

# SC204 Introduction to Feminist Science and Technology Studies

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Office Hours: Tuesdays 12:30-13:30 by appointment

Class Meetings: Tuesdays 9:00-12:15

Room: TBD

# **Course Description**

This course explores feminist science and technology studies (STS) as closely related to the disciplines of history and sociology of science, as well as to scientific practices in natural sciences and interdisciplinary approaches in social sciences. The explicit aim of this course is to give a comprehensive and historically contextualized overview of the key themes and debates within feminist STS scholarship and related disciplines such as the actor-network-theory, postcolonial theory, new materialism. Through readings, class discussions and practical assignments we will explore feminist engagements with science through the lenses of gender, sexuality, race, and class. The course is structured in three parts. The first part grapples with feminist epistemologies and introduces key methodologies. The second part maps out the spaces and places of scientific practices from laboratories and fieldwork to the issues of colonial legacy of Western scientific endeavors. The third part focuses on the body and medicine, introducing the gendered themes of materiality. Students do not need to have backgrounds in feminist theory nor scientific practice; the course is designed to work across disciplines.

# Requirements

## Attendance and participation

This is a discussion-based course. Students are required to attend all sessions (one absence is allowed) because an important component of learning will happen by listening and discussing the readings in the classroom with others. Basic preparation for each session is reading all assigned materials. On a weekly basis, students will be expected to devote up to four hours to complete the assigned readings. In class, students are expected to be able to critically engage with the assigned readings: express their opinions, ask questions, analyze and debate the issues posed in the texts in depth. The syllabus will be made available in a digital format, but students are strongly encouraged to purchase the course reader and use library services.

Attendance at all classes is a crucial part of the education offered by Bard College Berlin. To account for minor circumstances, two absences from twice-per-week courses or the equivalent (e.g., one absence from a once-per-week course) should not affect the participation grade or require documentation. Beyond that, students need to provide a doctor's notice to the instructor and an extra assignment will be set up for them to make up for each missed class. Bard College Berlin does not offer credit for any course in which a student has missed more than 30% of classes, regardless of the reasons for the absences. The full Bard College Berlin attendance policy can be found in the Student Handbook, Section 2.8.

# **Academic Integrity**

Bard College Berlin maintains the highest standards of academic integrity and expects students to adhere to these standards at all times. Instances in which students fail to meet the expected standards of academic integrity will be dealt with under the Code of Student Conduct, Section 14.3 (Academic Misconduct) in the Student Handbook. Acts of academic misconduct (plagiarism, self-plagiarism, collusion, cheating) will be reported and result in a disciplinary process (please see the Student Handbook for details).

# <u>Assignments</u>

- 1. Class Presentation: After Week 1, each student will choose one reading or a cluster of readings from the assigned material and in the beginning of the given class they will briefly summarize the main argument of the text(s), discuss its wider implications and/or applications, and raise 2-3 questions for a group discussion. The presentation should take approx. 15 minutes. Students are encouraged to use various mediums (videos, music, performance and visual arts, etc.) and creative forms of expression.
- 2. Paper proposal + Peer review: Students prepare the preliminary title of their final paper with a short abstract (300-500 words) and at least 3 bibliography titles. These proposals will be distributed among other students for a peer review (150-200 words). The paper proposals are due <u>March 10, 2023</u> by noon to be submitted electronically via Google Classroom. Feedback from the instructor and one peer feedback are due week 8 (<u>March 20, 2023</u>).
- 3. **Final paper**: The final paper should be 3000-3500 words long. The paper is expected to critically engage with one or two of the themes developed in the class. It has to be based on required and suggested readings from the syllabus, as well as additional sources and literature. Students are encouraged to bring in their own examples, analyze original case studies, and engage with matters that they are directly affected by. I am available for consultations during office hours. Papers are due by noon **May 15, 2023**, to be submitted electronically via Google Classroom. Essays that are up to 24 hours late can be downgraded up to one full grade (from B+ to C+, for example).

