FUNDAMENTAL GEOMETRY FOR TEACHERS
Math 206-001 CRN 34677 (3 Hours)
SPRING, 2010

Instructor: Dr. Wanda Weidemann
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Course Time: TR 11:10-12:30
Office Hours: MW 1:00-3:00 p.m
TR 9:00-11:00 a.m.

Materials:

Course Description:
This course is the second of a three course sequence which includes topics related to the K-8 mathematics curriculum. In this course topics are the fundamental concepts of geometry and measurement. This course is for students in the early grades (K-5), middle grades (5-9) or EXED teacher certification programs only.

Prerequisites:
A “C” or better in a general education mathematics course and in MATH 205 are prerequisites for this course.
Please note: A student must complete Math 206 with a grade of “C” or better to enroll in Math 308 or 403.

Attendance: YOU ARE EXPECTED TO ATTEND EVERY CLASS. Tardiness and absenteeism are poor qualities for those planning to become teachers. Furthermore, students with excessive absences do not normally do as well on tests.

Policy for absences due to weather or illness: If you must miss because of weather or illness, it is your responsibility to contact the instructor concerning work you have missed. If you are ill enough that others might become infected, please do not attend class. Please be reasonable concerning the weather. I do not want anyone to take chances if the roads are bad, but a 10% chance of snow does not a blizzard make!!! If you must miss a test day due to illness or weather, you must inform the instructor by email or telephone PRIOR TO THE TIME OF CLASS.

Important Dates:
January 27 – Last day to drop the course without a grade
March 8-12 – Spring break—no classes
March 29 – Last day to drop the course with a W or change to an audit – there will be no exceptions
Final Exam – Thursday, May 13 at 8:00

Course Design:
This course will be divided into three modules:
Module 1: Polyhedra, Polygons, Symmetry (Chapters 16-18)
Module 2: Tessellations, Similarity, Curves and Curved Surfaces, Transformational Geometry (Ch. 19-22)
Module 3: Measurement (Chapters 23-26)
The class will focus on mathematics content with special attention on conceptual understanding. Students are expected to possess procedural knowledge (skills) prior to taking these courses; consequently, skills will not be remediated within the course unless this is a byproduct of instruction. To help insure that students possess the appropriate procedural knowledge, some modules will begin with an out-of-class pretest devoted to testing “basic skills.”

To pass the class, you must pass all module tests, including the pretests, with a 76% or higher. A limited number of retakes will be allowed and will be described later in this document. If a student needs to retake a module or basic skill tests, then he/she will need to meet with the instructor to work out remediation plans. If a student needs to repeat a test, the highest grade that will be recorded for that student is 76%. The rational is twofold: (1) Students who passed initially cannot take a retake in order to “see the test” and then try to better their scores; and (2) students who can make an A or B on the first try should not have the same grade as one who repeats the test. You must also pass the comprehensive final exam with a 70% or higher.

Please note that because your final grade will not be based solely on tests, you could make at least a 76% on all tests and still not pass the class.

**Assessment / Evaluation:** Your course grade will be based on the following:

- **Module Tests:** There will be 3 module tests. All students will take each of these tests on the scheduled date and tests will be completed in the allotted time. The only exceptions will be for students that have written permission from the Office of Student Disability Services. You must make a 76% or higher on each module test to pass the class. If you do not make a 76% on your first attempt, you may retake the test one time. This retake must be completed outside of class and before the end of the next module.

  **Please note:** A make-up test will be given only under the most extenuating circumstances (as determined by the instructor) and only if the instructor is notified in advance.

- **“Basic Skills” Tests:** A module may have a “basic skills” test. These will differ from the Basic Skills tests in MATH 205 in that they have more to do with definitions, basic formulas, and geometric ideas that future teachers should know upon entering college. You must make a 76% or higher on a skills test to pass the module. A skills test will be given once in class. If you do not pass a skills test the first time with a 76% or higher, you will be allowed to retake the test two times on your own time. These retakes must be completed before the module is completed and must be scheduled with the Mathematics Department Testing Center.

- **Daily work, assignments, quizzes:** You are expected to read each chapter. Problems will be assigned on a daily basis and should be taken seriously. Regularly assigned homework or classwork may be collected at any time. Quizzes and writing assignments will also be given to help ascertain whether you understand the material from class. Some of these assignments will require the use of *Geometer’s Sketchpad*, a software package that is available in all the university computer laboratories. Some assignments will also require you to use problem-solving techniques that will be used to supplement content from the textbook.

- **Final Exam:** A comprehensive final exam will be given at the time designated by the university. A grade of at least 70% must be made on the final to pass this course regardless of your other grades in this class.

Points are determined as follows:

3 module tests at 100 points each …..Must make a minimum of 76 on each………………300 points
3 skills tests at 20 points each……….. Must make a minimum of 15 on each……… ….. 60 points
Grading: Your grade will be determined by taking the number of points you have accumulated and dividing by the possible number of points one could attain. Grades will be assigned according to the following scale:

- 92% – 100% A
- 84% – 91% B
- 76% – 83% C
- 68% – 75% D
- 0% – 67% F

SUMMARY:
In order to pass the course with a grade of C or better you must
- Attain a minimum grade of 76% on each of the three module tests
- Attain a minimum grade of 76% (15 points) on each skills test
- Attain a minimum grade of 70% (105 points) on the final exam
AND
- Attain an overall average of 76% for all work in the class.

Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services (OFSDS), DUC room A201 (Student Success Center). Please do not request accommodations directly from the instructor without a letter of accommodations from OFSDS.

Academic dishonesty will not be tolerated. This includes any form of cheating or plagiarism. The policy is found on the web at http://www.wku.edu/coursecatalog/index.php?subcategoryid=75

Academic Dishonesty —Students who commit any act of academic dishonesty may receive from the instructor a failing grade in that portion of the coursework in which the act is detected or a failing grade in the course without possibility of withdrawal. The faculty member may also present the case to the Office of Student Life for disciplinary sanctions. A student who believes a faculty member has dealt unfairly with him/her in a course involving academic dishonesty may seek relief through the Student Complaint Procedure.

Plagiarism —To represent written work taken from another source as one’s own is plagiarism. Plagiarism is a serious offense. The academic work of a student must be his/her own. One must give any author credit for source material borrowed from him/her. To lift content directly from a source without giving credit is a flagrant act. To present a borrowed passage without reference to the source after having changed a few words is also plagiarism.

Cheating —No student shall receive or give assistance not authorized by the instructor in taking an examination or in the preparation of an essay, laboratory report, problem assignment or other project which is submitted for purposes of grade determination.