

TUESDAYS & THURSDAYS • 10:00 A.M. – 11:20 A.M. • LSP 257

Professor: Geoff Holtzman • **E-mail:** geoff.holtzman@fandm.edu • **Office:** LSP 132F

COURSE DESCRIPTION

Neuroethics is an umbrella term used to describe two fields of study that, on their face, are quite different from one another. One of these fields is the applied ethics of neuroscientific practice: What is and is not a morally acceptable use of neurotechnologies? The other is the neuroscience of moral judgment and behavior: How does the brain construct—and act upon—our understanding of what is good and what is bad? Though these fields are different in many ways, they are also related: *The brain constructs our beliefs about the ethics of neuroscientific practice.* In this class, we will study both sets of issues, as well as ways these issues intersect.

This will be a highly interdisciplinary course, drawing on four fields of study: neuroscience, philosophy, psychology, and bioethics. We will spend the first month developing foundational skills and acquiring foundational concepts in neuroethics, and the remainder of the course applying these skills and concepts to new problems, discoveries, and issues in society.

GRADING

Your grade will be based on your engagement with the reading material and in the classroom, and on your deeper reflection upon the material and classes. Grading will reflect mastery of the material in both the assigned readings *and* classroom lectures and discussions. You will be expected to understand a number of concepts and know a number of definitions that will be covered in the classroom but won't be in any text we read. Grades will be calculated as follows:

- Class attendance and participation: 20%
- Exam: 20%
- Paper 1: 15%
- Paper 2: 15%
- Expanded & revised paper: 20%
- Debates: 10%

Participation grades: Each day of class, you will be given a grade for your participation. At the end of the semester, your five lowest grades in this category will be dropped and your 20 highest grades summed to create your participation score. After your participation score is calculated, points may be deducted for unexcused absences. Participation grading is as follows:

- 0: Did not participate or only engaged superficially in discussion
- ½: Contributed novel, well-reasoned perspectives or new information to discussion
- 1: Made such contributions in a way informed by and/or applied to the reading

Exam will be on 9/26.

Paper 1 will be assigned by 10/22 due by 10/29.

Paper 2 will be assigned by 11/26 and due by 12/3.

Expanded & revised paper will be assigned by 12/5 and due by 12/12.

CLASSROOM DISCUSSION

You will be expected to participate in class, and class participation will count toward your final grade. Likewise, you will be expected to foster an atmosphere in which others can and do participate in class.

POLICIES

All papers must be submitted both online and as hard copies by the start of the class period at which they are due. Papers submitted any time between the start of class and the end of the next day will be considered a day late. Late papers will be penalized a fraction of a letter grade for every day they are late. An 'A' paper handed in one day late becomes an 'A-'; after two days, it becomes a 'B+'; etc.

Plagiarism

Papers will be checked for plagiarism with the assistance of online tools. If any part of an assignment is not the student's own work, I reserve the right to give the entire assignment an F. However, I recognize that cryptomnesia, ignorance of the criteria for plagiarism, and the fuzziness of those criteria may lead to inadvertent copying of others' work without proper acknowledgement. I further recognize that individual differences in educational experiences and disciplines may influence awareness of the nature and pitfalls of plagiarism. For these reasons, if a reasonable case can be made that plagiarism was not deliberate nor facilitated by deliberate ignorance, I may allow students to make up plagiarized assignments. Please note that this policy is more lenient than that of the College, whose official view is that "Ignorance of the standards is not an excuse and intent is not a factor in determining responsibility for misconduct" (<https://www.fandm.edu/catalog/academic-honesty>).

Electronics

The use of cell phones, tablets, and laptops in this class will count against your participation grade unless I have provided specific guidance otherwise. If you have a pressing reason that you will need to pull out your cell phone during class, you should express this to me via e-mail ahead of class and I may allow its use without penalty. If you feel that you need electronic devices to keep notes, you may speak to me privately or have documentation sent to me by the Office of Student Accessibility Services. No audio or video recording is permitted.

You are required to bring a laptop to class on at least one prespecified date. Failure to do so may result in the loss of attendance and participation points. If you do not have a laptop or unable to use yours in class, you are responsible for obtaining one from a peer or from the [Technology Lending Center](#).

