



MAT 295 History of Mathematics II

Winter 2024

Course Credits: 4

Contact Hours: 56 hours

Instructor: TBA

Email:TBA

COURSE OBJECTIVES

This course provides an overview of the development of mathematics from the 17th century to the present day. Students will explore the evolution of mathematical concepts, theories, and techniques, as well as the social and cultural contexts in which they emerged. The course will also examine the contributions of key mathematicians and their impact on the field.

Upon Completion of this Course, students will be able to:

1. Analyze the historical development of mathematical concepts and theories
2. Evaluate the impact of social and cultural factors on the evolution of mathematics
3. Identify the contributions of key mathematicians to the field
4. Apply historical knowledge of mathematics to current mathematical problems and research

PREREQUISITES

N/A

GRADING

Grades will be determined by accumulating points, with 100 points being the maximum, as follows:

ITEM	POINTS
Quizzes	20 Points



Midterm 1	15 Points
Midterm 2	15 Points
Project	20 Points
Final Exam	30 Points
Total	100 Points

Late submissions will be graded at the end of the course. Grades will be assigned according to the following rule:

$$A \geq 90 > B \geq 80 > C \geq 70 > D \geq 60 > F.$$

We reserve the right to make adjustments to the overall grading policy.

COURSE MATERIALS

Required Texts:

Katz, V. J. (2009). *A History of Mathematics: An Introduction* (3rd ed.). Addison Wesley.

Recommended (Optional) Texts or Other Materials:

None

COURSE TOPICS

MODULE	TASKS
Module 1	<p>Topics: Topic 1: Egypt and Mesopotamia Topic 2: The Beginnings of Mathematics in Greece Topic 3: Euclid Topic 4: Archimedes and Apollonius</p> <p>Assessments: Quiz#1</p>
Module 2	<p>Topics: Topic 5: Mathematical Methods in Hellenistic Times Topic 6: The Final Chapters of Greek Mathematics Topic 7: Ancient and Medieval China Topic 8: Ancient and Medieval India</p> <p>Assessments: Quiz#2 Project</p>



Module 3	Topics: Topic 9: The Mathematics of Islam Topic 10: Mathematics in Medieval Europe Topic 11: Mathematics around the World Topic 12: Algebra in the Renaissance Assessments: Midterm#1 Project
Module 4	Topics: Topic 13: Mathematical Methods in the Renaissance Topic 14: Algebra, Geometry, and Probability in the Seventeenth Century Topic 15: The Beginnings of Calculus Topic 16: Newton and Leibniz Assessments: Midterm#2 Project due
Module 5	Topics: Topic 17: Analysis in the Eighteenth Century Topic 18: Probability and Statistics in the Eighteenth Century Topic 19: Algebra and Number Theory in the Eighteenth Century Topic 20: Geometry in the Eighteenth Century Assessments: Final Exam

ATTENDANCE

1) Class attendance is required. Missing classes without permission will lead to decrease in overall grade.

Missing less than two classes: no penalty.

Missing more than two classes: 7% will be taken off from the overall grade.

If the instructor reports a student's frequent missing of class to the Soochow University Academic Administration Office, the student might get a written warning and might be prohibited from attending final exam.

2) Participants in this course are expected to arrive in class promptly and adequately prepared. The primary objective of this course is to critically engage with the readings and the subject matter. Therefore, course participants are expected to have completed the reading prior to class and prepare thoughtful reflections/commentaries to share with fellow colleagues.



LEARNING REQUIREMENTS

- 1) Late assignments are not acceptable and are subjected to grade deductions.
- 2) Assignments submitted in the wrong format will be counted as not submitted.
- 3) Failure to submit or fulfill any required course component results in failure of the class.
- 4) Make-up for midterm and final exams only with valid excuses, as defined by the University.
- 5) In order to earn a Certificate of Completion, participants must thoughtfully complete all assignments by stated deadlines and earn an average quiz score of 50% or greater.

TECHNOLOGY POLICY

The use of electronic devices in class is distracting, both for the user and for the rest of the class. Only non-programmable calculators can be used in the tests and exam. Any attempts to use cell phones and other electronic communication devices will be seemed as cheating. Laptops are discouraged, unless you use them for activities DIRECTLY related to the course (eg., note taking, reading course documents).

ACADEMIC INTEGRITY POLICY

Soochow University highly values the academic integrity and aims to promote the academic fairness, honesty and responsibility. Any academic dishonesty behaviors and any attempts to cheats and plagiarism will be reported to the university administration office. A written warning and the relevant penalties will be imposed. The record might be shown on the official university transcript.

DISABILITY ACCOMMODATION

Soochow University is committed to maintaining a barrier-free environment so that students with disabilities can fully access programs, courses, services, and activities at Soochow University. Students with disabilities who require accommodations for access to and/or participation in this course are welcome.

Note:



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Please contact the University Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material.