

Spring 2008 Course Information
MATH 380 – History of Mathematics

CRN 46137

10:00-10:50 AM

MWF: Wubben Hall, Room 140

Dr. Jane Arledge, Professor of Mathematics

Office Hours: M 12-12:50, T & W 3-3:50, Th & F 9-9:50

(or by appointment)

Web page: www.mesastate.edu/~arledge/

Office: Wubben Hall, Room 153

Phone: 248-1751 or 248-1407

Prerequisites. You must have completed Calculus II before taking this course. Some mathematical maturity is required in order to understand the historical development of mathematics.

Textbook. The textbook for this course is *A History of Mathematics, Brief Edition*, by Victor Katz.

Course Objectives. One primary goal of this course is to understand the historical development of mathematical thought, with a secondary goal of understanding the context in which this thought arose. The other primary goal is to develop organization, research and presentation skills. Working towards these goals, you will

- study the development of mathematical thought from Babylonian times to the modern mathematical era with an emphasis on the development of geometry, algebra, number theory, and calculus, and also try to understand these developments in a cultural and historical framework; and
- research various mathematicians and mathematical breakthroughs, gaining insight to both the mathematics and the cultural history surrounding these works. You will present these findings in the classroom, and keep records of all such work.

Course Procedure. Class periods will consist primarily of class discussion and student presentations. Along with the presentations of the two main projects, you will be asked to present simple results from the book to the class on a regular basis. Since this is a participatory course, attendance is crucial. If you must miss class for some reason and can inform me in advance, please do. Part of your grade will be based on classroom participation (readiness, correctness of presentations, voluntary discussion, etc.).

In addition to in-class presentations, students will complete Homework Sets and Course Projects as described herein. Student presentations of homework problems, selected sections from the text, and reports on course projects will also be incorporated into class meeting time (sufficient notice will be given for preparation).

Course Projects. The two research projects this semester are the Important Mathematical Person (IMP) project and the Important Mathematical Event (IME). The handout has the details.

Homework Sets. Homework sets will be assigned and collected on a regular basis. For each chapter in the text that we cover, you will be assigned several mathematical problems to complete. These problems will sometimes require you to work in the style of the culture and time period under discussion. Doing so is an interesting exercise in understanding of mathematical history. These exercises not only deepen your own mathematical understanding, but also provide important insights into the process of assessing and evaluating the mathematical understanding of other individuals.

Some of the homework problems will be carefully read, commented upon and scored. You will have plenty of time to complete each homework assignment before its due date, so late homework will not be accepted. You are encouraged to discuss homework problems and reflection essays with each other and me; however, the write-up must be your own. Homework **must be neat, labeled, and stapled, with no fuzzy edges.**

Exams. There will be two exams in this course, a midterm exam and a final exam. The exams will include questions that come from the attached Course Questions Sheet. You should refer to these sheets during the course to ensure that you understand the material that will be included in your exams. We will discuss these exams further during the term.

Exam schedule

Midterm Exam: Friday, March 21

Final Exam: Monday, May 14, 10-11:50, in the same room as this class.

These dates may be changed; such changes would be announced during class. **Please note** that in order to avoid receiving a grade of 0 due to an absence on the exam date, because of an illness or emergency, you must call me or the mathematics department **prior** to the beginning time of the exam, and you must present **documentation** which will convince me of the legitimacy of your absence. **Neither exam will be rescheduled for personal reasons such as flight plans or vacations.**

Course Grades. A grade of at least 65% on the homework is required to qualify for a passing grade (D or better) in this course. Assuming that your homework percentage is satisfactory, you will receive a grade based on the following: 25% for class participation, 25% for the Important Mathematical Person project (IMP), 25% for the Important Mathematical Event project (IME), and 25% for the combined averages of your midterm and final exams. Your grade will be assigned on a basis not more strict than the usual A – 90% to 100%, B – 80% to 89%, C – 70% to 79%, D – 60% to 69%, F – 0% to 59%.

A grade of incomplete will be given in the case of a legitimate emergency *only* if you have a passing grade and the semester is almost complete at the time of the emergency. (See the MSC catalog for more information regarding receiving a grade of incomplete.)

Special Services. In coordination with Educational Access Services, reasonable accommodations will be provided for qualified students with disabilities. Please meet with me the first week of class to make arrangements. Educational Access Services can be contacted at 248-1856, or in person at 954 North Ave. (next to the Bike Shop), entrance in the alley.

Withdrawal from the course. Until February 6, you may drop this course. After March 24, you will get an F, even if you are passing, if you withdraw from the course. Watch these deadlines!

Student Conduct. Please read the section in the Mesa State College Catalog regarding student conduct. Academic dishonesty is severely penalized. *If you are caught cheating in this course, in any way, you will fail this course* and will be punished further as allowed under the rules of the college.

Please turn off your cell phones and any other electronic devices (except your calculator) during class. Put all such devices away, and keep them off of your desk and out of sight.

Please come to class *on time*, and stay until the class is finished. Coming and going during the lecture is very disruptive to other students. If you must leave early or know that you will be late for some reason, please let me know in advance.

Attendance. You need to attend class in order to do well in this course, and your attendance will affect your grade directly. If you do have to miss class for some reason, you should get notes from a classmate; **Please do not ask me for the notes or the assignment;** getting the information you missed is **your** responsibility.

Name:	Phone:	.
Name:	Phone:	.
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I will follow your course catalog regarding attendance, which says: *Students are expected to attend all sessions of each course in which they are enrolled. Failure to do so may result in a lowered grade or exclusion from class at the discretion of the instructor. At any time during a semester, a student who fails to attend regularly may be dropped from class rolls. An instructor may initiate a drop or withdrawal for a student who fails to attend classes regularly.*