

Mind and Medicine (HPS 0612)

Understanding New Technologies

Fall 2022

Thursdays 6PM-8:30PM

106 Lawrence Hall

Instructor: Dana Matthiessen

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Office hours: Online by Zoom, Mondays, 12PM-2PM

Claim a 15 minute slot using “Find Appointments” on Canvas calendar

Or drop in (you may have to wait), *or* email for an alternate time

Office hours will be held using Zoom: <https://pitt.zoom.us/j/7784657942>

This course will provide an entry-level introduction to the burgeoning fields of philosophy of medicine and philosophy of psychiatry. Through readings, lecture and discussions, we will explore philosophical topics beyond traditional bioethical problems, including: concepts of disease and mental disorder, classification and explanation in medicine and psychiatry, and the role of race in medicine. A theme that will occur at several points of the course is the role of new technologies in medical practice.

Objectives: Students who successfully complete this course will be able to...

- Identify and analyze different philosophical conceptions of disease and mental disorder.
- Critically examine the methods for classifying, studying, and explaining medical phenomena.
- Read and interpret complex philosophical arguments.
- Understand factors affecting the judgments of medical professionals and researchers, including various forms of bias.

This course is part of a core sequence leading to certification in the Conceptual Foundations of Medicine Certificate Program and is a companion course to HPS 0613 (Morality and Medicine) but may be taken independently. The course will be of particular interest to pre-medical and pre-health care students.

Readings

All course readings will be made available on Canvas or from links in this syllabus.

Please note that this is a reading-focused course. Students will be expected to arrive at class having digested the assigned readings enough that they can contribute to possible discussion and ask informed questions. Do not despair! Do your best to grasp the gist of the texts, bring your notes and readings to class, and we will work together in class to clarify and synthesize the material for that week. You are strongly encouraged to consult some of the guides on reading philosophy available online, such as...

David Concepción, “How to Read Philosophy” http://joelvelasco.net/teaching/3334/concepcion04-how_to_read_appendix.pdf

Hugh Wilder, “How to Read Philosophy” myweb.facstaff.wvu.edu/wasserr/114/how_to_read.pdf

Russo, “Reading a philosophical text” sophia-project.org/uploads/1/3/9/5/13955288/russo_reading.pdf

A note on classroom discussion

All students are encouraged to ask questions, raise points of concern, and contribute their own knowledge and reflections whenever they can. We will be surveying a wide range of material, much of which I am not an expert in, and I expect there is a great deal we can learn by hearing from one another. Ample space will be given for discussions of this sort.

It is paramount that everyone maintains a respectful attitude toward one another during these discussions. It may be that certain topics will grip you and generate enthusiasm that can lead to heightened emotions and even intellectual controversy, but this is absolutely no excuse to disparage, dismiss, talk over, or otherwise disrespect your fellow classmates. Any abusive, bigoted, or harassing behavior or language will not be tolerated. Any students who are experiencing behavior that is affecting their ability to concentrate and learn or otherwise have concerns about social dynamics of the class are strongly encouraged to contact me privately, and we will figure out how to best resolve the issue.

NOTE: Because this course deals with topics in the field of medicine, there is a possibility that your peers will disclose information related to their personal medical history during class discussion. For that reason, everyone attending this class will be asked to take a vow swearing that any such information discussed within the classroom is *not* discussed outside of it without the explicit permission of the relevant individual(s). Students who fail to uphold this standard may be asked to leave the class.

ALSO: This class meets late in the day, which could negatively affect the energy and focus of everyone in the room. *Let's all do what we can to combat this!* Whether that means taking a nap before class, loading up on energy drinks, or bringing a (quiet, non-smelly) snack, please keep tabs on your stamina and plan accordingly.

