

Math 486/586: Topics in History of Mathematics

Instructor: Dr. Joanna Bartlo

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Teaching Assistant: David Brown

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Student Drop-in Hours: Thursdays at 7 PM with Joanna, Mondays at noon with David, (Both of us are both happy to meet by appointment as well, so please reach out if you need another time)

Features of the Course:

The course will explore both the growth of mathematical ideas and the context in which these ideas developed, in various civilizations around the world. Attention will be paid to how these ideas relate to the teaching of middle school mathematics. This course is designed as a survey of the history of mathematics. But far too much mathematics has been done in the past 4000 years to treat its entire history carefully, so we will concentrate mainly on the development of number systems, algebra, and geometry.

Throughout the course students will:

- 1) Solve problems using historical methods and notations
- 2) Analyze historical results and discuss the influences of these results on different cultures
- 3) Connect historical results to the math classroom.

Grades: Grades will be determined by:

Interactive Google Slides Participation		20%
Video Discussions		15%
Mathematical Reflections		25%
Midterm Project	Due <i>Wednesday April 28th</i> by 11PM	20%
Final Project	Due <i>Wednesday June 2nd</i> by 11PM	20%

Classroom Environment: In order to facilitate learning and sense-making, we will create a class environment that allows for and supports individual think time, small-group discussions, and equitable whole-class discussions. Such an environment cannot be created without your participation and engagement. You are expected to *contribute* your own ideas and explain your thinking and to *listen* attentively to others, with the aim of genuinely understanding their thinking.

Class Participation: It is your responsibility to participate in all activities. Class discussions and group work are very important aspects of this course, please engage with class discussions through Google Slides and video discussions regularly and by the assigned dates. Google slides should be completed by Saturday evening. Please reach out immediately if extenuating circumstances are disrupting your ability to participate in class.

Homework: Homework will be assigned weekly. Homework will include math problems, readings, reflections, and curriculum design. As you work on your homework, you are encouraged to work with others, but you should each turn in your own assignment. Reading and videos should be completed by Monday evening. It is important to get these done on time, so you can engage in discussions with your classmates on them. Written reflection and video responses are due by Wednesday evening. 586 students will have an extra assignment.

Disability Services: PSU values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, useable, inclusive, and welcoming. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. The Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment.

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations. The DRC is located in 116 Smith Memorial Student Union, 503-725-4150, drc@pdx.edu, <https://www.pdx.edu/drc>.

Safe Space: Portland State University desires to create a safe campus for our students. As part of that mission, PSU requires all students to take the learning module entitled Creating a Safe Campus: Preventing Gender Discrimination, Sexual Harassment, Sexual Misconduct and Sexual Assault. See <http://www.pdx.edu/sexual-assault/safe-campus-module>. If you or someone you know has been harassed or assaulted, you can find the appropriate resources on PSU's Enrollment Management & Student Affairs: Sexual Prevention & Response website at <http://www.pdx.edu/sexual-assault>

Title IX Reporting: As an instructor, one of my responsibilities is to help create a safe learning environment for my students and for the campus as a whole. Please be aware that as a faculty member, I have the responsibility to report any instances of sexual harassment, sexual violence and/or other forms of prohibited discrimination. If you would rather share information about sexual harassment, sexual violence or discrimination to a confidential employee who does not have this reporting responsibility, you can find a list of those individuals on PSU's Enrollment Management & Student Affairs: Sexual Prevention & Response website at <http://www.pdx.edu/sexual-assault>. For more information about Title IX please complete the required student module "Creating a Safe Campus: Preventing Gender Discrimination, Sexual Harassment, Sexual Misconduct and Sexual Assault" in the "My Courses" section of D2L.

Academic Integrity: Academic integrity is a vital part of the experience at PSU. Please see the [PSU Student Code of Conduct](#) for the university's policy on academic dishonesty. A confirmed violation of that Code in this course may result in failure of the course.

Privacy Statement: We will use technology for virtual meetings and recordings in this course. Our use of such technology is governed by FERPA, the Acceptable Use Policy and PSU's Student Code of Conduct. Your instructor will not share recordings of your class activities outside of course participants, which include your fellow students, TAs/GAs/Mentors, and any guest faculty or community-based learning partners that we may engage with. You may not share recordings outside of this course. Doing so may result in disciplinary action.

Flexibility Statement: The instructor reserves the right to modify course content and/or substitute assignments and learning activities in response to institutional, weather, or class situations.