Marshall University
Syllabus

Course Title/Number	**Math 589: Graduate Mathematics Seminar**
Semester/Year	Spring 2014
Days/Time	Monday 4:00pm-4:50pm
Location	Smith Hall 509 (subject to change)
Instructor	Carl Mummert
Office	Smith Hall 742E
Phone	(304) 696-6156
E-Mail	mummertc@marshall.edu
Office/Hours	Monday, Wednesday, Thursday 3:00pm-4:00pm; Tuesday 3:00pm-5:00pm
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 University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description: From Catalog

A seminar on topics relevant to graduate students in mathematics, including college-level teaching, conducting research, professional ethics, and mathematics careers. This course does not satisfy any degree requirements, but is required for mathematics graduate assistants. CR/NC; 1 credit hour.

The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course.

Student Learning Outcomes	**How students will practice each outcome**	**How student achievement of each outcome will be assessed**
Students will produce written reflections on their experience in graduate school and, as applicable, experiences with college-level teaching and mathematics research.	Class discussion and class presentations	MU Online upload
Students will produce documents using LaTeX publishing software.	Class discussion and class presentations	MU Online upload
Students will examine case studies related to teaching, research, and ethics; produce written summaries of their opinions; and discuss these opinions with the class.	Class discussion and class presentations	MU Online upload
Students will observe a freshman-level class and produce a written reflection.	Class discussion and class presentations	MU Online upload

Required Texts, Additional Reading, and Other Materials

None.

Course Requirements / Due Dates

1. There are several mandatory uploads. The due dates are visible on MU Online.
2. Attendance at departmental research seminars is required
3. Class attendance is required

Grading Policy

- The course is graded on a CR/NC system (credit or no credit). To receive credit, students must complete all required activities assigned during the semester. These include class attendance, a biweekly reflective journal, an observation of a freshman-level class taught by a faculty member, attendance at several research seminars, and development of a professional vita.

Attendance Policy

Attendance at all class meetings is required, unless an excused absence is obtained.

Math 589: Graduate Mathematics Seminar
Marshall University Department of Mathematics
Spring 2014

Note from the instructor

In fall 2013, the graduate committee revised Math 589, and the mathematics department officially approved the revisions. The course is now titled "Graduate Mathematics Seminar". The course will still discuss college-level teaching, but the focus will expand to include other topics relevant to graduate students in mathematics. I have been testing some of these topics for the last few semesters, so the change should not be too jarring. But please remember this course is a work in progress. The central goal has always been, and is still, to support you in all aspects of your academic life at Marshall – taking classes, teaching, conducting research, and moving towards your career.

Course information

Instructor Dr. Carl Mummert. My office is Smith Hall 742E. My email address is `mummertc@marshall.edu`, and my office phone number is (304) 696-6156. My cell phone number is available on MU Online, for urgent matters only. I prefer to communicate by email.

Office hours I have an open door policy – you are welcome to stop in any time. My scheduled office hours are Monday 3–4pm, Tuesday 3–5pm, Wednesday 3–4pm, and Thursday 3–4pm.

Class meetings Monday at 4:00pm in Smith Hall 509.

Catalog description A seminar on topics relevant to graduate students in mathematics, including college-level teaching, conducting research, professional ethics, and mathematics careers. This course does not satisfy any degree requirements, but is required for mathematics graduate assistants. CR/NC; 1 credit hour.

Course objectives

1. Students will produce written reflections on their experience in graduate school and, as applicable, experiences with college-level teaching and mathematics research.
2. Students will produce documents using LaTeX publishing software.
3. Students will examine case studies related to teaching, research, and ethics; produce written summaries of their opinions; and discuss these opinions with the class.
4. Students will observe a freshman-level class and produce a written reflection.

Assessment and grading The course is graded on a CR/NC system (credit or no credit). To receive credit, students must complete all required activities assigned during the semester. These include class attendance, a biweekly reflective journal, an observation of a freshman-level class taught by a faculty member, attendance at several research seminars, and development of a professional vita.

Assignments The following assignments are due during the semester. All assignments that you submit will be uploaded on MU Online.

- **Reflective journal.** One journal assignment will be due every two weeks. Each assignment has a specific topic, but you can also use the journal to write about any other topics that are on your mind.
- **Exam written in LaTeX.** You will upload an exam from a class you are teaching, written in LaTeX. If you are not teaching, I will provide an alternate assignment.
- **Course observation.** You will observe a freshman-level class taught by another instructor, and then write a short reflection on it. I will provide full details.
- **Vita or resume.** You will prepare a professional vita or resume and upload it on MU Online.
- **Research seminars**. The department will host several research seminars during the semester. Attending these is a requirement of Math 589.
- **Class attendance.** Attendance in the weekly Math 589 meetings is required.

Students with disabilities Students with documented learning disabilities or documented physical disabilities should contact me immediately, so that the proper arrangements can be made.

Equal opportunity This course will follow Marshall University policy on affirmative action, which gives all students equal opportunity without regard to race, color, sex, religion, age, disability, national origin, or sexual orientation.

Other policies All policies in the student handbook apply to this course, even if they are not explicitly listed here. Please consult the handbook for additional information on university-wide course policies.

Course outline The course will include the following topics.

- Teaching college-level mathematics
  - Strategies for delivering content
  - Teaching with technology
  - Inquiry-based pedagogy and active learning
  - Assessment techniques and grading
  - Case studies
- Conducting mathematical research
  - Using LaTeX publishing software
  - General methods of mathematical research
  - Best practices for mathematical publication and citation
- Professional ethics
  - Ethics statements of professional societies
  - Purpose and role of an Institutional Review Board
- Career paths in mathematics
  - Overview of PhD studies in mathematics and applying to PhD programs
  - Overview of non-academic careers and applying for non-academic positions
  - Creating a professional vita

Course schedule

Additional events, particularly research seminars, will be announced during the semester.

January 13	Intro to semester. Writing syllabi. Course evaluations from Fall 2013. Tutoring lab.
January 20	MLK holiday – no class
January 27	**Presentation by Career Services**
February 3	Using LaTeX
February 10	Writing exams. LaTeX exam class. Bloom's taxonomy.
February 17	Teaching with technology. MU Online.
February 24	Research techniques in mathematics. Thesis writing. Role of the IRB.
March 3	**LaTeX exam upload due**
March 10	Writing a resume or vita
March 17	Spring break – no class
March 24	To be determined
March 31	**Course observation due**
April 7	Using writing in math courses
April 14	**Resume or vita due.** Registration for Fall 2014 begins.
April 21	Assigning final grades. End of semester checklist.
April 28	To be determined

May 2014 graduation deadlines

For more information, please see
`http://www.marshall.edu/graduate/graduation-and-commencement-timetable/`

February 7	Last day to submit application for graduation and pay diploma fee
April 25	Last day to take a comprehensive oral examination
May 2	Last day of class
May 8	Thesis students: last day to submit final ETD form
May 10	Graduation ceremonies

Updated: January 5, 2014