

Mathematics 309—Topics in geometry—Spring 2004

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Office hours: By appointment, usually through email
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My home page: <http://www.math.ubc.ca/~cass>
Course page: <http://www.math.ubc.ca/~cass/courses/m309-04a/>

Text: None. But notes useful for this course will be available on the course web page. In addition I shall put on reserve in the mathematics library a number of texts. *Since there is no text, and since not everything important to this course is covered in the notes, it is important that you ask questions in class whenever you don't understand something.*

You will need a ruler, a protractor, some coloured pencils, and a compass for drawing figures. You should bring all of them and a calculator to every quiz or examination.

Examinations: There will be at least one mid-term examination as well as a final examination. I do not know dates yet. *Examination grades will be counted proportionally to the length of time allotted to the examinations.* You are expected to use calculators in examinations.

Assignments: Homeworks will be due roughly every 2 weeks. Grades will be decreased by 5% for every day beyond the due date, up to the next class. After that, nothing will be accepted. *The homework assignments are extremely important.* They will probably count about 20% of the total term grade, but—more importantly—doing them is the only way you will learn what you are supposed to. I do not object to your working together, nor to your finding the solutions to problems in books. But I ask that you tell me on the assignment that you have done so. *If I find evidence of unacknowledged collaboration or of unacknowledged use of external resources, all parties involved will lose credit.* In every class at which homework is due I'll give a short quiz based on the material in the assignment. All the quizzes together will count 1/2 the mid-term.

In addition to the usual homework assignments, of which there will probably be 5 or 6, you will have to do a special project of some kind towards the end of the term. *This is the most important part of this course, and will count at least 20% of your grade.* Details will be explained later.

Outline: The subject of the course this term is the geometry of light. We'll start with simple refraction.

Internet access: As mentioned already, the course home page is

<http://www.math.ubc.ca/~cass/courses/m309-04a/>

Course materials will be available on line, including all handouts in either .ps and .pdf format.