

WGS/PHIL 2040 Science and Gender

New Mexico Tech
Spring 2022
MWF 11:00-11:50 AM
MSEC 103

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Famous women in science (left to right): astronaut Mae C. Jamison, physicist-chemist Marie Curie, computer scientist Margaret Hamilton, and primatologist Jane Goodall (more [here](#); artist: [Natasha Dzhola](#)).

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1. Course Description

Scientists search for the fundamental causes of so-called “sex differences” and sexual desire in humans—often framed as “nature or nurture” debates—implicating genes or environment as the root cause. Yet, science both informs and is informed by our cultural ideas about sex, gender, and sexuality. In turn, scientific practices & theories are shaped by gender politics and uneven social hierarchies—often for the worse: Women have historically been marginalized within scientific professions, and many of their intellectual achievements, especially for women of color, have been erased or stolen by men. Under the guise of “objective science,” Western medicine has categorized queer sexuality and gender non-conformity as “abnormal” and “disordered,” thus rendering homosexuality and trans* identity as “pathological.”

In turn, feminists have criticized science for its sexist, heteronormative, and racist biases; its lack of objectivity and diversity; and its tight alliances with industrial and imperial powers. These problems raise serious philosophical questions: Can science ever provide an “objective” understanding of nature and reality, free from corruption by social values? How can we improve science to avoid reinforcing social inequalities? How should we transform medicine to better benefit society and serve marginalized groups?

This course introduces students to conversations across the fields of gender studies and philosophy, including feminist philosophy of science, Black feminist thought, postcolonial feminisms, and queer science studies. Students explore the interplay between science and gender, with special attention to intersections of sexuality, race, and ethnicity. In Part I, we analyze the concepts of “sex” and “gender” by investigating the history of debates over the internal/external causes of so-called “sex differences.” Part II prompts students to think more broadly about gender in science in debates over underrepresentation, bias, values, and scientific objectivity. In Part III, the class delves into critical approaches to biomedicine, including breast cancer, HIV/AIDS, reproductive health, and LGBTQ+ healthcare. In workshops, students will develop the skills of logical reasoning, analytic writing, scientific criticism, scholarly research, and peer review. Along with regular participation, assignments include co-leading discussion, 5 quizzes, 2 short papers, and a final paper.

1.1. Pre-requisites

None

1.2. Place in Curriculum

This class satisfies the requirements of either Area 4 (social and behavioral sciences) or Area 5 (humanities) course in the New Mexico General Education Curriculum and focuses on the following Essential Skills: communication, critical thinking, information and digital literacy, and personal and social responsibility. For more on the NM General Education Curriculum and how these essential skills are assessed, please visit the following website:

<https://www.nmt.edu/academicaffairs/assessment/gened.php>. In addition, this course satisfies 3 credits toward a Philosophy minor or a Science, Technology, and Society minor: <https://nmt.edu/academics/class/minors.php>.

1.3. Course Learning Outcomes

By the end of class, students will be able to:

- *Construct* and clearly *communicate* arguments about sex/gender/sexuality and science; and *defend* their judgments with charity and without logical fallacies;
- *Write* and *research* essays about contemporary scientific debates over gender with analytic structure that engage with popular and scholarly conversations;
- *Recognize* how human cultures and value judgments shape the process of science and the practice of medicine, including dichotomies (e.g., nature/culture, sex/gender), biases (e.g., heteronormativity, Eurocentrism), and standpoints (e.g., Black feminism, disability rights);
- *Evaluate* critically scientific studies in terms of their assumptions about sex, gender, sexuality, etc., and their methodology; and *analyze* how to improve their theories, inferences, and objectivity.

1.4. Required Texts

1. Fausto-Sterling, Anne. (2020). *Sexing the Body: Gender Politics and the Construction of Sexuality*. Updated edition. New York: Basic Books.
Paperback from NMT Bookstore: \$28.60 new or \$22.90 used
or download EPUB from [RedShelf](#) (\$16.99).
(You can online access to edition 1 through the library [here](#).)
2. Lorde, Audre. (2020). *The Cancer Journals*. Penguin Random House.
Paperback from NMT Bookstore: \$14.00 new or \$11.20 used
or download EPUB from [RedShelf](#) (\$10.99).

If you are unable to secure hard copies, email the professor ASAP.

All other readings are available electronically on Canvas (Files>Readings) or online.

