

SPM 100: Minds, Machines, and Morals

Spring 2022

Wednesdays and Fridays, 2:30–3:50pm, LSP 257 (or Zoom, as necessary)

Professor: Joshua Rottman; **Office:** LSP 132D

Phone: (717) 358-4874; **Email:** jrottman@fandm.edu

Office Hours: Tuesdays, Wednesdays, and Fridays from 10:30am–11:30am

Course Description

This course provides an introduction to the central problems, concepts, and methods of cognitive science and moral psychology. We will analyze questions addressing the nature of intelligence, the relationship between minds and bodies, and the basis of moral beliefs and behaviors. These explorations will bridge the sciences and humanities by taking a fundamentally interdisciplinary perspective.

Course Objectives

By the end of the semester (provided regular attendance, active participation in class discussions, assiduous completion of all assignments, and adherence to all other class policies), you will attain and cultivate the skills needed to achieve the following objectives:

- Gain familiarity with basic tenets of philosophical inquiry (e.g., the method of cases, argumentation).
- Gain familiarity with basic tenets of experimental design (e.g., hypothesis testing, operationalization).
- Gain an understanding of the separations and connections between psychology and philosophy.
- Gain an appreciation of foundational ideas and questions in cognitive science and moral psychology.
- Gain tools and resources for thinking critically about philosophical and scientific theories.
- Gain experience writing interdisciplinary papers that incorporate argument and evidence.

Course Requirements and Grading

You will be assessed by your performance on the following assignments, detailed below (1,000 points total):

Thoughtful Participation	Applications and Skill-Building	Reading Reflections	Midterm Paper	Final Paper
150 pts.	300 pts. total	100 pts. total	150 pts.	300 pts.

Letter grades will be assigned as follows (decimals will be rounded to the nearest whole number):

A 93–100	A- 90–92	B+ 87–89	B 83–86	B- 80–82	C+ 77–79
C 73–76	C- 70–72	D+ 67–69	D 63–66	D- 60–62	F 0–59

Please note: You are not your grade. Your grade is an assessment of your mastery of course material; it is not an assessment of your worth as a human being.

Important Dates

January 25	February 7	March 11	April 14	May 6
Deadline to add classes	Deadline to drop classes without record	Midterm paper due	Deadline to withdraw or elect the P/NP option	Final paper due

Thoughtful Participation

The success of this course depends heavily on your contributions to our class discussions. Also, as research has convincingly shown¹, you will learn more effectively by actively participating in these discussions. You are expected to come to class prepared to discuss all of the readings critically and creatively, by making intelligent claims, raising objections, and asking thought-provoking questions that range from specific critiques of a particular methodology to big-picture applications of a body of findings. To give everybody an equal opportunity to receive full credit, I will sometimes refrain from calling on frequent participants. I may also call on students randomly, but I will provide you time to prepare for this (e.g., by pair sharing). Side conversations during class are discouraged and may result in penalties on your participation grade. Please respect a diversity of opinions and questions, and aim to contribute constructively and considerately.

You are expected to bring all assigned readings with you, and it will often be helpful to bring relevant readings from previous classes, as well as any notes you have taken. Because consistent attendance is necessary for you to have the opportunity to participate in class, absences will negatively impact your participation grade.

Your participation grade will primarily reflect the quality – rather than quantity – of your in-class comments, including how well you respond to classmates and actively encourage their participation. An excellent grade will be earned by reliably participating in thoughtful ways that reveal intellectual acuity and a deep engagement with the material; by always displaying excellent preparation, having thought critically about all assigned readings and formulated discussion questions before class; by respectfully listening to others and generously responding to their contributions, thus approaching discussion as a collaborative activity; and by making sophisticated connections that consistently elevate the level of discussion.

Applications and Skill-Building

Several short assignments will be sprinkled throughout the semester in order to provide opportunities for further engagement with the week's assigned readings and/or components of philosophical or psychological methodology. Unless otherwise announced, these will be due on Mondays at 11:59pm. The length and required time to complete each assignment will be variable; this variation will be reflected in the number of points that each assignment is worth. Some assignments will explicitly require group work, but otherwise they should be completed independently. Details about each assignment will typically be made available once the relevant concepts have been covered during class, often on the Wednesday or Friday before the assignment is due. To allow some flexibility in cases where there will be a quick turnaround time, you will be able to choose up to three assignments to submit 72 hours after the deadline (see the Policy on Late Assignments below).

