Spring 2-1-2018

M 429.01: History of Mathematics

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HISTORY OF MATHEMATICS
MATHEMATICS 429 SECTION 1
CRN 34320

INSTRUCTOR
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WEBPAGE `http://umonline.umt.edu/`

GOALS
1. To imbue a sense of the development of mathematical ideas over time.
2. To develop a knowledge of the times and places where ideas developed, and the ways in which such ideas were transmitted across cultures and time.
3. To learn about the people behind mathematics that is taught today, and to understand the contributions of other cultures to mathematics.
4. To improve the students ability to write in the context of mathematics.

TEXT
Burton, D. M. (2011). *The history of mathematics: An introduction* (7th ed.). New York, NY: McGraw Hill.

GRADE

Reading Journal	20	%
Quizzes	20	%
Research Paper 1	15	%
Research Paper 2	15	%
Research Paper 3	30	%

SCALE
Let S be your average weighted percentage of graded items in the course, then, you letter grade is determined by the following scale:

$$\begin{array}{rcccrcl}
93 & \leq & S & < & 100 & \Rightarrow & \text{A} \\
90 & \leq & S & < & 93 & \Rightarrow & \text{A-} \\
87 & \leq & S & < & 90 & \Rightarrow & \text{B+} \\
83 & \leq & S & < & 87 & \Rightarrow & \text{B} \\
80 & \leq & S & < & 83 & \Rightarrow & \text{B-} \\
77 & \leq & S & < & 80 & \Rightarrow & \text{C+} \\
73 & \leq & S & < & 77 & \Rightarrow & \text{C} \\
70 & \leq & S & < & 73 & \Rightarrow & \text{C-} \\
67 & \leq & S & < & 70 & \Rightarrow & \text{D+} \\
62 & \leq & S & < & 67 & \Rightarrow & \text{D} \\
60 & \leq & S & < & 63 & \Rightarrow & \text{D-} \\
0 & \leq & S & < & 60 & \Rightarrow & \text{F}
\end{array}$$

JOURNAL

You will be asked to keep a reading journal over the semester. In the reading journal you should record your answers to the reading questions and homework questions. Use the reading journal as an environment where you can practice writing about mathematics. Write in complete sentences. Use correct grammar. Explain your solutions to homework problems in narrative form. Your reading journal will be collected and graded on quiz days.

QUIZZES

There will be 5 quizzes over the course of the semester. Quizzes will cover mathematical content explored in class and assigned in the homework questions. Quizzes will also cover more general content addressed in the assigned reading questions. Quizzes are closed book but open journal. Calculators are allowed.

PAPERS

There will be three research papers required in the course. Each paper will require you to submit a topic outline and reference list, a first draft and a final draft.

1. Person Paper - Provide a historical essay about of a person (or group of people) that argues some aspect of the importance of his/her/their mathematical contribution. Cite a minimum of 3 outside sources (not all internet), write 1000-1500 words.

2. Time Period Paper - Provide a historical essay of a time period that argues the significance of mathematics developed during that period. Cite a minimum of 3 outside sources (not all internet), write 1000-1500 words.

3. Topic Paper - Provide a historical essay of the development of a particular mathematical topic over the course of history with special attention to any changes in concepts, understandings and/or approaches. Cite a minimum of 5 outside sources (not all internet), write 2500-3000 words.

HONESTY

All students need to be familiar with the Student Conduct Code. The Code is available at: `http://life.umt.edu/vpsa/student_conduct.php`.

DSS

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors and Disability Services for Students (DSS). If you think that you may have a disability adversely affecting you academic performance, and you have not already registered with DSS, please contact DSS in Lommassen 154. I will work with you and DSS to provide an appropriate accommodation.

DATES

February 9th is the last day to drop or add the course using Cyberbear. April 2nd is the last day to drop with instructor and advisor signatures. May 4th is the last day to drop the course or change grading option using a late drop form.

SEMESTER SCHEDULE

Monday	Wednesday	Friday
22-Jan CH1	24-Jan CH1	26-Jan CH2
29-Jan CH2	31-Jan CH2	2-Feb CH2
5-Feb QUIZ 1: CH1-2	7-Feb CH3	9-Feb CH3
12-Feb CH3	14-Feb CH4	16-Feb CH4
19-Feb President's Day	21-Feb CH4	23-Feb CH5
26-Feb QUIZ 2: CH3-4	28-Feb CH5	2-Mar CH5
5-Mar CH6	7-Mar CH6	9-Mar CH6
12-Mar CH7	14-Mar CH7	16-Mar CH7
19-Mar QUIZ 3: CH5-7	21-Mar CH8	23-Mar CH8
26-Mar Spring Break	28-Mar Spring Break	30-Mar Spring Break
2-Apr CH8	4-Apr CH9	6-Apr CH9
9-Apr CH9	11-Apr CH10	13-Apr CH10
16-Apr QUIZ 4: CH8-9	18-Apr CH10	20-Apr CH11
23-Apr CH11	25-Apr CH11	27-Apr CH12
30-Apr CH12	2-May CH12	4-May CH12
FINAL QUIZ 5: CH10-12 10:10 - 12:10 Friday, May 11th		

RESEARCH PAPER SCHEDULE

Paper	Outline/References	First Draft	Final Draft
1	February 2	February 16	March 2
2	February 23	March 9	March 23
3	April 13	April 27	May 11