# Grade Breakdown

Active participation in class discussions 30% Class Presentation 20% Paper proposal and peer review 10% Final Paper 40%



# SCHEDULE

## Week 1: Introduction: Why Feminist STS Matters?

In this introductory class I will present the structure of the course, discuss the assignments and grading, and we will divide topics for presentations. Together we will discuss the expectations from the course and start off with a general discussion about what feminist theory can offer for history and sociology of science. <u>Please read the two assigned articles!</u>

## Required readings:

Banu Subramaniam. "Moored Metamorphoses: A Retrospective Essay on Feminist Science Studies." *Signs: Journal of Women in Culture and Society* 34, No. 4 (2009): 951-980.

Wenda Bauchspies and María Puig de la Bellacasa. "Feminist science and technology studies: A patchwork of moving subjectivities. An interview with Geoffrey Bowker, Sandra Harding, Anne Marie Mol, Susan Leigh Star and Banu Subramaniam." *Subjectivity* 28 (2009): 334-344.

#### Recommended readings:

Uma Narayan, "The project of feminist epistemology: Perspectives from a non western feminist." In: A.M. Jaggar & S. Bordo (Eds.), *Gender/Body/Knowledge: Feminist Reconstructions of Being and Knowing* (New Brunswick: Rutgers University Press, 1989), pp. 256-69.

Nina Lykke, "Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science." In: (eds.) Lykke, Nina & Braidotti, Rosi. *Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace* (London & New Jersey: Zed Books, 1993), pp. 13-29.

# PART I. FEMINIST EPISTEMOLOGIES

#### Week 2: Sorting Things Out: Classifications

# Required readings:

Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (London, New York: Routledge, 2002), pp. 136-158.

Londa L. Schiebinger, "Why Mammals Are Called Mammals" in: *Nature's Body: Gender in the Making of Modern Science* (Boston: Beacon Press, 1993), pp. 40-74.

# Recommended reading:

Geoffrey C. Bowker and Susan Leigh Star, "Some Tricks of the Trade in Analyzing Classification" in: *Sorting Things Out: Classification and its Consequences, Inside Technology* (Cambridge, Mass: MIT Press, 1999), pp. 33-50.

## Week 3: Feminist Standpoint Theory

#### Required readings:

Sandra G. Harding, "From feminist empiricism to feminist standpoint epistemologies." in: *The Science Question in Feminism* (Milton Keynes: Open University Press, 1986), pp. 136-162.



bell hooks, "Choosing the Marigin as a Space of Radical Openness," in *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies*, ed. Sandra G. Harding (New York: Routledge, 2004), 153–59.

## Recommended readings:

bell hooks, Feminist theory: From margin to center (London: Pluto Press, 1990).

Sharon Crasnow, "Is Standpoint Theory a Resource for Feminist Epistemology? An Introduction," *Hypatia* 4, no. 24 (2009): 189-192.

# Week 4: Situated Knowledges

#### Required readings:

Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (1988): 575–99.

Patricia Hill Collins, "Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought," *Social Problems* 6, no. 3 (1986): 14-32.

# Recommended readings:

Sandra Harding, "Rethinking Standpoint Epistemology: What is Strong Objectivity?" in L. Alcoff and E. Potter, eds., *Feminist Epistemologies* (New York, London: Routledge, 1993), pp. 49-82.

Lorraine Daston, "Objectivity and the Escape from Perspective." *Social Studies of Science* 22, no. 4 (1992): 597-618.

#### Week 5: Feminist New Materialisms

#### Required readings:

Iris van der Tuin, "New Feminist Materialisms," *Women's Studies International Forum* 34, no. 4 (July 2011): 271–77.

Jane Bennett, Vibrant Matter: A Political Ecology of Things (Durham: Duke University Press, 2010), pp. 1-19.

Rebecca Coleman, "Glitter: A Methodology of Following the Material," *MAI*, May 15, 2019: <a href="https://maifeminism.com/glitter-a-methodology-of-following-the-material/">https://maifeminism.com/glitter-a-methodology-of-following-the-material/</a>, pp. 1-8.

