Course title: Mathematics II

Course basic information	
Academic Unit:	**Faculty of Civil Engineering**
Course Name:	**Mathematics II**
Level:	**Bachelor**
Course Status:	**Mandatory**
Year of Study:	**I (first)**
Number of Hours per Week:	**3+2**
ECTS Credits:	**9**
Time /Venue:	**According to time table**
Mësimdhënësi i lëndës:	**Prof.Dr.Abdullah Zejnullahu**
Detajet kontaktuese:	**e-mail:** abdullah.zejnullahu@uni-pr.edu www.fn.uni-pr.edu
Course Description	The subject concentrates on the information from the field of mathematics with the aim to facilitate and help other subjects from the field of Civil Engineering.
Course Objectives:	Introduction with the mathematical knowledge applicable engineering.
Learning Outcomes:	At the end of this course students will be able to use and to understand concepts of higher Mathematics with the aim to use this knowledge as an aide in other subjects which use mathematical apparatus. Upon completion of this course students will be able to: - To create sequences given their general formula -the apply arithmetic and geometric sequences in solving various problems - to find the graphs of elementary functions - to apply the limit of the function in order to determine the continuity of the function - To find the derivative of elementary functions and based on the properties of derivative to find the derivative of other functions, - To plot the graph of a function by using the derivatives - To find the indefinite integral for some classes of functions - To apply definite integral in solving some problems of geometry and mechanics.

Student Workload (Consistent with the Learning Outcomes)			
Activity	**Hours**	**Day/ Week**	**Total**
Lectures	3	15	45
Theory/ Lab Work	2	15	30
Practical Work			
Contact Hours with Teacher /Consultations during Office Hours	2	10	40
Field Work			
Colloquium, Seminars	9	2	18
Homework	2	15	30

Self-study Time (in the Library or at Home)	2	15	30
Final Exam Preparation	5	5	25
Evaluations (Tests, Quiz, Final exam)	3	2	6
Projects, Presentations, etc.			
Total			**224**

Teaching Methodology:	Lectures and exercises
Evaluation Methods:	First assessment 20% Second Assessment 20% Activity during exercises 10% Attendance 5% Final Exam 45%
Literature	
Basic Literature:	1. Fevzi Berisha-Abdullah Zejnullahu: Matematika- për arkitekturë , 1996, Prishtinë. 2. Fevzi Berisha: Përmbledhje detyrash të provimit nga matematika1,2, Prishtinë 2006. 3. Alexs Himonas , Alan Howard- Calculus Ideas and applications,203 USA 4. Robert T. Smith , Roland B. Minton -CALCULLUS Single Variable, 2002 USA.
Additional Literature:	1. Ejup Hamiti – Matematika I, II. Elektro - Prishtinë 2. Isak Hoxha – Matematika I,I Ndërtimtari, Prishtinë 3. Ismet Dehiri – Matematika I,II Fakultet Teknik, Prishtinë 4. Përmbledhje të ndryshme të detyrave 5. Interneti

Course Plan:

Week	Title of the Lecture
Week 1:	Numerical sequences
Week 2:	Limit of sequence
***Week 3*:**	Progressions
Week 4:	Numerical functions
Week 5:	Composition of functions
***Week 6*:**	Some distinct class of functions
Week 7:	Limit and the continuity of a function
Week 8:	Derivative of the function
Week 9:	Derivative of elementary functions
Week 10:	Elementary theorems on differential calculus
***Week 11*:**	Extreme values of a function
***Week 12*:**	Plotting the graph of any function
***Week 13*:**	Indefinite integral
***Week 14*:**	Definite integral
***Week 15*:**	Application of definite integral

Academic Policies and Rules of Civility:

- Students should be regular in attending lectures;
- Encouraged to ask questions and participate in any activity, freely;
- Must be attentive and respect the institution, schedule and rules set by the faculty;
- During the exams, the use of mobile phones is not allowed;
- Not allowed to arrive late or leave the classroom without any valid reason;
- Must take IDs with them when undergoing tests and examinations;
- During the seminar paper process, the instructions given by the professor must be followed.