

Gender, Science, and Technology

HIST/PHIL 3328: History and Philosophy of Science and Medicine

Spring 2015

Professor Contact Information

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Office: Jonsson 4.120

Office Hours: Wednesdays, 5:30-7:00pm

Course Pre-requisites

This course assumes you have taken at least one lower-division history or philosophy course. Both would be preferable.

Course Description

This course's topic touches on central and controversial issues in our lives and society, namely sex and gender, and particularly interaction between sex and gender and medicine, science, and technology. The main theoretical lenses for the course will include feminist philosophy, critical gender studies, history and philosophy of science, and philosophy of technology.

This course will build on the lectures in this year's Center for Values in Medicine, Science, and Technology series, "Sexing Science, Gendering Technology: Rethinking Sex and Gender in Science, Technology and Medicine." Students will have opportunities to attend lectures and interact with experts in the field.

Student Learning Objectives/Outcomes

- Students will be able to apply basic methodologies of critical thinking, historical investigation, and philosophical reflection to episodes in science, technology, and medicine.
- Students will demonstrate effective written and oral communication skills.
- Students will be able to work with the methods and concepts of feminist and critical gender theory.
- Students will display critical thinking about the role of gender in science, technology, and medicine.

Required texts

- Lise Eliot, *Pink Brain, Blue Brain*
- Jill Lepore, *The Secret History of Wonder Woman*
- Sarah Richardson, *Sex Itself: The Search for Male and Female in the Human Genome*
- Evelyn Fox Keller, *A Feeling for the Organism*
- Janet Kourany, *Philosophy of Science After Feminism*

Assignments & Academic Calendar

Day	Date	Topic and Readings	Assignments
Introduction: Feminism, Gender Theory, HPS			
M	1/12	Review syllabus, discuss class expectations. Basics of feminist and gender theory, history and philosophy of science, technology, and medicine. Discussion: How to write good discussion questions, part I.	
W	1/14	Read carefully: “Approaches to Feminism” & “Feminist Perspectives on Sex and Gender” Also read: “Feminist Epistemology and Philosophy of Science” & “Feminist Perspectives on Science” Discussion: How to write good discussion questions, part II.	
M	1/19	Martin Luther King, Jr. Day - <i>No Class</i>	
Gender and the Brain			
W	1/21	Read: Fausto-Sterling, “A Question of Genius: Are Men Really Smarter than Women?”; Fine, “New insights into gendered brain wiring, or a perfect case study in neurosexism?”; Cahill, “Equal ≠ the Same: Sex Differences in the Human Brain”; Fine et al., “Reaction. . .” Form groups for Engineering Ethics project	Discussion Questions required for all students
M	1/26	Read: Eliot, <i>Pink Brain, Blue Brain</i> , Ch 1-5	DQ required for all
W	1/28	Read: Eliot, <i>Pink Brain, Blue Brain</i> , Ch 6-8 Attend: Lecture by Lise Eliot, “Sex, Brain and Culture: The Science and Pseudoscience of Gender Difference”	DQ option
Gender and Technology			
M	2/2	Read: Winner, “Do Artifacts Have Politics?”; Dusek, “Women, Feminism, & Technology”	DQ option
W	2/4	Read: Faulkner, “The technology question in feminism: A view from feminist technology studies”	DQ option
M	2/9	Read: Reagle, “‘Free as in sexist?’ Free culture and the gender gap”	DQ option
W	2/11	Watch: Sarkeesian, <i>Tropes vs. Women in Video Games</i> Attend: Lecture by Anita Sarkeesian, “Tropes vs. Women in Video Games”	

