

Course Title	Mathematics/Algebra				
Course Code	IMATH-105				
Course Type	Required				
Level	1 st Cycle				
Year / Semester	Second/Fall				
Teacher's Name	Maria Christodoulou				
ECTS	6	Lectures / week	13	Laboratories / week	0
Course Purpose and Objectives	<p>The main objectives of this course are to:</p> <ul style="list-style-type: none"> • Develop methods for solving linear equations and inequalities in one variable. • Solve polynomial and polynomial equations. • Get introduced to the basic theory of equations and graphs. • Solve linear systems. • Get introduced to explicit, rational expressions. 				
Learning Outcomes	<p>After completion of the course students are expected to be able to:</p> <ul style="list-style-type: none"> • Solve linear equations of a variable and systems of linear equations with two variables. • Solve linear inequalities in one variable. • Mathematical operations to solve polynomials and solve polynomial equations. • Understand the theory of equations. • Draw a graph of a linear equation. • Operate with rational expressions and solve rational equations. 				
Prerequisites	None	Required	None		
Course Content	<ul style="list-style-type: none"> - Linear equations and inequalities in a variable. - Absolute value of equations and inequalities in one variable. - Linear equations and inequalities in two variables and the graphical representation of the linear equation. - Systems of linear equations. - Integral exponents, polynomials and polynomial functions. - Polynomials, polynomial factorization and solution of polynomial equations. - Solving equations based on the theory of equations. - Solving equations with rational expressions. 				
Teaching Methodology	Lectures, examples, amphitheatric demonstrations in modern labs, studies and presentations, videos and transparencies, as well as, in class work.				

Bibliography	Required: Dugopolski, ' <i>Intermediate Algebra</i> ' McGraw Hill 2009 0-073-53351-3
Assessment	Assignments, quizzes and final exams
Language	Greek