2775 History of Mathematics (6 credits)

Optional course in the graduate studies of Mathmatics

PROFESSOR

NOM: Joe Miró Julià Office: D168 AT Telephone: 971 172 982 email: joe.miro@uib.es web page: http://bioinfo.uib.es/~joemiro/teach.html

Office Hours

Schedule: I'm here every morning and most afternoons. Just drop by, or, preferably, set an appointment.

Place: Professor's office

BOE Descriptor

History of mathematics. Current topics in mathematics

Goals

The student will aquire knowledge of how mathematics has evolved in western culture from the egyptians and babylonians, through the greek, up to modern times. They will also learn how to solve several interesting problems using ancient methods, and to prove especially significant theorems of each era.

Method

Lectures, frequent exercises both in class and at home, written assignments

Topics

- **1.- Pre-greek matematics**
- 2. The birth of modern maths: the Greek
- **3. Medieval mathematics**
- 4. Maths during the Renaissance
- 5. The birth of calculus
- 6. Maths during the 19th. and 20th. centuries

Basic Bibliography

• Most of what will be taught during lecture can be found in web page links from the course web page (or searching the web).

Extra bibliography

- William Dunham: *Journey through genius*. Wiley, 1990\\
- R. Laubenbacher, D. Pengelley: *Mathematical expeditions*. Spinger, 1999.
- W.S. Anglin, J. Lambek: *The heritage of Thales*. Springer, 1995.
- Euclid: *Elements*

Grading

Grading will be done through class participation (10%), several short assignments(40%), and a final written report on an adequate subject (50%). All oral communication must be in English, written assignments can be done in Spanish or Catalan, although if they are done in English the student will receive extra credit.

Recommended backgroud

A good knowledge of english and of mathematics.

Other information