WGS333: FEMINIST MATHEMATICS

Winter 2026, University of Toronto

Thursdays, 11am-1pm, BA2135

https://q.utoronto.ca/courses/428087

THE TEACHING TEAM FOR FEMINIST MATHEMATICS

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Welcome! I'm Professor Mayes-Tang, and I'm glad that you are here.

Whether you are a STEM major who thinks about math every day, or you shake from anxiety every time you encounter mathematics, I believe that this course has something to offer you. I've been learning and teaching about what mathematics is since I became a professor about a dozen years ago. Over this time, I've both seen and felt the positive impacts of interrogating our fundamental beliefs about math.

During this course we will examine how a feminist perspective casts doubt on many popular assumptions about mathematics. Is math more like an art and as a science… and who gets to see it each way? Are some people just "better at math" than other people? Who is likely to have their work recognized as mathematical? Is mathematics as neutral as it claims to be? Are the writing practices of

mathematics as an academic discipline truly egalitarian, or could they perpetuate the status quo?

GOALS

FUNDAMENTAL KNOWLEDGE

Identify characteristics of mathematics as an academic discipline

Understand how stereotypes about mathematicians and mathematics are intertwined with society's gendered expectations about math

Identify research about the mathematical experiences of girls and young women that can speak to an individual's mathematical story

Cathleen Morawetz, UofT graduate and the first woman mathematician to receive a National Medal of Science (among many other honours)

APPLICATION

Analyze how mathematics is discussed in media, and how this interacts with the experiences of women and girls in mathematics

Engage in a process of mathematical discovery by studying a self-defined geometric object

Use the knowledge from this course to create something that improves the mathematical experience of women and/or girls in your immediate environment

INTEGRATION

Compare the role of definitions in mathematics with the role of meaning in women and gender studies.

Connect mathematics to textile crafts and other pursuits thought of as traditionally feminine to mathematics.

HUMAN DIMENSION

Come to see yourself as a capable doer and user of mathematics

Understand the role that identity plays in how individuals engage in science

CARING

Value mathematics and mathematical thinking as human endeavors.

Value feminist scholarship and the impact that it can have

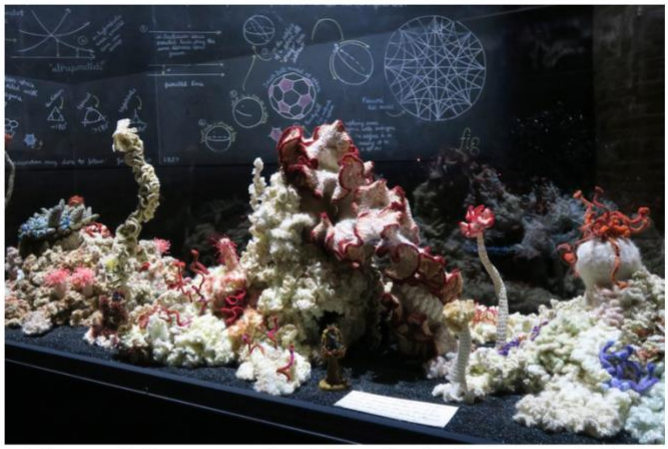
Be more interested in working to remove the barriers that can prevent women and girls from participating equally in STEM in your own life beyond this course.

LEARNING HOW TO LEARN

Develop skills to critically evaluate texts and write engaging, additive responses

Justify appropriate solutions for problems by breaking down problems into pieces

READINGS & REQUIRED TEXT



Mathematicians searched for physical representations of hyperbolic space for 100 years, until mathematician & crocheter Daina Taimina realized that women had them in their hands all along. The Crochet Coral Reef project was founded, in part, to showcase this. It combines collaborative feminist art with science and mathematics. (Photo from crochetcoralreef.org)

There is one text that is required for the course: *The Art of Logic in an Illogical World* by Eugenia Cheng. It is intended to add a cohesive mathematical narrative to the course alongside many very disparate readings from outside of math that we will be reading. I have assigned chapters from this text to students in past seminars, and it is consistently listed as a favourite reading of the semester.

