

MODULE DESCRIPTOR

MODULE TITLE	HISTORY OF MATHEMATICS		
MODULE CODE	MA1613 (L4)	CREDIT VALUE	20 CREDITS (10 ECTS)
CAMPUS	UCLAN CYPRUS		
SCHOOL	SCHOOL OF SCIENCE		

MODULE AIMS

This module aims to explore the historical development of mathematical topics and ideas together with the contributions made by various cultures and individuals towards this development.

In addition, the module aims to raise students' awareness of academic writing skills in the UK at Higher Education level and give them the necessary tools to be able to plan, draft and write a coherent and well researched academic essay.

MODULE CONTENT

History of Mathematics: The module will include topics from ancient, medieval and early modern mathematics. Some typical topics that may be covered are:

- Pre-Greek Mathematics
- Greek Mathematics (Notion of proof, classical problems of antiquity)
- Mathematics of Hindus and Arabs
- Renaissance Mathematics
- Astronomy (heliocentric systems)
- Algebra, Geometry and Probability in the 17th Century
- The development of Calculus

Academic Research and Writing Skills:

- Finding and evaluating information.
- Academic Writing.
- Oral presentation skills
- Teamwork

INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:	
1.	Solve problems using fundamental arguments from the evolution of mathematics from early number systems to the development of calculus.
2.	Correctly use information sources in order to research a topic related to the history of mathematics and avoid plagiarism.
3.	Prepare a written report.
4.	Demonstrate effective oral presentation skills.

TEACHING METHODS

The aim of this module is to present the historical evolution of mathematics through the centuries, starting from Egyptian and Babylonian mathematics until the 17th century with the development of Calculus.

One of the main objectives of this module is to enrich students' academic writing skills and equip them with the necessary tools in order to be able to plan, draft, write and present a coherent and well researched academic topic.

For the successful completion of this module, students should keep a portfolio with the solutions of exercises related to the material covered (tutorial sheets will be given every one or two weeks), provide a written report on a topic relevant to the scope of this module (not necessarily a topic that has already been discussed during the sessions of this module) and finally students need to work in groups to prepare a 15 minute presentation on a topic of their interest related to the history of mathematics.

Lectures will be used to introduce concepts, methods and to present examples. Tutorial classes will be used to develop skills in problem solving and group-work.

ASSESSMENT METHODS

The module is assessed through a Portfolio of set exercises and a History of Mathematics Project (written report and viva).