

Basic data of the subject	
Academic Unit:	Faculty of Life Sciences and the Environment
Course title:	Mathematics
Level:	Bachelor
Course status:	Mandatory
Study year:	I
Number of hours per week:	3+2
Credit value – ECTS:	6
Time / location:	12.30-14.45, classroom 217
Lecturer:	Prof.Dr.Abdullah Zejnullahu
Contact details:	Tel: 044276292, abdullah.zejnullahu@uni-pr.edu
Course description	
	Sets. Absolute value. The numeric string, its limit. Function, limit, continuity. Derivatives, partial derivatives. Function Extremisms with one and two variables. Conditional extras. Implementation in economics. Differentiation, geometric meaning, its application in the approximate calculation. The method of small squares. Integral Indefinite, Integral Assigned and Implemented. Numerical series, polynomial series. Differential equations. Some types of differential equations of the first order. Elements of probability theory and mathematical statistics.. Discrete and continuous random variables. Numerical characteristics of random variables. Distribution of rest variables. Choice. Characteristics of choice. Critical evaluation and interval of mathematical expectation. Verification of statistical hypotheses. Linear regressions.
Course objectives:	To provide students with the basic mathematical concepts and methods that are necessary to decipher the profile modules and to be able to apply mathematical models in solving various problems in the respective fields. Also give principles and fundamental techniques of the Mathematical Probability and Mathematical Statistics.
Learning outcomes:	Upon completion of this course, the students will: <ul style="list-style-type: none"> - Equip the concepts and basic methods of mathematics. - Maintain the subjects of the profile as well as the implementation of statistical methods for solving various problems in the field of Life Sciences and the environment.

	<ul style="list-style-type: none"> - Provide knowledge on various analytical analyzes from the field of study. - Provide knowledge with sufficient knowledge to understand today's literature in the field of study. - Ability to work with more sophisticated models from study profiles. 		
Contribution on student load (must correspond with learning outcomes)			
Activity	Hours	Days/week	Total
Lectures	3	15	45
Exercise theoretical/laboratory	2	15	30
Practice work			
Contact with lecturer/consultations	1	15	15
Field exercises			
Mid-terms, seminars	3	2	6
Homework			
Individual time spent studying (at the library or home)	2	15	30
Final preparation for the exam			18
Time spent in evaluation (tests, quiz, final exam)			6
Projects, presentations, etc.			
Total			150
Teaching methods	Lectures, exercises, colloquia, exams, homework.		
Evaluation methods	First Test : 15% Second Test: 15% Absence: 10% Final exam: 60%		
Literature			
Basic Literature:	F.Berisha, A.Zejnullahu – Matematika , Prishtine 2003		
Additional Literature:	A.Ahmeti- Matematika , Prishtine, 2015		
Designed study plan:			
Week	Lectures which will be held		
First week:	Notification of students with the syllabus of the subject.		
Second week:	Basic concepts in mathematics and logical symbols		

Third week:	Real numbers and their rules.
Fourth week:	Mathematical induction and binomial formulas. Complex numbers
Fifth week:	Matrix. Matrix operations
Sixth week:	Determinants . Systems of linear equations
Seventh week:	Numeric sequences and Progressions
Eighth week:	The first test
Ninth week:	Function and function limit with a variable and derivative of the function with a variable.
Tenth week:	The derivative of the function with a variable and two variables
Eleventh week:	Integral indefinite and integral definite
Twelfth week:	Differential equations
Thirteenth week:	Elements of probability theory
Fourteenth week:	Elements of Theory of Mathematical Statistics
Fifteenth week:	The final test

Academic policies and rules of conduct:
Students are obliged to attend regular lectures, Disconnect mobile phones, enter time in the classroom and keep silence in the classroom.

Exercises

Designed study plan:	
Week	Exercises which will be held
First week:	Duty from elementary mathematics

Second week:	Basic concepts in mathematics and logical symbols
Third week:	Real numbers and their rules.
Fourth week:	Mathematical induction and binomial formulas. Complex numbers
Fifth week:	Matrix. Matrix operations
Sixth week:	Determinants. Systems of linear equations
Seventh week:	Numeric sequences and Progressions
Eighth week:	The first test
Ninth week:	Function and function limit with a variable and derivative of the function with a variable.
Tenth week:	The derivative of the function with a variable and two variables
Eleventh week:	Integral indefinite and integral definite
Twelfth week:	Differential equations
Thirteenth week:	Elements of probability theory
Fourteenth week:	Elements of Theory of Mathematical Statistics
Fifteenth week:	The final test