

Fall 2020
HST427/527 Topics in the History of Science

Women Scientists

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Martha Maxwell (1831-1881), Colorado Naturalist & Taxidermist

Course Description: The story usually goes that with few exceptions women could not be scientists until late into the twentieth century when they finally elbowed their way into laboratories. This course, focusing primarily on American scientists, will show that women have been actively studying and advancing the sciences for centuries, though their legacies have often been ignored or erased. Going beyond the celebrity scientists who make their way into popular biographies, we will read about the multiple ways common women and men have practiced science; how race, gender, and class impacted credibility; how educational access transformed over time; and how scientists fought for space to follow their passion. More than just learning about the historical erasures and inequities, students will actively counter them. Over the course of the term, students write new articles or significantly edit existing articles on women in science on Wikipedia. Through that process, students will mine the digital resources and databases at PSU's library, learn how to evaluate these sources for accuracy and authority, and discover how Wikipedia works behind the scenes.

Office Hours: Please sign up for office hours at catherinemcneur.com/contact. Office hours will take place on Google Hangouts. Please use your pdx.edu account. If you cannot meet during the office hours listed, please email me.

Grades [HST427/HST495]:

5% Wikipedia Training

Complete the assigned training modules on the Wikipedia Dashboard each week. This will be graded as pass/fail. In other words, if you participate in all the modules, you'll get 10/10 points. If you don't, you'll get 0/10.

30% Discussion Participation

By Monday each week, respond to each of the discussion questions. You can only create a thread twice each week—most of your entries should be responses to classmates' threads. Your responses should show evidence of close reading of the course materials and should show engagement in the conversation with your classmates.

5% Topic Selection

By 10/19 at 12pm submit a paragraph explaining what topic you've chosen, whether it's a American woman scientist not currently on Wikipedia or one whose page needs significant editing. You can also choose an associated institution, organization, book, etc., as long as it relates to our course content. Make a case for your choice in the short paragraph and make sure there are at least a few sources out there before you commit. This will be graded pass/fail. I'll be giving you feedback and guiding you if you need to change course before you move on.

5% Bibliography

By 10/26 at 12pm submit a bibliography that you intend to consult for your Wikipedia entry. These books and articles ultimately become your citations. Briefly annotate each entry to explain what kind of material it contains about your scientist and why you find the source to be a good authority (consider the publisher, the author's expertise, etc.). Your bibliography should include at least four books or articles.

10% Peer Review of Classmates

By 11/16 at 12pm, you will be expected to provide feedback to two classmates on their Wikipedia entry. Follow the [guidelines provided by WikiEDU](#) on how best to provide feedback.

30% Wikipedia Contribution

By 11/30 at 12pm, finalize your Wikipedia article in your Sandbox. See the rubric on D2L for details about expectations.

- 15% Presentation and Reflective Essay on Research/Wikipedia
On 12/2 at 12pm you will submit a 5-minute video presentation about the scientist you focused on, and your experience writing for Wikipedia. Classmates will be asked to watch each video and by 12/4 at 12pm respond with questions or comments, as well as answer the questions posed by classmates to your video. You will also be asked to write a 500-word reflective essay on your experience writing for Wikipedia. See prompt on D2L for further details.

Grades [HST527/HST595]:

In addition to the above assignments, students enrolled in the graduate-level HST527 or HST595 will also be required to read and write 500-word book reviews for two books (either group A, or group B). They will then post a short video (~5 min) sharing with classmates how the books touched on themes in the course, what kinds of sources/methods the authors used, and whether they'd recommend classmates read the books.

Group A: 500-word book review and 5-minute video presentation

Renee Bergland, [*Maria Mitchell and the Sexing of Science: An Astronomer Among the American Romantics*](#) (Beacon Press, 2008)

Dava Sobel, [*The Glass Universe: How the Ladies of the Harvard Observatory Took the Measure of the Stars*](#) (Viking, 2016)

Group B: 500-word book review and 5-minute video presentation

Deidre Cooper Owens, [*Medical Bondage: Race, Gender, and the Origins of American Gynecology*](#) (University of Georgia, 2017)

Susan Lynn Smith, [*Sick and Tired of Being Sick and Tired: Black Women's Health Activism in America, 1890-1950*](#) (UPenn, 1995)

The grading for HST527/HST595 is as follows:

- 5% Wikipedia Training
- 25% Discussion Participation
- 5% Bibliography Submission
- 30% Wikipedia Contribution
- 5% Peer Review & Collaboration with Classmates
- 10% Presentation and Reflective Essay on Research/Wikipedia
- 10% Book Review #1 [due 10/19 12pm]
- 10% Book Review #2 [due 11/16 12pm]

Course Schedule:

Week 1: Confronting Erasures

Readings

Margaret W. Rossiter, ["The Matthew Matilda Effect in Science,"](#) *Social Studies of Science* 23.2 (May 1993): 325-341.

