Basic data of the subject	
Academic unit	**Faculty of Management**
Program	**Business Management and Entrepreneurship**
Subject	**Business Mathematics**
Level	**Bachelor**
Course status	**Obligatory**
Year of studies	**I**
Semester	**I**
Number of hours per week	**4**
Value of credits - ECTS	**6**
Time/ Location	**UASF**
Course lecturer	
Contact details	
Course description	Basic understading of sets and operations with sets; The set of real numbers and operations with real numbers; Elements of linear algebra (budget line equation), Determinants, Matrices and systems of linear equations; Understanding function and its application; Basic functions and their graphs; Number strings and their application; String and function limit; Function continuity, Function derivative and its implementation; Elements of financial mathematics.
Course objectives	The purpose of this module is to equip students with knowledge and skills for basic mathematical notions, elements of financial mathematics, the meaning of function, ways of representing functions, some classes of functions, the meaning of matrices, derivatives, etc., as well as their implementation in the field of business and economics (the field of their study), i.e. the development of skills and abilities of students to solve concrete problems in the field of economics.
Expected learning outcomes	Upon successful completion of this module, students will be able to: • To gain basic conceptual knowledge about the importance of the subject of Mathematics in business, • Understand the elements of linear algebra and their application in solving problems in the field of business • Acquire the elements of financial mathematics. • Know the concept of string and function,

	• List the types of functions, their properties and application in economics.		

Contribution to the student load (which must correspond with learning outcomes)

Activity	Hours	Days/Weeks	Total
Lectures	2	15	30
Theoretical exercises / laboratory	2	15	30
Internship			
Contacts with teacher / consultations	1	10	10
Field exercises			
Midterm, seminars and projects.			
Homework	3	10	15
Studying (at the library or at home)			45
Final preparation for the exam	2	5	10
Time spent on evaluation (tests, quiz and final exam)	3	2	6
Projects and presentations	1	4	4
Total			150

Teaching methodology	Lectures and exercises combined with in-class discussions
Assessment methods	During the semester there will be two written tests with 45 points each (tasks include open-ended questions and multiple choice questions), or the student has the right to take only the final exam which has 90 points (written / oral test), the test contains open-ended and multiple choice questions. The student passes the exam if he or she accumulates 50 points from all the evaluation criteria. • 10 points - Activity and attendance, • 90 points – Two written exams or the final exam
Teaching tools	Whiteboard, the Internet, wireless, computer, projector, PowerPoint, etc.
Theory vs. practice ratio	50% Practice, Tasks for independent work 50% Lectures

Literature	
Basic literature	1. N.L. Braha, V. Loku dhe Ilmi Hoxha, Matematika për ekonomistë, 2016, Prishtinë. 2. Ian Jacques-Mathematics,for economics and business, ninth edition, 2018
Additional literature	1. Razim Hoxha, Përmbledhje detyrash të zgjidhura nga matematika I, Prishtinë-2011
Designated learning plan	

Week	Lecture
Week one	Basic mathematical notions: 1. Numbers and their types Sets and set operations
Week two	Basic mathematical operations: 1. Rules of mathematical operations Numerical scale
Week three	Algebra: 1. Linear equations in one variable 2. Linear equations in two variables 3. Inequations Absolute value
Week four	Matrix: 1. Understanding matrices 2. Matrix operations Application of matrices
Week five	Determinants: 1. Understanding the determinants (second and third order) 2. The minority method 3. The triangle method Cramer's Rule
Week six	Application of matrices and determinants: 1. Solving systems of linear equations in two variables 2. Solving systems of linear equations in three variables
Week seven	Sequence: Understanding sequence; Types of sequences; Their application in business and economics
Week eight	First written test
Week nine	Limit of sequence
Week ten	Functions of one variable: 1. Ways of representing functions 2. Elementary functions and their graphs. Their application in business.
Week eleven	Limit of functions

Week twelve	Continuous function
Week thirteen	Function derivatives and derivative rules; The macroeconomic model
Week fourteen	Understanding and calculating percentages Financial mathematics: 1. Basic concepts of financial mathematics 2. Investment calculation 3. Calculation of interest rates Simple and compound interest
Week fifteen	Second written test
Academic policies and rules of conduct	
The student is required to attend the lectures regularly and to have appropriate behavior towards the colleagues and the staff of the University, as well as to maintain order in the classroom and actively participate in lectures and exercises.	