

STS 150 Gender and Science
Tues/Thurs 1:40 – 3:00 pm
Storer Hall 1344

Professor Emily Klancher Merchant
ekmerchant@ucdavis.edu
SSH 1252

Course Description: This course will provide an introduction to feminist scholarship in the field of science and technology studies (STS). It will focus on the science of sex, gender, and sexuality; feminist critiques of science; and the ways in which feminism has changed science.

STS 150 fulfills the **American Cultures, Governance, and History** and the **Domestic Diversity** requirements. Although we will consider examples from other times and places, the majority of our material will emphasize the history, government, and culture of the United States, and will foreground the role of science in the production, maintenance, and contestation of inequality along gender/sex and other axes of social difference, most notably sexuality, race, and disability. All of our readings will deal with gender and many with other forms of diversity; most will be situated within the historical, cultural, and political context of the United States. Classroom lectures and discussions will be designed to help you develop facility in thinking, writing, and speaking about U.S. culture, governance, and history, and specifically about gender and other forms of diversity in that context. These competencies will be assessed through writing assignments, which will ask you to critically assess scholarship in this area.

STS 150 is a **Writing Experience** and will provide you with frequent opportunities to practice informal writing in class and formal writing out of class. All formal writing assignments and most informal writing assignments will ask you to critically analyze important works of scholarship in the field of feminist STS. You will receive written instructions for each assignment (in class and on Canvas) and written feedback on each assignment that will help you develop your writing skills in preparation for the next assignment.

Course Outcomes: Assuming that you attend class regularly, complete required readings, and submit assignments on time, you can expect to be able to do the following by the end of the quarter:

- Describe and discuss (orally and in writing) key feminist critiques of science.
- Describe and discuss (orally and in writing) the role of science in the production, maintenance, and contestation of gender/sex and racial inequality in the United States.
- Apply core concepts to new situations.
- Locate a book in its institutional and intellectual context.
- Identify a book's major arguments.
- Evaluate evidence presented by scholars to support their arguments.
- Present (orally and visually) information and arguments from books that you have read.
- Design and execute activities to help your classmates learn about important STS texts.
- Draw insights by synthesizing information from disparate works of feminist STS scholarship.

Readings: Readings should be completed before class on the day noted in the course schedule. There is a list of background readings on Canvas to give you a sense of what else is available on a given topic; read them if and when you choose. All required books are available for purchase in

the UCD Bookstore and on Amazon, and are on reserve at Shields Library. Other required readings are available online; those that are not linked in the schedule below are available on Canvas. Please note that the links below will only work if you are on campus or connected through VPN.

Expectations: The work for this course should take you about 16 hours per week on average, including time in class. If you find that you are regularly spending more than that, please let me know. I expect that you will attend all class meetings and arrive having done the required reading and any other preparatory work. Missing one class will not adversely affect your grade; longer absences will need to be worked out in advance if possible, though I will make accommodations for emergencies. Written assignments are due through Canvas *before class* on the days indicated in the schedule below. Unless prior arrangements have been made, late work will be downgraded one point immediately and another point every 24 hours.

Accommodations: I will work with the Student Disability Center (sdc.ucdavis.edu) to make accommodations for documented disabilities. All requests must be initiated through the SDC, but do let me know if your needs are not being adequately addressed. If you think you might have a disability or medical or psychological condition that affects your learning, please do not hesitate to contact the SDC for evaluation.

Technology: You are welcome to use electronic devices in class to reference readings, complete in-class assignments, and participate in other classroom activities. Any other usage (texting, phone calls, email, social media, reading the news, etc.) is strictly prohibited and will lower your attendance and participation grade. You may take notes electronically, but current research indicates that you will learn more if you take notes by hand.

