Western University Department of Philosophy

Course Outline 2024-25

Grad Course Number: 9703A
Cross-listed with Undergrad Course Number: 4311F

Problems in the Philosophy of Science: Women and Science

The course focuses on the intersection between scientific knowledge and women. We consider the historical and sociological contexts that prevented women from accessing and producing scientific knowledge. We then discuss the questions at the center of the feminist reflection on science and the different perspectives produced in the feminist epistemologies.

Description

Learning Outcomes

No special background is required for the enrolment in this course. This course satisfies the requirements for a course in Philosophy of Science as well as Feminist Philosophy. Upon successful completion of this course, students will be able to:

Resources

Readings and other course materials will be made available through the OWL course website and the library system. Authors whose texts will be discussed include Karen Barad, Sandra Harding, Donna Haraway, Helen Longino, and Londa Scheibinger. Beyond texts, in the course we will possibly discuss additional multimedia material.

Requirements

- 1. Weekly reading responses
 - Each week the students will engage with reading and post on the Perusall course website a reaction, in the form of text annotations and questions based on the readings and addressing topics that they would like to be discussed in the class.
- 2. Participation in group discussions
 - A goal of this course is to give the opportunity to actively engage with the reading

Reccomandations

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

- Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
- Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
- Follow weekly checklists created on OWL or create your own to help you stay on track.
- Take notes as you go through the lesson material. Treat this course as you would a face-to-face course. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.
- Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.

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Western Academic Policies and Statements

Department of Philosophy Policies

The Department of Philosophy Policies which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at http://uwo.ca/philosophy/undergraduate/policies.html.

It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus ignorance of these policies cannot be used as grounds of appeal.

Course Commitments

The last day of scheduled classes in any course will be the last day on which course assignments will be accepted for credit in a course. Instructors will be required to return assignments to students as promptly as possible with reasonable explanations of the instructor's assessment of the assignment.

Accommodations

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. Documentation shall be submitted, as soon as possible, to the Office of the Dean of the student's Faculty of registration, together with a request for relief

Plagiarism Checking

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com http://www.turnitin.com.

Use of AI assistance

The use of AI assistance for the completion of assignments and for the final essay will be treated as a form of plagiarism. Academic sanctions may be taken accordingly.

Copyright and Audio/Video Recording Statement

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. Yu20.2 (n) -0.2 (.6 (L) -0.mn) -0.2

Week 3 - Spaces of Science, Spaces of Women

- 1. Ginzberg, R., Lang, R., & Guttmacher, A. (1987). <u>Uncovering gynocentric science</u>. Hypatia, 2(3), 89-105.
- 2. Schiebinger, L. (1991). Women in Science: Historical perspective.
- 3. Schiebinger, L. (1991). <u>Institutional environment. The mind has no sex? Women in the origins of modern science</u> (pp. 10-36). Cambridge, MA: Harvard University Press.
- 4. Davis, R. (2018). Women Scribes: The Technologists of the Middle Ages.
- 5. Popova, M. (2016). The Glass Universe: <u>The untold story of the trailblazing women scientists and patrons who catalogued the stars and helped prove that the universe is expanding.</u>

Optional/Recommended:

- ! Try to read as many as possibly files from: Women in Science (biographies)
- ! Try to watch one of these movies: Enigma(2011) and/or Hidden Figures (2017)
- ! Read the full first four chapters of Schiebinger, L. (1991). <u>The mind has no sex?</u> . <u>Cambridge, MA: Harvard University Press.</u>

Week 4 - Is there a Feminist Science?

