Sul Ross State University
Course Syllabus
MATH 3350-001, MC1: History of Mathematics
Fall 2015

Instructor: Dr. Angela Brown
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Office Telephone Number: (432)837-8223
Email Address: abrown4@sulross.edu
Office Hours: WF:10-11,TR 9:00-12:00
Time and Place of Class Meetings: MW 3:30-4:45 ACR 206

Course Prerequisites: Passing grades in MATH 2413 with a D or better

Mathematics Program Learning Objectives: The graduating student should be able to

- Apply knowledge of basic mathematics principles.

- Identify and provide valid proofs or solutions for theorems or problems.

- Recognize and dispute invalid mathematical statements by using counter-examples.

Course Objectives: To introduce students to a broad range of historical developments in mathematics. To be able to communicate mathematics through writing and presenting. To understand the role of civilization on mathematics. To gain a deeper appreciation of mathematical ideas.

Required Textbooks: <u>Great Moments in Mathematics Before 1650</u> and <u>Great Moments in Mathematics After 1650</u>. These can be purchased as a PDF file at http://www.maa.org/publications/ebooks/great-moments-in-mathematics-before-1650. Make sure you get both pdf files together to save money!

Checking out other math history books from the library is highly encouraged as well.

Other Equipment Needed: paper and pencils.

Grading Scale: 90-100 A, 80-89 B, 70-79 C, 60-69 D, 59-Below F

Grading Policy: The grade weighting will be as follows:
Homework: 20%
Midterm:10%
Paper: 25%
Project: 25%
Final Exam: 10%
Participation: 10%

Reading Assignments and Homework: You will have daily reading assignments. These are to be read before you come to class and will be discussed the following class period. This discussion will be part lecture and part active participation. You will be required to present certain problems in class as part of your participation grade.

After we have discussed the topics in class you will be assigned homework problems pertaining to that section. You will have at least a week to complete assigned problems.

Exam: We will have two exams, one midterm and one final. These are not comprehensive. No make up exams will be given. A missed exam will earn a grade of 0.

Paper: You will have one paper that you will write for the class. This paper will be 9-12 pages in length typed and double spaced with 1 inch margins. You will need at least 5 sources, only one of which is allowed to be a website. Wikipedia is not allowed as a source! Everything should be properly sourced. For mathematics the standard formatting is the AMS formatting. It is very closely related to MLA format which I will also accept. This paper should be submitted to me through Safe Assign on Blackboard. The topic can be anything that is relevant to the course. Your topic must be approved by me before writing your paper. No two students can pick the same topic, so I will post topics as they are chosen. Each paper must contain a famous theorem and proof or problem and its solution. The rubric for how the paper will be graded is as follows:

- Content and Structure 35%

- Theorem and proof/Problem with solution 30%

- Grammar 15%

- Correct bibliography 10%

- Length 10%

Any plagiarism will be grounds for an automatic zero in the course and will be reported for disciplinary action.

Project: Projects will be presentations on a topic of the students choice pertaining to math history. Topics must be approved by the instructor. Again there cannot be a repeat of topics including those already written up for the paper and topics taken will be posted. These presentations are allowed to be power point type presentations, but they should have a creative slant to them. In other word, make them interesting and entertaining! The projects will be presented the last few class days and should be 20-30 minutes long. You should have your sources given at the end of your presentation just as you do for a paper. The project will be graded as follows:

- Content/Historical Accuracy 50%

- Creativity 20%

- Grammar 10%

- Correct bibliography 10%

- Length 10%

Attendance Policy: Students are expected to attend every class. If class must be missed, the student is expected to get the notes from a classmate, and to check with me or on Blackboard for announcements and updated assignments.

Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class.

If for some reason you need to leave class early, please inform me before class. If you leave class for the day without permission, then an in class assignment will more than likely be given that you cannot make up. If you need to go to the restroom during class, please do so quietly. You will not be allowed to go to the restroom during a quiz or exam.

It is policy of the university to drop a student with a grade of "F" if 9 hours or more of class are missed. For this course that would be 6 or more class sessions missed.

Cell Phone Policy: Cell phones are not allowed in class. They can not be used as calculators on any assignment. Any phone ringing during class will be taken up until the end of class. If a phone rings during a test or quiz, the student will forfeit their right to finish said test or quiz.

Americans With Disabilities Act: As an instructor, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing the instructor for MATH 3350 of their need for accommodation and in providing authorized documentation through designated administrative channels. If you need to request such accommodations, please contact the ADA Coordinator in Counseling and Accessibility Services, Ferguson Hall 112, 432-837-8203.

Distance Education Statement: Students enrolled in distance education courses have equal access to the universitys academic support services, library resources, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should submit online assignments through Blackboard or SRSU email, which require secure login information to verify students identities and to protect students information. Exams will submitted to the proctor to be given during the scheduled class time of the exam. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook.

Important Dates:

August 24	First Day of Classes
August 27	Last Day for Late Registration and Schedule Changes
September 7	Labor Day Holiday
September 9	12th Class Day-Last Day to Drop a Course Without Creating an Academic Record
November 13	Last Day to Withdrawal from University or Drop Classes with a Grade of "W" (by 4 pm)
November 25-27	Thanksgiving Holiday
December 2	Last Day of Classes
December 3-4	Dead Days
December 7-10	Final Exams
December 12	Commencement

Tentative Schedule-Subject to Change

	Monday		Wednesday
Aug 24	Introduction and Early Numbering Systems	Aug 26	Early Numbering Systems
Aug 31	Early Egyptian Mathematics	Sept 2	Early Geometry
Sept 7	Labor Day	Sept 9	Pythagorean Theorem
Sept 14	The first Crisis and the Resolution	September 16	Axiomatizing Math
Sept 21	Euclid's Elements	Sept 23	Archimedes
Sept 28	A Boost From Astronomy	Sept 30	Number Theory
Oct 5	Algebra	Oct 7	Early Computing
Oct 12	The poet Mathematician	Oct 14	Test 1
Oct 19	Fibonacci	Oct 21	Cardano and Tartaglia
Oct 26	Napier and Logarithms	Oct 28	Galileo and Kepler
Nov 2	Probability	Nov 4	Calculus
Nov 9	Series	Nov 11	Non Euclidean Geometry
Nov 16	Non Commutative Algebra	Nov 18	Set Theory
Nov 23	The Dream that Came True	Nov 25	Thanksgiving
Nov 30	Presentations	Dec 2	Presentations
Dec 7	Final Exam 3-5		