Classroom Etiquette: This course will involve conversations about historical and contemporary constructions of gender, race, sexuality, and disability. These conversations may be difficult, but the classroom is a safe space to discuss and write about these issues. *Scholarly disagreements are allowed and debate is encouraged, but your comments should refer to course materials, not another person.* You will learn how to support your arguments in writing and conversation with quotes and textual references. For an up-to-date guide to appropriate and inappropriate terminology, consult the UC Davis LGBTQIA+ Resource Center Glossary (lgbtqia.ucdavis.edu/educated/glossary) or the Radical Copy Editor (radicalcopyeditor.com). I expect you to be courteous to your classmates and their ideas, to allow them to speak, and to listen to them carefully. If you think a reading or discussion may be triggering to you personally, please discuss with me in advance how we can manage the situation to protect your physical and emotional safety.

Meeting and Communication: I will hold **weekly office hours on Tuesdays at 12:15-1:15pm and Thursdays at 9:15-10:15am**. No appointments are necessary during office hours. If you need to see me outside of these hours, please contact me by email (ekmerchant@ucdavis.edu) to set up an appointment. You may also email me to discuss any aspect of this course. Please put the course number in the subject line of the email. I will respond within one business day.

Academic Integrity: As in all courses at UC Davis, you will be held to the University's Code of Academic Conduct (sja.ucdavis.edu/files/cac.pdf), which prohibits all forms of academic misconduct, from outright cheating or plagiarism to inadequate citation. You must acknowledge this Code of Academic Conduct for each course in which you are registered on the Academic Participation website (participate.ucdavis.edu). All work that you submit for this class must be your own and must not have been submitted for a grade in any other class without prior approval from myself and the instructor of the other class. I will report all cases of suspected misconduct to the Office of Student Judicial Affairs (sja.ucdavis.edu). We will discuss proper citation practices in class. Please do not hesitate to ask *in advance* if you are unsure whether something you plan to do violates the code.

Campus Resources: UC Davis offers many resources to help you cope with the challenges of college life. The Academic Assistance and Tutoring Center (success.ucdavis.edu/about/aat/index.html) offers workshops and tutoring for writing and study skills. The Center for Advocacy, Resources, and Education (care.ucdavis.edu), formerly known as the Campus Violence Prevention Program, is the on-campus, confidential resource for all students who have experienced any form of sexual or gender-based violence. The Student Health and Counseling Services (shcs.ucdavis.edu) provides a range of resources for psychological and medical support. Please do not hesitate to reach out for the help you need to succeed in college.

Assignments and Grading

In STS 150, we will focus on one particular type of writing: the book review. Writing a book review requires careful reading and critical engagement with scholarly texts, skills that will serve you well in future courses and just about any career you decide to pursue. *You will read a total of four books and write two kinds of reviews: three single-book reviews of approximately 800 words each and two two-book review essays of approximately 2000 words each.* The single-book reviews will prepare you for the two-book review essays, which will cover some of the same books. You may re-use material from the single-book reviews in your review essays, but *each essay must have a distinct argument.* Doing multiple assignments with the same form but different content serves two purposes. First, it gives you an opportunity to master a type of writing that you will most likely be required to do again in the future. Second, it allows you to get comfortable with the form of the writing so that, with each successive essay, you can engage more deeply with the content.

Everyone will read the following two books. These are available for purchase in the UCD Bookstore and on Amazon. They are also on reserve at Shields Library and available electronically through the links below (these links will only work if you are on campus or connected by VPN):

- Anne Fausto-Sterling. 2000. *Sexing the Body: Gender Politics and the Construction of Sexuality*. New York, Basic Books. <https://ebookcentral.proquest.com/lib/ucdavis/detail.action?docID=904413#>
- Banu Subramaniam. 2014. *Ghost Stories for Darwin: The Science of Variation and the Politics of Diversity*. Urbana: University of Illinois Press. <https://ebookcentral.proquest.com/lib/ucdavis/detail.action?docID=3414407#>

You will also read one book from each of the following two lists. These are available for purchase in the UCD Bookstore and on Amazon. They are on reserve at Shields Library, but are not available electronically. For each of these books, you will team up with other students who have read the book to either give a 20-minute presentation on the book (blue team) or lead your classmates through an active learning activity related to the book (gold team). Both activities will occur on the presentation dates listed below; please take these dates into account when you select your books. You will need to sign up for the books you want to read at bit.ly/sts150_signup by 10/1. No more than 10 people may sign up for any one book.

