UCONN
UNIVERSITY OF CONNECTICUT

**COURSE NUMBER**
**2720W**
Course Title
History of Mathematics
Department of Mathematics

## Mask and Social Distancing Expectations

Until further notice, to ensure a safe learning environment for everyone, masks/face coverings must be worn at all times when inside buildings, including in the classroom, regardless of vaccination status. If a student is not wearing a mask/face covering, they will be asked by the instructor to put one on immediately or leave the classroom. Repeatedly failing to follow this expectation will result in a referral to Community Standards. No eating is permitted in the classroom; brief unmasking to drink is permitted. For any other activities that require unmasking, please leave the classroom. If an instructor is not wearing a mask/face covering, students should feel comfortable asking the instructor to put one on immediately. More information about proper usage of masks is available from UConn Environmental Health and Safety at this link.

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## Syllabus -- Semester Year

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

## Course and Instructor Information

**Course Title:** History of Mathematics 2720W
**Credits:** #3
**Format:** In Person
**Prerequisites:** (i) MATH 2110Q or 2130Q, and 2210 or 2410Q, or (ii) MATH 2144Q or 2420; and ENGL 1010 or 1011 or 3800. This course may not be counted in any of the major groups described in the Mathematics Department listing

**Professor/Instructor/Facilitator:** Dr. Maria Gageonea **Pronouns:** (she/her/hers)

**Email: : Maria.Gageonea@uconn.edu** ( preferred method of contact; allow 48 hours respond time for weekend. Not using HuskyCT messages, email)
**Telephone:** Office phone # (if available)
**Office Hours/Availability:** (Be inviting**.** Include response time to questions as well as methods of communicating such as Video Conferences, Phone, text, etc. – consider including information about the purpose of office hours and the types of things students may want to discuss with you)

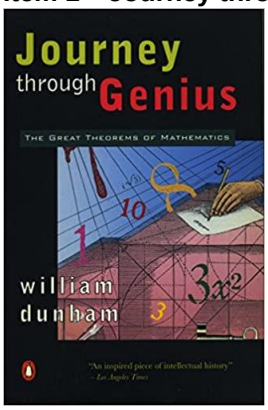
**Co-Facilitator/Teaching Assistant Contact**
**Email:** Email address (indicate preferred method of contact i.e. HuskyCT messages, email, etc)
**Office Hours/Availability: Tu/Th 11-12:30** or by appointment – consider including in your email information about the purpose of office hours and the types of things you may want to discuss)

## Course Materials

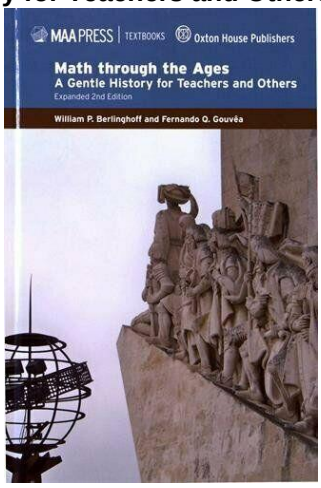
**Required course materials should be obtained before the first day of class**.

Required textbooks are available for purchase through the UConn Bookstore (or use the Purchase Textbooks tool in HuskyCT). Textbooks can be shipped (fees apply).

**Item 1➢Journey through Genius: The Great Theorems of Mathematics by William Dunham**




**Item 2➢Math through the Ages: A Gentle History for Teachers and Others (Expanded Second Edition) by**




**William P. Berlinghoff and Fernando Q. Gouvea**
(First edition covers material just for half of materials intended for this semmester).
**Required 2 textbooks are available for purchase through the UConn Bookstore** (or use the Purchase Textbooks tool in HuskyCT). Textbooks can be shipped (fees apply).

**Frequent Free Online Tools:** (browse to become familiar with the many biographies and mathematics topics available at this website):

**Item 3➢**The MacTutor History of Mathematics Archives (University of St Andrews) (**MAC)**

Item 4➢The Purdue Writing Lab **(OWL**)
*Additional course readings and media are available within HuskyCT, through either an Internet link or Library Resources*
Course

## Course Description

**Course Description.** A history of the growth of the various fields of mathematics. A survey (in varying depths) of the history and development of mathematical thought from ancient to modern times.

## Course Objectives

By the end of the semester, you should be able to:

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(1) To demonstrate the development of mathematics as a necessary and creative human activity.
(2) To show that mathematical ideas evolve over a period, are labored upon and are subject to change.
(3) To develop an appreciation of the structure and rigor of mathematics as viewed from a historical perspective.
(4) To reveal the interrelationships of seemingly diverse areas of mathematics, while also helping students integrate knowledge from other mathematics courses (e.g., calculus, analysis, differential equations, probability and statistics, geometry, number theory, and topology).
(5) To introduce the primary literature of mathematics.