Reading Reflections

At the beginning of class each Wednesday, you will be asked to write a *short* reflection on the assigned readings. Each of these reflections will be worth 10 points. You cannot make these up, so you will forfeit your points by being late or absent. If you have taken notes on the readings in advance, you are welcome to use these as a resource. Your highest 10 responses will be counted toward your grade; you may therefore replace your three lowest scores (or take up to three “free passes” for excused/unexcused absences).

Possible content includes raising questions about particularly confusing aspects of the readings, remarking on applications to your life or the lives of others, noting contradictions or agreements between different readings, or critiquing content in the readings (e.g., methods, assumptions, inferences, conclusions). Because you will only have a few minutes to write these brief reflections, you should focus only on one or two broad observations; it is crucial that you do not include irrelevant details and that you do not merely summarize. These reflections will serve two purposes: allowing me to ensure that you have completed the assigned readings, and allowing you to reflect on and critically interrogate the material before beginning discussion.

¹ See, e.g., Howard, J. R. (2015). *Discussion in the college classroom*. San Francisco, CA: Jossey-Bass.

Midterm Paper

A rogue cognitive scientist has recently created some new cutting-edge robots, who have escaped and were found wreaking havoc in downtown Lancaster, PA. The robots were soon captured and are currently being housed in an undisclosed location. Although they resemble large cockroaches, the robots are able to speak and have been pleading for their release. Some locals worry that the robots are dangerous, and are clamoring for them to be destroyed. Others are troubled by the robots' cries for help and worry that they are suffering a cruel injustice by being held captive. Amidst growing public unrest, a legal case has been brought to court. In this groundbreaking trial, the plaintiff will argue that the robots deserve no moral rights and should be destroyed, while the defense lawyer will argue that the robots deserve certain moral rights and should be released.

For this assignment, you may choose to assume the role of either the defense or the plaintiff, thus advocating either for or against the robots' basic rights. Your task is to write a persuasive opening statement. A successful case will rest on formulating a clear argument for why the robots do or do not possess moral standing, perhaps on the basis of possessing complex minds (with capacities for reason and/or emotional experience) or perhaps on the basis of certain relationships and dependencies that might or might not exist amongst the robots.

Be as creative as you'd like in generating the premises and evidence that you bring to bear. You are welcome to imagine that you've been able to hire a team of scientists to run every experiment possible to helpfully examine the robots' capabilities and relationship structures (or lack thereof). If you take the role of the plaintiff, you should anticipate and rebut some of the possible objections of the defense. If you take the role of the defense, you should similarly anticipate and rebut plausible arguments and evidence from the plaintiff's side. These considerations of counterarguments should comprise at least one-quarter of your paper.

A particularly excellent paper will present a delightfully insightful argument that thoroughly responds to the prompt by synthesizing material from a range of assigned readings and class discussions. It will maintain a clear thesis throughout and will demonstrate a strong grasp of the topic at hand, without misconceptions. Finally, it will be interdisciplinary, combining philosophical and psychological approaches in appropriate ways.

This paper should be 1,500 words (± 250 words) in length and should be uploaded to Canvas by 11:59pm on Friday, March 11. You should include only your F&M ID number for identification.

Final Paper

For your final paper, you should *substantially* revise and enhance your midterm paper. This revision process should involve (1) carefully addressing the feedback that you received on the midterm paper and (2) expanding your discussion of the robots' (un)deservingness of moral rights by incorporating new reading material assigned in March and April. In addition, you should write a new ending to your paper in which you inform the trial's judge about aspects of moral psychology that have the potential to cloud their judgments, thus imploring them to confront and overcome tendencies toward certain decisions that they may be inclined to make.

This paper should be 2,500 words (± 500 words) in length and should be uploaded to Canvas by 11:59pm on Friday, May 6. You should include only your F&M ID number for identification.

Opportunities for Extra Credit

You may earn up to 15 extra credit points during the semester (by May 7) through any combination of the below. Additional bonus opportunities may also arise, providing the potential to earn even more extra credit.

