

FLORIDA INTERNATIONAL UNIVERSITY
UNIVERSITY PARK CAMPUS
MATHEMATICS DEPARTMENT

MTG 1204 GEOMETRY FOR EDUCATORS

Meeting times: **MTWR 3:30pm–4:45pm**

Section 01B

Meeting Place: **PC 244**

SYLLABUS AND COURSE OUTLINE

SUMMER B 2009

INSTRUCTOR: Professor Orr

PHONE 305-237-2013 (at MDC, phone mail available)

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WEBPAGE <http://faculty.mdc.edu/dorr>

OFFICE DM 409A

OFFICE HOURS TR 1:00pm–1:50pm

TEXTBOOK: *College Geometry, A Problem-Solving Approach with Applications*, 2nd Edition, by Gary L. Musser & Lynn E. Trimpe, Prentice Hall publishers.

HOMEWORK:

Homework will be assigned during each class meeting. The homework assignments for the entire semester are listed in the course outline. (See the numbers in parentheses following the title of each section in the course outline.) This work will be neither collected nor graded, and so it will not directly affect your grade for the course. However, I strongly encourage you to complete the assigned homework on a regular basis, because the only way to learn the course material is through adequate drill and practice. The homework assignments constitute a list of the exercises you will be expected to know how to perform. Certainly the best way to ensure that you know *how* to do something is to actually *do* it, as thoroughly and as frequently as possible.

EXAMS:

There will be a total of three 75-minute exams worth 100 points each. Thus your grade will be based on 300 points possible. (1) You are expected to read all sections of the text listed in the course outline and to know all definitions, postulates, and theorems contained therein. Additionally, any example or proof worked out in the text may appear on an exam. (2) You are responsible for anything and everything that is discussed in class, including examples I select from the exercise sets to present in class. (3) You are responsible for any and all exercises assigned as homework, and you should be able to work any exercise *similar* to those assigned as homework.

NO MAKE-UPS:

THERE WILL BE NO MAKE-UP TESTS under any circumstances. For any test that you do not take in class at the scheduled time, your score will be recorded as a **zero**. The only remedy for a missed exam will be to allow the third exam score to count *double*. This remedy will be available **ONLY** if your reason for missing the exam is acceptable to

me and you can produce documentation to support your claim. In case of illness, the documentation must be on letterhead stationery, signed by a qualified health professional, and must indicate that you were unable to attend school on the day of the exam. Also, any test you *do* take will count, no matter what rationale you may offer afterward. So if there is any sort of extenuating circumstance that might negatively impact your performance, be sure to discuss it with me *before* you accept the exam paper into your hands.

CALCULATORS & PROTRACTORS:

Please note that no formula sheets will be allowed during exams. You are expected to memorize basic facts and formulas. Although use of a scientific calculator (with trigonometric functions) will sometimes be necessary in both the homework and the exams, **you may not use a graphing calculator** (or any other sort of device with the capability of storing formulas) during an exam. You will also need to provide a protractor and bring it with you to the first exam.

GRADES:

You may exercise your option to drop the class with a “DR” grade, provided you initiate such action no later than Friday, July 17. (Note: This deadline is established through the Registrar's Office and is subject to change. You may wish to contact the Registrar in advance for confirmation of the drop deadline.) If you have not dropped the class by that date, then I will be required to assign you a grade at the end of the semester. The most stringent grade scale I will enforce is as follows:

A	: 270–300
A ⁻	: 261–269
B ⁺	: 252–260
B	: 240–251
B ⁻	: 231–239
C ⁺	: 222–230
C	: 201–221
D ⁺	: 192–200
D	: 180–191
D ⁻	: 171–179
F	: 0–170.

INCOMPLETES:

The “IN” (Incomplete) grade is almost never given. Do not expect to be able to avoid a failing grade by requesting an “IN” grade at the last minute. In order to qualify for an “IN” grade, you must (a) have a reasonable expectation (in *my* judgment) of earning a “C” or better for the course, (b) be so near the end of the course that you require no further instruction, (c) have an excellent and documented reason for not being able to complete the course on schedule, and (d) obtain both my approval and the approval of the Mathematics Department. Even in those very rare instances when an “IN” grade is issued, it does *not* allow you to retake any exams already scored, nor does it allow you to sit in any class meetings during the following semester. It simply allows you to come back after the semester has ended to sit for the exam(s) missed at the very end of the term due to extenuating circumstances.