All other readings and videos are posted on the Quercus course website. They come from academic journals, publications for mathematicians and math teachers, and magazines and newspapers for a popular audience.

ACTIVITIES IN WGS333

All due dates are Thursday at 11 am, at the beginning of class.

WEEKLY CLASS MEETINGS & ENGAGEMENT (2 HOURS EACH THURSDAY)

Weekly class meetings will structure your learning and build community. You can expect that classes will mainly be active, asking you to something instead of passively taking in information. During class meetings you can expect to do things such as:

- discuss readings and other outside of class work in large and small groups;
- explore mathematical ideas through activities;
- talk to people who have different roles within and outside of mathematics;
- share personal experiences and observations;
- build written and artistic artifacts.

In addition to the reading and annotation, there may also be small preparation activities for a class (along the lines of finding an object in your house, taking a picture of something that you observe, or the like).

Engagement encompasses both how much you get from class and how much you give to the class. Actions as small as a willingness to participate, introduce yourself to someone new, or ask a question go a long way in creating a positive classroom environment. It also includes out-of-class actions. This list of activities from Roberta Hawkins & Leslie Kern describes diverse ways of engaging:

- Active Listening
- Posting on the class discussion board
- Sharing notes.
- Building up one another's ideas.
- Asking generative questions.
- Responding to verbal or written discussion prompts.
- Sending relevant links, e.g., news stories, to the instructor.
- Participating in organized classroom activities or breakout groups online.
- Setting up or attending study groups.
- Sharing relevant resources with the class.
- Coming prepared with notes and readings.
- Attending office hours.
- Putting away phones and turning off other distractions.
- Using the chat feature to contribute during online classes.

While engagement is not just measured in how much you speak, you should be willing to speak in class. If this type of participation poses a particular challenge for you, please speak with me during office hours or message me.

We will discuss the grading of engagement around the midterm, but I advise students not to think about it too much. We will give you advice if we believe that there is an issue with your engagement.

READINGS & ANNOTATIONS (WEEKLY; DUE ~~WEDNESDAY EVENING~~ THURSDAY MORNING)

As academics (students and professors, members of a University community) we engage in academic conversations. Part of this is that we are grounded in conversations that others have had before us. This is why we read. Academic book chapters and articles are part of conversations. By reading them we get a glimpse into the questions, issues, and arguments that academics are having so that we can then continue them ourselves.

The reading - and any other pre-class preparation, like videos or podcasts - is assigned on *Hypothesis*, a program that allows you to talk about the reading with your classmates. You can also tag me to ask questions. You will read a selection of book chapters, newspaper articles, and academic articles from several different sources.

Each week a different student will be responsible for summarizing the comments from their discussion group for the rest of the class, bringing out key questions and key points that were discussed in each of the discussion group.

CLASS CHRONICLE & WEEKLY WORKSHEETS (EACH WEEK, WEEKS 2-10)

Each week you will be assigned an online "worksheet" to complete. The purpose of the worksheet is to contribute to the Class Chronicle. The Class Chronicle will have two components.

1. The Math Monitor: We'll record when we hear someone mention math in a non-mathematical context. For example: A newscaster says "oh I'm not a numbers person"? Or someone on the subway is talking about their "unexpectedly hot" calculus TA next to you? These will go in the Math Monitor! After recording for a few weeks, we'll analyze what we have collected.
2. Our Math Stories: In the second half of the term, you'll think about how your own mathematical identities were developed. You'll begin just by thinking about key moments in your history with math, and creating a timeline. (If you do not want to do this activity, then there is an alternative parallel assignment. We can also discuss anonymization.) Then we'll look at literature from the social sciences on gender and education, or gender and parenting, to see how your experiences might line up – or run counter to – the literature. We'll discuss what we gain by putting these experiences and analyses together.

Assessment: Each worksheet will be graded out of 5 points.

THE SHAPE STUDY PROJECT (MULTI-STAGE; WEEKS 1-11)

This project is designed for you to experience the qualities of doing mathematics that are often hidden to students beginning their mathematics journey: creativity, intuition, openness, uncertainty.


