Mathematics-Science 381H – Ancient and classical mathematics

Trent University, Fall 2007

Instructor

Stefan Bilaniuk (pronounced Стефан Біланюк)

office: GCS 337

office hours: Monday & Tuesday 12:00-12:50, Thursday & Friday 13:00-13:50

... or by appointment, or just drop by!

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Prerequisite

MATH 110. Recommended: MATH 220H or MATH 235H. Excludes MATH 380.

Text

The Historical Roots of Elementary Mathematics,

by Lucas N.H. Bunt, Phillip S. Jones, & Jack D. Bedient

Dover Publications, New York, 1988, ISBN 0-486-25563-8

Meetings

Lectures: Monday 16:00-16:50 in GCS 110 and Friday 14:00-14:50 in DNA B106.

Seminars: Friday 12:00-12:50 in BL 103.

Marking Scheme

There will be five or six fortnightly assignments, a project, and a take-home final examination. The assignments will be handed out and collected every other week, the project will be due at the end of the term, and the final examination will be written during the examination period in December and will be due at its end. The final mark will be calculated as follows:

Best 4 assignments (4 @ 10% ea.)	40%
Project	30%
Final Examination	30%

Work submitted after the due date will not normally be accepted unless it was late due to circumstances beyond your control. Note that there is no requirement to attend classes, but the consequences of not doing so are your responsibility to manage.

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 381H Web Pages

http://euclid.trentu.ca/math/sb/381H/

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

Content

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

- 1. Prehistory (i.e. the speculative! origins)
- 2. Ancient Egypt and Mesopotamia
- 3. Classical Greece and Rome

Additional material may be covered on the assignments and projects.

Honour & Help

The obligatory statement concerning academic dishonesty reads as follows:

Academic dishonesty, which includes plagiarism and cheating, is an extremely serious academic offense and carries penalties varying from failure in an assignment to suspension from the University. Definitions, penalties, and procedures for dealing with plagiarism and cheating are set out in Trent University's Academic Dishonesty Policy which is printed in the University Calendar.

For clarity, the following guidelines will apply in MATH 381H:

You are permitted and encouraged to work together and ask anyone willing (especially the instructor!) for explanations, hints, and suggestions on the assignments and projects, and to consult whatever sources you wish, with the exception that you may not consult anyone who has taken a similar course recently or their work. However, all work submitted for credit must be written up entirely by you (with the exception of group projects), 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.

In some circumstances you may also be eligible for special help or accommodation. The obligatory statement concerning **access to instruction** reads as follows:

It is Trent University's intent to create an inclusive learning environment. If a student has a disability and/or health consideration and feels that he/she may need accommodations to succeed in this course, the student should contact the Disability Services Office (Bata Library Suite 109, 748-1281, disabilityservices@trentu.ca) as soon as possible. Complete text can be found under Access to Instruction in the Academic Calendar.