 25th February
- Final: Thursday 15th of April

3. Content and Readings

Recorded lectures will be posted for each week, sometimes with some exercises to help your learning.

For each week, readings are listed below. Readings include core and secondary readings. The core readings for each week are starred (*).

Core readings are the material that it is your responsibility to read before each class.

Core readings are also the material on which our weekly tutorial discussions will be based. Please do delve into the further reading too: these should be your first port of call when writing your essay. The core readings and as many as possible of the secondary readings are posted as PDFs on Learn.

Some hints: Read the core readings carefully. You may find an article challenging or difficult—persist! If you do not understand something, read it again, think about it, try to
make sense of it in your own words. If after multiple attempts to make sense of a passage, you still cannot, then there is a good chance that you have identified a real problem in the article—a perfect point to raise in your discussion forum, in the class, or to form the basis of an excellent essay! Jim Pryor has some wonderful tips for reading philosophy (as he says, 'you should expect to read a philosophy article more than once')

Background reading
The more background you know the better. A good starting point is to read one of the books listed below. Even if you already have a strong background in this topic already, I would encourage you to read one of these books during the semester to consolidate your knowledge.

Introductory

More advanced

Week 1: The Brain is Complicated… the Challenge of Neuroscientific Explanation
No readings or tutorials.

Week 2: Introduction to Scientific Explanation


Week 3: Reductionism

Week 4: Thinking about Mechanisms


Week 5: Mechanistic Explanation of the Brain/Mind
* Piccinini and Craver (2011) “Integrating psychology and neuroscience: functional analyses as mechanism sketches.” Synthese 183:283–311


Flexible Learning Week

Week 6: Brain as Information Processor


Week 7: Computational Explanation

Week 8: Brain meets Mind


Week 9: Neuroscientific explanation of Consciousness, pt. 1


Week 10: Neuroscientific explanation of Consciousness, pt. 2


Week 11: Review
No new readings