Cecilia Krieger, UofT math legend: First woman to earn a PhD in math in Canada and long-time professor

The task is to (a) define a "new" mathematical object and (b) ask questions about your object and try to answer them, following whatever paths interest you.

The only grading criteria for this project are the time that you invest in the project and the reflection that you have on your experience. More details about the project – including details about what is expected for each stage – will be provided on the course website.

- Definition: Week 3
- Check-in
    - Post journal: Week 6

    - Provide feedback on another journal: Week 7
- Final Results & Presentation: Week 11

THE DESIGN PROJECT (MULTI-STAGE; WEEKS 3-12)

Feminist math offers a vision for positive change. This project is designed to give you the opportunity to take an action based on what you learn throughout the semester.

You will begin by identifying issues related to women in mathematics on campus, in Toronto, in digital spaces you are a part of, or in other environments that are immediately accessible to you. Next, you will propose a partial solution one of the problems. Finally, you will work with one or two classmates to carry out a plan and address one of the problems.

Throughout the process, you will use what you are learning in WGS333 to unpack the problem, address the sources behind the problem, and back up your solutions with scholarly work.

- Identifying local problems: Week 4
- Solution Proposal: Week 8
- Plan proposal and conference: Weeks 9-10
- Final project & presentation: Week 12

GRADING

Details of the grading of each assessment will be posted on the course website. The final grade will be calculated as follows.

Assessment	**Percentage of Final Grade**
Hypothesis Annotation	20%
Weekly Worksheets	20%
Shape Study Project	20%
The Design Project	20%
Engagement	20%

DUE DATES AND LATE POLICY

I set due dates so that you keep up with the course and for practical reasons - like ensuring that you pace yourself throughout the semester and don't have work piling on top of itself. I will generally accept requests for extensions on late work submitted via email, and trust that you have a good reason (e.g. medical trauma, personal crisis) for submitting an assignment late. You must make the request at least 24 hours before the due date (unless there is an emergency circumstance). Some limits to this policy (that is, places where it is not reasonable or fair to accept late work) are outlined below.

When another member of our class depends on you for their work (e.g. peer review) due dates will be very strictly enforced. This is because it is not fair to your classmates. All term work must be completed before the end of classes.

If you have an official academic accommodation that impacts late work, your Accessibility Advisor needs to be aware of the extension request, so you should also file a form signed by them from Accessibility Services.

FEMINIST PEDAGOGY

Pedagogy refers to the "method or practice of teaching." So, when I refer to "my pedagogy" I am speaking about how I teach and the influences that inform how I teach. I include this section in my seminar syllabi. I debated about including it in a WGSI syllabus – where these practices are likely more expected, and I might be behind. I'd love to learn from your experiences in other classes and would be happy to dialogue about what I write here!

Women's work will not only be the subject that we study, it will inform how we study it and how I teach it. I aim to implement feminist pedagogical principles in this classroom or – in other words – teach using methods and practices that have been developed to respect the way that women think, learn, and work.

In mainstream Western culture, "feminine" thinking is often associated with the illogical, irrational, unreliable, and inferior. When speaking with women from a variety of walks of life, Belenky et al. (1988) found that women would often use metaphors of "voice" and listening to describe how their process of thinking (e.g. inner voice, silenced) rather than of the visual metaphors from the mainstream culture (e.g. lightbulb moment, came to me in a flash). This suggests that we should consider developing a voice and feeling as though one has a voice is an integral part of learning and self-identity as a learner.

Teaching is more than just "depositing" knowledge in a learner like a banker "deposits" money in the bank. Knowledge-making is a social process.

Classroom Application: Students become part of a community with teachers. They all work together to construct knowledge together.

In mainstream Western culture, women's intuitions are usually dismissed and often the subject of jokes. Personal stories relevant to a topic are dismissed as "antec-data".

In feminist pedagogies, intuitions, personal stories, and anecdotes are ways of knowing. Alternative ways of knowing are considered valid. They will not stand on their own as "complete knowledge" for the discipline, but they are respected, listened to, and used as part of a knowledge framework developed by our community.

