Epistemology, Ethics and Mind Online MSc/PGDipl/PGCert

Philosophy of Mind and Cognitive Science

PHIL11130
Course Guide 2019-20

People

Course Organiser:
Name: Dr. Indrek Reiland
Email: ireiland@ed.ac.uk
Office: 4.02
Office hours: By appointment

Course Secretary:
Name: Becky Verdon
Email: Rebecca.Verdon@ed.ac.uk

Course Librarian:
Name: Anne Donnelly
Email: anne.donnelly@ed.ac.uk

Office hours:
Please email Dr. Reiland to make an appointment if you need to discuss material covered in the course or essay topics.

Course aims and objectives

This course examines how the mind fits into the physical world. This is one of the central issues in contemporary philosophy of mind and cognitive science, and we will address it by examining some of the following questions:

- How do our everyday explanations of behaviour, e.g. Asha walked to the shops because she needed to buy bread, relate to neurological explanations of that same behaviour, e.g. Asha walked to the shops because of activity in her motor cortex?
- Does the mind work like a computer?
- Where is my mind? Is it in the head or can it extend beyond my skull and into the world?
- What is innate knowledge and do we have any?
- What is the nature of introspection?

These issues bring together traditional concerns from the philosophy of mind and findings from psychology and neuroscience, and we will draw on a variety of sources in exploring possible answers to these questions.
Intended learning objectives

On completion of this course, the student will:

- Have a grasp of fundamental issues in the philosophy of mind and cognitive science, e.g. non-reductive materialism, eliminative materialism, varieties of functionalism, the extended mind hypothesis, tacit theories, nativism.
- Be able to critically analyse and engage with literature by key philosophers in this field.
- Understand how empirical work can support philosophical arguments, and be able to use empirical data in their essays and arguments.
- Be able to present arguments clearly and concisely both within a classroom context and in a 2,500 word essay.
- Gain transferable skills in research, analysis and argument.

Learning, teaching and assessment

The learning is organized into watching pre-recorded lectures by Dr. Suilin Lavelle, and online seminars with Dr. Reiland. On the weeks that there are no seminars students have to write discussion posts (see below for more info). The material is structured into three blocks covering: Personal vs. Sub-Personal Explanations (green), Psychological Explanation (lilac) and Cognitive Architecture (orange).

Schedule of lectures, seminars, tutorials and assessments

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Induction</td>
<td>9 September</td>
<td></td>
</tr>
<tr>
<td>Week 1</td>
<td>Introduction and levels of explanation</td>
<td>Seminar</td>
</tr>
<tr>
<td>Week 2</td>
<td>Non-reductive Materialism</td>
<td>Seminar</td>
</tr>
<tr>
<td>Week 3</td>
<td>Eliminative Materialism</td>
<td>Discussion Posts</td>
</tr>
<tr>
<td>Week 4</td>
<td>Mechanistic explanation</td>
<td>Seminar</td>
</tr>
</tbody>
</table>
Topics and reading

Week 1 – Introduction and Levels of Explanation

In giving a personal-level explanation of behaviour we treat the person as an intentional agent, and we make sense of their behaviour in terms of reasons. Sub-personal explanations by contrast are concerned with underlying mechanisms that might explain how personal-level explanations could be true. These mechanisms might be computational, information-processing mechanisms or they might be neurophysiological mechanisms. Can these distinct types of explanations and the theories that underpin these explanations be integrated or are they radically incommensurable types of explanation?

Class reading


Secondary readings


Davidson (2006). “Psychology as Philosophy” In Bermudez & MacPherson (Ed.)


Week 2 – **Non-reductive Materialism**

Non-reductive physicalists defend the token (as opposed to type) identity of the mental and the physical. Token identity is normally analyzed in terms of supervenience. We will introduce the view and explore some of the arguments that have been given in support of it.

**Class reading**


**Secondary readings**


Week 3 – **Eliminative Materialism**

Patricia and Paul Churchland are highly influential philosophers of mind who argue that beliefs do not exist. On their account, ‘folk psychology’, that is, our everyday understanding of the mind as consisting in beliefs and desires about the world, is radically misguided. In this lecture we explore the foundations of this view, before examining how Paul Churchland has developed it in more recent years.

**Class reading**


**Secondary readings**


**Week 4 – Mechanistic Explanation in Psychology**

Scientific explanation is often taken to be the subsumption of an individual event under a law of nature. Individual events are explained by deducing them from laws together with initial conditions, and laws are explained by deducing them from more fundamental ones. In psychology laws are conceived of as effects (e.g. the McGurk effect) and are what psychologists want to explain rather than what does the explaining (Cummins 2006). Cummins tells us that the primary target of explanation in psychology are capacities (e.g. the capacity to see depth, learn a language etc.). How are capacities explained? In this week we will explore some recent work in philosophy of science that suggests that psychological capacities are explained in terms of mechanisms where these can be conceived of as “entities and activities organized such that they are productive of regular changes from start of set up conditions to finish or termination conditions” (Machamer et al 2000).