Sara Stidstone Gronim, ["What Jane Knew: A Woman Botanist in the Eighteenth Century,"](#) *Journal of Women's History* 19.3 (Fall 2007): 33-59.

Sara Boboltz, ["Editors Are Trying To Fix Wikipedia's Gender and Racial Bias Problem,"](#) *Huffpost*, 15 April 2015.

Claire Jarvis, ["What a Deleted Profile Tells Us About Wikipedia's Diversity Problem,"](#) *Undark*, 25 April 2019.

Wikipedia Work (on Wikipedia Dashboard) [due by 10/5 12pm]

Introduction to Wikipedia ["Editing Wikipedia,"](#) pp1-5.

Introduction to Wikipedia: "Evaluating Wikipedia"

Get Started on Wikipedia: Wikipedia Policies

Get Started on Wikipedia: Sandboxes, Talk Pages, and Watchlists

Create a Wikipedia account.

Discussion on D2L [due by 10/5 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 2: Women as Amateurs & Public Scientists

Readings

Sally Gregory Kohlstedt, ["In from the Periphery: American Women in Science, 1830-1880,"](#) *Signs* 4.1 (Autumn 1978): 81-96.

Vera Norwood, "The Illustrators: Women's Drawings of Nature's Artifacts," in *Made from This Earth* (Chapel Hill: UNC, 1993), 55-97. [pdf]

Mary Treat, "Preface" and your choice of ONE part (Birds, Insects, Plants that Eat Insects, or Flowering Plants) in [Home Studies in Nature](#) (New York: Harper & Brothers, 1885), 5-6 + your choice of section.

Wikipedia Work (on Wikipedia Dashboard) [due by 10/12 12pm]

Training: Evaluate articles and sources

Training: How to edit: Wikicode vs. Visual Editor

Exercise: Evaluate Wikipedia

Discussion on D2L [due by 10/12 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 3: Education as Access

Readings

Deborah Jean Warner, "[Science Education for Women in Antebellum America](#)," *Isis* 69.1 (Mar 1978): 58-67.

Kim Tolley, "Chapter 8: Physics for Boys," in [The Science Education of American Girls](#) (Routledge, 2003), 177-208.

Helen Zoe Veit, "A School for Wives: Home Economics and the Modern Housewife," in [Modern Food, Moral Food: Self-Control, Science, and the Rise of Modern American Eating in the Early Twentieth Century](#) (UNC, 2013): 77-100.

Wikipedia Work (on Wikipedia Dashboard) [due by 10/19 12pm]

Exercise: Choose your article

Read the bibliographies, history, and women's studies guides for writing articles

Discussion on D2L [due by 10/19 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Due on D2L [due by 10/19 12pm]: Submit paragraph with your chosen article topic for feedback.

HST527: Book Review #1 [due by 10/19 12pm]

Week 4: Space for Women to Do Science

Readings

Kara Swanson, "[Rubbing Elbows and Blowing Smoke: Gender, Class, and Science in the Nineteenth-Century Patent Office](#)," *Isis* 108, no. 1 (March 2017): 40-61.

Donald L. Opitz, "[Domestic Space](#)" in Lightman, ed., *A Companion to the History of Science* (2016)

Debra Lindsay, "[Intimate Inmates: Wives, Households, and Science in Nineteenth-Century America](#)," *Isis* 89.4 (Dec 1998): 631-652.

Smithsonian Symposium on Women in Science

Make sure to attend at least one event this week on Tuesday, Wednesday, or Thursday that is part of the Smithsonian Symposium on Women in Science. Links and further information will be on D2L.