Classroom Application: Anecdotes, personal stories, and intuitions are valued because they help connect us – as people and as a community – to the subjects that we are studying. They help to remind us that the material that we study is not simply intellectual fun. This also means that emotions become part of learning and a part of the material that we study. We acknowledge, however, that anecdotes and stories do not prove or disprove anything and that we have to go beyond these for a proof.

In mainstream Western culture, a power hierarchy exists everywhere we go. Power dynamics play out – even in our classrooms – and allow those with traditionally "stronger voices" to have a greater say. It is assumed that everyone experiences the same objective world. In feminist pedagogy, we are conscious of the power and power dynamics in the world, including the fact that the classroom itself is situated in this system. We acknowledge that there are differences between our lived experiences. "community, understood in conjunction with solidarity and coalition, lies at the centre of the feminist value system" (hooks 43).

Classroom Application: We "deliberately pay attention to listening, speaking, risk-taking, respect, reconciliation, and mutuality as central to [the class's] success" (from the main source). We value the intersectional and individual identities of instructors, students, visitors, and authors of the course texts that we choose. We acknowledge that a power hierarchy must sometimes exist – for example, in a classroom between professors and students – but we are aware of the implications of it.

Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). *Women's ways of knowing: The development of self, voice, and mind* (Vol. 15). New York: Basic books.

Bostow R., Brewer S., Chick N., Galina , McGrath A. Mendoza K., Navarro K., & Valle-Ruiz L. (2015). *A Guide to Feminist Pedagogy*. https://my.vanderbilt.edu/femped/. Accessed August 2022.

hooks, bell. (1984) *Feminist Theory: From Margin to Center*. New York: Routledge, 2015.

COPYRIGHT, ACADEMIC INTEGRITY & COMPUTERS THINKING FOR YOU (E.G. AI)

My policies are guided by a care for student learning, the belief that intellectual work is the result of labour and is valuable, and knowledge that students often violate academic integrity policies due to pressure. The grading and assessment in this course is designed to minimized the pressure that you feel to achieve "perfection": we care more about hearing from you than from some fictional (and boring!) AI voice.

But you DO need to put in work. Learning requires work. I will do what I can to support students in this course, but it is also my obligation ensure that students who knowingly violate academic integrity guidelines experience the consequences of their actions.

COURSE MATERIALS ARE COPYRIGHTED

Do not share any note, video, or anything else related to the course without the written permission of the Professor. This include close family members and employes.

THE USE OF A.I. POLICY

• You may use generative artificial intelligence tools (e.g., ChatGPT, Gemini, Claude, etc.) for learning and practicing the concepts in this course that are not part of assessments, but these tools may NOT be used for completing assignments in this course. **However, I encourage that you limit your use of these tools when you study.** They are terrible for their environmental impact, and we've found that office hour attendance is dropping due to generative A.I.: computers are not a substitute for humans.
• Representing as one's own an idea, or expression of an idea, that was AI-generated is

considered an academic offense in this course. That is, you may not copy or paraphrase from any generative artificial intelligence applications, including ChatGPT, Gemini, Claude, Microsoft Copilot and other AI writing and coding assistants, for the purpose of completing assignments in this course. This includes in-class and in-tutorial assignments.

Statements from https://www.viceprovostundergrad.utoronto.ca/wp-content/uploads/2024/08/Syllabus-language-for-Gen-AI-2024-08-21.pdf#page=3.28

I suggest that you only turn to A.I. tools - if you do at all - after you have completed your annotations.

ACADEMIC INTEGRITY

Academic integrity is fundamental to learning and scholarship at the University of Toronto and beyond. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves. Violating standards of academic integrity will prevent you from learning material, refining your problem-solving skills, and developing self-sufficiency and self-esteem.

I am strongly committed to assigning grades based on students' honest efforts to demonstrate learning in this course. Academic dishonesty in any form will thus not be tolerated in this course.

Students are expected to know what constitutes academic integrity: familiarize yourself with the information available at this site. It is the rule book for academic behaviour at the U of T. Potential offences include, but are not limited to:

- Having another student, stranger, or someone else write a paper or assignment for you (in part or in full)
- Copying or paraphrasing a source without citing it
- Allowing someone else to copy the ideas in your journal, projects, or other assignments
- Taking unattributed text from somewhere else
- Misrepresenting reasons for being late or absent for a class or presentation

The following actions are NOT offences in this class.

