

Phil 329: Minds, Machines, and Persons
Spring 2024
Section 02

Instructor: David Sorensen

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Meeting time: MW 5:40-7:00pm

Meeting place: Hickman Hall, Room 214 (Douglas Campus)

Office Hours: TBA

Office Location: 106 Somerset St (next to Barnes and Noble), Room 540

In this course, we will study competing philosophical theories about the nature of the mind and mental phenomena—intentionality, mental representations, and consciousness—and what these theories tell us about the possibility of creating machines with minds like ours. We will begin with some of the most foundational metaphysical issues in the philosophy of mind. Then, we will examine the foundations of computational cognitive science and artificial intelligence research. Next, we will look at attempts to understand and explain mental representations *naturalistically*. Lastly, we will discuss the metaphysical and ethical issues surrounding the possibility of mind uploading, mind extension, and the creation of super-intelligent AI.

Here are some of the questions that we will raise and try to answer:

- What distinguishes mental phenomena from nonmental phenomena?
- What is the metaphysical relation between the mind and brain?
- Can intentionality be naturalized?
- What is consciousness? Is consciousness just a complex state of the brain or is it something more than that (e.g. a *nonphysical* entity or property)?
- Is it possible to build machines (e.g. digital computers) that have minds like ours?
- Are our smartphones and laptops (literally) extensions of our minds?
- In the future, will it be possible to “upload” our minds to a cloud server? Will the uploads be us or just a clone of us? Is there a relevant difference between these two options?

Course Requirements

1. Course readings:

(a) Textbooks:

- 1) *The Mechanical Mind* by Tim Crane (**3rd** edition)
- 2) *Artificial You: AI and the Future of Your Mind* by Susan Schneider

(b) Supplementary readings available on Canvas (go to “pages” and then “readings and homework”, or visit the “Files” section)

- 1)** You are expected to read the assigned articles and chapters **before** the class session the readings are scheduled for. However, I recommend doing the readings both before and after the class session, as the material may at times be difficult, or unclear the first time reading it. After lecture and in-class discussions, the material should be much easier to understand. But it's important to know in advance that not everything will be covered in lecture. There will be quiz questions based on supplementary readings, videos, podcasts, etc. If they are not covered in lecture and you do not understand them, please send me an email or schedule an appointment with me during office hours.
- (c)** Powerpoints will be made available on Canvas (typically) the day before class. I recommend skimming the slides before class and carefully reviewing them before exams.

2. Course evaluation:

- (a)** Exams: There will be two essay-based exams (midterm and final). Study guides with topics and a sample question (which will appear on the exam) will be made available 2 weeks before each exam.
- (b)** Low-stakes assignments: argument map submissions, discussion posts, and short writing assignments based on the reading(s)
- (c)** Canvas quizzes (based on lectures, readings, and videos/podcasts), ranging from 3 to 5 questions (MC, MA, T/F, Matching). Quizzes will be posted in a module every week and will be due Sunday by 11:59 pm. Quizzes can still be submitted late up until 3 days after the due date, but with an automatic deduction of 2 points (out of 10). Thus, the highest score you can get on a late quiz will be a B-. Quizzes will not be accepted after the 3-day late submission window as the answers for the quiz will be revealed the fourth day after the deadline.

Grade breakdown:

Attendance and Participation: 15%
Low stakes assignments (Canvas and in-person): 10%
Weekly quizzes: 25%
Midterm (in-person): 25%
Final exam (in-person): 25%

Grading Scale:

A	90-100
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	65-66
F	Below 65

Expectations of students:

Students are expected to carefully read the syllabus, regularly attend class, do the readings, keep notes, and complete all course assignments. **You should always bring your textbook, a notebook, and a writing instrument to class.** Students should also regularly check your email (every day), and log onto Canvas to check for course updates or revised deadlines. If any problems arise, you should contact me ASAP.

Participation and Attendance Policy:

Beginning January 29th, I will take attendance at the end of each class through Canvas. You are permitted up to **four** absences without a medical note. Every absence after four will result in a one-point deduction from both your attendance and final grade. For example, if you miss eight classes, without any doctor's notes, you will lose four points from your final grade. Participation will be graded P/F (5 points/0 points). You may meet the participation requirement by participating during in-class discussions or during office hours, in class you're uncomfortable speaking up in class.

Assignment deadlines: Each week, there will be two modules posted (one on Tuesday and the other on Thursday). Unless stated otherwise, all of the module assignments for a given week are due at the end of that same week (Sunday, by 11:59 pm).

How to do well in the course:

- 1) Take the readings seriously:** There will be lots of readings assigned in this course, some of which will be quite difficult. It is best to complete all the readings *before* attending the lecture for which they are assigned. Reading philosophy can be difficult, requiring much more time and focus than readings in other fields and genres. As a philosopher, you are also not just aiming to understand what the author is saying, but whether their claims are true. Thus, a special kind of *active* reading is required to get the most out of the assigned readings. I've provided a Canvas module with some tips and articles on active reading (in general) and also how to read philosophical papers.
- 2) Be prepared with questions and comments**
- 3) Regularly check Canvas** (at least once every 48 hours) for course updates, assignments, and newly added powerpoints
- 4) Attend office hours:** If questions remain after class, or some questions were not adequately addressed, office hours allow students to have continued and more focused conversations about the course content. You do not even have to come to office hours prepared with a list of questions or comments about the course. I am happy to talk with you about any topics of interest in philosophy or science.

