Mind 2015/2016

Code: 42532 ECTS Credits: 6

Degree	Туре	Year	Semester
4313410 Challenges of Contemporary Philosophy	ОТ	0	2

#### Contact

# Use of languages

Name: Olga Fernández Prat

Principal working language: catalan (cat)

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**Teachers** 

María Pilar Dellunde Clavé

## **Prerequisites**

No prerequisits.

## **Objectives and Contextualisation**

This course is aimed at students who want to know present and central philosophical discussions about the nature of mind and its relation to bodies, biological or mechanics. Thus it will be shown present debates about topics like the possibility of thought in machines, the possibility of Artificial intelligence or whether machines could become conscious.

The first part of the course (classes 1 to 6) will consist in an introduction to the present philosophical debate about the caracterization of mind and/or consciousness, the associated metaphysical problems and the possibility of the scientific study of consciousness.

The second part (classes 7 to 12) will introduce logics for Artificial Intelligence (AI). AI is a part of computer sciences aimed to the development of algorithms that would allow a machine to take intelligent decisions (or at least to behave like having and intelligence similar to the human). One fundamental part for making AI systems is based on the development of adequate representations of knowledge. In this course we will study the role of logic in these representations.

It is **not** a prerequisit of this module being familiar with computer science and Al.

### Skills

- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Continue the learning process, to a large extent autonomously
- Critically analyse and summarise information from a specialist article or monograph, or information of high quality available on internet.
- Define, design, plan and draw up an original unpublished research project on philosophy, following the established academic and scientific parameters.
- Establish and take into account the implications of scientific research and knowledge for advanced philosophy research.

- Reconstruct and critically analyse the positions of the principal current researchers into philosophy, in
  each of the central branches of the master's programme (science, art and politics), using the categories
  and vocabulary that characterise them.
- Seek out, select and manage information autonomously, both from structured sources (databases, bibliographies and specialist journals) and from internet.

# Learning outcomes

- Analyse philosophically the basic concepts, methods and theories in contemporary philosophy of the mind
- 2. Apply knowledge of cognitive sciences to the analysis of contemporary issues regarding the mind.
- 3. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- 4. Continue the learning process, to a large extent autonomously
- 5. Critically analyse and summarise information from a specialist article or monograph, or information of high quality available on internet.
- 6. Seek out, select and manage information autonomously, both from structured sources (databases, bibliographies and specialist journals) and from internet.
- 7. Understand the principal philosophical views on the mind in the 20th century.
- 8. Write a research paper presenting an original idea on the central arguments in contemporary philosophy of the mind rigorously, critically, creatively and autonomously.

#### Content

- Class 1: Theories of mintd: dualism (classic and contemporary)
- Class 2: Behaviourism
- Class 3: Mind-Brain Identity
- Class 4: Objections: consciousness (1)
- Class 5: Objections: consciousness (2)
- Class 6: Do Machines have rights?
- Class 7: Can machines think? Mind as a computer.
- Class 8: Objections to Classical Artificial Intelligence: machines and the Turing test.
- Class 9: Can Machines be creative?
- Class 10: Representation of knowledge and reasoning.
- Class 11: Logics for Artificial Intelligence.
- Class 12: Intelligent Artificial Agents in society: multi-agent systems and institutions.

## Methodology

Dr. Olga Fernández Prat will teach classes 1 to 6 and Dr. Pilar Dellunde will teach classes 7 to 12.

The classes will consist in exposition of the topics and discussion of the readings.

## **Activities**

#### Mind 2015 - 2016

Title	Hours	ECTS	Learning outcomes
Type: Directed			
Class	40	1.6	1, 7
Type: Supervised			
Tutorial supervision	60	2.4	5, 3, 4
Type: Autonomous			
Reading, search of information	50	2	5, 6

#### **Evaluation**

A breaf essay about one of the topics of the course. The student must write an original paper. The tutor of the student will be the teachers of the module. The topic of the paper must be agreed.

## **Evaluation activities**

Title	Weighting	Hours	ECTS	Learning outcomes
Paper	100%	0	0	2, 8

# **Bibliography**

## References for classes 1 to 6

- A) D. Chalmers, 'The Matrix as Metaphysics". http://consc.net/papers/matrix.html
- B) G. Ryle, 'El mito de Descartes', http://www.filosoficas.unam.mx/~gmom/intro/ryle.pdf
- C) Putnam, 'La naturaleza de los estados mentales, http://www.icesi.edu.co/blogs/experimentosmentales/files/2010/05/LA-NATURALEZA-DE-LOS-ESTADOS-MENTALES2.pdf
- D) Penrose, selecció de Shadows of the Mind, Oxford University Press, 1996.
- E) Nagel, 'Qué se siente al ser un murciélago',

http://www.icesi.edu.co/blogs/experimentosmentales/files/2010/03/Qué-se-siente- ser-un-murcielago-Nagel.pdf

- F) Dreyfus, parts de 'What Computers Still Can't Do', https://archive.org/stream/whatcomputerscan017504mbp/whatcomputerscan01750 4mbp\_djvu.txt
- G) Gips, 'Towards the Ethical Robot', http://www.cs.bc.edu/~gips/EthicalRobot.pdf

## Distribution of readings:

- Class 1: A
- Class 2: B
- Class 3: C
- Class 4: D

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Class 5: E, F

Class 6: G

#### References for classes 7 to 12

- A) D. Gabbay, F. Guentner (eds.) (2014) Handbook of Philosophical Logic, Vol 1-17, Springer.
- B) S. Russell, P. Norvig (2009) Artificial Intelligence: A Modern Approach, Prentice-Hall, primer capítol (traducció al castellà: S. Russell, P. Norvig (2009) Inteligencia Artificial: un enfoque moderno, Prentice-Hall, Pearson Educación). <a href="http://aima.cs.berkelev.edu/">http://aima.cs.berkelev.edu/</a>
- C) Oppy, Grahamand Dowe, David, "The Turing Test", *The Stanford Encyclopedia of Philosophy* (2011) <a href="http://plato.stanford.edu/archives/spr2011/entries/turing-test/">http://plato.stanford.edu/archives/spr2011/entries/turing-test/</a>
- D) L. Hauser, "Artificial Intelligence" Internet Encyclopedia of Philosophy: http://www.iep.utm.edu/art-inte/
- E) A. Turing (1950) Computing Machinery and Intelligence, Mind, vol. 59 (traducció al castellà: A.M. Turing, ¿Puede pensar una máquina?, Cuadernos Teorema).

## **Distribution of readings:**

Class 7: B)

Class 8: E)

Class 9: E)

Class 10: Apunts

Class 11: Apunts

Class 12: B)

Reference readings: A), C) i D)

#### Web links:

The Internet Encyclopedia of Philosophy:http://www.iep.utm.edu/

Stanford Encyclopedia of Philosophy:http://plato.stanford.edu/contents.html

Field Guide to the Philosophy of Mind: http://host.uniroma3.it/progetti/kant/field/

Philosophy and Cognitive Science. Selected bibliography:http://www.phil.mq.edu.au/staff/jsutton/CogSciIndex.html

Consciousness, philosophy of mind, and such (Dave Chalmers' compilation):http://www.u.arizona.edu/~chalmers/resources.html