2. Course Grading & Requirements

The total points for the class (100%) are broken down into 6 categories:

1. Participation & Attendance (20%): attend and contribute during classes, including large- and small-group discussion and online forums (3 “freebies” for unexcused absences).
2. Quizzes (25%): 5 quizzes (5% each) on readings, class content, and workshop skills.
3. Discussion Leader (10%): in small groups, give a short presentation (5 minutes) on a news article/op-ed related to chosen week’s themes and then moderate a class discussion.
4. Analytic Papers (20%): write 2 analytic essays on a chosen reading, using AOR structure (2 full pages plus citations, 10% each).
5. Final Paper (25%): research, write, and revise a paper critically analyzing one debatable piece of research, technology, or law/policy related to course themes (includes 1-page proposal, 4-5 pg. draft, and 5-7 pg. final paper).
6. Extra Credit (+2%): write a reflection on a talk/topic approved by the professor (2 full pg.).

2.1. Participation & Attendance

To facilitate active learning, the course is highly interactive and discussion-based. Hence, regular attendance and engaged participation are required. All students are expected to attend every class and participate with their peers in small and large groups and on discussion boards. Regarding

attendance specifically, students are allowed 3 unexcused absences (“freebies”). Additional unexcused absences will result in the loss of participation points (minus 1 of the total 20). An *excused* absence is one that has been arranged between the student and the professor. (Valid excuses include [symptoms related to COVID](#), hospitalization/serious illness, occupational/educational duties, family emergencies, triggering content, and religious holidays.) Students are responsible for communicating with the professor via email/Canvas.

Participation is crucial for students’ abilities to recognize and engage with class topics, develop their own beliefs, and explain them to their peers. Students should engage with their small groups each class and make at least one contribution to the larger discussion each week. For *documentaries* and any *asynchronous classes*, students are to participate in online discussion on Canvas. In these cases, post a reflection and question for your peers, and then make one reply (each worth ¼ of a participation point).

2.2. Quizzes

Students will be quizzed 5 times throughout the semester, including multiple choice questions and short responses. Quizzes are aimed to assess students’ comprehension of the readings since the last quiz and their skills following workshops. Quizzes will be available online on Canvas (45 mins. max), and students must complete them during the 48 hours before the beginning of the next class for full credit. Late quizzes are deducted 20% per day, to be arranged with the professor. *Students must take the quiz alone. They are allowed to refer to their notes, readings, and lecture recordings.* Students who need accommodations for time or for an extended period of absence should make arrangements with the professor.

2.3. Discussion Leader

One day during the semester each student (in groups of 2-3) will take their turn leading class discussion. Starting the fourth week of class, student pairs will choose a week and facilitate discussion based on their own specific interest related to the topic. Student-led discussions consist of three parts: assigning a short reading, creating a discussion question, and making a brief presentation with discussion (20 minutes total) during the second half of class. First, the group will pick a *short news article, blog, or op-ed* related to the week’s assigned materials and topics. Students should contact the professor one week before their presentation date with ideas. Second, groups will prepare *1 open-ended question* for discussion. Groups are responsible for submitting their reading and question to the professor by midnight two days before their presentation. Third, the group will prepare and present a short *oral presentation* (5 minutes) with a set of slides about the reading and its relation to the week’s content, and then they will *moderate* discussion with their question (15 minutes). Students will be graded solely in terms of completeness.

2.4. Analytic Papers

Students will write 2 analytic essays on the reading assigned during the course (at least 2 full pages plus citations, double spaced, 12-point font, 1-in margins). In these essays, students should pick a specific claim in one assigned material since the last paper. The essay should use the Argument-Objection-Response (AOR) structure (see Handouts 1 and 3):

- 1) *Claim*: Pick a claim made in the material *that you agree or disagree with*, state it succinctly, and identify where it appeared;
- 2) *Argument*: State why you agree/disagree with it (the more reasons, the better);
- 3) *Objection*: Identify a strong objection to your argument; and
- 4) *Response*: Reply to that objection. (Repeat steps 2, 3, and 4.)

Papers should also state the theoretical or social significance of the issue and argument. Include at least 2 objections and responses, and use as many AORs as needed to complete 2 full pages. References should be in APA format (see [research guide](#)); citations do not count toward minimum page requirement. The aim of this exercise is to facilitate charitable reading, clear reasoning, and ability to engage constructively with objections. The professor will grade the papers for *completeness*, *charity*, and *clarity* (see examples on Canvas).

2.5. Final Paper

This is equivalent to a final exam. Each student will research, write, and revise a critical analysis of one scientific study, emerging technology, or policy/law related to course themes, such as sex/gender differences, gender and bias in science, or gender/sexuality in medicine. Analyses must contain the following 4 content areas:

- 1) *Target*: Find and describe a concrete, singular debatable piece of research, technology, or law/policy from the past decade related to course themes;
- 2) *Position*: Take a critical stance toward several aspects of the target based on its methodological, theoretical, or ethical problems;
- 3) *Grounds*: Elaborate your position, drawing on course materials, outside knowledge, and personal experience;
- 4) *Defense*: Defend your position from 2+ strong objections with equally strong responses, and discuss broader implications.