List One:

- Fine, Cordelia. 2010. *Delusions of Gender: How Our Minds, Society, and Neurosexism Create Difference*. New York: Norton. **Presentation 10/9**
- McCaughey, Martha. 2008. *The Caveman Mystique: Pop-Darwinism and the Debates Over Sex, Violence, and Science*. New York: Routledge. **Presentation 10/16**
- Oudshoorn, Nelly. 1994. *Beyond the Natural Body: An Archaeology of Sex Hormones*. New York: Routledge. **Presentation 10/11**
- Richardson, Sarah. 2013. *Sex Itself: The Search for Male and Female in the Human Genome*. Chicago: University of Chicago Press. **Presentation 10/18**

List Two:

- Colatrella, Carol. 2011. *Toys and Tools in Pink: Cultural Narratives of Gender, Science, and Technology*. Columbus: Ohio State University Press. **Presentation 11/15**
- Hicks, Marie. 2017. *Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing*. Cambridge: MIT Press. **Presentation 11/20**
- Schiebinger, Londa. 1993. *Nature's Body: Gender in the Making of Modern Science*. Boston: Beacon Press. **Presentation 11/13**
- Schiebinger, Londa. 1999. *Has Feminism Changed Science?* Cambridge: Harvard University Press. **Presentation 11/27**

Assignments will be due and graded as follows:

October 16: Single-book review of *Sexing the Body* (7 points)

October 9-18: Group presentations on books from List 1 (7 points)

October 25: Single-book review of your choice of books from List 1 (7 points)

November 1: First draft of Review Essay #1 (*Sexing the Body* and your List 1 book) (7 points)

November 6: In-class peer editing of Review Essay #1 (7 points)

November 13: Review Essay #1 due (10 points)

November 13-27: Group presentations on books from List 2 (7 points)

November 20: Single-book review of your choice of books from List 2 (7 points)

December 4: First draft of Review Essay #2 (*Ghost Stories for Darwin* and your List 2 book) (7 points)

December 6: In-class peer editing of Review Essay #2 (7 points)

December 14: Review Essay #2 due (10 points)

Specific instructions for each activity will be given in class.

The course is worth a total of **100 points**. You can earn up to 83 of these points through the

assignments listed above. *You will earn the remaining 17 points by coming to class well-prepared and participating in classroom activities.* Participation points will be allocated three times during the quarter following an in-class self review. Grades will be assigned as follows: A+ [100, 97), A [97, 93), A- [93, 90), B+ [90, 87), B [87, 83), B- [83, 80), C+ [80, 77), C [77, 73), C- [73, 70), D+ [70, 67), D [67, 63), D- [63, 60), F [60, 0].

Schedule

Thursday 9/27: Introduction to the Course and to Feminist Science Studies

Week 1:

Tuesday 10/2: Reading a Book and Defeating Dualisms

- o **Read:** Anne Fausto-Sterling. 2000. *Sexing the Body: Gender Politics and the Construction of Sexuality*. New York, Basic Books. Preface, Acknowledgments, Chapters 1 and 9. <https://ebookcentral.proquest.com/lib/ucdavis/detail.action?docID=904413#>
- o **Optional:** If you want to know more about Dynamic Systems Theory, watch Fausto-Sterling's recent lecture on infant gender acquisition: <http://www.annefaustosterling.com/#1446583429521-a5848f5f-070b>

Thursday 10/4: Intersex and Experience-Based Expertise

- o **Read:** Fausto-Sterling, *Sexing the Body*. Chapters 2-4.

Week 2:

Tuesday 10/9: Sex and/in the Brain

- o **Read:** Fausto-Sterling, *Sexing the Body*. Chapter 5.
- o **Presentation:** Fine, *Delusions of Gender*.