		Feminist History of Science	
M	2/16	Read: Keller, <i>A feeling for the Organism</i> , Ch 1-8	DQ option Deadline: First Meeting for Ethics Advising Project
W	2/18	Read: Keller, <i>A feeling for the Organism</i> , Ch 9-12	DQ option
		Feminist Philosophy of Science	
M	2/23	Read: Harding, "Should the History and Philosophy of Science Be X-Rated?"; Okruhlik, "Gender and the Biological Sciences"	DQ option
W	2/25	Read: Longino, "Subjects, Power, and Knowledge"; Anderson, "Uses of Value Judgments in Science: A General Argument, with Lessons from a Case Study of Feminist Research on Divorce"	DQ option
		Philosophy of Science after Feminism	
M	3/2	Read: Kourany, <i>Philosophy of Science after Feminism</i> , Ch 1-3	DQ option Paper proposal due
W	3/4	Read: Kourany, <i>Philosophy of Science after Feminism</i> , Ch 4-5	DQ option
		Gender in Science: Diversity and Representation	
M	3/9	Read: NSF Report, "Women, Minorities, and Persons with Disabilities in Science and Engineering: 2013"; Rosser and Taylor, "Why Are We Still Worried about Women in Science?"	DQ option
W	3/11	Read: Fehr, "What is in it for me? The benefits of diversity in scientific communities"; Phillips, "How Diversity Makes Us Smarter" Attend: Lecture by Carla Fehr, "Overcoming Ignorance About Excellence: Improving the Representation of Women in Science and Engineering"	DQ option
M	3/16	No class - <i>Spring Break</i>	
W	3/18	No class - <i>Spring Break</i>	
M	3/23	No class	
		Wonder Woman and Science	
W	3/25	Read: Lepore, <i>The Secret History of Wonder Woman</i> ; Other essays TBD	Deadline: Second meeting for Ethics Advising Project
		Gender and Medicine	
M	3/30	Read: "Feminist Bioethics"	DQ option
W	4/1	Read: Maya J. Goldenberg, "On evidence and evidence-based medicine: Lessons from the philosophy of science"	DQ option
		Gender, Biology, and Medicine	
M	4/6	Read: Sarah Richardson, <i>Sex Itself: The Search for Male and Female in the Human Genome</i> , Ch 1-6	DQ option
W	4/8	Read: Sarah Richardson, <i>Sex Itself: The Search for Male and Female in the Human Genome</i> , Ch 7-10 Attend: Lecture by Sarah Richardson, "Gender and Science at the Interface of Mother and Fetus"	DQ option

M	4/13	No class - Writing/Project Week - Classroom open for group meetings	
W	4/15	No class - Writing/Project Week - Classroom open for group meetings	
M	4/20	Presentations of Final Papers / Projects (Group 1) N.B.: During presentations, attendance counts double.	
W	4/22	Presentations of Final Papers / Projects (Group 1)	
M	4/27	Presentations of Final Papers / Projects (Group 2)	
W	4/29	Presentations of Final Papers / Projects (Group 2)	Group 1 - Final Papers / Reports Due
W	5/6	<i>Finals Week</i> - No final exam	Group 2 - Final Papers / Reports Due

Requirements & Grading

1. Attendance at lectures (100 points max):

- 20 points per lecture, 5 lectures
- Key dates are 1/29, 2/11, 3/11, 3/25, and 4/9.

2. Weekly discussion questions (100 points max):

- Two questions per week. 12 points max per question.
- First two questions are required. Failure to complete them will result in additional penalties.

3. Ethics Advising Project (50 points max):

- Two meetings with engineering students to consult on the ethical ramifications of their projects.
- Reflection papers (600-1000 words), due 48 hours after meetings.
- One representative from each team attends Senior Design Day to talk to teams and to rate posters.

4. Research paper or creative or service project (100 points max)

5. In-class presentation of final paper or project (50 points max)

6. Attendance and participation (50 points max)

- Starts at 20 points
- Quality and quantity of contributions to class discussions – adds as much as 50 points
- Absences subtract 5 points. Tardies subtract 3 points.
- Attendance is mandatory. Egregious absenteeism will be grounds for an **F** in the course

Maximum possible points: 450.

Your grade will be calculated on a 4-point scale, based on your total points divided by 100. So 400 points = A. 265 points = B-. Etc.