The project involves three stages. **Stage 1**: Students will search for a scientific paper, current/proposed technology, or policy (e.g., bill, law, regulation) that they find lacking in some aspect. The class will be instructed in scientific criticism and scholarly research in workshops 3 and 4. Students should find one scholarly source as their primary point of analysis, and use additional sources to support their arguments. Then, they will submit a 1-page proposal describing the study/technology/policy, two or more possible lines of critique, and their preliminary plans for research (see [research guide](#)). **Stage 2**: Students will analyze and write a draft analysis in which they take a critical position, elaborate their position, and defend it from objections (at least 4-5 full pages plus citations, double spaced, 12-point font, 1-in margins). This draft is due the last Monday before exams. During workshop 5, students will receive comments from their peers for improving their draft. **Stage 3**: Based on peer-review comments and any comments from the instructor, students will revise and expand their draft according to the same elements as listed above (at least 5-7 full pages plus citations, double spaced, 12-point font, 1-in margins).

This exercise facilitates students' abilities to conduct independent research, read science critically, recognize the influence of society on science, and communicate their own thoughts through writing. The professor will grade final papers in terms of *completeness* of the paper (according to the above 4 elements), the *clarity* of argument, and the *charity* of their critique, including uptake of peer-review comments.

2.6. Extra Credit

For two percentage points of extra credit toward their final grade, students may write a reflection paper on the issues raised by a talk/event during the semester (2 full pages, 12 points font, double spaced, 1 in. margins). Instead of merely summarizing the talk, the essay should focus primarily on the student's own reflections, judgments, and evaluations of one or more issues raised related to gender studies/philosophy. The professor will post various talks and events that will work well for this assignment. Alternatively, students may request to write a reflection on something else, such as a documentary of their choice (professor approval required). Papers will be graded only for *completeness*.

2.7. Late Paper Policy

For all papers, a late penalty of 1% per day (out of the assignment's 100 total points) is incurred on submissions past the due date. For instance, a paper turned in 10 days late has a starting grade of 90%. For papers late by over 3 weeks, students are responsible for contacting the professor to arrange a plan for completion.

2.8. Final Grades

Final grades will be based on the percentage of total points earned (see Gradebook on Canvas): **A** (100-93%), **A-** (92-90%), **B+** (89-87%), **B** (86-83%), **B-** (82-80%), **C+** (79-77%), **C** (76-73%), **C-** (72-70%), **D** (69-60%), and **F** (<60%).

3. Notes from the Professor

I encourage all students to come by office hours in the beginning of the semester and personally introduce yourself. My office hours are a *safe space*; I am happy to help you work through any questions or problems that might arise related to the course or school more generally. Please approach me if you have any questions about the assignments, readings, grading, other aspects of the class, or gender studies/philosophy as fields of study (and the [Philosophy minor](#)). The best way to communicate with me is via email.

3.1. Course Policies for Respect and Equity

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity the students bring to this class be viewed as a resource, strength, and benefit. I aim to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Given the sensitive and challenging nature of the materials discussed in class, it is imperative that there be an atmosphere of *safety*, *inclusiveness*, and *equity* in the classroom. Accordingly, we will follow the advice of the writer James Baldwin:

*We can disagree and still love each other
unless your disagreement is rooted in my oppression and
denial of my humanity and right to exist.*

In line with this, students are also expected to promote *respectful inclusiveness*, especially in the face of differences, disagreement, and discrimination. Accordingly, certain disagreements, e.g., over the humanity, value, or abilities of marginalized groups, are disrespectful, unfair, and against our ground rules. As the instructor, I will attempt to foster an environment in which each class member is able to hear and respect each other.

Relatedly, students are expected to adopt a policy of *step forward; step back*: In order for everyone's voice to be heard, students who tend to dominate discussions should attempt to "step back" so that other students may participate and contribute to discussion; students who tend to keep quiet during discussions should attempt to "step forward" and let the class benefit from their contributions. In any discussions, all students are encouraged to ask questions and engage fellow students in a respectful manner that facilitates an interdisciplinary setting. Students should also have respect for their fellow classmates and refrain from repeating sensitive or confidential discussions outside of the classroom.

