MIND AND BRAIN (PH 4711)
Dominican School of Philosophy and Theology

MEETING INFORMATION

Thursdays: 11.10-12.30
Room: DSPT classroom 1
Zoom Meeting ID for remote learning: TBA
Instructor: Marga Vega, email: mvega@dspt.edu
Office Hours: By appointment.

COURSE DESCRIPTION

As physicalism attempts an exhaustive explanation of the world, and neuroscience hopes to map the brain, it seems that the way to find out who we are, what we are capable of, and how we should behave in the world is contained in the three pounds of gray matter inside our skull.

This course addresses how we can make sense of the relation between our brain and our mental life. How can the mind, supposedly an immaterial entity, have any causal influence on the body and our environment? Is there a mind and body interaction, or can we safely assume that all there is for having mental life is neurological processes?

In the first part of the course, we will review the leading solutions to the mind-body interaction (dualism, behaviorism, identity theory, functionalism, computer functionalism, eliminativism, anomalous monism, supervenience, biological naturalism, among others), their merits and difficulties. Hylomorphism will be presented as an alternative to the problems of reductive physicalism and dualism while acknowledging the contributions and insights of the other previous theories.

Secondly, we will explore specific mental experiences and their underlying neurological basis: free will, personal identity, the self, religious experience, the computational theory of the mind, the unconscious, and intentionality. Some of the questions we will examine are: Does our brain make decisions for us? Does the brain create the conditions for religious experience and our sense of selfhood and personal identity? Does it create the world that we naively believe to perceive directly? Does the brain work mostly unconsciously, rendering superfluous our experience of consciousness? Could we say that our brain runs its processes computationally so that the analogy between brains and hardware and minds and software should be taken literally? Can intentionality and consciousness then be naturalized and further modeled through algorithmic representations regardless of their material implementation? Will this lead to the possibility of “uploading” our mind in the hopes of a future download? Does our biological makeup matter when it comes to our mental life, or can the mind be instantiated on any physical basis, including computers? Are our cognition and experience constrained by the brain or by our whole body?
COURSE METHODOLOGY

The course combines the methodology employed in the philosophy of mind with the information provided by the sciences that study the brain and model cognition. Methodologically, we will examine the assumptions behind some research by neuroscientists and cognitive scientists from a philosophical standpoint. Additionally, we will turn to the History of Philosophy, more specifically to Aristotle and Aquinas, to present a non-dualist, non-reductionist model for the relation between the mind and its brain.

COURSE FORMAT

This course consists of an online seminar with two sessions:

- **Session 1**, asynchronous: The student will follow a PowerPoint presentation or video on the assigned topic.
- **Session 2**, synchronous: Weekly in-person meetings will allow for discussions and presentations on the assigned readings. Students not attending campus will join this session remotely on Thursdays.

COURSE GOALS

Following DSPT institutional goals of 1. Deep learning (integrative thinking, intellectual humility, and self-direction), 2. Effective leadership, the student will have an opportunity to:

1. Acquire systematic knowledge of the main problems in the Philosophy of Mind, in particular, current topics of perception, intentionality, personal identity, embodiment, and free will.
2. Understanding of the problems of the mind and brain, both in philosophy and neuroscience, in the larger context of the history of philosophy and, hylomorphism.
3. Integration of the Aristotelian-Thomistic tradition with current scholarship on the philosophy of mind and philosophical assumptions behind the popularization of neuroscientific results. Shed new light on the topics discussed through this integration of diverse philosophical approaches.
4. To improve argumentative, research skills in Philosophy through class participation and assignments; and to acquire familiarity with teaching tools that can facilitate online learning.

For program, course and institutional goals and outcomes mapping visit the Moodle site.
COURSE OUTCOMES

Concerning the course contents, by the end of the semester, the student will be able to:

1. Exhibit deep learning by:
   1. Understanding of a. dualist and physicalist theories of the mind, b. the challenges these theories face, and c. alternatives to dualism and reductionism.
   2. Comparing the metaphysical assumptions on causation that underlie different conceptions of the mind.
   3. Evaluate some of the arguments against physicalism: Kripke (Modal Argument), Leibniz’s Law, Nagel (What is it like to be a bat), Putnam’s super Spartans (behaviorism), Searle (Chinese Room against functionalism), and Jackson (What Mary didn’t know), among others.

