

Mathematics/Science 380 – History of Mathematics
TRENT UNIVERSITY, 2002–2003

Instructor

Stefan Bilaniuk (pronounced Стефан Біланюк)

Champlain College H12

Mon 11:00-11:50, Wed 2:00-2:50, Thu 1:00-1:50, Fri 10:00-10:50, or by appointment, or just drop in . . .

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home page: <http://www.trentu.ca/mathematics/sb/>

Prerequisites

MATH 110 and 235H, or MATH 110 and permission of the instructor. Second-year students wishing to take the course must have permission of the instructor.

Text

A History of Mathematics, Jeff Suzuki

Prentice-Hall, Inc., Upper Saddle River, New Jersey, 2002, ISBN 0-13-019074-8

Meetings

Lectures: Mondays 9:00-10:50 in OCA 207.

Seminars: Thursdays 3:00-3:50 in CCW A2.

Marking Scheme

There will be twelve fortnightly assignments, two term projects, and a take-home final examination. The assignments will be handed out and collected every other week in the Wednesday lectures, the projects will be due at the end of each term, and the final examination will be written during the examination period in April and will be due at its end. The final mark will be calculated as follows:

Best 10 of 12 assignments (10 @ 4% ea.)	40%
2 Projects (2 @ 15% ea.)	30%
Final Examination	30%

This scheme may be modified for students in *exceptional* circumstances. Any such modification will require the agreement of both the student and the instructor.

MATH 380 Web Pages

<http://www.trentu.ca/mathematics/sb/380/>

Consult the MATH 380 web pages for (hopefully) up-to-date information about the course. Copies of the assignments and other handouts will be posted there too.

Syllabus

We will survey the historical development of some important parts of mathematics. In particular, we will focus on the evolution of proofs and abstraction and the development of algebra. In rough chronological order, we will consider mathematics in:

1. Prehistory (*i.e.* the – speculative! – origins)
2. Egypt and Mesopotamia
3. Classical Greece and Rome
4. China, India, and the Islamic world
5. Europe from the Middle Ages on
6. The world at present

Note that additional material may be covered on the assignments and projects.

Honour

Plagiarism is an extremely serious academic offense and carries penalties varying from failure in an assignment to debarment from the University. Definitions, procedures, and penalties for academic misconduct can be found in the Academic Regulations section of the Trent University Calendar. The following guidelines will apply in MATH 380:

You are permitted and encouraged to study together and to work together on the assignments and projects, consult any books or other sources you wish, and ask anyone willing (especially the instructor!) for hints, suggestions, and help. However, **you must write up all work submitted for credit entirely by yourself, giving due credit to all relevant sources of help and information. No aid may be given or received on the exam,** except with the instructor's permission.

Inspiration

No doubt but magic may do much in this;
For he that reads but mathematic rules
Shall find conclusions that avail to work
Wonders that pass the common sense of men.

Robert Greene (from *Friar Bacon and Friar Bungay*)