3.2. Land Acknowledgement

We acknowledge that the New Mexico Tech main campus stands on the unceded ancestral lands of the Pueblo and Mescalero Apache peoples. These lands were taken by Congress in the Indian Land Cession 689 on October 1, 1886, and the military forcibly moved the Native peoples to reservations. These injustices were accomplished under false white-supremacist ideologies such as Manifest Destiny and the Doctrine of Discovery. For those of us who are visitors to these lands, we appreciate their millennia of stewardship to the land, water, animals, and plants, and the opportunity to live and learn here. Please visit <https://indianpueblo.org/new-mexicos-19-pueblos> and <https://mescaleroapachetribe.com/> to learn more about these Native nations, their cultures and sovereignty.

3.3. Disability and Accommodations

I want this class to be accessible for each student to flourish with their unique abilities. New Mexico Tech is committed to protecting the rights of individuals with disabilities. Qualified individuals who require reasonable accommodations are invited to make their needs known to the Office for Disability Services (ODS) as soon as possible. To schedule an appointment, please call 575-835-6209, or email disability@nmt.edu.

3.4. Counseling Services

Your mental health and experience in this class is important to me. New Mexico Tech offers individual and couples counseling, safety assessments, crisis intervention and consultations through The Counseling Center. These confidential services are provided free of charge by licensed professionals. For more information, please call 575-835-6619, email counseling@nmt.edu or complete an Intake Form on at <https://www.nmt.edu/cds/>. All services are provided via phone or Zoom during the COVID-19 pandemic.

3.5. Writing and Communication Lab

The WCL's mission is to help students become better writers by offering tailored, individual tutoring both in person and online for undergraduate and graduate students. We can assist with

lab reports, essays, posters, oral presentations, and much more. The WCL will be open for tutoring in Spring 2022 starting the week of January 24, M-Th from 12-5pm, and Sunday from 7-10pm, in Skeen Library next to the OSL. To make an appointment, please use our scheduling program, WC Online (<http://nmt.mywconline.com>) to make an appointment during our open hours, or email us at write@nmt.edu. Schedule is subject to change based on tutor availability, so please check WC Online or email us to confirm. Visit our website for more information: <https://www.nmt.edu/academics/class/center.php>.

3.6. Academic Dishonesty

Students are expected to submit their original work on quizzes, papers, and other assignments. For papers, students must acknowledge any use (in part or full) of someone else's work with proper citations (in [APA style](#)). Quizzes are open notes and open book (i.e., students may refer to readings, notes, and class slides during the quiz). However, answers must be their own, so there is no use of the internet, no peer collaboration on the quiz, and no answer sharing. The instructor will not tolerate either plagiarism or cheating, which will result in an automatic failing grade on the assignment and/or the class. New Mexico Tech's Academic Honesty Policy for undergraduate students is in the Student Handbook: <https://www.nmt.edu/studenthandbook/>. Students are responsible for knowing, understanding, and following this policy.

3.7. Title IX Reporting (Sex/gender-based Discrimination)

Sexual misconduct, sexual violence and other forms of sexual misconduct and gender-based discrimination are contrary to the University's mission and core values, violate university policies, and may also violate state and federal law (Title IX). Faculty members are considered "Responsible Employees" and are required to report incidents of these prohibited behaviors. Any such reports should be directed to Tech's Title IX Coordinator (Dr. Peter Phaiah, 20D Brown Hall, 575-835-5880, titleixcoordinator@nmt.edu). Please visit Tech's Title IX Website (www.nmt.edu/titleix) for additional information and resources.

3.8. COVID-19 Safety Issues for Face-to-Face Instruction

As of the beginning of Spring semester, NMT classes are under the following constraints, which may change as COVID conditions and/or New Mexico Governor's orders change. Please check for daily updates of COVID constraints, posted on www.nmt.edu/covid19/.

- 1) All vaccinated and unvaccinated individuals are required to wear a face mask indoors anywhere on campus.
- 2) Instructors and TAs will not ask for proof of vaccination.
- 3) Please note provisions on masks, vaccines or other possible requirements are subject to change as the situation evolves, based on guidance from the Centers for Disease Control, the State of New Mexico, and university officials (i.e., the President and the Board of Regents).
- 4) Students should not come to class if they are feeling ill and to follow any quarantine guidelines that they are given in the event of exposure to COVID-19. If you do miss class, please contact the instructor for missed assignments, contact the Student Health Center, and consider getting tested for COVID-19.

The above guidelines may be modified in response to changing conditions. For the most up-to-date guidelines, please consult NMT's COVID- 19 information page:

<https://www.nmt.edu/covid19/>.