- Discussing questions from homework with classmates, building off of each others' ideas
- Using online resources to help you understand the content of the course or homework problems
- Using sources for ideas and quoting them with citations
- Using AI for the purposes of assisting you

In accordance with the University's Code of Behaviour on Academic Matters, we will actively investigate any suspected cheating, plagiarism, misrepresentation or other dishonest practices. The consequences for academic misconduct can be severe, including a failure in the course, a notation on your transcript, suspension, and expulsion.

If you have any questions about what is or is not permitted in this course, please do not hesitate to contact your me. Students are usually reluctant to report incidents of academic dishonesty. As we are working together to preserve the fairness of this course, I encourage you to let me know (anonymously, if necessary) if you observe behaviour that you feel might be unethical. Your name will be held in confidence.

PLAGIARISM DETECTION TOOL

Sometimes, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

EQUITY: A COURSE VALUE

As outlined in the Student Code of Conduct, the University of Toronto does not condone discrimination or harassment against any persons or communities especially when based on grounds protected under the Ontario Human Rights Code. The University of Toronto's Equity Offices remain available to students to provide support on equity issues that arise as a result of COVID-19.

What does the dance arrangement on the left tell us about the theorem on the right? Quite a bit as Nancy Scherich's Dance your PhD video tells us.

Students are encouraged to support one another and the University's commitment to human rights and our values of diversity, inclusion, and respect in managing any inappropriate comments or disruptive behaviours. If you experience or witness inappropriate comments or behaviours in your classes, you are encouraged to contact your instructor. If you can, take and share a screenshot of the inappropriate content with me - Prof. Mayes-Tang - so that I can follow-up with you and address the conduct.

EQUITY IN MATH

Math does not represent the demographics of the country or the world at large. Likewise, the math department and the math courses at UofT do not adequately represent the diversity of Toronto's population, in terms of race, gender, or other diversity metrics.

The actions that we take and the things that we say within our mathematical spaces - whether they be physical or virtual, or "official" or "informal" - create the culture of math at UofT. It is this culture that shapes people's experience with math at the University.

I treat the responsibility to shape the mathematical culture positively and openly very seriously. Think about the consequences that your words and actions have. For example, when you talk about someone being "good at math" or a "genius", what other stereotypes are you also calling to mind? If you say that

someone is "surprisingly" good at math, what stereotypes are you invoking? Even harmless statements can have a big impact.

STUDENTS WITH DISABILITIES & ACADEMIC ACCOMMODATIONS

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs.

Students with diverse learning styles and needs are welcome in this course. If you have a disability that may require accommodations, please feel free to approach me and/or the Accessibility Services* office.

RELIGIOUS OBSERVANCES

The University provides reasonable accommodation of the needs of students who observe religious holy days other than those already accommodated by ordinary scheduling and statutory holidays. Students have a responsibility to alert members of the teaching staff in a timely fashion to upcoming religious observances and anticipated absences and instructors will make every reasonable effort to avoid scheduling tests, examinations or other compulsory activities at these times.

Please reach out to me as early as possible to communicate any anticipated absences related to religious observances, and to discuss any possible related implications for course work.

The final mural (click to enlarge)

Drawing the Dictionary by Stefanie Posavec, is a collection of drawings representing the 1000 most used English words.

FAMILY CARE RESPONSIBILITIES

The University of Toronto strives to provide a family-friendly environment. You may wish to inform me if you are a student with family responsibilities. If you are a student parent or have family responsibilities, you also may wish to visit the Family Care Office website at familycare.utoronto.ca.

STUDENT SUPPORT / RESOURCES

MENTAL HEALTH SUPPORT

You may find yourself feeling overwhelmed, depressed, or anxious. Lots of people feel the same way. There is help available from mental health professionals 24 hours a day via online and phone-based services. Here are some that are available to U of T students:

U of T Telus Health Student Support: 1-844-451-9700, or outside of Canada call 001-416-380-6578

Good2Talk Student Helpline 1-866-925-5454, or text GOOD2TALK to 686868

Distress Centres of Greater Toronto 416-408-4357, or text 45645

There is also the new Navi tool for U of T students, it is a chatbot and your questions

GENERAL UNIVERSITY RESOURCES

Health & Wellness can help with appointments with a range of clinicians, nutrition, immunizations, sexual and reproductive health and much more. Many of their services continue to be available online.

