

College Algebra

Course Title	College Algebra									
Course Code	TMAT-102									
Course Type	This course serves as both Elective and Requirement, according to the program.									
	<table border="1"> <tr> <td>Hospitality Diploma/ Bachelor</td> <td>Requirement</td> </tr> <tr> <td>Business Diploma/ Bachelor</td> <td>Requirement</td> </tr> <tr> <td>All Programs</td> <td>General Elective</td> </tr> </table>		Hospitality Diploma/ Bachelor	Requirement	Business Diploma/ Bachelor	Requirement	All Programs	General Elective		
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Business Diploma/ Bachelor	Requirement									
All Programs	General Elective									
Level	Bachelor (1 st Cycle)									
Year / Semester	Year 1, B' Semester									
Teacher's Name	Mariana Pelekanos									
ECTS	4	Lectures / week	3	Laboratories / week						
Course Purpose and Objectives	The course aims to introduce the fundamental mathematical concepts, techniques and theories of college algebra, which include equations and inequalities, functions, graphing, systems of equations and inequalities, and linear programming. Upon completing this course, students will be able to formulate and solve real-world problems.									
Learning Outcomes	<p>Upon completion of this course students will be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate a clear understanding of the fundamental mathematical principles, techniques, formulas and theories. 2. Apply algebraic concepts to model and solve real-life situations using linear, polynomial, rational, exponential, root and/or Inequalities. 3. Use tables, transformations, critical points, and other characteristics to graph functions, conic sections and parametric equations 4. Identify the term linear programming and inspect its application to minimize or optimize functions. 5. Develop logical skills and explore the various applications of mathematical logic and formulas in Business related examples. 									
Prerequisites	Placement Test or TMAT-100 Basic Mathematics	Required								
Course	1. Review of real numbers and polynomials									

Content	<ol style="list-style-type: none"> 2. Linear equations and inequalities 3. Quadratic equations 4. Graphing 5. Functions and their graphs 6. Systems of equations and inequalities 7. Problem formulation and solving 8. Introduction to linear programming 9. Applications related to business 								
Teaching Methodology	The course is delivered through lectures, tutorials and exercises.								
Mode of delivery	Face to face.								
Bibliography	<p>Required</p> <ol style="list-style-type: none"> 1. Sullivan M., College Algebra Essential, 8th ed., Pearson Prentice Hall, 2008. 2. Salzman, S., Miller, C., and Clendenen, G., Mathematics for Business. 8th ed., Pearson Education Inc, 2007. <p>Recommended</p> <ol style="list-style-type: none"> 1. Dugopolski, M., Intermediate Algebra, 6th ed., McGraw Hill, 2009. 2. Mizrahi, A. and Sullivan, M. Finite Mathematics. 8th ed., John Wiley, 2000. 								
Assessment	<p>The following assessment methods are employed to assess this course:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>30 – 50 %</td> <td>Final Exam</td> </tr> <tr> <td>20 – 40 %</td> <td>Mid –Term / Tests / Quizzes</td> </tr> <tr> <td>10 – 30 %</td> <td>Assignments / Projects</td> </tr> <tr> <td>0 – 10 %</td> <td>Class Attendance & Participation</td> </tr> </table>	30 – 50 %	Final Exam	20 – 40 %	Mid –Term / Tests / Quizzes	10 – 30 %	Assignments / Projects	0 – 10 %	Class Attendance & Participation
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Language	English								