**Class reading**


**Secondary readings**

Cummins (2006). “‘How does it work?’ versus ‘What are the laws?’: Two conceptions of psychological explanation.” Reprinted in Bermudez & MacPherson (Eds.)


**Week 5 – The Language of Thought hypothesis**

One of the most influential accounts of cognition is Fodor’s view of the mind as a computer, coupled with his ‘Language of Thought’ hypothesis. Fodor claims that by understanding our cognitive processes as computational, we can explain human reasoning and inferential processes. Contained within our minds are representations of the world which can be cognitively integrated into reasoning processes. In this seminar we examine the computational theory of mind and the language of thought hypothesis.
Class reading


Secondary readings


Crane (2016). The Mechanical Mind, 3rd. Ed. Ch. 6 & Ch. 8


Week 6 – Tacit knowledge and theories in cognitive processes

Many philosophers and psychologists have maintained that our cognitive processes are underpinned by various theories. This seems an odd claim to make: in what way could neural firings be understood to be theory-like? How do these cognitive processes resemble scientific theories, or other theories as we know them? Furthermore, philosophers like Stich and Fodor maintain that cognitive processes draw on tacit knowledge. What does it mean to say that we know something tacitly, and how can we tell if we have such knowledge if it is tacit? In this seminar we will look at the foundations for the claim that some of our cognitive abilities are subserved by theories.

Class readings


Secondary readings


[Section 4 is the most important one for our topic; however, if you’d like to write on this topic, you should read the whole paper at some point].


Week 7 – The Extended Mind

Clark and Chalmers have famously argued that cognitive and mental processes can include as proper parts things outside our heads, things that are located in the organism’s external environment. We will show how their argument for extended cognition is based on a particular version of functionalism, and outline and assess a recent argument by Mark Sprevak that the extended mind constitutes a reductio of functionalism in general.

Class readings


Secondary reading

Shapiro (2011). Embodied Cognition. Ch. 3 & 6

Clark (2011). Supersizing the Mind


Week 8 – The Modular Mind

Whatever the architecture of our mind turns out to be, it must have some kind of plausible evolutionary story. The field of evolutionary psychology aims to give evolutionarily plausible stories for our current cognitive capacities. One particular view of how the mind is structured – the ‘Modularity’ view – has been of particular interest to evolutionary psychologists, as both proponents and opponents of Modularity draw on arguments from evolutionary pressures to support their claims.
Class Reading

Carruthers (2004). “The mind is a system of modules shaped by natural selection”. In C. Hitchcock (Ed.), Contemporary Debates in Philosophy of Science. pp. 293-311


Secondary Reading


Sterelny (2003). Thought in a Hostile World. Ch.10

Week 9 – The Embodied Mind

What is Embodied Cognition? In this seminar we will look at the collection of views described as ‘embodied’, and how they purport to contrast against traditional ‘computational’ views of the mind. In this seminar we will look at the broad differences between the views, focussing next week on a particular dispute regarding the representational nature of mental states.

Class Reading

Shapiro (2011). Embodied Cognition. Ch. 2 & 3

Secondary reading


Week 10 – **Against the Computational Mind**

Representational mental states have been the standard explanation for cognitive processes in the philosophy of mind. Recently, however, the explanatory value of representational states has been challenged by a group of philosophers promoting a ‘replacement’ program: to replace representational mental states with an alternative explanation for our behaviour and thought. In this seminar we will look at the plausibility of these views.

**Class reading**


**Secondary reading**


Week 11 – **Review**

This week we will bring together the themes of the course, discuss essays and anything else you’d like to go over.

**Resources**

Reading list materials are available via the course LEARN site. Please ensure you have completed the library induction tutorial. Should you have any problems accessing any of the materials for the course please contact the course librarian, Mrs Anne Donnelly: anne.donnelly@ed.ac.uk
**Assessment**

Students will be assessed by a mid-term 2000-word essay (30%), a 2500-word essay at the end of the semester (60%), and one of either a seminar presentation or a short discussion paper (10%).

**Discussion Posts**

On weeks where there is no seminar you will have to contribute at least two max 300-word post on the discussion board. Your first post must be up by midnight on Wednesday of the relevant week; your second post must be up by midnight on Sunday of the same week.

The posts are mandatory, but not graded. You will, however, lose marks from your overall grade for each week you miss (you may miss one week without penalty). If you have to miss participation for a good reason, please inform us as soon as possible.