## Course Requirements and Grading

**Summary of Course Grading:**

| Course Components | Weight |
|---|---|
| Quizzes | 10% |
| Individual Assignments | 15% |
| Group Work | 15% |
| Paper 1 | 10% |
| Paper 2 | 15% |
| Paper 3 | 25% |
| Presentation of draft final paper | 10% |

### ➢ QUIZZES

Details: weekly quizzes via HuskyCt. Quizzes should be completed AFTER you complete the assigned materials and readings.

### ➢ GROUP WORK

Groups will be assigned. **Students will work together to create ONE complete submission of each groupwork.** Almost every week there will be posted a group work related to the topic of study that is intended to practice of a mixture of writing exercises and mathematical concepts.

### ➢ INDIVIDUAL ASSIGMENTS

**Details: Informal or formal weekly assignment may include:**

- Own research of the topic for each week
- Writing Topic Logs regarding the topic of each week.
- Drafts for each assigned paper
- Proposals for paper two and three
- Peer review for paper two and three

### ➢ ACADEMIC PAPERS

**Paper 1-(Short 3-page paper) -Detailed study of a specific topic**

The draft should not be a sloppy piece of work.
For this draft you will get commentaries from instructor via HuskyCt.
A more polished final version of this paper is expected to follow the draft suggestions.

**Paper 2 – (a 5-page paper)- A Biography 5-page paper** Write about both the person's life and his or her mathematical achievements.

Proposal

First draft followed by Student Peer Review to receive commentaries and suggestions.

Final Draft

**Paper 3 (long a 7-page paper. Is equivalent to final examination.)**

Proposal

Rough draft -Commentaries on drafts received by Student Peer review

Final Paper **due on last day of classes** (No final exam.)

**Due Dates and Late Policy**

All course due dates are identified in HuskyCt via **CALENDAR** tab. Deadlines are based on Eastern Time unless otherwise specified. ***The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.***

**Late Policy...No late submissions.**

*Instructors have final authority in permitting students to submit assignments late and **needs to be notified PRIOR to due date**. Points will be deducted for assignments submitted late. Evaluation rubrics for papers are included and posted in HuskyCT.

*Note that effective Fall, 2020, the grade of A+ no longer exists Husk

**Grading Scale:**

| Grade | Letter Grade | GPA |
|---|---|---|
| 93-100 | A | 4.0 |
| 90-92 | A- | 3.7 |
| 87-89 | B+ | 3.3 |
| 83-86 | B | 3.0 |
| 80-82 | B- | 2.7 |
| 77-79 | C+ | 2.3 |
| 73-76 | C | 2.0 |
| 70-72 | C- | 1.7 |
| 67-69 | D+ | 1.3 |
| 63-66 | D | 1.0 |
| 60-62 | D- | 0.7 |
| <60 | F | 0.0 |

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**Feedback and Grades**

I will make every effort to provide feedback and grades in weekly. To keep track of your performance in the course, refer to My Grades in HuskyCT.

**Weekly Time Commitment**

You should expect to dedicate about 3 hours a week to this course (except the time for preparing the papers that could differ from student to student). This expectation is based on the various course activities, assignments, and assessments and the University of Connecticut's policy regarding credit hours. (More information related to hours per week per credit can be accessed at the Online Student website).
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## Course Outline

**Module 1 Topic:** Introduction and course overview
**Module 2 Topic: Babylon and Egyptian Mathematics**

**Module 3 Topic: Early Greek: Thales, Pythagoras**

**Module 4 Topic: Euclid**

**Module 5 Topic: Archimedes**

**Module 6 Topic: Arabic Mathematics and Pi**

**Module 7 Topic: Renaissance Mathematics**

**Module 8 Topic: Great Thinkers Abel, Galois**

**Module 9: Descartes. Fermat, Newton**

**Module 10: Calculus**

**Module 11: Euler**

**Module 12-14: Revisions and presentations**

## Calendar due dates on HuskyCT

## Class Meeting Schedule

***TU/Th***
***9:30-10:45 Mont 314***
***12:30-1:45 Mont 113***

## How to Succeed in this Course

**NOTE: If you need to polish your writing skills in English, you may find the University Writing Center to be helpful. Reference: writingcenter.uconn.edu.**
**Since this is a "W" course, one cannot pass the course without passing the writing part.**

All students can succeed in this course and we are here to help you along the way. Please do not hesitate to ask questions or attend office hours. All questions are important here. Success in this course program depends heavily on your personal health and well-being. Recognize that stress is an expected part of the college experience, and it often can be compounded by unexpected setbacks or life changes outside the classroom. Your teaching assistants and I strongly encourage you to reframe challenges as an unavoidable pathway to success. Reflect on your role in taking care of yourself throughout the semester before the demands of exams and projects reach their peak. Please feel free to reach out to me about any difficulty you may be having that may impact your performance in your courses or campus life as soon as it occurs and before it becomes too overwhelming. In addition to your academic advisor, I strongly encourage you to contact the many other support services on campus that stand ready to assist you.