Disability & Health Accommodations

Students with mental or physical disabilities, or with chronic or acute health issues that may impact their ability to excel in class, should feel free to contact me and/or the Office of Disability Services to arrange accommodations. Through the Office of Disability Services or the Student Wellness Center, students may arrange accommodations without disclosure of their condition to me.

Language

Restriction of speech to those modes typically associated with institutions of higher learning has the potential to make individuals—and large swaths of entire sociocultural classes—feel intimidated or out of place. Such a climate is not conducive to learning nor to participation in the classroom. As such, the use of profanity is acceptable in this class. However, in light of the expectation of fostering an atmosphere of open and honest civil debate, it is not acceptable for you to curse *at* people. Nor should you curse in the context of denigrating what others have said—because while you should feel free to voice disagreement, you should not be disparaging or denigrating toward others.

Triggers

There will be no trigger warnings issued in this class.

READINGS

All readings will be posted on Canvas. **Many of the readings will be difficult, even if they are short.** You should anticipate that a 3-page reading might take you just as long to comprehend as a 20-page reading. It is your responsibility to obtain and complete all readings before the classes for which they are assigned. There may be changes to the readings and schedule as the class unfolds. I anticipate some spillover from each day's readings into the next class period, as lectures and discussion will be guided by educational goals and not arbitrary time cutoffs.

Interdisciplinary foundations

- 8/29 No reading
- 9/3 Roskies, “Neuroethics for the New Millennium”
Roskies, “Neuroethics,” §§1, 5, & 6
- 9/5 Poldrack Ch. 1, “Thinking on 20 Watts”
- 9/10 Racine, “fMRI in the Public Eye”
- 9/12 Greene, “The Cognitive Neuroscience of Moral JDM,” pp. 1013-1015
Greene, “Beyond Point-and-Shoot Morality,” pp. 695-706
- 9/17 Gillon, “Medical Ethics: Four Principles Plus Attention to Scope” pp. 1-3
Greely, “Neuroethics Guiding Principles for the NIH BRAIN Initiative”
- 9/19 Baron, “Against Bioethics,” §1-§2.2.3. (15 pp.)
- 9/24 Review & discussion
- 9/26 Exam

Brain injuries, diseases, and therapies

- 10/1 Burns, “Right Orbitofrontal Tumor with Pedophilia”
Kindler, “Emergence of Kleptomania During Treatment for Depression with SSRIs”
- 10/3 Douglas, “Coercion, Incarceration, and Chemical Castration”

10/8 **FALL BREAK—NO CLASS**

10/10 Carter, “Addiction Neuroethics”

10/15 Schermer, “Ethical Issues in Deep Brain Stimulation”

10/17 Levy, “The Neuroethics of Non-Invasive Brain Stimulation.”

Drugs & enhancement

10/22 Pryor, “Guidelines on Writing a Philosophy Paper.”

LAPTOP REQUIRED IN CLASS

PAPER 1 ASSIGNED

10/24 Crockett, “Neuromodulators and the (In)stability of Moral Cognition”

10/29 Diller, “The Run on Ritalin”

PAPER 1 DUE

10/31 P.H. Mason, “What is Normal?”

11/5 Farah, “Neurocognitive Enhancement: What Can We Do and What Should We Do?”

11/7 Greely, “Toward Responsible Use of Cognitive Enhancing Drugs by the Healthy”

Mindreading and the law

11/12 Young and Waytz, “Mind Attribution is for Morality”

PAPER 2 ASSIGNED

11/14 Jones, “Law and Neuroscience”

11/19 Kiehl, “Without Morals: The Cognitive Neuroscience of Criminal Psychopaths”

11/21 Farah, “Functional MRI-Based Lie Detection: Scientific and Societal Challenges”

The military, capitalism, and democracy

11/26 Attiah, “Minds, Motherboards, and Money: Futurism and Realism in BCI”

Tennison, “Neuroscience, Ethics, and National Security: The State of The Art”

PAPER 2 DUE

11/28 **THANKSGIVING BREAK—NO CLASS**

12/3 Murphy, “Neuroethics of Neuromarketing”

12/5 New York Times (2015), “Neuropolitics, Where Campaigns Try to Read Your Mind”

New York Times (2007), “This is Your Brain on Politics”

New York Times (2007), “Politics and the Brain”

FINAL PAPER ASSIGNED