# Recommended readings:

For definitions, please check: New Materialism Almanac 2016, http://newmaterialism.eu/.

Karen M. Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), pp. 3-25.

QueerLit Podcast with Nicole Seymour: <a href="https://www.spreaker.com/user/14328383/queer-lit-nicole">https://www.spreaker.com/user/14328383/queer-lit-nicole</a>

## PART II. PLACES AND SPACES OF SCIENCE

# Week 6: Laboratory

#### Required readings:

Steven Shapin, Simon Schaffer. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, N.J: Princeton University Press, 1985), Chapter 2, pp. 22-79.



Eva Hayward, "Fingeryeyes: Impressions of Cup Corals," *Cultural Anthropology* 25, no. 4 (November 2, 2012): 577–99.

Martina Schlünder, "Lousy Research: The History of Typhus Vaccine Production, 1915-1945" in: *Boxes: A Field Guide*, eds. Susanne Bauer, Martina Schlünder, and Maria Rentetzi (London: Mattering Press, 2020), pp. 539-555.

## Recommended readings:

Liboiron, M., Ammendolia, J., Winsor, K., Zahara, A., Bradshaw, H., Melvin, J., Mather, C., Dawe, N., Wells, E., Liboiron, F.and Fürst, B. "Equity in Author Order: A Feminist Laboratory's Approach." *Catalyst: Feminism, Theory, Technoscience* 2, no. 3 (2017): 1-17.

Bruno Latour and Steven Woolgar, *Laboratory Life: The Construction of Scientific Facts*. (Princeton: Princeton University Press, 1986).

#### Week 7: Fieldwork

## Required readings:

Linda Marie Fedigan, "The Paradox of Feminist Primatology: The Goddess's Discipline?," in *Feminism in Twentieth-Century Science, Technology, and Medicine*, eds. Angela N. H. Creager, Elizabeth Lunbeck, and Londa L. Schiebinger, (Chicago: University of Chicago Press, 2001), pp. 46–72.

Juno S. Parreñas, "An Anthropology of primatology exceeds the Primate order: A feminist and queer critique," *Cahiers d'anthropologie sociale* 18, no. 1 (2019): 126–43.

# Recommended readings:

Deborah Blizzard, Wenda K. Bauchspies, "Stability of Shifting Ground. Feminist Ethnography and Practice," *Praktyka Teoretyczna* 10, no. 4 (2013): 113-134, https://pressto.amu.edu.pl/index.php/prt/article/view/2961

Silvia Tomášková, "Mapping a Future: Archaeology, Feminism, and Scientific Practice," *Journal of Archaeological Method and Theory* 14, no. 3 (2007): 264–84.

## Week 8: Science, Domination, and Colonialism

# Required readings:

Londa L. Schiebinger, "Feminist history of colonial science." Hypatia 1, no. 19 (2004): 234-254.

Anne McClintock, *Imperial Leather: Race, Gender, and Sexuality in the Colonial Contest* (New York: Routledge, 1995), Chapter 1, pp. 21-61.

## Recommended readings:

Katherine McKittrick. *Demonic grounds: Black women and the cartographies of struggle* (Minneapolis: University of Minnesota Press, 2006).

#### Week 9: Postcolonial Science Studies

#### Required readings:

Kim TallBear, "Narratives of race and indigeneity in the Genographic Project." *The Journal of Law, Medicine & Ethics* 35, no. 3 (2007): 414-424.



Max Liboiron. Pollution is Colonialism. (Durham: Duke University Press, 2021), Introduction: pp. 1-37.

#### Recommended readings:

Vandana Shiva, "Colonialism and the evolution of masculinist forestry." In Sandra Harding (Ed.) *The* "racial" economy of science: Toward a democratic future (Bloomington, IN: Indiana University Press, 1993), pp. 303-314.

Warwick Anderson, "Postcolonial Technoscience." Social Studies of Science 5-6, no. 32 (2002): 643-658.

#### PART III. THINKING BODIES

#### Week 10: Sex/Gender

#### Required readings:

Evelyn Fox Keller, "The Gender/Science System: Or, Is Sex to Gender as Nature Is to Science?," *Hypatia* 2, no. 3 (1987): 37–49.