2. Comprehensive knowledge of history and tradition by:
   1. Being able to place within the history of philosophy and the Aristotelian-Thomistic philosophy on the mind, features of mental phenomena like intentionality, the qualitative and conscious aspects of mental states, the irreducibility to physical processes, the relation between consciousness and intentionality, and the role of the unconscious.
   2. Show familiarity with some neuroscientific research as it relates to philosophical questions concerning the mind and personhood.

3. Show evidence of the integration of historical and systematic knowledge in a specialized topic of the student’s choice.
   1. Understand the connection of one Thomistic metaphysical or anthropological notion as it reappears or is overlooked in neuroscientific debates.
   2. Develop critical thinking on the assumptions behind Neuroscientific research’s popularization and on philosophical theories that address the relation between the mind and the brain.

4. Improved skills for research, and communication:
   1. Share insights with others through class participation.
   2. To show proficiency in the academic literature on the topic.
   3. Ability to:
      • Articulate a philosophical problem
      • Assess the arguments
      • Provide a personal contribution.
   4. Use of:
      • The Philosopher’s Index
      • The Stanford Encyclopedia of Philosophy, and other research resources
      • Zotero/Hipernomicon
ASSIGNMENTS

1. Precis. Each week, students will post on Moodle a précis of one of the assigned readings (100-250 words) and share it during our weekly discussions.
2. Quiz # 1 on materials up to September 26th (on Moodle).
3. Quiz # 2 on materials up to November 7th (on Moodle).
4. **PowerPoint Presentation at the end of the semester:** The students will prepare a PowerPoint presentation on one of the following areas related to their topic of interest: artificial intelligence, free will, and neurobiology, the self in neuroscience, embodiment, or religious experience. Due on December 17th.

The grade breakdown for the course will be 10% for weekly precis, 25% for each quiz, 40% for the PowerPoint.

ASSIGNED READINGS


The instructor will email the students the reading for the first week of the semester through Moodle one week before classes start. Please, make sure that your email address on Moodle is updated.

If the student has difficulty finding or purchasing a copy of the text above, please contact the instructor. Other assigned readings in the schedule of classes will be provided electronically.
SCHEDULE OF CLASSES

SEP. 6th-12th – WEEK 1
THE MIND AS A PROBLEM IN A PHYSICALIST WORLDVIEW

Contents
- Physicalist assumptions
- Assumptions in Neuroscience and Artificial Intelligence
- The human brain, amidst other animal brains
- The human species as a symbolic and social species

Readings
- “Substance Dualism and Its Physicalist Rivals” and “Redressing Substance Dualism” from The Blackwell Companion to Substance Dualism, pages 1-22.

SEP. 13th -19th – WEEK 2
REDUCING THE MIND TO THE BRAIN: REDUCTIVE AND ELIMINATIVE PHYSICALISM. OBJECTIONS

Contents:
- Objections: Leibnitz’s Law. Kripke’s modal argument.

Learning materials:
- PowerPoint Lectures
- Reading:
  - “Substance Dualism: A Defense,” from The Blackwell Companion to Substance Dualism 43-60.

SEP. 20th-26th – WEEK 3
FUNCTIONALISM AND QUALIA
QUIZ #1

Contents:
- Functionalism
- Objections on qualia: What is it like to be a bat, Chinese Nation, Zombies, What Mary Didn’t Know, Inverted Qualia.
Learning materials:
- PowerPoint Lectures
- Readings:
  - Debating the Unity of Consciousness: “Substance Dualism and the Unity of Consciousness,” “Problems With the Unity of Consciousness,” “Arguments for Substance Dualism”

STP. 27th-OCT. 3rd – WEEK 4
COMPUTER FUNCTIONALISM

Contents: Computer functionalism and objections.
- Semantics: Chinese Room
- Naturalizing Intentionality
- The Background versus the Cognitive Unconscious

Learning materials:
- PowerPoint Lecture
- Video
- Readings:

OCT. 4th-10th – WEEK 5
REDUCING THE MIND TO THE BRAIN: NON-REDUCTIVE PHYSICALISM

Contents:
- Non-Reductive: Biological Naturalism, Neutral Monism, Mind-Body Pessimism.