Course and Instructor Policies

Safe Space

In this course, we will be discussing difficult and sometimes personal topics. Our discussions will be governed by two key rules:

1. **Try your best** to speak respectfully, tactfully, and not to attack persons in or out of the class. Criticism should apply to texts and ideas, not to persons or groups.
2. **Be generous with others' honest mistakes.** We all make them occasionally. Assume that all contributions are made in good faith, and do your best to gently suggest ways of improvement.

Contacting the Instructor

Before you contact me, I suggest checking the syllabus, course website, and all handouts to see if the answer to your question is there. For more complex questions, you should see me in office hours or [make an appointment](#). You can send me an email, but this is not a good way to get in touch with me about either trivial matters (which are almost certainly on the syllabus or best discussed in class) or difficult issues (which should be discussed in person). I will not accept work or provide feedback via email. Email has generated many unreasonable expectations in our lives that we should all think more critically about, and I encourage you to do so. Of course, you should feel free to email me to remind me about something, or if you need to contact me urgently (if, for instance, you will miss an assignment due to a dire medical issue).

Late Work and Make-Up

No late work or make-up exams will be allowed without consent of the professor *prior to* the due/exam date, except in situations where University policy requires it. All assignments must be completed in satisfactory manner in order to receive a passing grade in the course.

Class Attendance

While reading and writing are crucial parts of the course, a central part of intellectual activity is in-person discussion. (Hence the continuing importance of talks and conferences in every academic field.) While class will occasionally involve bits of lecture, this is merely an instrument to a more well-informed discussion and other structured activities. **Attendance is thus considered mandatory.** Missed classes will count heavily against your participation grade, and egregious absenteeism will be grounds for an **F** in the course at the professor's discretion. In-class assignments and activities likewise cannot be made up unless the professor agrees to it before the class is missed. Disruptive or extremely late arrivals or early departures will be considered absences.

Laptops and Other Devices

You should not use a laptop or tablet computer in this course during lecture or discussion, including for note-taking or reading purposes, unless you can demonstrate a compelling need for it. Likewise, you may not use a music player or headphones, unless they are attached to a hearing-assistive device approved by the instructor or the Office of Student AccessAbility. If you are given such an exception, it will be immediately and permanently revoked if you abuse the technology for off-topic purposes.

The use of such devices can be a distraction to your classmates and instructor and a detriment to your own learning. Readings should be brought to class in the print version or printed out. Notes should be taken on paper and scanned or transcribed after class (transcribing handwritten notes is a fairly effective study method). Given the nature of the course, you should not have to take such copious notes as to require any extra speed afforded by typing them. This strict and paternalistic policy is a result of both personal experience and a close look at the psychological and pedagogical research on the pros and cons of laptop usage in class. Across every measure, the evidence speaks against indiscriminate use of laptops in class.

For certain activities in-class, the instructor may request you to bring a laptop or to take it out and use it for that specific purpose. These will be specified by the instructor.

Classroom expectations

You are expected to have **read the assignments *before* class**, and it would be to your benefit to also read them again after class. You are expected to **bring a copy of assigned readings** for each day's class, and have them available to refer to. You are expected to **listen respectfully** to the professor and your fellow students, and **participate** in class discussions and activities.

Clear failure to abide by these expectations will result in you being asked to leave the classroom and being counted absent for the day.

Tips on Forms of Address

It is appropriate and courteous to refer to your professors by the title of "Professor" or "Doctor" as in "Professor Brown" or "Dr. Brown," though in some circles the latter connotes someone with an MD rather than a PhD. Unless you write for the New York Times, it is generally inappropriate to refer to your professor as "Mr." or "Ms." It is never appropriate to use "Mrs./Miss" as forms of address in a professional setting, unless someone has specifically asked you to use these terms. Having been educated in part in the informal academic climate of California, it would also be fine if you call me "Matt." (Please don't call me "Matthew," only my mother does that.) Having also been educated in the South, I am fine being referred to in a formal fashion as well (and would be happy to refer to you formally if you prefer).

Other Stuff

<http://go.utdallas.edu/syllabus-policies>

A syllabus is not a suicide pact. This syllabus is subject to change in the interest of improving the quality of the course.