



Меѓународен Универзитет Визион - International Vision University  
 Universiteti Ndërkombëtar Vizion - Uluslararası Vizyon Üniversitesi

Adres: Ul. Major C. Filiposki No.1, Gostivar – Kuzey Makedonya  
 tel: +389 42 222 325, [www.vizyon.edu.mk](http://www.vizyon.edu.mk), [info@vizyon.edu.mk](mailto:info@vizyon.edu.mk)

## SYLLABUS

COURSE NAME	COURSECODE	SEMESTER	COURSE LOAD	ECTS
CALCULUS II	CEN-1008	2	180	6

<b>Prerequisite(s)</b>	None
------------------------	------

<b>Course Language</b>	Macedonian, Turkish, English
<b>Course Type</b>	Required
<b>Course Level</b>	First Cycle
<b>Course Lecturer</b>	
<b>Course Assistants</b>	
<b>Classroom</b>	
<b>Extra-Curricular Office Hours and Location</b>	

<b>Course Goals</b>	To teach indefinite integral, methods of indefinite integral, Properties of the integral, Theorems related with the Riemann integral, Applications of the Riemann integral (Calculation of Area, length of arc, volume and surface area), Generalized integrals and their properties, functions of several variables.
<b>Program Outcomes</b>	<ol style="list-style-type: none"> <li>1 He/ she recognizes the concept of the indefinite integral.</li> <li>2 He/ she applies the integral methods.</li> <li>3 He/ she recognizes the definite integral.</li> <li>4 He/ she recognizes the generalized integrals.</li> <li>5 He/ she interprets the properties of the generalized integrals.</li> <li>6 He/she recognizes functions of several variables.</li> <li>7 He/she solves limit and continuity at the function of several variables</li> </ol>
<b>Course Contents</b>	He/she solves limit and continuity at the function of several variables.

## WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

<b>Week</b>	<b>Subjects</b>	<b>Related Preparation</b>
1	Indefinite Integral. Indefinite integration rules. Rule of substitution of variables.	Related Chapters of Course Sources
2	Integral of trigonometric expressions.	Related Chapters of Course Sources
3	Integrals of irrational algebraic expressions. Binomial integral. Some changing of variables.	Related Chapters of Course Sources
4	The concept of definite integral. The scale of the range, the definition of Riemann sums and definite integrals.	Related Chapters of Course Sources
5	Computation of definite integral by using the definition. Proof of basic rules of integration.	Related Chapters of Course Sources
6	Integral of trigonometric expressions.	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Definite integrals partial integration method. Integral of some specific custom defined functions.	Related Chapters of Course Sources
9	Area calculation with using definite integral.	Related Chapters of Course Sources
10	Volume calculation with using definite integral.	Related Chapters of Course Sources
11	Volume calculation with using definite integral.	Related Chapters of Course Sources
12	Series Concept	Related Chapters of Course Sources
13	Convergence Tests for Positive Series	Related Chapters of Course Sources
14	Alternative Series	Related Chapters of Course Sources
15	Final Exam	Related Chapters of Course Sources

## ECTS / WORKLOAD TABLE

Presentation / Seminar			
Hours for off-the-classroom study (Pre-study, practice)	14	3	42
Midterm Exam	1	12	12
Final examination	1	14	14
<b>Total Work Load</b>			
<b>ECTS</b>		<b>6</b>	

## GENERAL PRINCIPLE RELATED WITH COURSE

Dear students,

You need to be included in the flow, please follow the course of learning and using that to achieve our success you deserve, you need to practice every day on topics that are covered by the course. It takes practice reading basic and auxiliary literature that is strictly recommended. You should visit classes course I need to make an effort to visit all the professors' lectures. Your activity on the session will be assessed by your professors and the Battle active participant in the discussions that will take place during the time. Students visiting lectures for all at the end if an additional 15 points.

## SOURCES

### COMPULSORY LITERATURE

No	Name of the book	Author's Name, Publishing house, Publication Year
1	Matematik Analiz 1	Mustafa Balcı, Sürat Üniversite Yayınları, 8. Baskı
2		
3		

### ADDITIONAL LITERATURE

No	Name of the book	Author's Name, Publishing house, Publication Year
1	Çözümlü Matematik Analiz Problemleri 1	Mustafa Balcı, Sürat Üniversite Yayınları, 8. Baskı
2		
3		

## EVALUATION SYSTEM

<b>Underlying the Assessment Studies</b>	<b>NUMBER</b>	<b>PERCENTAGE OF GRADE</b>
Attendance/Participation	15	%10
Project / Event	1	%20
Mid-Term Exam	1	%35
Final Exam	1	%35
<b>TOTAL</b>	<b>17</b>	<b>%100</b>

## ETHICAL CODE OF THE UNIVERSITY

In case students are cheating on exams or preparation the same, it is not making reference to the source to be used in studies, as for example in assignments, projects and presentation (plagiarism), in accordance with legislations by Ministry of Education and Science of the Republic of Macedonia and International Vision University, apply relevant disciplinary rules. International Vision University students are expected never attempts in this kind of behavior.