Mathematics-Science 380 – History of Mathematics
Trent University, 2006–2007

Instructor

Stefan Bilaniuk (pronounced Стефан Біланюк)
office: GCS 337
Fall hours: Mondays 12:00-12:50, Tuesdays 10:00-10:50, Thursdays 10:00-10:50, Fridays 10:00-10:50
    . . . or by appointment, or just drop by! (Winter hours to be announced later.)
phone: 748-1011x7474
home phone: 742-7862 – Do *not* call between 10 p.m. and 8 a.m. unless it's an emergency.
e-mail: `sbilaniuk@trentu.ca`
home page: `http://euclid.trentu.ca/math/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

The Heritage of Thales, by W.S. Anglin & J. Lambeck
Springer Verlag, 1995,   ISBN 0-387-94544-X

Meetings

Lectures: Mondays and Thursdays 11:00-11:50 in GCS 110.
Seminars: Thursdays 12:00-12:50 in GCS 110.

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, 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.

Honour

Plagiarism is an extremely serious academic offence and carries penalties varying from failure in an assignment to suspension from the University. Definitions, penalties and procedures for dealing with plagiarism are set out in Trent University's *Academic Dishonesty Policy* which is printed in the Calendar and can be found at:

`http://www.trentu.ca/deansoffice/dishonestypolicy.html`

For clarity, the following guidelines will apply in MATH 380: You are permitted and encouraged to work together and ask anyone willing (especially the instructor!) for

explanations, hints, and suggestions on the problem sets, and to consult whatever sources you wish, with the exception that **you may not consult anyone who has taken the course before or their work**. However, **all work submitted for credit must be written up entirely by you, giving due credit to all relevant sources of help and information**. The take-home final exam will have more restrictive conditions that will be spelled out on the exam.

Content

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.

MATH 380 Web Pages

        http://euclid.trentu.ca/math/sb/380/

Consult the MATH 380 web pages for (hopefully) up-to-date information about the course.