4. Important Dates and Deadlines (subject to change)

- 1/21: Skills Workshop 1 (Logic)
- 2/4: Rank Topics for Discussion Leader due
- 2/7: Quiz 1 due
- 2/11: First Student-led Discussion (repeated nearly each week)
- 2/18: Skills Workshop 2 (Analytic Writing)
- 2/25: Quiz 2 due
- 2/28: Analytic Paper 1 due
- 3/2-4: Canvas discussion on *Picture a Scientist* documentary
- 3/11: Quiz 3 due
- 3/30: Skills Workshop 3 (Scientific Criticism)
- 4/8: Quiz 4 due
Skills Workshop 4 (Scholarly Research)
- 4/11: Analytic Paper 2 due
- 4/13-18: Canvas discussion on *United in Anger* documentary
- 4/18: Final Paper Proposal (Stage 1) due
- 5/2: Final Paper Draft (Stage 2) due
Skills Workshop 5 (Peer Review)
- 5/4: Quiz 5 due
- 5/6: Final Paper Revised (Stage 3) due
- 5/7 (optional): Extra-credit due (before midnight)
- 5/7: Late Assignments due (before midnight)

5. Detailed Course Schedule

Required readings/prep (—), expected in-class activities (>), and assignment due dates (*); note that content warnings (CW) are marked with double asterisks (**):

Week 1:

Introduction to Science & Gender

[M 1/17: Martin Luther King Jr. Holiday, No Class]

W 1/19: Course Introduction

—Read (optional): Davies, Sally. (2019). *Feminists Never Bought the Idea of a Mind Set Free from Its Body*. Aeon. <https://aeon.co/essays/feminists-never-bought-the-idea-of-a-mind-set-free-from-its-body>.

—Listen (optional): Reser, Anna, Leila McNeill, and Rebecca Ortenberg (hosts). (2018). *Bonkers Things Men Have Said About Women's Bodies, A History* [Audio podcast,

v1 (1/18/22)

58:56]. In Lady Science Podcast. <https://www.ladyscience.com/podcast/episode8-historyof-womensbodies>.

>In class: Review the syllabus

*Due (before class): Introduce yourself to the class by posting on the Canvas discussion board.

F 1/21: Workshop on Logic

—Review: Handout 1 on Basics of Logic

—Review: Handout 2 on Common Logical Fallacies

>In class: Skills Workshop 1 (Logical Reasoning)

Part I: Sex Differences: Nature or Nurture?

Week 2:

Sex, Biology, and Sexuality

M 1/24: The Notorious Case of Women’s “Hysteria”

—Read: Gilman, Charlotte Perkins. (1892). *The Yellow Wallpaper*.

<https://americanliterature.com/author/charlotte-perkins-gilman/short-story/the-yellow-wallpaper>.

—Read: Gilman, Charlotte Perkins. (1913). *Why I Wrote the Yellow Wallpaper*.

<https://americanliterature.com/author/charlotte-perkins-gilman/short-story/why-i-wrote-the-yellow-wallpaper>.

—Read: Barnes, Elizabeth. (2020). *The Hysteria Accusation*. Aeon.

<https://aeon.co/essays/womens-pain-it-seems-is-hysterical-until-proven-otherwise>.

W 1/26: Sexual Desire & “Anatomy is Destiny”

—Read: Freud, Sigmund. (1905). The Sexual Drive in Neurotics (pp. 23-33) and The Transformations of Puberty (pp. 61-90). In *Three Essays on the Theory of Sexuality* (Trans. U. Kistner).

F 1/28: Becoming a Woman

—Read: Beauvoir, Simone de. (1949). The Psychoanalytic Point of View (pp. 38-52) and The Formative Years: Childhood (pp. 267-84). In *The Second Sex* (Trans. H. M. Parshley). New York: Vintage Books.

Week 3:

Gender, Culture, and Queerness

M 1/31: Gender as Performance

—Read: Butler, Judith. (1988). Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory. *Theatre Journal* 40(4): 519–31.

>In class: Activity on Principle of Charity

W 2/2: Queer Sexuality and Gender Identity

v1 (1/18/22)

—Read: Rubin, Gayle. (1992). Of Catamites and Kings: Reflections on Butch, Gender, and Boundaries. In *Deviations: A Gayle Rubin Reader*, 241-53. Durham, NC: Duke University Press Books.

>In class: Assign Discussion Leader Rankings

F 2/4: Gender as Western Colonial Construct

—Read: Oyèwùmí, Oyèrónké. (2002). Conceptualizing Gender: The Eurocentric Foundations of Feminist Concepts and the Challenge of African Epistemologies. *Jenda* 2(1): 9 pg.

>In-class: Assign Quiz 1 (due before class Monday)

*Due: Rankings for Discussion Leader

(Note: Last day to drop classes)

Week 4:

Male, Female, and Intersex

M 2/7: Beyond Binaries

—Read: Fausto-Sterling, Anne. (2020). Chapter 1: Dueling Dualisms. In *Sexing the Body: Gender Politics and the Construction of Sexuality*. Updated edition. New York: Basic Books. 1-31.

