

MATH 345 College Geometry (4 units)

Preliminary Syllabus

Spring 2008

Instructor Wil Clarke. Office: 256 Price Science Center, Phone x2548; home phone 951-687-4556, please don't call after 10:00 p.m. e-mail: wclarke@lasierra.edu. Web page: <http://faculty.lasierra.edu/~wclarke> My office hours are listed below and posted on my office door. If those are inconvenient, please let me know and we'll find a time to meet that is convenient to each of us.

Texts David A. Thomas *Modern Geometry* (2002) Brooks/Cole, Pacific Grove, CA. and the software package *Geometer's Sketchpad*, v.4 Key Curriculum Press.

Bulletin Description Elementary and modern plane geometry. Topics chosen from non-Euclidean geometry, foundations of geometry, Offered alternate years. Prerequisite: MATH 231; or current enrollment in MATH 231; or consent of the instructor.

Objective To introduce the student to the concepts of geometry. We will explore not only Euclidean geometry, but non-Euclidean geometry, and more recent developments in geometry that impact modern mathematics such as transformational, fractal and projective geometries.

- Course Requirements**
1. **Homework** Homework will be assigned on a regular basis and is due at the beginning of the designated class period. Late homework will not be accepted. It is impossible to pass the class without turning in most of the homework. You will be expected to present some of your homework on the board in class.
 2. **Tests** Tests and exams determine most of your grade for this class. Make up tests will be given only at the discretion of the instructor and only for extreme personal reasons. Students who leave the room during a test or exam will not be permitted to return while it is in progress.
 3. **Final Exam** A grade of at least 50% on the final exam is required to pass the course. See the note about the final examination schedule below.
 4. **Outside Reading** You are required to read six articles from current journals and report on these in the manner specified in class. You are also required to find two helpful web sites that feature college geometry topics, other than listed in my "Helpful URL's" site. To report on the web sites you find. List the URL, write a brief summary of materials you found that were helpful to you, and print out several web pages as samples of what you found.
 5. **Attendance** Attendance is expected and you are responsible for all material presented and assignments made in class. A portion of your grade is based on your participation in class. You are encouraged to ask questions in class. Asking questions can only help your participation grade. Changes in this syllabus become effective after being announced to the class. You are responsible for these, even if you were absent when the changes were announced. The participation grade is mine to give based only on my perception of your performance. Being absent for 10% or more of the classes will result in an automatic failing grade.

Plagiarism and cheating You are encouraged to seek assistance from faculty or students in doing your homework. However work that is done primarily by someone else is unacceptable and may result in your failing the course. Plagiarism and/or cheating on tests, exams or papers means an automatic zero on that occasion, a letter to the dean, and possible further disciplinary action.

Final examination schedule note from the CAS bulletin "A four-day examination schedule allowing a two-hour period for each class is printed in the *Schedule of Classes*. Students are required to take the scheduled final examinations at the appointed time and place in order to secure credit....Exceptions to the examination schedule are granted only for emergency situations."

Disability La Sierra University complies with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Any student with a documented disability (physical, learning, or psychological) needing academic accommodations should contact the Office of Disability Services (ODS) as early in the quarter as possible. All discussions will remain confidential. Please contact the ODS (La Sierra Hall, Suite 100 – x2450) for additional information. Students who qualify for accommodations, must bring their ODS paperwork to their instructor no less than 3 school days before they wish such accommodations to take effect.

Grading Scheme

Grade assignment will approximate:

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Homework	12%	75–100%	A range
In-Class Tests	53%	65–74%	B range
Final Exam	25%	50–64%	C range
Participation	5%	40–49%	D range
Outside Reading	5%	0–39%	F

There are no such grades as “C-” or “D-” in this class.

Outline:

	DATE		Sections	Homework
March	31	M	Ch 1	1.1: 1,2,4,5,7; 1.2: 1,2,3,5
April	2	W		1.3: 1, 2, 3; 1.4: 1, 4, 5
	7	M		Complete Ch 1. Start ch 2 2.1: 1-5
	9	W	Ch 2	Test Ch 1
*	14	M		2.2: The questions following each of the concurrency constructions
	16	W		2.3: 1,2,5
	21	M	Ch 3	3.1: 1-3 Test ch 2
	23	W		3.2: 1-5
	28	M		3.3: 1-5; 3.4: 4,5
	30	W	Ch 4	4.1: 1-6
May	5	M		4.2: 1,2 & Investigations Test ch 3 GSP
	7	W		4.3: 1-5 Test ch 3 Paper & Pencil
	12	M	Ch 5	4.4: 1-7; 4.6: 1-6; 5.1: 1-3,5,6 , Investigations
	14	W		5.2: 1,2 & Investigations
	19	M		5.4: 1-3; 5.5: 1-4 Test ch 4
	21	W	Ch 6	6.1: 1,2 & Investigations 1-3
	26	M	Holiday	Memorial Day
§	28	W		Test ch 5
	2	M		6.2: 1-8 & Investigation 1
June	4	W		
	11	W	11:00 a.m	Final Exam

* Last day to drop a class with no record on transcript is Monday April 14.

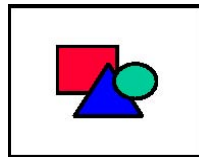
§ Last day to drop a class with a “W” grade is Thursday, May 29.

Final Exam Wednesday June 11, 11:00 a.m.

Εἰ δὲ τις ὑμῶν λειπεται σοφιας,
 αιτειτω παρα τοῦ διδοντος Θεοῦ
 πα̃σιν ἁπλῶς και μη ονειδιζοντος,
 και δοθησεται αυτω̃.

If any of you need wisdom, you
 should ask God, and it will be
 given to you. God is generous
 and won't correct you for asking.

James 1:5 (Nestle & CEV)



Hour	Monday	Tuesday	Wednesday	Thursday	Friday
8:00			University		
9:00	Applications of	Mathematics	Studies	Applications of	Mathematics
10:00	Office	Office	Analysis II	Office	Office
11:00	Seminar	Assembly	Analysis II	Chapel	Dept Mtg
12:00	Lunch	Lunch	Lunch	Lunch	
1:00	College		College		
2:00	Geometry		Geometry		
3:00	Office		Office		
4:00					
5:00	CAS meeting	N/A		N/A	
6:00	Analysis II	N/A		N/A	
7:00	Analysis II	N/A		N/A	