- Schiebinger, L. (2000). <u>Has feminism changed science?</u> Signs, 25(4), 1171-1175.
- 2. Schiebinger, L. (2003). Introduction: Feminism in the Sciences. Signs, 28(3), 859-866.
- 3. Keller, E. F. (1989) <u>Women and basic research: respecting the unexpected.</u> Technology review, 1984-11-01, Vol.87, p.44 and Keller, E. F. (1984) <u>A feeling for the organism</u> (last chapter of the book)
- 4. Fedigan, L. M. (2001). <u>The paradox of feminist primatology: The GoddessÕs discipline</u>? A. Creager, E. Lunbeck, & L. Schiebinger (Eds.), Feminism in twentieth-century science, technology, and medicine (pp. 46-72). Chicago, IL: University of Chicago
- 5. Wylie, A. (1997) <u>The Engendering of Archaeology. Refiguring Feminist Science Studies</u>, Osiris (Bruges), 1997, Vol.12, p.80-99
- 6. Whitten, B. (2012). (Baby) steps toward feminist physics. Journal of Women and Minorities in Science and Engineering, 18(2), 115-134.

Optional/recommended

- ! Keller, E. F. (1984) <u>A feeling for the organism</u>: the life and work of Barbara McClintock.
- ! Schiebinger, L. (1999). <u>Has feminism changed science?</u> Harvard University Press
- ! Article collection (1992) <u>The Knowledge explosion : generations of feminist scholarship,</u> New York : Teachers College Press
- ! Article collection (2003) Feminism inside the sciences, Signs, Journal of Women in Culture and Society, 28 (2003):859-922
- ! Weasel, L. (2001). Laboratories without walls: The science shop as a model for feminist community science in action. In M. Mayberry, B. Subramaniam, & L. Weasel (Eds.), Feminist science studies: A new generation (pp. 305-320). New York: Routledge.

Video of Alison Wylie: OWhy Feminism Matters to ArchaeologyO

Week 5 - Feminist Science Fiction

This week there is no class because it is Thanksgiving, so there will be a special "holiday reading". In our discussion it was mentioned that language shapes the narratives about science and gender, but

can we use language to create the future we desire? Feminist science writers have done so! We start by reading:				

- 5. Clough, S. (2004), <u>Having It All</u>: Naturalized Normativity in Feminist Science Studies. Hypatia, 19: 102-118.
- Hundleby, Catherine. (2011). Feminist Empiricism. Handbook of Feminist Research: Theory and Praxis, 28-45.

Optional/Recommended

- ! Nelson, Lynn Hankinson, 1990, Who Knows: From Quine to a Feminist Empiricism, Philadelphia, Pa.: Temple University Press.
- ! Quine, W. V. O., 1963, ÒTwo Dogmas of Empiricism,Ó in From a Logical Point of View, New York: Harper & Row.
- ! Quine, 1969, ÒEpistemology Naturalized,Ó in Ontological Relativity and Other Essays, New York: Columbia University Press.

Week 11 - Neo-Materialism

- 1. Barad, K. (2003) Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter, Signs Vol. 28, No. 3, Gender and Science: New Issues (pp. 801-831)
- 2. Fraser, Nancy and Linda Nicholson, 1990, Social Criticism without Philosophy, Ó in Nicholson 1990.
- 3. Iris van der Tuin (2019) New Concepts for Materialism: Introduction
- 4. Fricker, M., ÒFeminism in epistemology: Pluralism without postmodernismÓ
- 5. Coole, D. and Frost, S. (2010) "Introducing the New Materialism" in New Materialism. Ontology, Agency and Politics, Duke University Press.

Optional/Recommended

- ! Barad, K. (2007) Meeting the universe halfway: quantum physics and the entanglement of matter and meaning, Chapter 4, Durham: Duke University Press.
- ! Hekman, S. (1992) Gender and Knowledge. Elements of a Postmodern feminism. Chap.1 and Chap.4, Northeastern University Press, Boston.
 - ! Rick Dolphijn and Iris van der Tuin (2018) New Materialism: Interviews & Cartographies
- ! Jennifer Mae Hamilton, Susan Reid, Pia van Gelder and Astrida Neimanis (2018) Feminist, Queer, Anticolonial Propositions for Hacking the Anthropocene: Archive
- ! Smith, B. H. (2018) Practicing Relativism in the Anthropocene: On Science, Belief, and the Humanities