| Basic data of the subject |  |
| :--- | :--- |
| Academic unit: | Faculty of Management |
| Subject title: | Mathematics for Business |
| Study level: | Bachelor |
| Subject status: | Compulsory |
| Year of study: | I |
| Number of hours per week: | 6 |
| Value of credits - ECTS: | Feride Qorrolli |
| Lecturer of the subject: | feride.qorrolli@ushaf.net |
| Contact details: | Basic concepts for unions and actions with the <br> unions, the Association of real numbers and <br> operations with real numbers, elements of linear <br> algebra (the budget line), determinants, matrices <br> and systems of linear equations, Understanding the <br> function and its application, basic functions and <br> their graph, strings of numbers and their <br> application, limit of the string and function, <br> Continuity of function, derivative function and its <br> application, elements of financial mathematics. |
| Subject description | The purpose of this module is to equip students <br> with knowledge and skills for basic mathematical <br> meanings, elements of financial mathematics, <br> understanding the function, the way of giving <br> function, some classes of functions, meaning <br> matrices, derivative, etc. And the main goal is the <br> implementation of their field of business and <br> economy (their field of study), so the development <br> of student skills and abilities to solve concrete <br> problems in the economic field. |
| Pruppose of the subject: | Upon successful completion of this module, <br> students will be able to: <br> - Have basic knowledge of the subject conceptual <br> importance of Mathematics in business, <br> - Know and understand the elements of linear <br> algebra to solve problems in the field of business <br> - Know the concept of chain and function, types of <br> functions, their properties and applications. Their <br> application in the economy. <br> - Get to know the limit of function, derivative and <br> its application in the study of functions. |
| The contribution of the student's learning (something that should be correspond with |  |
| the result of the students learning) | Hour <br> Activity |
| Expected learning outcomes: Day / week $\quad$ Total |  |



|  | 2. Linear equations with two unknowns <br> 3. Inequations <br> 4. Absolute value |
| :---: | :---: |
| Fourth week: | Matrices: <br> 1. The meaning of matrices <br> 2. Actions with matrices <br> 3. Application of matrices |
| Fifth week: | Determinants: <br> 1. Understanding determinants (of the second and third order) <br> 2. Method of minors <br> 3. Method of triangle <br> 4. The method of Kramer |
| Sixth week: | Application of matrices and determinants: <br> 1. Solving systems of linear equations with two unknowns <br> 2. Solving systems of linear equations with three unknowns |
| Seventh week: | The verses: <br> 1. The meaning of verses <br> 2. Types of verses <br> 3. Applying them in business and economics |
| Eighth week: | First Test |
| Ninth week: | Limit of the string |
| Tenth week: | Functions with a variable: <br> 1. Forms of appearance of functions <br> 2. The basic functions and their graph. <br> 3. Application of them in business. |
| Eleventh week: | The limit of function |
| Twelwth week: | Continuity of function |
| Thirteenth week: | Derivative function and rules of deriving Keys macroeconomic model |
| Fourteenth week: | Understanding and calculation of percentage Financial Mathematics: <br> 1. Basic concepts of financial mathematics <br> 2. Calculation of investment <br> 3. Calculation of interest <br> 4. Simple and compound interest |
| Fifteenth week: | Second Test |
| Academic policies and rules of conduct: |  |
| Regular attendance, to maintain the peace and active engagement in dialogue during lectures and exercises is obligatory. |  |

