

Math 257 Syllabus (section 030, summer 2001)

Dr. Holmes

June 14, 2001

1 Information and Policies

Instructor: M. Randall Holmes.

Office number: MG240A

Office telephone: 426-3011.

Office hours: to be discussed

Home telephone: 345-2899 (please do not use after 8:30 pm or between 6 pm Friday and noon Sunday).

Internet: E-mail holmes@math.boisestate.edu

Web page <http://math.boisestate.edu/~holmes>

This syllabus and other course information will be accessible from my web page.

Title of Course: Math 257: Geometry and Probability for Teachers.

Schedule: MTThF 10:10 am-12:10 pm

Final exam dates and times: The final exam will be given on the last day of class, Friday, August 3.

Textbook: A Problem-Solving Approach to Mathematics for Elementary School Teachers, Billstein, Liebeskind, and Lott, 7th ed.

Mathematical Activities for Elementary School Teachers: a problem-solving approach. Dolan, Williamson, and Muri

This is the same textbook and lab manual required for Math 157.

Prerequisites: Math 157 with C or better.

Getting into the Class: I will make no exceptions to policies regarding prerequisites or the capacity of the room.

Core Learning Objectives: This is a core course. Take a look at the departmental curriculum document which is attached.

Calculators: I understand that some of you have TI-73 calculators. It may sometimes be useful to have one of these in class. At a minimum, you should have a scientific calculator. Calculators will be allowed at exams.

Required Supplies: You need a compass, a protractor, and a set of colored pencils. A pair of scissors of your own and a roll of tape are also a good idea. A little mathematics pack for students might contain all these items.

Attendance: Attendance will be taken as part of the process for awarding credit for in-class activities. You have three automatic excused absences for the term: absences above this level will have an unavoidable effect on your in-class activity grade. To minimize problems with homework and tests caused by absences, please make arrangements in advance if you can.

In-Class Activities: In-class activities will be carried out in groups. You will work in assigned groups, under two different schemes which I will set up at the beginning of class and may modify after I have some information about relative abilities of students in the class and how well the groups work together. Credit for in-class activities will be based partly on attendance and partly on reports on group activities prepared by group members.

Homework: Homework assignments will be given regularly. You may work on homework either by yourself or with a partner of your choice.

Exams: There will be three in-class exams and a final exam in this course. You will have the full two-hour session to do each exam.

Late Work and Makeups: Makeups for exams will be possible, and should if possible be arranged in advance of your absence. On late homework I do not admit having any consistent policy at all: if you hand in your homework late you may get graded normally, graded with a penalty, or receive a minimal grade merely for handing it in, at my entire discretion. There will be no make-ups for in-class work, as noted above.

Computation of Grades: Exams will usually be scaled linearly so that the median class grade is 75%, then graded with 90's = A, 80's = B, 70's = C, 60's = D, etc. I may change the scaling if I am displeased with the class performance (though this seldom happens); I will never scale grades downward.

Your homework grade and your in-class activities grade each have the same weight as a regular exam; your final exam will have the weight of two regular exams. Your lowest regular exam grade (or your homework grade or in-class grade if it is lowest) may be replaced by your grade on the final exam if this helps you. Your course grade will be the sum of your regular exam grades, your homework grade and your in-class grade (the lowest of these five grades being replaced by the final exam grade if this helps) plus twice the final exam grade, divided by seven.

Each homework assignment will be marked in the following way: you get 30% for handing it in, then you get a percentage of the remaining 70% determined by your performance on the assignment. I reserve the right to mark selected problems from any assignment rather than the entire assignment; you will not know in advance which problems I will select to grade, but you can always request that I look at your solutions to other problems. Your homework grade will not be scaled or adjusted in any other way. It is seldom the case that a student's lowest grade is their homework grade, if they do their homework regularly.

Open Office Policy: I will be in my office most of the usual working day, and will generally be willing to talk to students if they show up there. You can make appointments to see me there.

I encourage students to correspond with me by e-mail.

Academic Honesty: The penalty for cheating (defined as looking at another student's paper or unauthorized use of books or notes during an exam) will be a grade of zero (0) on the relevant exam. A repeat offense will mean an F in the course.

There is a great deal of collaborative work in this course (you are expected to do in-class activities in groups and you are allowed to do homework with a partner or individually). Collaborative work, while it has educational advantages if done correctly, has obvious potential for abuse. Please work with others rather than allowing them to work for you. Make sure that you understand any work done by any collaborator on a homework assignment or in an in-class activity.

Definitions: The word "yesterday" is defined to mean the previous class session; the word "tomorrow" is defined to mean the next class session, unless I specifically say otherwise :-)

2 Schedule of Sections Covered (with Exam Dates)

This is of course subject to change. This document is the framework for the pending homework schedule, updates to which will appear throughout the term.

A homework assignment is due two class sessions after the session at which it is assigned, to allow for questions in class on the intervening day.

It is always your responsibility to read indicated sections before the class meeting. Keep an eye on updated homework sheets: they may include modifications to the sections covered on particular days.

June 11: administrative activities; survey

June 12: 10.1, 9.1

June 14: 10.2, 9.2

June 15: 9.3

June 18: 10.3

June 19: 10.4, 10.5?
June 21: 9.4, 10.5?
June 22: Test 1 (geometry)
June 25: 11.1, 12.1
June 26: 11.2, 12.2
June 28: 11.3
June 29: 12.3, 12.4
July 2: 11.4
July 3: 11.5, 12.5
July 5: 12.5
July 6: Test 2 (geometry)
July 9: 7.1
July 10: 7.1, 7.2
July 12: 7.2
July 13: 7.3
July 16: 7.4
July 17: 7.5
July 19: overflow
July 20: Test 3
July 23: 8.1
July 24: 8.1
July 26: 8.2

July 27: 8.2

July 30: 8.3

July 31: overflow; department survey

August 2: review for final

August 3: Final exam