

FOUNDATIONS OF GEOMETRY, STATISTICS, AND PROBABILITY

M316L Fall 2009 Unique #: 57635 / 57640 Time: MWF 9-10 am / 12-1 pm Location: RAS 310 / 215	Instructor: Michael B. Williams (call me Mike) Office: RLM 12.132 Office hours: W 10-12, F 1-2, by appointment Email: mwilliams@math.utexas.edu
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COURSE DESCRIPTION: This course is an analysis, from an advanced perspective, of the methods of geometry, statistics, and probability, with emphasis on problem solving and communicating mathematics effectively. Class time will be used to investigate these topics through hands-on activities. Students are expected to read the text outside of class. *We will not discuss teaching methods*; you do this later in your program.

TEXTBOOK AND MATERIALS: Bassarear, *Mathematics for Elementary School Teachers*, Fourth Edition
 You must have both the textbook and the Explorations manual, which we will use in class every day. You should also have a ruler, protractor, and compass for the geometry explorations. You may find it helpful to have a binder and hole punch to store handouts and returned work.

COURSE WORK AND GRADING:

- Exams
 - In-class: October 12 (on Chapters 8 and 9), November 16 (on Chapter 10), worth 15% each.
 - Final: cumulative, see dates below, worth 20% total.
- Written Work
 - Weekly homework, worth 15% total.
 - Journals: approximately 5 short (1-2 page) writing assignments, worth 10% total.
 - Projects: two well-written investigative reports, worth 10% each.
- Attendance/Participation: this is intentionally ambiguous, but worth 5% total.

Grades will roughly follow a typical grading scale: 100-90 A, 89-80 B, 79-70 C, 69-60 D, 59-0 F, and +/- will be used. I may lower the grade cutoffs if necessary (which can only help you).

LATE WORK: No late Homework will be accepted, but the lowest 2 scores will be dropped. No late Journals or Projects will be accepted, as you will have plenty of advance warning. Make up exams will only be given in *extreme cases!!!*

SCHEDULE: Here is a tentative schedule for topics to be discussed in class. This may be adjusted to allow for deeper discussion of certain topics, if needed.

August	September	October	November	December
28 - 31 §8.1	2 §8.1	2 - 7 §9.3	2 - 9 §10.3	2 - 4 §7.3
	4 - 11 §8.2	9 - 16 §10.1, Exam 1	11 - 18 §7.1, Exam 2	
	14 - 18 §8.3	19 - 30 §10.2	20 - 25 §7.2	
	21 - 25 §9.1			
	28 - 30 §9.2			

DROP DATES: Wednesday, September 24 is the last day to drop a class without a possible academic penalty. Wednesday, October 22 is the last day to drop *with the dean's approval*.

PREREQUISITES: Prerequisite is M 316K with grade of C or better (except for students pursuing middle grades mathematics teacher certification through the UTeach program).

FINAL EXAM: Times are set by the University registrar and locations will be announced later:

- Saturday, December 12, 2-5 pm for the MWF 9-10 am section
- Monday, December 14, 9-12 noon for the MWF 12-1 pm section

CLASS WEBSITE: <http://www.ma.utexas.edu/users/mwilliams/F09/M316L/index.html>

It contains the information on this handout, plus more information on all assignments and exams.

STUDENTS WITH DISABILITIES: The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.