COURSE: MTE 211, Structures of Geometry, 4 Credits

SEMESTER: Winter, 2007

INSTRUCTOR: Professor Jerrold Grossman
346 SEB, (248) 370-3443
office hours: I’m almost always available
e-mail: grossman@oakland.edu

CLASS MEETING: This is section 12801. The class meets Tuesday and Thursday afternoons from 1:00 to 2:47 in 164 SEB. Please attend all classes, on time, with cell phones turned off. I like to take a break of about eight minutes about halfway through.

PREREQUISITES: A 2.0 or better in MTE 210 or an equivalent course at another school. If you do not meet the prerequisite, you will not be permitted to remain in the course.

TEXTS: A Problem Solving Approach to Mathematics for Elementary School Teachers, 9th Edition, by Billstein et al., published by Addison-Wesley (2004). We will cover most of chapters 9-12, and maybe some additional material as well. There is also a student solutions manual, which you can purchase if you wish; it has worked-out solutions to the odd-numbered exercises in Billstein’s text (answers, not worked-out solutions, to some, but not all, exercises, both odd and even, are also available in the back of the textbook). Sometimes answers and solutions contain errors, so don’t necessarily doubt your own work if it disagrees with the authors’. A copy of Billstein, the solutions manual, and some alternative textbooks are available on 2-hour reserve at Kresge Library (under MTE 210). If you have not already read Principles and Standards for School Mathematics, published by the National Council of Teachers of Mathematics, you really should. You can purchase this from the NCTM if you wish (see their website), but it is available on-line and you can read it there if you join the organization (which you should seriously consider doing) or with free access for 90 days. Week-by-week readings are shown on my old MTE 210 course website (with links).

CALCULATOR AND COMPUTER POLICY: For this course you will need a calculator with at least the four arithmetic operations and square root. You
can get a simple one for about $3 or fancier (“scientific”) ones (with many other functions, graphing capability, etc.) for more money (the TI-83 or 84 is a wise choice if you plan to take courses like MTH 141). You may use the calculator in all work for this course, and it is important to learn how and when to use it effectively. Using a calculator’s memory to store information for a test is not permitted. Some of the projects (see below) will involve a wonderful software package called *Geometer’s Sketchpad*, which is available in the computer laboratories on campus (e.g., in the basement of Kresge Library). You will also need to have some geometric “weapons of math instruction” (the pun is not original): ruler, compass, and protractor.

**TESTS:** There will be two class tests, worth 100 points each. These tests, as well as the quizzes and the final examination (see below), are closed book tests. The tentative dates for the tests are February 8 and March 22.

**QUIZZES AND HOMEWORK:** Homework from the textbook will be assigned regularly. You must do it conscientiously, but it will not be collected or graded. We will go over any questions you have about these problems in class (please ask!). Three special homework assignments (projects) will also be given; these are to be written up formally and handed in (preferably with students working in groups of two), and they will count a total of 100 points. There will be three half-hour quizzes, based on the homework. The quizzes will count a total of 100 points. The tentative dates for the quizzes are January 25, March 6, and April 5.

**FINAL EXAM:** The final examination will be comprehensive. It will be given on Wednesday, April 25, 12:00–3:00 p.m. and will be worth 200 points.

**EMERGENCY CLOSING:** If the University is closed at the time of a scheduled quiz or test (for example, because of snow), it will be given during the next class period when the University reopens.

**EXTRA CREDIT:** You can earn extra credit in various ways. See the website for more information.

**GRADING POLICY:** Your course grade will be based upon the percentage of total points you have earned out of the 600 points available to you. There is no fixed grading scale for this course; a conversion formula from your percentage score to Oakland University grades will be determined at the end of the course. However, the following “standard scale” shows the lowest possible grade that a given percentage score will earn (the grade may be higher than this): 95%→4.0, 80%→3.0, 65%→2.0, 50%→1.0. After each test, an indication of class performance on that test and an approximate
grade conversion for that test will be announced. Grades may be adjusted slightly up or down to reflect your class participation.

MAKE-UP POLICY: No make-up tests or make-up quizzes will be given. If you miss a test and have a valid excuse, your grade for the missed test will be based on the final exam; otherwise the missed test will be counted as a 0. An excused absence from a quiz will result in the average of the scores on the other quizzes being substituted for the score on the missed quiz.

ACADEMIC HONESTY: Cheating is a serious academic crime. Oakland University policy requires that all suspected instances of cheating be reported to the Academic Conduct Committee for adjudication. Anyone found guilty of cheating in this course will receive a course grade of 0.0, in addition to any penalty assigned by the Academic Conduct Committee. Handing in written work that has essentially been copied from someone else is cheating. Receiving help from someone else or from unauthorized written material during a quiz, test, or final exam is also cheating, as is using a calculator as an electronic “crib sheet”.

SUCCEEDING IN THE COURSE: The Department of Mathematics and Statistics is committed to achieving the goal of an academically sound freshman and sophomore mathematical sciences curriculum in which most conscientious Oakland University students can expect to be successful. If you have had Professor Grossman for MTE 210, then you know what to expect; if not please read “supplementary information” and “my feelings about this course” on the MTE 210 website. You are encouraged to take advantage of the resources available to you: each other (forming study groups), your instructor’s office hours, the Academic Skills Center, the library, the World Wide Web, and your friends and family.

IMPORTANT DATES:

- January 18: Last day for “no-grade” drops
- Week of February 26: Winter recess
- March 15: Last day for official withdrawal (W grade)
- April 17: Last day of class in MTE 210

NOTE: This class will have a World Wide Web page, which has additional information and lots of interesting links. Please consult it often. The URL is http://personalwebs.oakland.edu/~grossman/MTE211 (or go there via WebCT).