**Ethics, Science, and Biotechnology**

MW 4-5:30pm / Fall 2017

Professor: Dr. Aaron Simmons

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Office: IMMAC 110A

Office Hours: MWF 1-2pm, MW 3-4pm (or by appointment)

**Course Summary**

In this course we will examine a variety of ethical issues pertaining to biomedical technology and research. Among the issues we will study are the creation and destruction of human embryos to develop stem cell therapies, assisted reproductive technologies such as in-vitro fertilization and cloning, the use of genetic technology to prevent diseases and disabilities in future offspring or to create children with enhanced physical or intellectual traits, and the development of neurological technologies to treat or improve human beings such as by making people cheerier or blunting painful memories. We will also learn about past and present problems in research using human subjects, including research on vulnerable populations such as those in developing countries. And we will consider to what extent it is ethical to use animals as tools for medical research and promoting human health, including using animals to grow human tissue and organs for transplantation.

**Course Goals**

1. To learn about important issues in bioethics and the perspectives that philosophers have had on those issues
2. To enhance your critical thinking skills, including the ability to evaluate arguments for holding certain beliefs, to construct good arguments for your beliefs, and to reach rational, well thought-out solutions to complex ethical problems
3. To enhance your ability to communicate complex ideas and arguments clearly.
4. To improve your writing skills, particularly your ability to write a good argumentative paper

**Grading**

Papers

During the semester, you will be expected to write two philosophy papers: a midterm paper and a final paper. Papers should be approximately 1500-2100 words long (roughly 5-7 pages double-spaced). In your papers you will be expected to *analyze and evaluate readings* from the course and to *construct an argument* for some view you hold on an issue we’ve studied. We will spend time in class discussing how to write a philosophy paper. Each paper will count for 30% of your final grade. After the midterm paper, you will be given the option of writing a second midterm paper to improve the grade you received on the first paper.

Group Project

During the second half of the semester, you will be given a group project assignment. Students will organize into groups of four and choose an ethical case study from a list that I will provide. Each group will be responsible for (1) writing a 4-5-page paper analyzing its case study and (2) making a presentation to the rest of the class. The overall group project will be worth 20% of your final grade. I will provide further details on this assignment after the halfway point of the semester.

Reading Responses

 You will be expected to write a 1-2-page informal “reading response” to at least six assigned readings during the semester. In your reading responses, you should aim to do two main things: (1) identify the main ethical issue that the author is addressing in her article, and (2) summarize the authors’ main argument with regard to this issue including her final conclusion or view on the issue (for example, whether the author believes that it is ethical to destroy human embryos for stem cell research). Reading responses should be typed, double-spaced, and must be submitted to me in class on the date that we will be discussing the assigned reading. Late responses (after we have already discussed a particular reading in class) will not be accepted. Reading assignments and their due dates may change during the semester based on my discretion; any changes will be announced in class. Your reading responses will count for 10% of your final grade. Additional reading responses, beyond the six required, will be counted as a small amount of extra credit. I will not be grading your responses as I would a more formal paper assignment; however, incomplete or inadequate responses will not be accepted. (NOTE: The first reading response may be submitted beginning in week two.)

Attendance, Participation, Preparation, and Effort (APPE)

Your attendance, participation, preparation, and effort in this class count for 10% of your grade. To earn an A for this portion of your grade, you must have good attendance, *regularly volunteer to participate in class discussions* (on average, at least once per week), come to each class period having done the reading assignments, & demonstrate good effort in the class. The following behaviors will count against your APPE grade: texting in class, using your computer in class for non-class purposes, sleeping in class, and frequently coming to class late or leaving class early. If you are not comfortable participating in classroom discussions, you can also earn participation credit by typing up a short paragraph in which you comment on (or raise questions about) the readings and/or the classroom discussion. Written participation should be submitted to me on paper no more than one week after we have discussed a particular reading or topic in class.

Grade Breakdown

1. Midterm paper 30%
2. Final paper 30%
3. Group project 20%
4. Reading responses 10%
5. APPE 10%

**Classroom Etiquette**

Philosophy, by its nature, involves debate and disagreement on questions that are controversial and sometimes personal. As we examine philosophical questions in this class, we will sometimes disagree with each other. Class time will include discussions in which students’ beliefs may be questioned, challenged, and debated by other students or the professor. That being said, everyone in the class is expected to follow basic rules of respect for one another. Criticism and disagreement with one another’s opinions should be expressed in a respectful manner. Personal attacks are not acceptable. Additionally, I ask that students raise their hands to speak and try to avoid interrupting one another.

**Cheating and Plagiarism**

Cheating on tests and plagiarism on paper assignments will not be tolerated in this class. Plagiarism consists of passing off another author’s words or ideas as your own without giving the author proper credit. Before your first paper assignment, we will discuss plagiarism in greater detail and the proper way to cite authors. Students who are caught cheating or plagiarizing will be punished accordingly. Punishments may include failing the assignment, failing the entire course, and/or being reported to the University.

