

Math 330: Topics in Geometry – Administrative Information**Introduction**

Topics in Geometry is a Junior-level course offered as an elective for the Mathematics major, and a compulsory course for Secondary Certification. The course description allows for some variation in topics. This semester, the course will consist of:

An axiomatic approach to Euclidean Geometry, with both historical (Euclidean) and modern (Hilbert) components and approaches. The emphasis will be on the logical structure of the theory, and secondarily, on the more advanced results in Euclidean Geometry, with applications to models of Hyperbolic Geometry. Alternative models of geometry with contrasting axioms will be presented, such as the Poincaré model of Hyperbolic Geometry.

Course Structure

We will use a conventional lecture–discussion format, with a recitation on Thursdays. There will be homework, which will be discussed at the recitation or in class, up to 4 possible tests, and a Final examination.

Notes, and the Portfolio

Most of your courses will involve assembling a large volume of detail into an organized structure, and the higher the level, the more organization it will probably require. Geometry is no exception; in fact the logical and structural aspects of it are so important that you are required to do the following:

1. Maintain your notes in loose-leaf form, which can be re-organized to make your review process easier, or to suit your evolving ideas of how the theorems should be ordered.
2. EITHER: Make a fair copy of each complete piece of information, from your class notes, and place them in a folder; OR: write up each piece of information in *Word*, and place in a folder in your server space. This will be known as your *Portfolio*. Each result or item must have pointers to all the most important other material to which it is related. Furthermore, this other material must have back links to each new addition. Wherever appropriate, your portfolio must be illustrated with sketches made using *Geometer's Sketchpad*.
3. Every Thursday, your Portfolio must be available for viewing if the Instructor wishes to do so.

How your grade is computed

The semester score is a weighted average of items of evaluations as shown in the bar on the right. The grades cutoffs are also shown on the right.

Attendance, Punctuality, Missed work and Tests

Please be punctual and stay for the entire class. The success of the class will be a group effort, and your absence will be missed.

If you must miss a day due to an unavoidable reason, you must obtain the notes from your fellow students and catch up.

Missed tests will not usually be made up. In exceptional circumstances, the instructor may offer an alternative means of making up the missed test, which may differ substantially from the original test taken by the class.

Extreme lateness is disrespectful to your classmates, and will not be tolerated. You will be assessed half an absence for extreme lateness. Total absences in excess of 15 hours will result in an immediate grade of F.

Handicapped and Learning Differenced Students

Students who have certified learning differences can obtain special arrangements with Mr Dan Hartssock's office, including special arrangements for test taking.

INSTRUCTOR:	S. S. de Silva
OFFICE:	Academic Center D 312
PHONE:	570.321.4285
OFFICE HRS:	M, W, F 3:30–4:30p
SECRETARY:	Ms Sheran Swank, AC D 328B, 570.321.4009
Course Calendar	
Test 1:	Sep 17
Test 2:	Oct 15
Test 3:	Nov 12
Test 4:	Dec 04
Final:	As published
Grade Cutoffs	
A	95% or better
B	85% or better
C	75% or better
D	65% or better
Score weights	
Tests :	60%
Portfolio :	15%
Participation, attendance, homework and recitation :	5%
Final Examination :	20%