Thursday 10/11: Sex Hormones and Actor Network Theory

- o **Read:** Anne Fausto-Sterling, *Sexing the Body*. Chapters 6-8.
- o **Presentation:** Oudshoorn, *Beyond the Natural Body*.

Week 3:

Tuesday 10/16: Gender and Evolution

- o **Due before class: Review of Fausto-Sterling, *Sexing the Body***
- o **Read:** Kim Q. Hall. 2012. 'Not much to praise in such seeking and finding': Evolutionary psychology, the biological turn in the humanities, and the epistemology of ignorance. *Hypatia* 27(1): 28-49. <https://doi.org/10.1111/j.1527-2001.2011.01229.x>
- o **Presentation:** McCaughey, *The Caveman Mystique*.

Thursday 10/18: Sex Chromosomes and Gender Critical Science

- o **Read:** Sarah Richardson. 2012. Sexing the X: How the X became the 'female chromosome.' *Signs* 37(4): 909-933. <https://doi.org/10.1086/664477>
- o **Presentation:** Richardson, *Sex Itself*.

Week 4:

Tuesday 10/23: Ghost Stories and Intersectionality

- o **Read:** Banu Subramaniam. 2014. *Ghost Stories for Darwin: The Science of Variation and the Politics of Diversity*. Urbana: University of Illinois Press. Preface, Acknowledgments,

Introduction, Conclusion. <https://ebookcentral.proquest.com/lib/ucdavis/detail.action?docID=3414407#>

Thursday 10/25: Genetic Variation and the Ghost of Eugenics

- o **Due before class: Review of List One Book**
- o **Read:** Subramaniam, *Ghost Stories for Darwin*. Chapters 1-3.

Week 5:

Tuesday 10/30: Invasion Biology and Situated Knowledge

- o **Read:** Subramaniam, *Ghost Stories for Darwin*. Chapters 4-6.

Thursday 11/1: Women in Science

- o **Due before class: First draft of Review Essay #1**
- o **Read:** Subramaniam, *Ghost Stories for Darwin*. Chapters 7-9.

Week 6:

Tuesday 11/6: Peer Editing

Thursday 11/8: No Class

Week 7:

Tuesday 11/13: Gender and Race in the History of Science

- o **Due before class: Review Essay #1**
- o **Read:** Londa Schiebinger. 1990. "The Anatomy of Difference: Race and Sex in Eighteenth-Century Science." *Eighteenth-Century Studies* 23(4): 387-405. <https://www.jstor.org/stable/2739176>
- o **Presentation:** Schiebinger, *Nature's Body*.

Thursday 11/15: The Gender of Science in Popular Culture

- o **Due before class: Submit a video clip depicting women in science.**
- o **Presentation:** Colatrella, *Toys and Tools in Pink*

Week 8:

Tuesday 11/20: Women and Computing

- o **Due before class: Review of List Two Book**
- o **Read:** Jennifer S. Light. 1999. When computers were women. *Technology and Culture* 40(3): 455-483. <https://www.jstor.org/stable/25147356>
- o **Presentation:** Hicks, *Programmed Inequality*.

Thursday 11/22: No Class

Week 9:

Tuesday 11/27: Has Feminism Changed Science?

- o **Read:** Evelyn Hammonds and Banu Subramaniam. 2003. "A Conversation on Feminist Science Studies." *Signs* 28(3): 923-944. <https://www.jstor.org/stable/10.1086/345455>
- o **Presentation:** Schiebinger, *Has Feminism Changed Science?*

Thursday 11/29: #MeToo, STEM Edition

- o **Read:** 500 Women Scientists. NAS Report on Sexual Harassment. <https://500womenscientists.org/nas-summary>

Week 10:

Tuesday 12/4: Data on Gender and Science

- o **Due before class: First draft of Review Essay #2**

Thursday 13/6: Peer Editing

- o **Peer editing review and participation review #3 due 12/7 at 5pm**

Friday 12/14: Review Essay #2 due 10am