Arts & Sciences student resources through

General student services and resources at Student Life site. Time management tips, tricks and tools..

- Resources on how to improve your academic skills from the **Centre for Learning Strategy Support**
- Learner support at the **Writing Centre**
- Information about **Accessibility Services**
- Quercus Information in the Canvas Student Guide
- Logistical and social support for **international students** at the Center for International Experience
- A list of University financial supports, work-study opportunities, and government programs is available on the University's Financial Support & Funding Opportunity directory .

If you have further questions, please email ask.artsci@utoronto.ca.

Thank you to Melissa Cheyney at Oregon State, and Liza Bolton formerly at UofT for sharing wording and resource lists that I used on this syllabus.

PART 1: WHAT IS MATH AND WHERE ARE THE WOMEN?

Note: All due dates are Thursday at 11 AM!!

WEEK 1: ORIENTATION

No readings, no deadlines

WEEK 2: THE NATURE OF MATHEMATICS

Due: Worksheet

READINGS:

From *The Art of Logic in an Illogical World* (Cheng,):

- Chapter 1: Why logic?
- Chapter 2: What logic is

Lockhart, P. (2009). A mathematician's lament: How school cheats us out of our most fascinating and imaginative art form. Bellevue literary press.

Shelley, N. (1995). Mathematics: Beyond good and evil. Equity in Mathematics Education. Influences of Feminism and Culture, 247–264.

WEEK 3: IS MATH FOR WOMEN?

DUE:

Worksheet

Definition for Shapes project

READINGS:

Selection from part 1 of Cheng's *The art of Logic in an Illogical World (TBA)*.

Hanna, G. & International Commission on Mathematical Instruction (Eds.). (1996). Feminist Perspectives on Gender and Mathematics (Panel Discussion). In Towards gender equity in mathematics education: An ICMI study (pp. 377–392). Conference Gender and Mathematics Education, Dordrecht London. Kluwer.

Hottinger, S. N. (2016). The Role of Portraiture. In *Inventing the mathematician: Gender, race, and our cultural understanding of mathematics* (pp. 52–72). Suny Press.

Leyva, L. A. (2017). Unpacking the male superiority myth and masculinization of mathematics at the intersections: A review of research on gender in mathematics education. Journal for Research in Mathematics Education, 48(4), 397–433.

Fellus, O. O., Low, D. E., Guzman, L. D., Kasman, A., & Mason, R. T. (2022). Hidden Figures, Hidden Messages: The construction of mathematical identities with Children's picture books. For the Learning of Mathematics, 42(2), 2–8.

WEEK 4: MATH IN "FEMININE" WORK AND MATH ETHNOGRAPHY

DUE:

Worksheet

Identifying local problem for Design Project

READINGS:

D'Ambrosio, U. (2020). Module 5: Ethnomathematics and Nonkilling Mathematics: Mathematics for Peace. In Rosa, M. & Clark Orey, D. (2024). ICMI AMOR Project – Ubiratan D'Amrosio Unit – Ethnomathematics as a Program for Mathematics Education. https://www.mathunion.org/icmi/awrds/amor/ubiratan-dambrosio-unit.

Gerdes, P. (1998). 6 Ovilame—Bead Ornaments. In *Women, art and geometry in Southern Africa* (pp. 61–86). Africa World Press.

Harris, M. (1987). An example of traditional women's work as a mathematics resource. *For the Learning of Mathematics*, *7*(3), 26–28.

Roberts, S. (2024). The Crochet Coral Reef Keeps Spawning, Hyperbolically. *NYTimes. January*, *15*.

WEEK 5: JOYFUL WOMEN MATHEMATICIANS

DUE:

Worksheet

Feedback on classmates' problems for Design project

READINGS:

Senechal, M. (2012). Culture clash at cold harbour spring. In I died for beauty: Dorothy Wrinch and the cultures of science (pp. 6–20). Oxford University Press, USA.