Wikipedia Work (on Wikipedia Dashboard) [due by 10/26 12pm]

Training: Adding Citations

Exercise: Add to an article

Exercise: Copyedit an article

Due on D2L [10/26 12pm]: Bibliography Submission

Discussion on D2L [due by 10/26 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 5: Women & Environmental Protection

Readings

Maril Hazlett, "Voices from the Spring: Silent Spring and the Ecological Turn in American Health," in *Seeing Nature through Gender*, ed. Virginia Scharff (University Press of Kansas, 2003), 103-128. [\[pdf\]](#)

Vera Norwood, "Women's Role in Nature Study and Environmental Protection," *OAH Magazine of History* 10.3 (Spring 1996): 12-17.

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Make sure to attend at least one event this week on Tuesday, Wednesday, or Thursday that is part of the Smithsonian Symposium on Women in Science. Links and further information will be on D2L.

Wikipedia Work (on Wikipedia Dashboard) [due by 11/2 12pm]

Training: Plagiarism

Training: Drafting in the sandbox

Start writing your article.

Discussion on D2L [due by 11/2 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 6: Race, Class, and Authority

Readings

Britt Rusert, "Chapter 5: Sarah's Cabinet: Fugitive Science in and Beyond the Parlor," in [*Fugitive Science: Empiricism and Freedom in Early African American Culture*](#) (NYU Press, 2017), 181-218.

Linsey E. Malcom and Shirley M. Malcom, "[The Double Bind: The Next Generation](#)," *Harvard Educational Review* 81.2 (Summer 2011): 162-171.

Londa Schiebinger, "Chapter 6: Who Should Do Science?" in *Nature's Body: Gender and the Making of Modern Science* (Rutgers, 1993): 184-200. [pdf]

Wikipedia Work (on Wikipedia Dashboard) [due by 11/9 12pm]

Continue writing your article so it is ready for peer review.

Discussion on D2L [due by 11/9 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 7: Gender and Darwinism

Readings

Tina Gianquitto, "[Botanical Smuts and Hermaphrodites: Lydia Becker, Darwin's Botany, and Education Reform](#)," *Isis* 104.2 (June 2013): 250-277.

Renee Bergland, "[Urania's Inversion: Emily Dickinson, Herman Melville, and the Strange history of Women Scientists in Nineteenth-Century America](#)," *Signs* 34.1 (Oct 2008): 75-99.

Tina Gianquitto, "Chapter 4: Spiders, Ants, and Carnivorous Plants: Mary Treat and Evolutionary Science," in "[Good Observers of Nature": American Women and the Scientific Study of the Natural World, 1820-1885](#) (University of Georgia Press, 2007), 136-176.

Wikipedia Work (on Wikipedia Dashboard) [due by 11/16 12pm]

Peer review 2 classmates' articles in their sandboxes.

Discussion on D2L [due by 11/16 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

HST527: Book Review #2 [due by 11/16 12pm]

Week 8: Women & the Space Race

Readings

Lauren Micheletti Puaca, "[Introduction](#)," in *Searching for Scientific Womanpower* (UNC 2014): 1-8.

Lauren Micheletti Puaca, "[Chapter 3: Scientific Womanpower Enters the Sputnik Era](#)" in *Searching for Scientific Womanpower* (UNC 2014): 85-126.

Margot Lee Shetterly, "Epilogue," from *Hidden Figures* (Harper Collins, 2016), 246-265. [[pdf](#)]

Optional Watch: Makers: [Margaret Hamilton](#)

Optional Watch: Makers: [Katherine Johnson](#)

Wikipedia Work (on Wikipedia Dashboard) [due by 11/23 12pm]

Respond to your peer reviews by editing your article.

Training: Contributing images and media files

Exercise: Continue improving your article

Discussion on D2L [due by 11/23 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 9: History of Science's Blind Spots

Readings

Robin Wall Kimmerer, "Planting Sweetgrass" in [Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants](#) (Milkweed, 2013), 1-59.

Due on Wikipedia [due by 11/30 12pm]: Finish your article.

Discussion on D2L [due by 11/30 12pm]

Respond to all of the questions in the discussion section. You can only create a maximum of two threads. The rest of your entries should be replies to classmates' threads.

Week 10: Presentations

Due on D2L [due by 12/2 12pm]: Reflective Essay (see details on D2L)

Due on D2L [due by 12/2 12pm]: 5-minute presentation on your scientist & your experience using Wikipedia (see details on D2L)

Discussion on D2L [due by 12/4 12pm]

Submit questions/comments to classmates and respond to those posted to your video presentation.