Math 3133 - Geometry for Elementary Majors — Summer 2006

Course Information

Location:	http://blackboard.sosu.edu
Instructor:	Dr. Karl Frinkle
Office:	MTH 208
Office Hours:	by appt.
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Required Materials

Text: *A Problem Solving Approach to Mathematics for Elementary School Teachers* (8th Edition), by Billstein, Libeskind, & Lott, ISBN # 0321172566
Software: *MyMathLab* access code, by Course Compass

Prerequisite

The student must have completed the following or the equivalent:

1. MATH 1303 - Mathematics in the Liberal Arts; and MATH 1513 - College Algebra;
2. OR MATH 1543 - Algebra for the Sciences (Will not count toward a major or minor in mathematics or a certificate to teach mathematics.)

Course Overview

This course is the study of geometry concepts such as measurement, congruence, constructions, lines and circles.

Major Goals

A student completing Geometry for Elementary Majors will be able to:

1. Use geometric concepts and spatial understanding to describe and model real world constructs. This will include:
   - Identification of and knowledge of characteristics of two and three-dimensional figures;
   - Knowledge of triangles and the relationships between their parts; and
   - Ability to perform simple constructions commonly used in plane geometry.
2. Demonstrate knowledge of measurement concepts and procedures.
3. Use calculators and computers to solve mathematical problems.
4. Use geometric tools to develop geometric concepts.
5. Communicate knowledge of mathematics to others.

Conceptual Framework

All current mathematics education texts make frequent references to the Principles and Standards for School Mathematics, National Council of Teachers of Mathematics (NCTM), 2000. The curriculum is modeled from these standards, and the emphasis of the course reflects their importance. These standards may be viewed on the NCTM website, http://www.nctm.org.

Oklahoma's Priority Academic Student Skills represent the basic skills and knowledge all students should learn in the elementary and secondary grades. This document is available through the State Department of Education website (http://sde.state.ok.us/home/defaultie.html).

The Professional Standards for Teaching Mathematics, National Council of Teachers of Mathematics, 1991 promote the following as essential components for the professional development of teachers of mathematics: personal experiences in contexts that model and value good mathematics teaching;

development of knowledge about mathematics, students, and teaching; opportunities to apply knowledge and experience through practice; and the gradual assumption of responsibilities for professional growth and change.

Expected Learner Outcomes

1. The learner will demonstrate knowledge of geometry as an axiomatic system of mathematics.
2. The learner will demonstrate the ability to communicate, using appropriate geometrical terms, both orally and in written assignments.

Methods of Instruction

This course will be conducted using a variety of instructional methods and learning activities, including but not limited to, "virtual" lectures/chats, discussion boards, homework, exams, written activities, and online activities. Check the course website every day, at least five days a week! Approximately 20-24 hours per week will be required for successful completion of course requirements. Read, read, and re-read directions and information carefully before emailing or calling for help. You will find most of your questions answered in the course syllabus or on the discussion board.

Course Attendance Policy

Since this is an online course, students are expected to be highly self-motivated. Enrollment in this course obligates the student to attend "virtual" class and to participate in "virtual" class activities and assignments. **It is imperative that you check the course website every day, at least five (5) times a week**.

Evaluation System

Students will be evaluated using online homework assignments, chapter tests, written assignments, and participation in online discussions.

Grades

Grades will be assigned using a point system. Each activity will incur points. Each of the 46 homework assignments have a maximum score of 10 points each, for a total of 460 points. Participation on the Discussion Board will give you a maximum of 20 points per week. There will also be three exams, each worth 100 points each. At the end of the semester, your percentage will be calculated by dividing the number of points earned by the total number of points possible, and multiplying by 100. Grades will be assigned using the following scale:

percentage	grade
90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Students may determine their grade at any time during the course by using the formula given above.

Course Participation

Student participation is critical to the success of this class. To be a successful online learner, you must be highly self-motivated. You will be graded on your email responses, timeliness of submitting homework, communication with other students, and meaningful contributions to the discussion boards. The discussion board is where you and the instructor make the class come alive, so be sure to participate early and often!