Learning materials:
- PowerPoint Lectures
- Readings:
  - Debating non-reductive physicalism, from The Blackwell Companion to Substance Dualism, pages 316-339.
OCT. 18th -24th – WEEK 6
THE IRREDUCIBILITY OF THE MIND TO THE BRAIN

Contents:
- Substance Dualism and Idealism.
- Epiphenomenalism, emergentism, and panpsychism.

Learning materials:
- PowerPoint Lectures
- Reading:
  - Debating Emergent Dualism, from *The Blackwell Companion to Substance Dualism*, pages 61-86.

OCT. 25th-31st – WEEK 7
READING WEEK

NOV. 1st -7th – WEEK 8
HYLOMORPHISM
QUIZ #2

Contents:
- Hylomorphism and the mind-body problem, mental causation, the concept of matter.
  - Organic basis of cognitive capacities. Embodiment.

Learning materials:
- PowerPoint Lecture
- Readings:
  - Debating Thomistic Dualism, from *The Blackwell Companion to Substance Dualism*, pages 87-130.

NOV. 8th-14th – WEEK 9
IS REALITY CREATED BY OUR BRAIN?

Contents:
- The case of perception

Learning materials:
- Video Lecture: *Intentionality of Perception*
- Reading: Kandel 2018
NOV. 15th-21st – WEEK 10
IS FREE WILL AN ILLUSION?

Contents:
- Free will and neurobiological determinism
- Free Will and Libet type experiments

Learning materials:
- Video Lecture: Free Will
- Readings:

NOV. 22nd-28th - WEEK 11 - THANKSGIVING

NOVEMBER 29TH- DECEMBER 5TH– WEEK 12
IS OUR PERSONAL IDENTITY REDUCIBLE TO OUR PHYSICAL IDENTITY?

Learning materials:
- PowerPoint Lecture
- Readings: Kandel 2018

DEC. 6th-12th – WEEK 13
RELIGIOUS EXPERIENCE AND THE BRAIN

Contents:
- Religiosity and Neuroscience.
- Aristotle on the Agent Intellect and arguments for the immortality of the human soul.

Learning materials:
- Video: Neuroscience and Religious experience
- Readings: Kandel 2018

DEC. 13th-19th – WEEK 14
LAST ASSIGNMENT DUE
BIBLIOGRAPHY

General Introductions and Background Readings


Hylomorphism: Aristotle and Aquinas

• Vega, M. “Biological Naturalism: Overdetermination or Causal Multi-Tasking? Some Insights from Aristotle.”

Physicalism


Challenges to Physicalism

• Byrne, Alex. Inverted qualia. Stanford Encyclopedia of Philosophy.

Biological Naturalism

• Vega, M. “Biological Naturalism: Overdetermination or Causal Multi-Tasking? Some Insights from Aristotle”.

Intentionality, Externalism, Non-Intentional States

• Crane, Tim. 1991. “All the difference in the world.” Philosophical Quarterly 41 (January):1-25
Freedom and Neurobiology

- Zhu, Jing, “Reclaiming Volition. An Alternative Interpretation of Libet’s Experiment”

Personal Identity

- Zahavi, “The Unity of Consciousness and the Problem of Self”
- Galen Strawson, “The Minimal Subject”
- John Campbell, “Personal Identity”
- Parfit, “Why Our Identity is Not What Matters”
- Korsgaard, “Personal Identity and the Unity of Agency: A Kantian Response to Parfit”

Topics in Neuroscience


———. The Age of Insight: The Quest to Understand the Unconscious in Art, Mind, and Brain, from Vienna 1900 to the Present. Random House Incorporated, 2012.

———. The Age of Insight: The Quest to Understand the Unconscious in Art, Mind, and Brain, from Vienna 1900 to the Present. Random House, 2012.