Useful links to the Dean of Students Office, Academic Achievement Center, Writing Center, Quantitative Learning Center, Center for Students with Disabilities, Title IX Office, Student Health and Wellness -- Mental Health

## Husky Study Groups

Are you interested in forming a study group with other students in the class? There is a study group application in Nexus that can help you get started. Feel free to check this video ( here for more information).

## Resources for Students Experiencing Distress

The University of Connecticut is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement.

Students who feel they may benefit from speaking with a mental health professional can find support and resources through the **Student Health and Wellness-Mental Health** (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern.

Mental health services are included as part of the university's student health insurance plan and also partially funded through university fees. If you do not have UConn's student health insurance plan, most major insurance plans are also accepted. Students can visit the **Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor,** or contact the office at **(860) 486-4705, or https://studenthealth.uconn.edu/** for services or questions**.**

## Accommodations for Illness or Extended Absences

Please stay home if you are feeling ill and please go home if you are in class and start to feel ill. If illness prevents you from attending class, it is your responsibility to notify me as soon as possible. You do not need to disclose the nature of your illness, however, you will need to work with me to determine how you will complete coursework during your absence.

If life circumstances are affecting your ability to focus on courses and your UConn experience, students can email the Dean of Students at dos@uconn.edu to request support. Regional campus students should email the Student Services staff at their home campus to request support and faculty notification.

COVID-19 Specific Information: People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness. These symptoms may appear 2-14 days after exposure to the virus and can include:

- Fever,
- Cough,
- Shortness of breath or difficulty breathing
- Chills

- Repeated shaking with chills
- Muscle pain
- Headache
- Sore throat
- New loss of taste or smell

Additional information including what to do if you test positive or you are informed through contract tracing that you were in contact with someone who tested positive, and answers to other important questions can be found here: https://studenthealth.uconn.edu/updates-events/coronavirus/

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## Classroom/Virtual Classroom Guidelines

Please review and be familiar with the library's Plagiarism Resources.

(Student Created Videos) The videos created by students as part of this course are for sole use of the students enrolled in this course. Any other use of these videos or any pictures or derivatives of the videos without the written consent of the video creator is prohibited.

**Statement on Copyright**: ***"My lectures, notes, handouts, and displays are protected by state common law and federal copyright law. They are my own original expression and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. I will inform you as to whether you are authorized to record my lectures at the beginning of each semester. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me."***

## Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
    - Academic Integrity
    - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar

- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

## Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or http://csd.uconn.edu/.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from Blackboard's website)

## Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include
Equipment Recommendations
HuskyCT/Blackboard (HuskyCT/ Blackboard Accessibility Statement, HuskyCT/ Blackboard Privacy Policy)

- Adobe Acrobat Reader (Adobe Reader Accessibility Statement, Adobe Reader Privacy Policy)
- Google Apps (Google Apps Accessibility, Google for Education Privacy Policy)
- Microsoft Office (free to UConn students through uconn.onthehub.com) (Microsoft Accessibility Statement, Microsoft Privacy Statement)
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).

**Privacy Statement**: For information on managing your privacy at the University of Connecticut, visit the University's Privacy page. NOTE: This course has NOT been designed for use with mobile devices.

## Help

Technical and Academic Help provides a guide to technical and academic assistance.

This course uses the learning management platform, HuskyCT. If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the Help Center. You also have 24x7 Course Support including access to live chat, phone, and support documents.

## Student Technology Training

Student technology training is now available in a new HuskyCT short course created by students for students. It will prepare you to use the IT systems and services that you will use throughout your time at UConn, whether learning online or on-campus. It is available at https://lms.uconn.edu/ultra/courses/_80016_1/cl/outline .

## Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

## Evaluation of Course Experience

Students will be given an opportunity to provide feedback on their course experience and instruction using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).

The University of Connecticut is dedicated to supporting and enhancing teaching effectiveness and student learning using a variety of methods. The Student Evaluation of Teaching (SET) is just one tool used to help faculty enhance their teaching. The SET is used for both formative (self-improvement) and summative (evaluation) purposes.

Additional informal formative surveys and other feedback instruments may be administered within the course.