UNIVERSITY of NICOSIA

Course Syllabus

Course Code	Course Title	ECTS Credits
MATH-105	Intermediate Algebra	6
Prerequisites	**Department**	**Semester**
None	Computer Science	FALL/SPRING
Type of Course	**Field**	**Language of Instruction**
Required	Mathematics	English/Greek
Level of Course	**Lecturer(s)**	**Year of Study**
1st Cycle	Dr. Stavros Pouloukas	1st
Mode of Delivery	**Work Placement**	**Corequisites**
Face-to-face	NA	None

Course Objectives:

The main objectives of the course are to:
- Develop the methods for solving linear equations and inequalities in one variable.
- Provide students with deep knowledge of linear systems.
- Provide students with deep knowledge of polynomials and polynomial equations.
- Provide students with deep knowledge of rational expressions.

Learning Outcomes:

After completion of the course students are expected to be able to:
1. Solve linear equations in one variable and systems of linear equations in two variables.
2. Solve linear inequalities in one variable.
3. Carry out operations involving polynomials, factor polynomials and solve polynomial equations.
4. Carry out operations involving rational expressions and to solve rational expression equations.
5. Sketch the graph of a linear equation.

Course Content:

1. Linear equations and inequalities in one variable.
2. Absolute Value equations and Inequalities in one variable.
3. Linear equations and inequalities in two variables and the graph of the linear equation.
4. Systems of linear equations.
5. Integral exponents, polynomials and polynomial functions.
6. Factoring polynomials and solving equations by factoring.
7. Solving equations involving rational expressions

Learning Activities and Teaching Methods:

Lectures, Handouts, Assignments and In-class Exercises

Assessment Methods:

Final Examination, Midterm Examinations, Assignments and Participation.

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Intermediate Algebra	Dugopolski	McGraw Hill	2009	0-073-53351-3

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Intermediate Algebra	Martin-Gay	Prentice Hall	2008	0-136-00729-6