

Course Name : Mathematical Analysis II							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 128	B	Spring	3.00	1.00	0.00	3.50	5.00
Lecturer Sofokli Garo, PhD							
Assistant							
Course language Albanian							
Course level Bachelor							
Description This course provides concepts about indefinite and definite integrals and their implementations. An important part of this course is differential computation and solving differential equations. The course concludes with knowledge about series and their kinds.							
Objectives Ne perfundim te kursit studentet duhet te dine konceptet dhe zbatimet e tyre qe lidhen me integralin e pacaktuar, integralin e caktuar dhe serite.							
Core Concepts The fundamental concepts are the following: 1. Indefinite integral 2. Definite integral 3. The differential equation 4. Convergent and divergent series							
Course Outline							
Week	Topic						
1	Indefinite integral						
2	Fundamental elementary formulas						
3	Implementation in exercises and problems						
4	Definite integral						
5	Computation of closed surfaces						
6	Computation of volumes for solids revolved around x axis						
7	Not proper integrals						
8	Midterm test						
9	Differential equations						
10	Equations with separated variables						
11	Differential homogeneous equations						
12	The concept of arithmetic and geometric sequence						
13	The convergent series						
14	Divergent series. Types of divergent series						
15	Review						
16	Final Exam						

Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• Muka. V. Analiza Matematike		
References	• Howard. V. Calculus. 6th edition		
Course Outcome			
1	Ne perfundim te kursit studentet do te kene bazen e nevojshme te njohurive matematike per te perballuar konceptet ne kurset profesionale te IT		
2	Ne perfundim te kursit studentet do te kene bazen e nevojshme matematike per te ndjekur disiplina te tjera matematikore.		
Course Evaluation			
	In-term Studies	Quantity	Percentage
	Midterms	1	30
	Quizzes	0	0
	Projects	0	0
	Term Projects	0	0
	Laboratory	0	0
	Class Participation	1	20
	Total in-term evaluation percent		50
	Final exam percent		50
	Total		100
ECTS Workload (Based on Student Workload)			
	Activities	Quantity	Duration (hours)
	Course duration (Including the exam week: 16x Total hours of the course)	16	4
	Study hours outside the classroom (Preparation, Practice, etc.)	14	0
	Duties	0	0
	Midterms	1	0
	Final Exam	1	0
	Other	3	21
	Total Work Load		127
	Total Work Load / 25 (hours)		5.08
	ECTS		5.00