**Accommodations for Students with Documented Disabilities**

Marywood University complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 as amended by the ADA Amendments Act of 2008. Students with disabilities who need special accommodations must submit documentation of the disability to the Office of Disability Services, Learning Commons 166, in order for reasonable accommodations to be granted. The Office of Disability Services will partner with students to determine the appropriate accommodations and, in cooperation with the instructor, will work to ensure that all students have a fair opportunity to perform in this class. Students are encouraged to notify instructors and the Office of Disability Services as soon as they determine accommodations are necessary; however, documentation will be reviewed at any point in the semester upon receipt. Specific details of the disability will remain confidential between the student and the Office of Disability services unless the student chooses to disclose or there is legitimate academic need for disclosure on a case-by-case basis. For assistance, please contact Diane Webber, Associate Director of Disability Services, at 570.348.6211 x2335 or dtwebber@marywood.edu.

**Texts**

All readings for this course can be accessed in a Google Drive folder I have set up for the class at the following address: <https://goo.gl/pB5yvj>

**TENTATIVE SCHEDULE**

This schedule of readings and assignments is subject to change based on my discretion and how quickly we work our way through the readings. Any changes in the schedule will be announced in class. Readings listed as “optional” are not required but may be discussed in class and may be useful for additional research on a paper topic.

Week One

8/28

**Introduction**

First day case: Choosing for disability

Deech and Smajdor, “Reproductive Technologies and the Birth of the HFEA” (No reading response)

Week Two

9/4 – 9/6

**Monday, September 4th – No class (Labor Day)**

**Genetic Testing**

Steinbock, “Preimplantation Genetic Diagnosis and Embryo Selection”

Steinbock, “Using Preimplantation Genetic Diagnosis to Save a Sibling: The Story of Molly and Adam Nash”

Week Three

9/11 – 9/13

**Genetic Testing**

Purdy, “Genetics and Reproductive Risk: Can Having Children Be Immoral?”

**Genetic Testing**

Parens and Asch, “The Disability Rights Critique of Prenatal Genetic Testing”

Week Four

9/18 – 9/20

**Genetic Testing**

Robertson, “The Presumptive Primacy of Procreative Liberty”

Robertson, “Preconception Gender Selection”

**In-Vitro Fertilization**

Warren, “IVF and Women’s Interests: An Analysis of Feminist Concerns”

Optional: Steinbock, “A Philosopher Looks at Assisted Reproduction”

Week Five

9/25 – 9/27

**Cloning**

Brock, “Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con”

Kass, “Cloning of Human Beings”

**Discuss Midterm Paper Assignment**

Week Six

10/2– 10/4

**Embryos**

Steinbock, “The Morality of Killing Human Embryos”

President’s Council on Bioethics, “Human Cloning and Human Dignity: An Ethical Inquiry”

**Embryos**

Ryan, “Creating Embryos for Research: On Weighing Symbolic Costs”

Week Seven

10/9 – 10/11

**Genetic Therapy**

Gyngell, Douglas, and Savulescu, “The Ethics of Germline Gene Editing”

Optional: Powell, “In Genes We Trust: Germline Engineering, Eugenics, and the Future of the Human Genome”

**Genetic Enhancement**

Brock, “Genetic Engineering”

Kevles, “Eugenics and Human Rights”

Optional: Buck v. Bell, United States Supreme Court, 1927

**Midterm Paper due – Friday, October 13th**

Week Eight

10/16 – 10/18

**Monday, October 16th – No class (Fall Break)**

**Genetic Enhancement**

Sandel, “Mastery and Gift”

Week Nine

10/23 – 10/25

**Human Research**

The Belmont Report

Pence, “The Tuskegee Study”

**Human Research**

Glantz et al, “Research in Developing Countries: Taking Benefits Seriously”

Brody, “Ethical Issues in Clinical Trials in Developing Countries”

Week Ten

10/30 – 11/1

**Human Research**

Holm, “The Role of Informed Consent in Genetic Experimentation”

**Animal Research**

Cohen, “The Case for the Use of Animals in Biomedical Research”

Hettinger, “The Responsible Use of Animals in Biomedical Research”

Optional: Frey, “Animals”

**2nd Optional Midterm Paper due – Friday, November 3rd**

Week Eleven

11/6 – 11/8

**Animal Research**

DeGrazia, “Human-Animal Chimeras: Human Dignity, Moral Status, and Species Prejudice” (E)

**Group Project Discussion**

Week Twelve

11/13 – 11/15

**Group Project Discussion**

**Neuroethics**

Kramer, “Makeover”

Freedman, “Aspirin for the Mind? Some Ethical Worries about Psychopharmacology”

Week Thirteen

11/20 – 11/22

**Neuroethics**

DeGrazia, “Prozac, Enhancement, and Self-Creation”

**Wednesday, November 22nd – No class (Thanksgiving break)**

Week Fourteen

11/27 – 11/29

**Neuroethics**

President’s Council, “Memory Blunting: Ethical Analysis”

Kolber, “Ethical Implications of Memory Dampening”

**TBA**

Week Fifteen

12/4– 12/6

**Group presentations**

**Group presentations**

Week Sixteen

12/11

Semester wrap-up

**Final Paper due – Monday, December 11th**