Detailed schedule of topics/readings (tentative)

R: Required Supplementary Readings**P: Podcast****V: Video****O: Optional Readings*****: Difficult reading**

Date	Topic	Readings/Homework
January 17 (Wednesday)	Course introduction: Philosophical methods	Syllabus Complete "Philosophy 101" Module
January 22 (Monday)	The Mechanical World Picture	Crane Ch. 1
January 24 (Wednesday)	Mental Representation and Intentionality	Chs. 2 and 3
January 29 (Monday)	Original Intentionality vs. Derived Intentionality	
January 31 (Wednesday)	Minds and their place in nature: Substance Dualism Vs. Materialism	Crane Ch. 4, Sec 1
February 5 (Monday)	Minds and their place in nature: Functionalism and Property Dualism	Reading: Fodor, <i>The Mind-Body Problem</i>
February 7 (Wednesday)	Consciousness	What it is like to be a bat Nagel
February 12 (Monday)	Consciousness pt. 2	Ch. 13
February 14 (Wednesday)	Free Will and the threat of Determinism	Reading: Free Will and Free Choice (1000 word Philosophy)
February 19 (Monday)	Free Will and the threat of Epiphenomenalism	
February 21 (Wednesday)	The origins of intentionality, agency, and consciousness: the evolution of biological machines	Guest Lecture (asynch): The Evolution of Agency, Michael Tomasello
February 26	Midterm Exam	

(Monday)		
February 28 (Wednesday)	The Nature of Computation and Computing Machines	Crane Ch. 6
March 4 (Monday)	Thinking Machines and Intelligence	Crane Ch. 7 Recommended: Minds, Brains, Programs, <i>Searle</i>
March 6 (Wednesday)	Is Artificial Creativity Possible?	Creativity and Artificial Intelligence: A Contradiction in Terms? <i>Margaret A. Boden</i>
March 11 (Monday)	SPRING BREAK	
March 13 (Wednesday)	SPRING BREAK	
March 18 (Monday)	Mechanisms of Thought: Classical Computationalism	Crane Ch. 8 (sec 1 and 2)
March 20 (Wednesday)	Mechanisms of Thought: Connectionism	Crane Ch. 8 (sec 3 and 4)
March 25 (Monday)	Non-computational theories in cognitive science	Podcast: Embodied Cognition Evan Thomson
March 27 (Wednesday)	Consciousness Science	<i>Consciousness Science Underdetermined</i> A Short History of Endless Debates <i>Matthias Michel</i>
April 1 (Monday)	Consciousness Science, cont'd	P: Anil Seth on Consciousness
April 3 (Wednesday)	Explaining Mental Representation: Scientific Approaches	P: <i>Mind as Representation Machine</i> , Rescorla
April 8 (Monday)	The extended mind	Crane Ch. 11 (secs 1-3) R: Chalmers and Clark, <i>The Extended Mind</i> V: Guest Lecture: Weiskopf on the Extended Mind

April 10 (Wednesday)	Varieties of Artificial Intelligence	Schneider, Introduction and Chapter 1
April 15 (Monday)	Consciousness and LLMs: Might a future iteration of ChatGPT be conscious?	<u>Guest Video Lecture: Chalmers</u>
April 17 (Wednesday)	Consciousness Engineering	Schneider, Chapters 2, 3, and 4 R: Chalmers, The Singularity (excerpt)
April 22 (Monday)	Personal Identity	Olson, Ch. 1 Handout: Two Puzzles about Identity (The Ship and Theseus)
April 24 (Wednesday)	The Possibility of Mind Uploading	Schneider, Chapters 5, 6, and 7 O: Chalmers, <i>The Singularity</i>
April 29 (Monday)	Personhood and Robot Rights	
Final Exam	TBA	

COVID-related policies:

In the event that the college closes temporarily or permanently due to COVID or some other emergency, we will shift to a remote synchronous format. The lectures will take place during the same time as the in-person sessions. Additionally, exams will be taken remotely rather than in person.

Unexplained absences and missing assignments:

Under most circumstances, if you do not report to me, in advance, that you will be absent or unable to submit an assignment on time, then you will not receive full credit. Assignments that are not complete by May 4th will automatically turn into zeros.

Rutgers Academic Integrity Policy: *Principles of academic integrity require that every Rutgers University student:*

- *properly acknowledge and cite all use of the ideas, results, or words of others*
- *properly acknowledge all contributors to a given piece of work*

- *make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of unsanctioned materials or unsanctioned collaboration*
- *obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions*
- *treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress*
- *uphold the canons of the ethical or professional code of the profession for which he or she is preparing.*

Adherence to these principles is necessary in order to insure that:

- *everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments*
- *all student work is fairly evaluated and no student has an inappropriate advantage over others*
- *the academic and ethical development of all students is fostered*
- *the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.*

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

Disability services: The Office of Disability Services works with students with a documented disability to determine the eligibility of reasonable accommodations, facilitates and coordinates those accommodations when applicable, and lastly engages with the Rutgers community at large to provide and connect students to appropriate resources (e-mail: <https://ods.rutgers.edu/>, phone: (848) 445-6800). Students with disabilities requesting accommodations must follow the procedures outlined at <https://ods.rutgers.edu/students/applying-for-services>. Please give your letter of accommodation to me as soon as possible, and we will coordinate the accommodations privately.