Discussion boards will be available on a weekly basis. New topics, if required for that week, will be posted on Mondays and will remain available until the following Monday. To receive credit for participating, you must make meaningful contributions to the discussion boards each time a topic is available. Simply "I agree" or "I disagree" is not meaningful. You are required to post your solution/answer to a problem/question on the discussion board. You will receive a score depending on the quality and accuracy of your solution/answer. You must also comment on at least 3 other

posts each week. You will be awarded points for each of the three critiques as well. The idea is to "discuss" the problem or topic. Be sure to carefully read and follow the instructions posted with each discussion.
Each discussion board will have its own set of instructions that you will see before entering the discussion. There will be discussion boards for posting questions and/or comments concerning aspects of the class (General Class Chat), for posting solutions to discussion questions and commenting on others' answers (Graded Whole Class Discussion). When the assignment says "Group Discussion", you should post under "Graded Whole Class Discussion".
Remember, Blackboard automatically tracks and records every click, including your name. I can see if and when you logged on, the date and time of day you logged on, and even what you accessed once you logged on. This is one way I can determine whether or not you participated in the assignment.

Assignments

Weekly assignments will be posted on Mondays, unless there is a holiday. The due dates for all assignments are listed on the Assignment Schedule posted under Course Information. All homework and discussion board posts must be submitted by noon on the due date.
All homework assignments (listed as "Homework" on the Assignment Schedule) will be completed online and submitted to the instructor through MyMathLab. To access the homework, click on MyMathLab from the main Blackboard menu and choose Do Homework. Choose the assignment you want to work on and click on specific exercises. If you want to stop and return later, click on "Back to Do Homework" at the top of the page. You may work similar problems for each type of exercise, giving you the option of earning 100% on each homework assignment. When the assignment is completed and ready for grading, click on "Submit Homework" at the bottom of the page. The homework assignment will be automatically graded and entered in the MyMathLab gradebook. After the due date for each assignment, I will enter the homework grades into the Blackboard gradebook. Please check your grades regularly and stay in touch with me concerning submitted assignments that are not reflected in your grades.
No extra assignments will be given at any time during the semester to "bring up your grade!" Work diligently from the beginning and complete every assignment as if IT is worth extra points that will raise your grade!
Except for extenuating circumstances handled by the instructor on an individual basis, any assignment received after the due date and time will be a zero. For the recordthere are very few extenuating circumstances. Excuses such as "The system was down" and "I couldn't get to a computer" are NOT considered extenuating circumstances. Don't wait until the last minute to complete assignments and you won't encounter these types of problems.

Chapter Exams

No makeup exams will be given. It is your responsibility to meet deadlines and timelines!
Chapter exams will be posted for 48 hours only, with a designated time limit to complete the exam. Do not wait until the last minute to take the exam. If you miss taking the exam during the time it is available, for any reason, a zero will be recorded. Exam dates are listed on the Exam Schedule posted under Course Information.

Cyber Netiquette

What is considered good behavior online? - see Course Information for the correct document.

Contacting Your Instructor

If you have course-related questions or comments, I encourage you to contact me by email at kfrnkle@sosu.edu or by phone at (580) 745-2028. However, it is your responsibility as an online learner to check your email, to check the Blackboard course site as stated in the course syllabus, and to read and follow the directions for every assignment.

Other Policies

The instructor reserves the right to make adjustments to the syllabus and/or grading policy as needed in order to meet the instructional needs and goals of the class. Students will be notified of any adjustments to the syllabus.
There is a Zero-Tolerance Policy concerning Plagiarism and/or duplication of another individual's work. Besides making you feel horrible, you will receive a zero and the policy will be enforced

under the guidelines of the Academic Honesty Policy for the University. Students are expected to work individually and turn in their own work. Any violation of academic honesty will be reported to the Office of Student Affairs. The policies regarding academic misconduct are set forth in the institution's Student Code of Responsibilities and Conduct.

Special Accommodations

Any student needing special accommodations due to a physical, mental or learning disability should contact Mrs. Susan Dodson, the Coordinator for Student Disability Services, Hallie McKinney, Room 111B or call (580) 745-2394 (TDD# 745-2704). It is the responsibility of each student to make an official request to the Coordinator for Student Disability Services for all academic accommodations due to a disability. For copies of disability related policies, please contact Student Services (Administration Building, Room 205) or Student Support Services (Hallie McKinney, Room 111B).