MATH 2051, Problems in Geometry
Fall 2007
Toby Kenney

Instructor:	Toby Kenney
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Course Website:	www.mathstat.dal.ca/~tkenney/205107.html
Office Hours:	Monday 11:45-12:45, Tuesday 10:00-11:00, Thursday 3:00-4:00
Lectures:	MWF 10:35-11:25 CHEMISTRY 223
Topics:	Euclidean geometry: circle & triangle theorems
	3-dimensional geometry: regular polyhedra, Euler's formula,
	semiregular polyhedra, 4-dimensional geometry
	hyperbolic geometry: the disc model, area of triangles,
	hyperbolic trigonometry
Textbook:	Arthur Baragar *A Survey of Classical and Modern Geometries*

Course Work and method of assessment

There will be a midterm exam and a final exam. The time, date and location of the midterm exam will be announced at least 2 weeks before midterm. There will also be weekly homework assignments, which must be handed in each Wednesday in the lecture. No credit will be given for late homework. When the homework is handed in, I will give out a sheet of model solutions. For some questions, I may give out a hint, rather than a complete model solution. Revised answers to these questions may be submitted with the following week's homework.

Grades will be determined by performance in the exams and the weekly homeworks. The midterm exam counts for 30%, the final counts for 55%, while the homework counts for the remaining 15%. The overall homework score will be the average of the best nine assignments. (Out of ten – if it turns out that there are more or fewer than ten homework assignments, the best $n-1$ will count, where n is the number of assignments.) You must pass the final exam to obtain a passing grade in the course. Percentages are converted to lettered grades using the following modified scale:

A+	A	A−	B+	B	B−	C+	C	C−	D	F
87-100	82-87	75-82	70-75	65-70	60-65	57-60	53-57	50-53	45-50	< 45

Sections of the text covered

We will begin with Euclidean geometry – covering most of the material from Chapter 1, with calculations from Chapter 2 explained in the relevant places, to give examples of the applications. If we run short of time, we will omit some

(or all) of Sections 1.12-1.15. Next we will cover Chapter 3, possibly omitting some sections if short of time. We will then cover Chapter 5.

Next we will give an introduction to hyperbolic geometry, covering Chapter 6, and, if time permits, some of Sections 7.14-7.16.

Students with disabilities

Students with disabilities are encouraged to register as quickly as possible at the Student Accessibility Services if they want to receive academic accommodations. To do so, plese 'phone 494-2836, email access@dal.ca, drop in at the Killam, G28, or visit our website at www.studentaccessibility.dal.ca.

Plagiarism

Plagiarism is a serious academic offense which may lead to loss of credit, suspension or expulsion from the university. Please read the Policy on Intellectual Honesty contained in the Calendar or on the Dalhousie web site at: http://www.registrar.dal.ca/calendar/ug/UREG.htm#12.