



Math 380.001 History of Mathematics

COURSE SYLLABUS: Spring 2020

Instructor: Rebecca Dibbs, PhD

Office Location: 318 Binnion

Office Hours: TBD

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COURSE INFORMATION

Materials

Textbook(s) Required: Math through the Ages (Berlinghoff), Math Games & Activities from Around the World (Zaslavsky), A Gebra Named Al, The Number Devil, and Secrets, Lies, & Algebra.

Course Description: A survey of the history of mathematics; attention will be given to the origin, development, and importance of mathematical ideas. Pre-requisite: Math 301.

Student Learning Outcomes

1. Students will learn an overview of the history of middle school mathematics
2. Students will learn historical computation techniques
3. Students will complete projects exploring mathematics history
4. Students will be exposed to ethnomathematics

COURSE REQUIREMENTS

Late Policy:

All late assignments must be paid for by a token. All students will receive two tokens at the start of the semester. Additional tokens may be earned by turning in assignments early.

Course Activities

This is a specification-graded course. See specification table for requirements for each grade band.

Activities: There is a short activity associated with each topic in the course. The purpose of the activity is to help you explore the concepts we are exploring that day before diving into the homework. See schedule for due dates.

Homework: There will be problems assigned for each section. Homework will be the class after the section is covered

Sketch Outlines: You will outline each historical sketch as part of your reading assignment. See sketch assignment rubric for further details.

Mandatory Mini Projects: There are two mandatory mini projects in this class that all students must complete to earn at least a C in this course. The first project is Nutshell 1: a mathematician biography. You must choose a mathematician who is not a white male. The second mandatory mini project is a historical timeline. There are six possible timelines. See Project sign up and rubrics for more details.

Midterm: The midterm exam will be take home. It is based on the work done earlier in class. See Dropbox for details.

Final Exam: The final exam is also take home. It can be done in pairs. See Dropbox for further details.

Mini Projects: You must complete 2-6 mini projects during this course. These projects are a variety of activities including papers, challenging math problems, or art projects. The sign up is in Dropbox and is available on a first come, first served basis. You are in charge of your deadlines in this class. You may choose to complete your mini-projects early in the semester, spaced out over the semester, or at the end of the semester. The choice is yours.

Discussion Board/Journals: There is a discussion board for this course. However, you are expected to post all questions about assignments in the discussion board. This way everyone can see the questions asked and the answers

Literature Project: One of the best things we can do in the middle school mathematics classroom is tie mathematics to other subjects. In this project you will create a lesson

around a section of a math literature book you could read with your class. See project description for more details.

GRADING

Grade	Specification
F	At least two D specifications not met
D	Pass Midterm Pass Final 50% homework assignments completed 75% discussion boards completed 60% reading outlines 3-5 late assignments 3-5 absences (2 tardies = 1 absence) At least 1 C specification not met
C	All D specifications 0-2 unexcused absences 0-2 late assignments 75% of homework completed 75% activities completed 100% discussion boards completed 80% of reading outlines 2 mandatory mini projects 2 mini projects At least one B specification not met
B	All C specifications 100% reading outlines 2 mini projects (4 total) At least one A specification not met
A	All B specifications 2 mini projects (6 total) Literature Project

TECHNOLOGY REQUIREMENTS

You will need reliable internet access for this course. A graphing calculator or wolfram alpha may also come in handy from time to time.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

My primary form of communication with the class will be through Email and Announcements. Any changes to the syllabus or other important information critical to the class will be disseminated to students in this way via your official University Email address available to me through MyLeo and in Announcements. It will be your responsibility to check your University Email and Announcements regularly.

Students who Email me outside of regular office hours can expect a reply within 24 hours M-F. Students who Email me during holidays or over the weekend should expect a reply by the end of the next regularly scheduled business day.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at <https://leo.tamuc.edu>.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In **ALL** instances, incidents of academic dishonesty will be reported to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test or assignment
- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment

If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

University Specific Procedures

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

COURSE OUTLINE / CALENDAR

WEEKLY SCHEDULE:

Week of...	Tuesday	Thursday
1/13	Intro/Syllabus Activity 0	Activity 1 Activity 0 Sketch 1 Outline
1/20	Activity 2 Activity 1 Sketch 2 Outline	Ethnomathematics I Activity 2 Nutshell Outline (Beginnings) Due HW 1
1/27	Activity 3 Ethnomathematics I Sketch 3 Outline HW 2	Activity 4 Activity 3 Sketch 4 Outline Mini Project 1
2/3	Activity 5 Activity 4 Sketch 5 Outline HW 3 Mini Project 2	Math Games I Activity 5 Nutshell Outline (Greek & India) HW 4
2/10	Activity 6 Math Around the World I Sketch 6 Due HW 5 Mini Project 3	Activity 7 Activity 6 Sketch 7 Outline Due Mini Project 4
2/17	Activity 8 Activity 7 Sketch 8 Outline Due HW 6 Mini Project 5	Ethnomathematics II Activity 8 Nutshell Outline (Arabic & Medieval) HW 7
2/24	Activity 9 Ethnomathematics II Sketch 9 Outline Due HW 8 Mini Project 6	Activity 10 Activity 9 Sketch 10 Outline Due Mini Project 7
3/2	Activity 11 Activity 10 Sketch 12 Outline Due HW 9 Mini Project 8	Math Games II Activity 11 Nutshell Outline (15/16th & Algebra Comes of Age) Due Mathematician Paper Due (Nutshell 1) Nutshell Mini Projects Due
3/9	Activity 12 Math Around the World II Sketch 14 Outline Due HW 10 (Sketch 12) Mini Project 9	Activity 13 Activity 12 Sketch 15 Outline Due Mini Project 10 MIDTERM DUE
3/16	Spring	Break

Week of...	Tuesday	Thursday
3/23	Activity 14 Activity 13 Sketch 16 Outline Due HW 11 (Sketch 14) Mini Project 12	No Class: Do Activity 15 on your own
3/30	Ethnomathatics III Ethnomathematics III Sketch 17 Outline HW 13 (Sketch 16) Mini Project 14 Activity 14 Nutshell Outline (Calculus & Rigor) Due HW 12 (Sketch 15)	Math Games III Activity 15 Nutshell Outline (Abstraction) Due
4/6	Activity 16 Math Around the World III Sketch 21 Outline Due	Activity 17 Activity 16 Sketch 22 Outline Due
4/13	Activity 18 Activity 17 Sketch 25 Outline Due HW 14 (Sketch 21)	Math Games IV Nutshell Outline (Mathematics Today) Due HW 15 (Sketch 22)
4/20	Activity 19: Math & Art I Math Around the World IV	Activity 20: Math & Art II Activity 19
4/27	Activity 21: Math & Art III Part 1 (Optional) Activity 20 Mini Project 25	Book Presentations Activity 21: Math & Art III Part 2 (Optional) Math Around the World Mini Projects Last Day for Revisions Last Day to use Tokens
FINALS WEEK	Final Exam (Group) All Math & Art Mini Projects Due	

Notes:

1. Bold = assignments are due that day
2. Only the mini-project deadlines you sign up for apply to you
3. Red: Math Games Day!
4. Purple: Ethnomathematics Day!
5. Green: Math & Art
6. Grey: No class. Do activity on your own and turn in any assignments by email