Grading and assignment schedule (more info in “Assignments” folder in “Files” on Canvas)

- **Syllabus quiz: 2% (complete before class Thursday Sept 8)**
 - o This is an untimed quiz going over the syllabus. It will be up in “Quizzes” on Canvas.
- **Active reading assignment: 4% (submit by the beginning of class Thursday Sept 15)**
 - o For the second week of class, students are required to either print the reading assignment by Amundsen and bring in notes taken while actively reading the text, or submit photographs or a digital version of notes via email (5%).
 - Note-taking should strive to identify and label the main thesis of the paper, identify components of the argument supporting this thesis—supporting claims for the thesis and the primary lines of evidence/argumentation meant to back them up—and record any points of confusion or critical comments the student

has in response to specific points or terminology in the paper (e.g., written in the margins).

- Note-taking may be on the reading assignment itself (encouraged), or a separate piece of paper, which properly identifies the parts of the paper for each note.

- **Reading responses and course participation: 30% (every week starting September 5)**

- Discursive reasoning is a basic skill for reflecting on the issues we will encounter in class. With that in mind, I have arranged the course to emphasize discussion. While I will provide some framing and moderation, my aim is for a good portion of the class content to be generated by the questions and interests that come from student participants, either through in-class discussion or through use of the course's online discussion board.
- Starting the week of September 5, I will ask students to prepare and submit a brief *discussion prompt response* each week. I will present several prompts for your choosing, answer one of them and provide supporting reasons for your answer based on reflection on course material. *Consult the hand-out for this assignment for further guidance.*
 - Except for special circumstances, students are required to submit these before class via email or bring them in paper to class. Since I will not be taking attendance, they serve as a proxy for being "in" class.
 - These will be given a grade of either 1 (complete), 0.5 (poor effort) or 0 (no submission/no effort). Ten responses will be required. Students can hand in more if they like for extra participation credit. If fewer than ten are submitted, the remainder will be given a score of 0.
- The remaining 20 participation points will be given in ½ point increments based on substantive contributions to in-person or online discussion, attendance of office hours, and other clear signs of engagement with the content of the course. *Note: to enhance discussion it may be useful to have a way to access the papers during class time.*
 - To enable online discussion, I will create a new topic for each reading assignment every week in the "Discussions" section of the course Canvas page. Students are encouraged to respond to the article by posting comments, questions, or criticisms, or by responding to other students' posts.
 - A substantive contribution is on topic, does not simply repeat previous remarks or your reading response, and is something that gives some supporting reasons or context, rather than a single sentence or utterance. A few more guidelines will be provided in a pinned post on the discussion board.
 - If these forms of participation are difficult for you, please contact me and we can work out an alternative way to earn credit, including the following:
 - Additional active reading assignments.
 - Sending me an email with an article that is relevant to our weekly reading, along with your thoughts on its contents.
 - A more detailed version of the analytical comment assignment, that includes additional criticisms or raises a "big picture" question or comment with respect to the reading.
 - Directly emailing me with questions or comments regarding the ideas and debates discussed in class.

- Some other evidence of extracurricular engagement with the course materials.
- **Weekly quizzes: 24% (complete online before class every Thursday, except final week)**
 - Quizzes will involve 4 multiple choice questions, graded at 0.5 points each.
 - They will be uploaded to the “Quizzes” section on Canvas toward the end of each preceding week.
- **Disease/disorder analysis: 12% (submit by the beginning of class Thursday Oct 27)**
 - Students are required to submit a written assignment analyzing a disease of their choice using the theoretical tools explored in the first half of the course.
- **Documentary response: 8% (submit by the beginning of class Thursday Dec 1)**
 - Students are required to submit a written assignment in response to the documentary, *The Color of Care*. You will analyze the documentary using the framework for understanding racial health disparities presented in the Chowkwanyun reading. The documentary can be streamed for free here: <https://pluto.tv/en/on-demand/series/the-color-of-care/episode/the-color-of-care-2022-1-1>
- **Final short paper: 20% (email by the end of the day Thursday Dec 15)**
 - Every student will be required to submit an 800-1000 word essay at the end of term.
 - The topic will be of their own design, but should engage with some of the issues, literature, and/or philosophical frameworks covered during the course.
 - We will take steps to plan these papers prior to the end of term.

NOTE: If you find yourself struggling with the course material or are concerned about your grade, please act sooner than later. Come to office hours and we will work to identify the source of your difficulties and improve your understanding of tricky subjects.