Emily Martin, "The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles," *Signs*, Vol.16, No.3. (1991): 485-501.

## Recommended readings:

Anne Fausto-Sterling, "The bare bones of sex: Part 1—Sex and Gender." Signs 2, no. 30(2005): 1492-1527.

Londa Schiebinger, "More Than Skin Deep: The Scientific Search for Sexual Difference," in: *The Mind Has No Sex*? (Cambridge Mass.: Harvard U.P., 1989), pp. 189-213.

# Week 11: Cyborgs

# Required readings:

Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. 149-181.

Hilary Malatino, "Biohacking Gender," Angelaki 22, no. 2 (April 3, 2017): 179–90.

# Recommended readings:

Malini Johar Schueller, "Analogy and (White) Feminist Theory: Thinking Race and the Color of the Cyborg Body," *Signs: Journal of Women in Culture and Society* 31, no. 1 (September 1, 2005): 63–92.

Cecilia Åsberg, "Enter Cyborg: Tracing the Historiography and Ontological Turn of Feminist Technoscience Studies," *Feministtechnoscience.Se*, 2010, 1–25.

#### Week 12: Hormones

#### Required readings:

Nelly Oudshoorn, *Beyond the Natural Body: An archaeology of sex hormones* (New York and London: Routledge, 1994), Chapter 2: pp. 14-40.

Celia Roberts, "Drowning in a Sea of Estrogens: Sex Hormones, Sexual Reproduction and Sex." *Sexualities* 6.2 (2003): 195–213.



## Recommended readings:

Merriley Borell, "Organotherapy and the Emergence of Reproductive Endocrinology." *Journal of the History of Biology* 18.1 (1985): 1–30.

Paul B. Preciado, *Testo Junkie: Sex, Drugs, and Biopolitics in the Pharmacopornographic Era*, (New York: The Feminist Press, 2013), Chapter 8, pp. 144-235.

# Week 13: Reproductive technologies

## Required readings:

Marks, Lara V. "Sexual Chemistry" in: *Sexual Chemistry: A History of the Contraceptive Pill*. (Yale University Press, 2001), pp. 60-88.

Michelle Murphy, "Traveling Technology and a Device for Not Performing Abortions" in: *Seizing the Means of Reproduction: Entanglements of Feminism, Health, and Technoscience*. (Durham, NC: Duke University Press Books, 2012), pp. 150-176.

# Recommended readings:

Octavia E. Butler, Bloodchild (New York: Seven Stories Press, 2005), pp. 1-21.

Sophie Lewis, "Amniotechnics," The New Inquiry (blog), January 25, 2017, <a href="https://thenewinquiry.com/amniotechnics/">https://thenewinquiry.com/amniotechnics/</a>.

Agata Ignaciuk, "No Man's Land? Gendering Contraception in Family Planning Advice Literature in State-Socialist Poland (1950s–1980s)," *Social History of Medicine* 4, no. 33 (November 2020): 1327–1349.

# Week 14: In-Class Workshop: "The Margins Manifesto Lab: Between Species and Genres."

For the last session we will engage in a practical in-class assignment using primary and secondary scientific sources. In our ready-made laboratory we will form a team whose task will be to first dissect excerpts from natural-scientific articles and then morph them into a multispecies story, which will hopefully transcend the genres of political, academic, and creative writing. This exercise will help in summing up the main topics discussed in the course and will lead to a final discussion on the course's outcomes.

## Required reading:

Patricia Kaishian & Hasmik Djoulakian, "The Science Underground: Mycology as a Queer Discipline." *Catalyst: Feminism, Theory, Technoscience* 2, no. 6 (2019): 1–26.

#### Recommended:

"For the Wild" Podcast, Interview with Dr Patricia Kaishian: <a href="https://podcasts.apple.com/us/podcast/for-the-wild/id942809988?i=1000543658615">https://podcasts.apple.com/us/podcast/for-the-wild/id942809988?i=1000543658615</a>