- Each time you send me (via email) a paragraph-length description of a relevant talk that you attended (e.g., Common Hour, or a talk sponsored by PSY or PHI), you will earn 2 extra credit points.
- Each time you send me (via email) a paragraph-length description of a relevant news article, podcast, television show (e.g., *Westworld* or *Black Mirror*), or movie (e.g., *The Imitation Game* or *Ex Machina*), accompanied by a paragraph detailing the connections to class content, you will earn 1 extra credit point.
- Each time you visit the Writing Center for help on an assignment, you will earn 1 extra credit point.

Course Policies and Recommendations

Academic Integrity

I take academic honesty very seriously. You risk severe consequences by committing acts of plagiarism (i.e., representing someone else's work as your own), cheating, falsification, impersonating, or other similar offenses, including facilitating another student in committing an act of academic dishonesty. Penalties for these offenses will be carefully assessed on a case-by-case basis, and may include receiving a failing grade in the course or expulsion from F&M. Please refer to the Franklin & Marshall College Catalog for additional details.

Appealing Grades

If you receive a grade that is inconsistent with what you believe you should have earned, you have a week to set up an appointment with me to appeal your grade. When scheduling this appointment, you must submit a written statement explaining your case. After one week has passed, all grades will be considered final.

Policy on Late Assignments

You will lose 5% of your grade on an assignment for every day it is late. However, you have three "free gifts" that you can use at any time: the opportunity to take a 72-hour extension on an assignment (including the midterm and final papers). In extreme cases when unexpected and unavoidable circumstances prevent you from completing an assignment on time, please inform me as soon as possible and I will use my discretion to determine whether to give additional "free gifts" and/or to waive or attenuate the late penalty.

Academic Accommodations

I strive to provide an environment that is equitable and conducive to achievement and learning for all students. As such, I invite you to speak with me about your individual learning needs so that we can discuss how this course can best accommodate them. In addition, formal academic accommodations are available for students who require them. Please schedule an appointment with me during the first week of class to discuss any accommodations for this course that have been supported by appropriate documentation and approved by the Office of Student Accessibility Services. I will keep all information confidential.

Communication

Email is the best way to reach me; I typically respond within 24 hours. I also convey most announcements via email; please be sure to stay on top of your inboxes and read all emails fully. I will be available to meet during my office hours, by appointment, and anytime when my office door is open. I strongly encourage you to take advantage of this, particularly in cases when you need further clarity on an assignment or when course material has made you uncomfortable in any way. While mild discomfort is often a positive indication of personal and intellectual growth, please come speak to me immediately if you experience (or anticipate experiencing) any form of distress. If any issues arise that have the potential to interfere with your success in the course, please be in touch with me as soon as possible. I value open communication, and I invite you to be frank with me.

Tips for Success

This class will be intensive. You will be expected to consistently keep up with all of the readings and to assimilate and synthesize a lot of difficult material. This will often require spreading readings across several days preceding each week and re-reading some material after classes. I am here to help you succeed, and I urge you to come talk to me about concerns or confusions regarding the course material and assignments. Your fellow students can also be great resources; reaching out to them can be a fun and collaborative way to learn. In particular, swapping paper drafts with your classmates to receive informal peer evaluations is an acceptable and encouraged practice to improve your writing. Additionally, please feel free to take advantage of the many other resources that F&M has to offer! For example, the Writing Center (located on the second level of Diagonthian Hall) can assist you with writing and other academic skills; you can book an appointment via <https://fandm.mywconline.com>. If English is not your primary language, you can also schedule an appointment with Nadia Mann via the Writing Center scheduler, and she can offer a range of academic support. Finally, a number of resources are available to support your wellbeing, including Counseling Services at the Student Wellness Center, DipCares, and the House Deans. If any issues arise that have the potential to interfere with your success in the course, please be in touch as soon as possible.

Semester Schedule

Components of this schedule are subject to change; please check Canvas regularly for updates.