TED (Director). (2014, August 11). *Own your body's data* [Video recording]. https://www.youtube.com/watch?v=_GMVTJ9ZKVc

Video will be added

PART 2: HOW DO GIRLS AND WOMEN EXPERIENCE MATH?

WEEK 6: THE LIMITS OF MATH

DUE:

Worksheet (includes midterm engagement check)

Post journal for Shapes project (mid-term check-in)

READINGS:

Selected chapters from Part 2 of *The Art of Logic,* The Breakdown of Logic

Kaiser, G. (with Rogers, P.). (1995). Equity in Mathematics Education: Influences of Feminism and Culture. Routledge.

WEEK 7: THE MATH CURRICULUM – INTENDED, ENACTED, AND IMPLEMENTED

DUE:

Worksheet

Feedback on Shapes project midterm checkin

READINGS:

Hottinger. (2010). Mathematics and the Flight from the Feminine: The Discursive Construction of Gendered Subjectivity in Mathematics Textbooks. Feminist Teacher, 21(1), 54. https://doi.org/10.5406/femteacher.21.1.0054

WEEK 8: MATH TEACHING & MATH TEACHERS

DUE:

Worksheet

Solution Proposal for Design Project

READINGS:

Higgins, J. (1995). We don't even want to play: Classroom strategies and curriculum which benefit girls. Equitv in Mathematics Education: Influences of Feminism and Culture, 200–208.

Joseph, N. M., Hailu, M. F., & Matthews, J. S. (2019). Normalizing Black Girls' Humanity in Mathematics ss. Harvard Educational Review, 89(1), 132–155. https://doi.org/10.17763/1943-5045-89.1.132

Deshler, J. M., & Burroughs, E. A. (2013). Teaching Mathematics with Women in Mind. *Notices of the American Mathematical Society*, *60*(09), 1156. https://doi.org/10.1090/noti1042

WEEK 9: STEM ACADEMIC CULTURES

DUE:

Worksheet

Plan proposal & Conference for Design Project

READINGS:

Malecki, W. P., Kowal, M., Krasnodębska, A., Bruce, B. C., & Sorokowski, P. (2024). The reverse Matilda effect: Gender bias and the impact of highlighting the contributions of women to a STEM field on its perceived attractiveness. Science Education, 108(5), 1474–1491. https://doi.org/10.1002/sce.21878

Martin, G. (2015). Addressing the underrepresentation of women in mathematics conferences (arXiv:1502.06326). arXiv. https://doi.org/10.48550/arXiv.1502.06326

Roberts, S. (2019, January 22). A Movement to Close the Gender Gap in Mathematics. *Quanta Magazine*. https://www.quantamagazine.org/a-movement-to-close-the-gender-gap-in-mathematics-20190122/

Zernike, K. (2023). All for One or One for All. In The exceptions: Nancy Hopkins, MIT, and the fight for women in science (First Scribner hardcover edition, pp. 309–327). Scribner.

IMAGINING A DIFFERENT MATHEMATICS FOR THE FUTURE

WEEK 10: THEORIZING FEMINIST MATHEMATICS

DUE:

Worksheet

Plan proposal and conferences for Design Project continue

READINGS:

Burton, L. (1995). Moving towards a feminist epistemology of mathematics. *Educational Studies in Mathematics*, *28*(3), 275-291.

De Freitas, E. (2008). Mathematics and its other: (Dis)locating the feminine. *Gender and Education*, *20*(3), 281–290. https://doi.org/10.1080/09540250801964189

Haack, S. (2003). Knowledge and Propaganda. In Scrutinizing feminist epistemology: An examination of gender in science (p. 7). Rutgers University Press.

Mura, R. (1987, August). Feminist Views on Mathematics. *Association of Women in Mathematics Newsletter*, *17*(4), 5–10.

WEEK 11: EXPERIENCING FEMINIST MATHEMATICS

DUE: Shapes Project

No readings

WEEK 12: ENACTING FEMINIST MATHEMATICS

DUE: Design Project

No readings

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