*Due: Quiz 1 (on Canvas)

W 2/9: “Fixing” Intersex Genitals

—Read: Fausto-Sterling, Anne. (2020). Chapter 2: That Sex Which Prevaileth and Chapter 3: Of Gender and Genitals. In *Sexing the Body*. 32-82.

F 2/11: How Many Sexes?

—Read: Fausto-Sterling, Anne. (2020). Chapter 4: Should There Be Only Two Sexes? In *Sexing the Body*. 83-116.

>In-class: Student-led Discussion 1 (on Intersex, Trans*, and Non-Binary Today)

Week 5:

Gendering Brains and Neuroscience

M 2/14: Cognitive Differences and Scientific Facts

—Read: Fausto-Sterling, Anne. (2020). Chapter 5: Sexing the Brain. In *Sexing the Body*. 117-49.

—Review: *Think Again: Men and Women Share Cognitive Skills*. American Psychological Association (APA). (2014). <https://www.apa.org/research/action/share>.

W 2/16: Equality and Difference in Neuroscience

—Read: Roy, Deboleena. (2016). Neuroscience and Feminist Theory. *Signs*. 41 (3): 531–52.

>In class: Student-led discussion 2 (on Gender in Cognitive Science Today)

F 2/18: Workshop on Analytic Writing

—Skim: Fausto-Sterling, Anne. (2020). Afterward. In *Sexing the Body*. 315-43.

—Review: Handout 3 on Two Examples for Writing Analytic Arguments

>In class: Skills workshop 2 (Analytic Writing)

v1 (1/18/22)

>In class: Assign Analytic Paper 1 (due 2/28)

**Week 6:
Developing Sex/Gender/Sexuality**

M 2/21: Dynamic Systems and Gender/Sex Identity

—Read: Fausto-Sterling, Anne. (2020). Chapter 10: A Sea of Gender. In *Sexing the Body*. 268-313.

W 2/23: Distributed Mind and Extended Sex

—Read: Ayala-López, Saray, and Nadya Vasilyeva. (2015). Extended Sex: An Account of Sex for a More Just Society. *Hypatia* 30(4): 725–42.

>In class: Student-led discussion 3 (on Development of Sex/Gender/Sexuality Today)

>In class: Assign Quiz 2 (due before class on Friday)

F 2/25: Guest Lecture on Gender & Genetics (Dr. Rebecca Reiss, Biology)

—Read: None

*Due: Quiz 2

**Part II:
Gender & Bias in Science**

**Week 7:
Gendering Science & Nature**

M 2/28: Documentary on Women's Experiences in the Sciences

—Read**: Johnston, Julie. (2019). *What It's Like to be a Trans Scientist with Imposter Syndrome*. Lady Science. <https://www.ladyscience.com/essays/what-its-like-to-be-a-trans-scientist-with-imposter-syndrome>.

**CW: transphobia, depression, suicide

>In class**: watch selections from *Picture a Scientist*. Directed by Sharon Shattuck and Ian Cheney, 2020 (Uprising Production). Documentary on women's "own experiences in the sciences, ranging from brutal harassment to years of subtle slights."

**CW: Testimonials of sexual and gender-based harassment in the workplace.

*Due: Analytic Paper 1

W 3/2: Masculine Science and the Death of Nature

—Read**: Merchant, Carolyn. 1980. Introduction (pp. xix-xxiv), Nature as Female (pp. 1-20), and Dominion over Nature (pp. 164-172). In *The Death of Nature: Women, Ecology, and the Scientific Revolution*. San Francisco, CA: Harper & Row.

**CW: Descriptions of sexual violence in Francis Bacon's writings.

*Due: Before class, post on Canvas a short reflection culminating in a question about *Picture a Scientist*.

F 3/4: Postcolonial Development and the Feminine Principle

—Read: Shiva, Vandana. (1988). Development, Ecology, and Women (pp. 1-13) and Women in Nature (pp. 37-52). In *Staying Alive: Women, Ecology and Survival in India*. New Delhi:

v1 (1/18/22)

Kali for Women.

>In class: Student-led discussion 4 (on Gender in Science & Nature Today)

*Due: Before class, post on Canvas a response to someone else's question about *Picture a Scientist*.

Week 8:

Reality & Bias in Science

M 3/7: Reality and Scientific Sexism

—Read: Hubbard, Ruth. (1979). Have Only Men Evolved? In *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology, and Philosophy of Science*, ed. Sandra Harding and Merrill B. Hintikka, 45–69. Schenkman Publishing Company.