Week #	Topic	Reading Assignments (to be completed by the beginning of each week)
Minds and Mattering: Discerning the Basis of Moral Consideration		
Week 1 (1/19 + 1/21)	Introduction	Course syllabus.
Week 2 (1/26 + 1/28)	Identifying other minds	Dennett, D. C. (1996). <i>Kinds of minds</i> (pp. 1–37). New York: Basic Books. Gross, M. (2016). Could plants have cognitive abilities? <i>Current Biology</i> , 26(5), R181–R184.
Week 3 (2/2 + 2/4)	Mentalizing and moral standing: The case of animals	Loughnan, S., Bastian, B., & Haslam, N. (2014). The psychology of eating animals. <i>Current Directions in Psychological Science</i> , 23(2), 104–108. Norcross, A. (2004). Puppies, pigs, and people: Eating meat and marginal cases. <i>Philosophical Perspectives</i> , 18(1), 229–245.
Week 4 (2/9 + 2/11)	Alternative bases of moral standing	Kittay, E. F. (2005). At the margins of moral personhood. <i>Ethics</i> , 116, 100–131.
Minds and Machines: Uncovering the Nature of Thought		
Week 5 (2/16 + 2/18)	Turing machines: Can computation produce a mind?	Pinker, S. (1997). <i>How the mind works</i> (pp. 59–79). New York: Norton. Searle, J. R. (1990). Is the brain's mind a computer program? <i>Scientific American</i> , 262(1), 26–31.
Week 6 (2/23 + 2/25)	Artificial neural networks	Pinker, S. (1997). <i>How the mind works</i> (pp. 98–111). New York: Norton. Churchland, P. M., & Churchland, P. S. (1990). Could a machine think? <i>Scientific American</i> , 262(1), 32–37.
Week 7 (3/2 + 3/4)	Fleshing out cognition: Roles of the body and world	Barrett, L. (2011). <i>Beyond the brain</i> (pp. 39–49 & pp. 94–111). Princeton, NJ: Princeton University Press. Shapiro, L. (2007). The embodied cognition research programme. <i>Philosophy Compass</i> , 2, 338–346.
Week 8 (3/9 + 3/11)	Progress in modeling cognition	Lake, B. M., Ullman, T. D., Tenenbaum, J. B., & Gershman, S. J. (2017). Building machines that learn and think like people. <i>Behavioral and Brain Sciences</i> , 40, e253. [read pp. 1–9.]
Uniting Science and the Humanities to Illuminate Morality		
Week 9 (3/23 + 3/25)	Interdisciplinary perspectives	Astuti, R. (2007). Weaving together culture and cognition: An illustration from Madagascar. <i>Intellectica</i> . 46(2), 173–189.
Week 10 (3/30 + 4/1)	Concepts and biases	Gelman, S. (2004). Psychological essentialism in children. <i>Trends in Cognitive Sciences</i> , 8(9), 404–409. Leslie, S.-J. (2017). The original sin of cognition: Fear, prejudice, and generalization. <i>Journal of Philosophy</i> , 114(8), 393–421.
Week 11 (4/6 + 4/8)	Dual process theory and moral judgment	Stanovich, K. E. (2009). Rational and irrational thought: The thinking that IQ tests miss. <i>Scientific American Mind</i> , 20(6), 34–39. Greene, J. D. (2007). The secret joke of Kant's soul. In W. Sinnott-Armstrong (Ed.), <i>Moral psychology, Vol. 3</i> (pp. 35–79). Cambridge, MA: MIT Press.
Week 12 (4/13 + 4/15)	Critiquing “trolleyology”	Bauman, C. W., McGraw, A. P., Bartels, D. M., & Warren, C. (2014). Revisiting external validity: Concerns about trolley problems and other sacrificial dilemmas in moral psychology. <i>Social and Personality Psychology Compass</i> , 8, 536–554. Kahane, G. (2015). Sidetracked by trolleys: Why sacrificial moral dilemmas tell us little (or nothing) about utilitarian judgment. <i>Social Neuroscience</i> , 10, 551–560.
Week 13 (4/20 + 4/22)	Bringing brains to bear on moral and legal responsibility	Roskies, A. (2006). Neuroscientific challenges to free will and responsibility. <i>Trends in Cognitive Sciences</i> , 10(9), 419–423. Weisberg, D. S. (2008). Caveat lector: The presentation of neuroscience information in the popular media. <i>Scientific Review of Mental Health Practice</i> , 6(1), 51–56.
Week 14 (4/27)	Mundane moral failings	Schwitzgebel, E. (2019). Aiming for moral mediocrity. <i>Res Philosophica</i> , 96(3), 347–368.