Writing center

I encourage all of you to take advantage of the Writing Center, located at 317B O'Hara Student Center. For information about the center, visit: www.writingcenter.pitt.edu
You can easily make an appointment with a writing consultant online.

Academic integrity

Students in this course will be expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and programmable calculators.

Disability services

If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify both the instructor and Disability Resources and Services no later than the second week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call (412) 648-7890 (Voice or TTD) to schedule an appointment. The Disability Resources and Services office is located in 140 William Pitt Union on the Oakland campus.

A note on Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources at <https://www.titleix.pitt.edu/resources> (Please note that faculty and staff are considered required reporters—this means that if you disclose to me, or another employee of Pitt, that you have been a victim of sexual violence we have the obligation to report the situation. My report does not mean that you are officially reporting the incident – rather, this process is in place so that our schools can make sure you are able to receive the support and resources you need. Additional information may be found at the following website (including confidential sources on and off campus): <https://www.titleix.pitt.edu/resources/university-and-community-resources>

Course schedule

Note: readings for each day are marked with a bullet point. Readings marked *Supplement* are not required, but help round out a topic if you have time for them. All readings without links are available Canvas. If there are multiple assignments, I've chosen them so they do not take up more reading time than a single long one. In general, journalism articles do not need to be read as closely.

Thursday 9/1: Introduction; reading philosophy

PREP FOR NEXT WEEK: Syllabus quiz, Weekly quiz, Weekly discussion prompt DUE 9/8

Unit One: The Concept of Disease

Thursday 9/8: Naturalism/objectivism

- Christopher Boorse, “On the Distinction Between Disease and Illness”
- Arthur Caplan, “The ‘Unnaturalness’ of Aging”

ACTIVE READING ASSIGNMENT DUE 9/15

Thursday 9/15: Normativism, hybrid theories, and more

- Jacob Stegenga, *Care and Cure*, Sections 2.1 - 2.6 (pp. 30-42)
- Ron Amundsen, "Against Normal Function"
- Jerome Wakefield, "The Concept of Mental Disorder"

Unit Two: The Classification of Disease

Thursday 9/22: Are diseases/mental disorders natural?

- Jeremy Simon, "Realism and Constructivism in Medicine"
- Rachel Cooper, "Explanations in psychiatry 1: Natural-history based explanations" from *Psychiatry and Philosophy of Science*, except section 4.2.3

Thursday 9/29: Controversial diseases and medicalization

- Jacob Stegenga, *Care and Cure*, Sections 6.1 - 6.4 (pp. 80-91)
- Allan Horwitz & Jerome Wakefield, excerpt of "The Concept of Depression" from *The Loss of Sadness* (pp. 3-14)
- Thomas Szasz, "The Myth of Mental Illness"
- *Supplement*: Robert Chapman, excerpts of "Neurodiversity Theory and Its Discontents" (read at least these two sections: "The neurodiversity paradigm" pp.372-376 and "Multiply disabled autism as neurominority" pp. 379-383)
- *Supplement*: The Guardian, "Children's hyperactivity 'is not a real disease' says US expert"

Thursday 10/6: Classification of complex medical phenomena

- Anya Plutynski, "Cancer: Natural, Medical, and Social Kind" from *Explaining Cancer*
- Helen Longino, "What Do We Measure When We Measure Aggression?"

Unit Three: Understanding and Explaining Disease

Thursday 10/13: Medical evidence and inference

- Jacob Stegenga, *Care and Cure*, Chapter 7 (pp. 98-115)
- Robyn Bluhm & Kirstin Borgerson, "Evidence-Based Medicine" (focus on sections 2, pp. 204-214, and 4, pp. 221-229; skip section 5)
- *Supplement*: Michael Keane, "Time to rethink the RCT and consider more efficient and ethical approaches to clinical knowledge acquisition"

