UNIVERSITY of NICOSIA

Course Code	Course Title	ECTS Credits
MATH-108DG	Finite Mathematics with Applied Calculus	6
Department	**Semester**	**Prerequisites**
Computer Science	Fall, Spring	None
Type of Course	**Field**	**Language of Instruction**
Core	BBA DL Greek	Greek
Level of Course	**Year of Study**	**Mode of Delivery**
1st Cycle	2nd	Distance Learning
Work Placement	**Lecturer**	**Co-Requisites**
N/A	Dr. Marios Christou	None

Objectives of the Course:

The main objectives of the course are to:

1. Set up linear models using realistic data.
2. Get familiar with matrix operation and th.0
3. e Gauss-Jordan elimination.
4. Solve linear systems of m equations with n unknowns.
5. Introduced to nonlinear problems.
6. Introduced to the derivative and its applications
7. Introduced to the integral and its applications.

Learning Outcomes:

After completion of the course students are expected to:

1. Be able to set up and formulate problems related to their majors.
2. Use linear and nonlinear functions and models.
3. Apply mathematical techniques and methods to solve application problems.
4. Be able to work problems involving derivative, integrals and matrices.

Course Contents:

- Functions and Linear Models
- Systems of Linear Equations.
- Matrix Algebra and Applications.
- Nonlinear Models.
- The Derivative and its Applications.
- The Integral and its Applications.

Learning Activities and Teaching Methods:

Online Tutor-led Lecturing, Online Video/PDF Tutorials, Case Studies, Assignment, Online Interactions (Forums and Chats).

Assessment Methods:

Tests
Final Exam

The course includes nine (9) hours of tutorials. Your course lecturer will be delivering the specific tutorials which will be announced in due course throughout the semester. Participation in these tutorials is recommended as they will assist you in successfully completing your course.
Three tutorials of three (3) hours each will be delivered throughout the semester. The specific tutorials will be delivered in the form of face-to-face sessions which will simultaneously be delivered lived live through Web-Ex (a web conferencing system where allows students' participation). The specific live sessions will be recorded. The recordings will be also available for reviewing throughout the semester.

Required Textbook:

Authors	Title	Publisher	Year	ISBN
Stefan Waner, Steven R. Costenoble	Finite Math and Applied Calculus.	Thomson Brookscole	2013	978-1133607700

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Michael Sullivan, Abe Mizrahi	Mathematics: An Applied Approach, 8th Ed.	Pearson-Prentice Hall	2005	978-0-471327844