ATTENDANCE:

You are expected to attend and to be **on time** to all class meetings. You are responsible for all coursework, whether you are present or not. Your grade will be determined solely on the basis of your exam scores, as described above, and will *not* be directly affected by your attendance record, unless you are absent on the day of an exam.

CLASSROOM RULES:

You may not smoke, eat, or drink in the classroom. If you have a cell phone or beeper, please **turn it off**. If you have a question or comment, please raise your hand and wait to be recognized before speaking. Disruptive behavior of any sort may result in expulsion from the classroom.

UNPAID STATUS:

Even if you are expecting financial aid, it is *your responsibility* to ensure that you are properly registered **with fees paid** by whatever deadline the University has established for you. If you are not yet registered for this class, please be advised that the last day to register is Wednesday, July 1. If the class has no open seats, please make other arrangements, because **I do not override the established seat limit at any time for any reason.**

CHEATING:

ACADEMIC MISCONDUCT includes (but is not limited to) giving or receiving assistance on a test or homework assignment for which such assistance is not permitted, falsifying a document to obtain an excusal from a test, and using unauthorized notes on a test. A more complete definition of Academic Misconduct is given on pp.120-121 of the Student Handbook. Penalties for Academic Misconduct range from an F in the course to expulsion from the university.

MISCELLANEOUS:

It is your responsibility to save all materials I distribute to you in class and to save all exam papers I return to you. If you have any question about the grade you receive in this class, you must raise that question within 45 days of the date classes begin in the next term. Such questions should be addressed directly to me via telephone or email. Please do not bother the Mathematics Department with grade issues unless you have first discussed those issues with me.

COURSE OUTLINE

(Exam dates are identified for your convenience only. I reserve the right to make adjustments to this schedule as needed. Any changes will be announced in class as far in advance as possible.)

<u>WEEK</u>	<u>CHAPTER/SECTION</u>	<u>TOPIC</u>
1	2.1	Undefined terms, definitions, postulates, segments and angles (1–19 odd, 23, 25, 27)
	2.2	Polygons and circles (1–29 odd)
2	2.3	Angle measure in polygons and tessellations (5–25 odd, 29–33 odd)
	2.4	Three-dimensional shapes (1, 7, 9, 13, 21–31 odd)
	2.5	Dimensional analysis (1–27 odd)
	3.1	Perimeter, circumference, and area of rectangles and triangles (1, 3, 9, 11, 15–21 odd, 25, 27, 31, 33, 35, 39)
3	3.2	More area formulas (1–25 odd, 29, 33, 39, 41)
	3.3	The Pythagorean Theorem and right triangles (1–9 odd, 13–43 odd)
(Wednesday, July 8)	TEST	Test #1 (§2.1–2.5, 3.1, 3.2)
	3.4	Surface area (1–29 odd)
4	3.5	Volume (3–17 odd, 21–33 odd)
	4.1	Reasoning and proof in geometry (1–45 odd)
	4.2	Triangle congruence conditions (1–43 all)
	4.3	Problem solving using triangle congruence (1–15 odd)
Reminder: Friday, July 17 is the last day to drop with a “DR” grade		
5	5.1	Indirect reasoning and the parallel postulate (1–40 all)
	5.2	Applications of parallel lines (1–29 all)
	5.3	Parallelograms and rhombuses (1–31 all, 33–43 all)
(Thursday, July 23)	TEST	Test #2 (§3.3–3.5, 4.1–4.3, 5.1, 5.2)
6	5.4	Rectangles, squares, and trapezoids (1–46 all)
	6.1	Ratio and proportion (1–35 all, 38–41 all)
	6.2	Similar triangles (1–19 odd, 20, 31–39 odd)
	6.3	Applications of similarity (1–39 odd)
7	6.4	Right triangle trigonometry (1–46 all, 59–69 all)
	7.1	Central angles and inscribed angles (1–46 all, 55, 57)
	7.2	Chords of a circle (1–22 all, 27–32 all)
(Thursday, August 6)	TEST	Test #3 (§5.3, 5.4, 6.1–6.4, 7.1, 7.2)