Thursday 10/20: Explaining complex physical and mental conditions

- Anya Plutynski, "Explaining Cancer" from *Explaining Cancer*
- Dominic Murphy, "Conceptual Foundations of Biological Psychiatry", Intro and Section 2 (pp. 425; 437-443)
- Havi Carel, excerpts of "Why Use Phenomenology to Study Illness" (up to section 1.2, pp. 14-19) and "Bodily Doubt" up to section 4.3, pp. 86-103) from *Phenomenology of Illness*

DISEASE/DISORDER ANALYSIS DUE BEFORE CLASS 10/27

Unit Four: Medical Judgment and Decision-Making

Thursday 10/27: Cognitive biases

- Amos Tversky and Daniel Kahneman, “The Framing of Decisions and the Psychology of Choice”
- Gerd Gigerenzer, Wolfgang Gaissmaier, Elke Kurz-Milcke, Lisa Schwartz, & Steven Woloshin, “Knowing Your Chances: What Health Stats Really Mean”
- Diana Burgess, Michelle van Ryn, John Dovidio, & Somnath Saha, “Reducing Racial Bias Among Health Care Providers: Lessons from Social-Cognitive Psychology”

Thursday 11/3: Clinical vs automated medical judgment

- Robyn Dawes, David Faust, & Paul Meehl, “Clinical Versus Actuarial Judgment”
- Alex London, “Artificial Intelligence and Black-Box Medical Decisions: Accuracy versus Explainability”
- Jens Bjerring & Jacob Busch, “Artificial Intelligence and Patient-Centered Decision-Making”

Unit Five: Race and Medicine

Thursday 11/10: The concept of race and its clinical applicability

- Robin Andreasen, “The Concept of Race in Medicine”
- Jay Kaufman, Joanna Merckx, & Richard Cooper, “Use of Racial and Ethnic Categories in Medical Testing and Diagnosis: Primum Non Nocere”
- Esteban Burchard et al., “The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice”

Thursday 11/17: Interpreting data—disparities and ancestry

- Merlin Chowkwanyun, “What is a ‘Racial Health Disparity?’”
- Deborah Bolnick & John Relethford, “Ancestry, Identity, and Race” from *Reflections of Our Past* (appendix optional)
- *Supplement*: Lewis et al., “Getting genetic ancestry right for science and society”

DOCUMENTARY RESPONSE DUE BEFORE CLASS 12/1

[NO CLASS 11/24 – THANKSGIVING]

Unit Six: New Medical Technologies and Social Impact

Thursday 12/1: Precision medicine and medical AI—promise and practice

- Joshua Denny & Francis Collins, “Precision medicine in 2030—seven ways to transform healthcare”
- Davide Cirillo et al., “Sex and gender differences and biases in artificial intelligence for biomedicine and healthcare”

- Irene Chen, Emma Pierson, Sherri Rose, Shalmali Joshi, Kadija Ferryman, & Marzyeh Ghassemi, “Ethical Machine Learning in Health Care”
- Adewole Adamson and Avery Smith, “Machine Learning and Health Care Disparities in Dermatology”
- *Supplement:* Marina DiMarco, Helen Zhao, Marion Boulicault, & Sarah Richardson, “Why ‘sex as a biological variable’ conflicts with precision medicine initiatives”
- *Supplement:* Ziab Obermeyer, Brian Powers, Christine Vogeli, & Sendhil Mullainathan, “Dissecting racial bias in an algorithm used to manage the health of populations”

Thursday 12/8: Sociogenomics and the political uses of medical science

- Brenna Henn, Emily Klancher, Anne O’Conner, & Tina Rulli, “Why DNA Is No Key to Social Equality: On Kathryn Paige Harden’s ‘The Genetic Lottery’”
- Andrea Ganna et al., “Large-scale GWAS reveals insights into the genetic architecture of same-sex sexual behavior” (skim the technical material)
- Joanna Wuest. “From Pathology to ‘Born Perfect’: Science, Law, and Citizenship in American LGBTQ+ Advocacy”
- *At least skim:* Matthews and Levy, “A sociogenomic paradigm to replace the racial paradigm”

FINAL PAPER DUE BY THE END OF THURSDAY 12/15