W 3/9: Androcentric Assumptions and Female Sexuality

—Read: Lloyd, Elisabeth A. (1993). Pre-Theoretical Assumptions in Evolutionary Explanations of Female Sexuality. *Philosophical Studies* 69: 139–53.

>In-class: Assign Quiz 3 (due before class Friday)

F 3/11: Scientific Racism and Social Science

—Read: Spillers, Hortense J. (1987). Mama's Baby, Papa's Maybe: An American Grammar Book. *Diacritics* 17(2): 65–81.

>In class: Student-led discussion 5 (on Gender & Bias in STEM Today)

*Due: Quiz 3

[M 3/14—F 3/18: Spring Break, No Class]

Week 9:

Feminist Standpoint Theory

M 3/21: Intersectional Oppression and Black Feminist Standpoint

—Read: Collins, Patricia Hill. (1986). Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought. *Social Problems* 33(6): S14–32.

W 3/23: “The View from Nowhere” and Partial Perspectives

—Read: Haraway, Donna. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies* 14(3): 575-99.

(Note: Mid-semester point)

[F 3/25: Professor travelling, No Class]

Week 10:

Scientific Objectivity and Criticism

M 3/28: Interactive Objectivity and Underdetermination

—Read: Longino, Helen. (1990). Values and Objectivity. In *Science as Social Knowledge*, 62-82. Princeton University Press.

W 3/30: Workshop on Reading Science Critically

—Read: AlShebli, Bedoor, Kinga Makovi, and Talal Rahwan. (2020). RETRACTED ARTICLE: The Association between Early Career Informal Mentorship in Academic Collaborations and Junior Author Performance. *Nature Communications* 11: 5855. 8 pp.

—Read: Editors of Nature Communications. (2020). Regarding Mentorship. *Nature Communications* 11: 6447. 2 pp.

—Review: Alford, Emily. (2020, Nov. 24). *Women Scientists Are Calling Bullshit On a Study Claiming That Women Make Bad STEM Mentors*. Jezebel. <https://jezebel.com/women-scientists-are-calling-bullshit-on-a-study-claimi-1845741789>.

—Review: Flaherty, Colleen. (2020, Nov. 23). *Journal Faces Backlash for Publishing Article on Female Mentorship*. Inside Higher Ed. <https://www.insidehighered.com/news/2020/11/23/journal-faces-backlash-publishing-article-female-mentorship>.

>In class: Skills Workshop 3 (Scientific Criticism)

>In class: Assign Analytic Paper 2 (due 4/11)

F 4/1: Strong Objectivity and Standpoint Epistemology

—Read: Harding, Sandra. (1995). “Strong Objectivity”: A Response to the New Objectivity Question. *Synthese* 104(3): 331–49.

>In class: Student-led discussion 6 (on Objectivity in STEM today)

Part III: Gender, Health, and Medicine

Week 11:

Battling Breast Cancer

M 4/4: Intersecting Identities and Experiences of Illness

—Read: Lorde, Audre. (2020) [1980]. Introduction, Section I: The Transformation of Silence into Language and Action, and Section II: Breast Cancer, A Black Lesbian Feminist Experience. In *The Cancer Journals*. Penguin Random House. 1-47.

W 4/6: Surviving Cancer, Mourning the Breast

—Read: Lorde, Audre. (2020) [1980]. Section III: Breast Cancer: Power vs. Prosthesis. In *The Cancer Journals*. 48-69.

>In class: Student-led discussion 7 (on Breast Cancer Screening/Diagnosis/Treatment Today)

>In-class: Assign Quiz 4 (due before class Friday)

F 4/8: Workshop on Research

—Review: Library course research guide

>In class: Skills Workshop 4 (Scholarly Research)

>In class: Assign Final Paper (proposal due 4/18)

*Due: Quiz 4

Week 12:

Resisting HIV/AIDS

v1 (1/18/22)

M 4/11: Documentary on AIDS Activism

—Read: none

>In class: Watch *United in Anger: A History of ACT UP* (2012). Directed by Jim Hubbard. Documentary on the oral history of civil disobedience in the face of social indifference and government neglect for the suffering AIDS patients, especially queer men.

*Due: Analytic Paper 2

W 4/13: “At-risk Communities” and Black Queer Agency

—Read: Bailey, Marlon M. (2009). Performance as Invention: Ballroom Culture and the Politics of HIV/AIDS in Detroit. *Souls* 11(3): 253-74.

(Note: Grade option deadline)

*Due: Before class, post on Canvas a short reflection culminating in a question about *United in Anger*.

