| Course Title/Number | MTH 405: History of Math | |
|---------------------|--|--|
| Semester/Year | Spring 2015 | |
| Days/Time | Monday and Wednesday, 5:00pm – 6:15pm | |
| Location | Smith Hall 516 | |
| Instructor | Carl Mummert | |
| Office | Smith Hall 742E | |
| Phone | 304 696-6156 | |
| Email | mummertc@marshall.edu | |
| Office/Hours | MWF 9:00am – 11:30am, and by appointment | |
| University Policies | By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to www.marshall.edu/academic-affairs and clicking on "Marshall Uni- versity Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/policies/. Policies: Academic Dishonesty, Excused Absence Policy for Under- graduates, Computing Services Acceptable Use, Inclement Weather, Students with Disabilities, Academic Dismissal, Academic Proba- tion and Suspension, Academic Rights and Responsibilities of Stu- dents, Affirmative Action/ Sexual Harassment. | |

Important note

Because of an unanticipated change in instructor, the syllabus for Math 405 (Spring 2015) has been amended as of March 2, 2015. Students will not be penalized for any activities before this date, and will receive credit for low stakes assignments before this date.

Course Description: From Catalog

A study of the history of mathematics from the time of the ancient Greeks to the end of the nineteenth century.

Required Text

Journey Through Genius, William Dunham, 1990. Reprint, Penguin, ISBN 014014739X

Course Student Learning Outcomes

The table below shows how each student learning outcome will be practiced and assessed in the course.

| Student Learning Outcome | How students will practice this outcome | How student achievement of this outcome will be assessed |
|--|---|--|
| Students will write more effectively by regularly using writing as a means to investigate problems and to learn mathematical concepts. | Discussion, in-class tasks with and without technology, response sheets (low-stakes writing), discussion questions, homework | Exam questions, mathematician presentation, mathematician poster |
| Students will read and interpret mathematical ideas independently. | Discussion, in-class tasks with and without technology, response sheets (low-stakes writing), discussion questions, homework | Exam questions, mathematician presentation, mathematician poster |
| Students will use their exploration of the historical struggle to find an effective system of notation in order to more effectively communicate mathematical ideas in written and oral forms. | Discussion, in-class tasks with and without technology, response sheets (low-stakes writing), discussion questions, homework | Exam questions, mathematician presentation, mathematician poster |
| Students will examine the changes that have taken place in the standards of proof in order to address issues related to representation including what technology is appropriate to solve a problem and to present a topic. | Discussion, in-class tasks with and without technology, response sheets (low-stakes writing), discussion questions, homework | Exam questions, mathematician presentation, mathematician poster |
| Students will learn to mathematically model situations and creatively solve problems for which they may never have seen examples and be able to pass such strategies on to their own students by doing the related mathematics associated with historically important developments | Discussion, in-class tasks with and without technology, response sheets (low-stakes writing), discussion questions, homework | Exam questions, mathematician presentation, mathematician poster |

| Students will learn to use their knowledge of the history of mathematics as a resource for the learning and teaching of mathematics. | Discussion, in-class tasks with and without technology, response sheets (low-stakes writing), discussion questions, homework | Exam questions, mathematician presentation, mathematician poster |
|---|---|--|
| Students will enhance their writing skills and strategies | In-class tasks with and without technology, response sheets (low-stakes writing), homework | Exam questions, mathematician presentation, mathematician poster |

Course Schedule

- O March 4 Assign presentations. Discuss Chapter 3.
- O March 9 Discuss Chapter 4.
- O March 11 Discuss Chapter 5
- O March 23 Discuss Chapter 6. Presentation drafts due.
- O March 25 Exam
- O March 30 Discuss Chapter 7
- O April 1 Discuss Chapter 8. Poster drafts due.
- O April 6 Presentations. Discuss one poster.
- O April 8 Presentations. Discuss one poster.
- O April 13 Presentations. Discuss one poster.
- O April 15 Presentations. Discuss one poster.
- O April 20 Presentations. Discuss chapter 9.
- O April 22 Presentations. Discuss chapter 9.
- O April 27 Presentations. Discuss chapter 10.
- O April 29 Presentations. Discuss chapter 10.
- O May 4 Final Exam

Course Requirements / Due Dates

| Activity/Deliverable | Due Date | |
|----------------------|---------------------------|--|
| Homework | Various dates (weekly) | |
| Presentation draft | March 23 | |
| Presentations | Various dates in April | |
| Poster draft | April 1 | |
| Poster final | One week after discussion | |
| Midterm exam | March 25 | |
| Final exam | May 4 | |

Grading Policy

Your overall grade is a weighted average of assignments and exams.

| Activites and weights | | |
|------------------------------------|--------|--|
| Activity | Weight | |
| Participation (low stakes writing) | 10% | |
| Homework (medium stakes) | 10% | |
| Exam 1 | 20% | |
| Exam 2 | 20% | |
| Presentation and slides | 20% | |
| Poster (group assignment) | 20% | |

| Grading Scale | | |
|---------------|--------------|--|
| Score | Letter Grade | |
| 90 - 100 | А | |
| 80 - 90 | В | |
| 70 - 80 | С | |
| 60 - 70 | D | |

Attendance Policy

Attendance will be taken each time the class meets. If you are absent when a response sheet, participation points, or an announced quiz is given, it cannot be made up. You are responsible for all notes and assignments given during any absence. If you are aware that you will be missing a class, make arrangements to find out the assignment before you leave. If some emergency forces you to miss class, contact me before the next class. The Academic Affairs policy for excused absences can be accessed at http://www.marshall.edu/academic-affairs/policies/ as well as other university-wide policies. If you have an excused absence for a class assignment that cannot be made up, an alternate assignment will

muOnline

It is important to visit muOnline regularly for up-to-date information about the course.

Policy for Students with Disabilities

Marshall University is committed to equal opportunity in education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disabled Student Services (DSS) in Prichard Hall 117, phone 304-696-2271, to provide documentation of their disability. Following this, the DSS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, please visit http://www.marshall.edu/disabled or contact Disabled Student Services Office at Prichard Hall 117, phone 304-696-2271.