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M 429.01: History of Mathematics

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HISTORY OF MATHEMATICS

MATHEMATICS 429 SECTION 1 CRN 30197

INSTRUCTOR Matt Roscoe

Office: Math 213

Phone: (406) 243-6689 or (406) 203-2112

Email: matt.roscoe@umontana.edu

http://umonline.umt.edu/ WEBPAGE

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.

Burton, D. M. (2011). The history of mathematics: An introduction (7th TEXT

ed.). New York, NY: McGraw Hill.

% GRADING Homework 10

> % Reading Journal 10 % Quizzes 20 % 30 Essav 1 Essay 2 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:

93

S

< < S90 Α-< 93 87 S< 90 \Rightarrow B+< < < S83 87 \Rightarrow В < 80 SВ-83 \Rightarrow < < S< \Rightarrow C+ 77 80 S73 < 77 \Rightarrow С < | < | < | < | < | < | < | 70 S< 73 \Rightarrow C-S67 < 70 \Rightarrow D+

<

100

Α

S62 < 67 D \Rightarrow

S60 63 \Rightarrow D-

0 S \mathbf{F} 60 \Rightarrow

GOALS

HOMEWORK

You will be assigned homework problems from each chapter of the text. Note that answers to selected problems are given in the text. A subset of homework will be graded for accuracy, the remainder for completion.

JOURNAL

You will be assigned reading questions for each chapter of the text. You should record your answers to these questions in a reading journal. Use the reading journal as an environment where you can practice writing about mathematics. Write in complete sentences. Use correct grammar. Your reading journal will be collected and graded for completion.

QUIZZES

There will be 5 quizzes over the course of the semester. Quizzes will assess your knowledge of mathematical content and its history which will be explored in lectures, assigned in homework and assigned as reading questions. Quizzes are closed book but open to the use of lecture notes, homework problems and reading journal. Calculators are allowed.

ESSAYS

There will be two essay papers. Each is to be an argumentative piece of writing that aims to *convince* the reader of a particular position on a topic of mathematics history. Essays should have an identifiable introduction that includes a thesis statement, a presentation of supporting evidence and a summarizing conclusion. Each essay should be supported by a minimum of 5 outside sources. Each essay must be at least 2500 words. The topic of each essay is open to your choosing as long as it argues a thesis about some aspect of mathematics history. For each essay, you will be asked to submit work that demonstrates your preparation, your first draft and your final draft. You will also be asked to engage in peer review.

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.

ODE

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and the Office for Disability Equity (ODE). If you anticipate or experience barriers based on disability, please contact the ODE at: (406) 243-2243, ode@umontana.edu, or visit http://www.umt.edu/disability for more information. Retroactive accommodation requests will not be honored, so please, do not delay. As your instructor, I will work with you and the ODE to implement an effective accommodation, and you are welcome to contact me privately if you wish.

DATES

February 7th is the last day to drop the course using Cyberbear. March 29th is the last day to drop with instructor and advisor signatures (W appears on transcript). May 6th is the last day to drop the course or change grading option using a late drop form (WP/WF appears on transcript).

SEMESTER SCHEDULE

Monday	Wednesday	Friday		
	19-Jan	21-Jan		
	CH 1	CH 1		
24-Jan	26-Jan	28-Jan		
CH 2	CH 2	CH 2		
31-Jan	2-Feb	4-Feb		
CH 2	CH3	QUIZ 1: CH1-2		
7-Feb	9-Feb	11-Feb		
СНЗ	CH3	CH4		
14-Feb	16-Feb	18-Feb		
CH4	CH4	CH4		
21-Feb	23-Feb	25-Feb		
President's Day	CH5	QUIZ 2: CH3-4		
28-Feb	2-Mar	4-Mar		
CH5	CH5	CH6		
7-Mar	9-Mar	11-Mar		
CH6	CH6	CH7		
14-Mar	16-Mar	18-Mar		
CH7	CH7	QUIZ 3: CH5-7		
21-Mar	23-Mar	25-Mar		
Spring Break	Spring Break	Spring Break		
28-Mar	30-Mar	1-Apr		
CH8	CH8	CH8		
4-Apr	6-Apr	8-Apr		
CH8	CH9	CH9		
11-Apr	13-Apr	15-Apr		
CH9	CH10	QUIZ 4: CH8-9		
18-Apr	20-Apr	22-Apr		
CH10	CH10	CH11		
25-Apr	27-Apr	29-Apr		
CH11	CH11	CH12		
2-May	4-May	6-May		
CH12	CH13	CH13		
FINAL QUIZ 5: CH10-13				
10:10 - 12:10 Monday, May 9th				

RESEARCH PAPER SCHEDULE

Essay	Preparation	Draft	Revision
1	February 9	March 2	March 16
2	April 6	April 20	April 29