[F 4/15: Spring Holiday, No Class]

Week 13:

Revolutionizing Pregnancy & Reproduction

M 4/18: Reproductive Risks & Public Health

—Read: Kukla, Quill. (2010). The Ethics and Cultural Politics of Reproductive Risk Warnings: A Case Study of California’s Proposition 65. *Health, Risk & Society* 12(4): 323–34.

*Due: Final Paper Proposal (Stage 1)

*Due: Before class, post on Canvas a response to someone else’s question about *United in Anger*.

W 4/20: Reproductive Justice & Mothers in Shackles

—Read**: Ocen, Priscilla A., and Julia Chinyere Oparah. (2015). Beyond Shackling: Prisons, Pregnancy, and the Struggle for Birth Justice. In *Birthing Justice: Black Women, Pregnancy, and Childbirth*, eds. J. C. Oparah and A. D. Bonaparte. Paradigm Publishers, 197–209.

**CW: Testimonies of abuse from formerly incarcerated people.

F 4/22: A Pill for Cisgender Men?

—Read: Shahvisi, Arianne. (2020). Towards Responsible Ejaculations: The Moral Imperative for Male Contraceptive Responsibility. *Journal of Medical Ethics* 46(5): 328–36.

>In class: Student-led discussion 8 (on Reproductive Health Today)

Week 14:

Queering Health

M 4/25: Gender Dysphoria and Trans Experiences

—Read: Stone, Sandy. (1994) [1987]. The Empire Strikes Back: A Posttranssexual Manifesto. *Camera Obscura* 10(2): 150–76.

v1 (1/18/22)

W 4/27: Psychiatric Disease and Queer Pathologies

—Read**: Drescher, Jack. (2010). Queer Diagnoses: Parallels and Contrasts in the History of Homosexuality, Gender Variance, and the Diagnostic and Statistical Manual. *Archives of Sexual Behavior* 39(2): 427–60.

**CW: Negative descriptions of queer and transgender identities in history.

F 4/29: Improving LGBTQ+ Healthcare

—No reading

>In class: Time to write

>In class: Student-led discussion 9 (on LGBTQ+ Healthcare today)

Week 15:

Course Conclusion

M 5/2: Workshop Draft Papers

—Read: none

>In class: Skills Workshop 5 (Peer Review)

>In class: Assign Quiz 5 (due before class Wednesday)

*Due: Final Paper Draft (Stage 2)

W 5/4: Bringing It All Together

—Read: none

*Due: Quiz 5

(Note: Final day of class)

[R 5/5—T 5/10: Finals Week, No Class]

(Note: No final exam)

*Due F 5/6: Final Revised Paper (Stage 3) before midnight

*Due Sa 5/7 (optional): Extra Credit (before midnight)

*Due Sa 5/7: Late assignments (before midnight)

Disclaimer:

The content of this syllabus is subject to change. The instructor will notify students in class and via Canvas of any changes with prior warning.

6. About the Professor

I am the Assistant Professor of Ethics at New Mexico Tech. I specialize in philosophy of science, biomedical ethics, and feminism. My research and teaching lie at the intersection of science and values, particularly the philosophical issues raised by pharmaceutical drugs. My main line of research explores how values and gender norms shape drug regulation at the US Food and Drug Administration (FDA), involving reproductive health and the labeling of drugs, as well as the consequences for women's health and reproductive justice. I am currently analyzing how values influence biomedical research on male contraception in the form of double

standards.

Through philosophy, I work on socially relevant issues in health equity, public policy, and industry-funded research. To engage a broader audience, I write essays about public philosophy and science communication. I also serve as the Faculty Advisor for Responsible Conduct of Research with the NMT Office of Research and direct the [Research Ethics series](#). To get outside my head, I climb rocks and read comics. My daily struggle is keeping house plants (likes terrariums and bonsai trees) alive in the desert climate of New Mexico—which is much less cooperative than my original home, New Orleans, LA.

I offer several philosophy courses for undergraduates involving ethics and values in science, for both general education and degree requirements in biology, computer science, and IT. I also teach gender studies courses about feminism and sex/gender in science, and ethics for the transdisciplinary cybersecurity graduate program. I am the primary adviser for [philosophy minors](#) in the CLASS department. Course offerings include:

- PHIL 130/1146: Ethics and Values in STEM, Fall semester.
- WGS/PHIL 2040: Science & Gender, Spring semester.
- PHIL 342: Philosophy of Bioethics, Fall semester.
- CSE/IT/PHIL 382: Ethics in Computing and Information Technologies, Spring semester.
- CYBS 502/PHIL 489/PHIL 589: Cybersecurity Ethics & Law.

For syllabi and more, see my website at:

<http://nmt.edu/academics/class/faculty/cchoglueck/index.php>.