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Course title	Business Mathematics			
Course code	MATH108			
Course type	Theoretical, Elective Course			
Level	Undergraduate			
Year / Semester	Year 1 Semester 1			
Teacher's name	Dr. Kyriacou Sofia			
ECTS	6	Lectures / week	3	Laboratories / week
Course purpose and objectives	The course aims to help students to acquire applied mathematical knowledge and skills that are considered essential to the progression of their career in the business sector. The course emphasises on business concepts and scenarios that require mathematical solution and places each concept in the context of the business landscape using specific examples.			
Learning outcomes	<p>Upon the completion of the course, students are expected to:</p> <ul style="list-style-type: none"> • Know basic terms of Algebra and graphs of linear and quadratic functions, power functions and general polynomial functions, and exponential and logarithmic functions. • Understand the calculation and rounding of whole numbers and decimals. • Apply arithmetic operations involving whole numbers, fractions, decimals, ratios, and percentages. • Solve problems related to prices, sales, trade discounts, merchandise. 			
Prerequisites	None	Required	None	
Course content	<ul style="list-style-type: none"> • Algebra <ul style="list-style-type: none"> Quadratic Equations • Solving linear inequalities (geometric method only) • Determinants and matrices • Whole numbers and decimal numbers • Whole numbers • Applied problems • Decimal numbers • Addition and subtraction of decimal numbers 			

	<ul style="list-style-type: none"> • Multiplication and division of decimal numbers • Fractions <ul style="list-style-type: none"> • Adding and subtracting fractions • Adding and subtracting mixed numbers • Multiplying and dividing fractions • Convert decimals to fractions and fractions to decimals • Percentages <ul style="list-style-type: none"> • Convert decimals and fractions to percentages • Equations and formulas <ul style="list-style-type: none"> • Solving equations • Business formulas • Mathematics related to purchases and sales <ul style="list-style-type: none"> • Invoices and trade discounts • Selling price • Price reduction • Turnover and control of goods
<p>Teaching methodology</p>	<p>The course content will be taught using:</p> <ul style="list-style-type: none"> • Power Point presentations • Guided discussions with the active participation of students • Examples and case studies that relate to the content of the course • Question and answer section • Use of internet and related IT infrastructure • Use of video projector and whiteboard • Use of calculators
<p>Bibliography</p>	<p>Greek Bibliography</p> <ul style="list-style-type: none"> • Μπεληγιάννης, Α. (2015). <i>Μια εισαγωγή στη βασική Άλγεβρα</i>. Kallipos Open Academic Editions. Ανακτήθηκε από http://hdl.handle.net/11419/4847 • Παπαϊωάννου, Σ., και Βογιατζή, Δ. (2015). <i>Μαθηματικά Ι</i>. Kallipos Open Academic Editions. Ανακτήθηκε από http://hdl.handle.net/11419/4551 • Τουμπής, Σ., και Γκιτζένης, Σ. (2015). <i>Λογισμός συναρτήσεων μιας μεταβλητής</i>. Kallipos Open Academic Editions. Ανακτήθηκε από http://hdl.handle.net/11419/2177 • Αδάμ, Μ., Χατζάρας, Ι., Ασημάκης, Ν. (2016). <i>Μαθηματική Ανάλυση</i>. Kallipos Open Academic Editions. Ανακτήθηκε από http://hdl.handle.net/11419/6356 <p>English Bibliography</p>

	<ul style="list-style-type: none"> • Karris, S. T. (2007). <i>Mathematics for Business, Science, and Technology : With MATLAB and Spreadsheet Applications</i>. 3rd Edition. Orchard Publications. EBSCOhost. 9781934404010 • Adil H. M. (2015). <i>Quantitative Methods for Business and Economics</i>. London: Routledge. EBSCOhost. ISBN 9780765604583 • Sunandra, R. (2020). <i>A First Course in Mathematical Economics</i>. Cambridge Scholars Publishing. EBSCOhost. 9781527547230
Assessment	<ul style="list-style-type: none"> • Attendance and Class Participation: 10% • Intermediary Written Examination: 40% • Final Written Examination: 50%
Language	Greek or English