

Meetings: Tuesday and Thursday 11:00 AM - 12:20 PM – 105 HL.

Instructor: Prof. Robert Van Gulick. RNVANGUL@syr.edu

Office Hours: Tues 1:00PM - 2:30PM in 536HL & other times by appointment on Zoom.

Course Topic: The course is a *philosophical conversation* about the nature of minds and thinking – both natural minds and artificial minds. In part, this will involve investigating philosophical issues related to work in Artificial Intelligence and the Computational Theory of Mind, but it is not just about AI. A recurrent theme will be trying to understand and answer the question, "*Can machines think?*", which will require us to define what we mean by a *machine* and figuring out what is involved in being able to *think*. Can machines reason, understand, be conscious, be self-aware, learn, be creative, have emotions, and use natural language? We will ask these questions both about man-made computers systems, and also about the hypothesis that the mental properties of the human mind are best understood by treating the brain as a kind of computer. The last part of the course will focus on social and ethical issues related to the use of AI.

Course Readings (most readings will be by philosophers).

- **One text for purchase:** E. Yudkowski and N. Soares, *If Anyone Builds It, Everyone Dies. Why Superhuman Intelligence Would Kill Us All*. New York: Little, Brown 2025. (Hard copy or E-book available at Amazon).
- **All other readings will be posted on Blackboard** – including “AI in the News” items.
- You will be asked to **watch several sci-fi movies** about AI mostly from SU Library.
- Some activities will involve using the Anthropic **AI system Claude**. Be sure to register for your free SU Claude account if you have not already done so.

Course Requirements - All parts of the course must be completed to receive course credit*.

1. **READING the assigned readings** (*before* the class at which they are to be discussed).
2. Regular **Attendance* & Participation in discussions** including small group discussions.
3. **MIDTERM EXAM: In-class Thursday, March 5.**
4. **FINAL EXAM: Friday May 1, 12:45pm-2:45pm**
5. An **ESSAY** (5 pages) + there also be a **peer-commentary component**.
6. Regular **SHORT WRITINGS** (1-page or less) will be assigned - weekly or biweekly.
7. **ACTIVE THINKING** about the issues and questions both in class and out of class.

***Attendance Policy. Class attendance is required** – the course is a *conversation*.

3 unexcused absences are allowed with no deduction.

4th unexcused absence: - 0.33 deduction in course grade (e.g., from B to B-)

5th unexcused absence: - additional 0.33 deduction in course grade

6th unexcused absence: - additional 1.0 deduction in course grade

7th unexcused absence: F in class, failure to complete all parts of the course.

Basis of course grade:

Midterm Exam = 25%. Final Exam = 25%. Essay = 25%.

Participation & Short Assignments (including peer commentary on essays) = 25%
- last part will receive an A grade if all parts are satisfactorily completed.

Part I of Course (up to Midterm)

Week of 1/13 & 1/15 Can Machines Think? - Defining the question.

"In the Age of AI", video from PBS Frontline (November 2019). Can be watched at <https://www.pbs.org/video/in-the-age-of-ai-zwfwzb/> or https://www.youtube.com/watch?v=5dZ_lvDgevk

Week of 1/20 & 1/22 Where did the question come from? Can animals think?

Descartes, Rene. three selections: excerpts from the *The Discourse on Method*, letter to Henry More, and letter to the Marquis of Newcastle.

Haugeland, John. "The saga of the modern mind" from *Mind Design*.

Week of 1/27 & 1/29 - The Turing Test - One possible answer to the question.

Turing, Alan. "Computing machinery and intelligence"

Moor, James. "Turing Test"

Dennett, Daniel. "Can machines think?"

Week of 2/3 & 2/5 Intentional Systems - Another behavioral answer.

Dennett, Daniel. "True believers, the intentional stance and why it works"

Week of 2/10 & 2/12 Intrinsic Meaning & the Introspective challenge.

Searle, John. "Minds, brains and programs"

Week of 2/17 & 2/19 Brain-like computing - Nets, Nodes and Networks

Churchland, Patricia and Churchland, Paul. "Could a machine think?"

Searle, John. "Is the brain's mind a computer program?"

Week of 2/26 & 2/28 Semantic Grounding - Where does meaning come from?

Van Gulick, Robert. "Consciousness, intrinsic intentionality and self-understanding machines"

Week of 3/3 and 3/5 Review and Exam.

Tues 3/3: Wrap-up & Review.

➡ Thurs 3/5: Midterm Exam in-class

END of Part I of course

Topics in part II of course will include : • Could a machine be conscious?

- Could be a machine be a person?
- Could a machine be moral?
- Could an AI have moral rights?
- Algorithmic bias and the social harms of AI.

- Autonomous lethal AI weapons.
- Superintelligence, the Singularity and the existential threat of AI.