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

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SYLLABUS

COURSE NAME	COURSECODE	SEMESTER	COURSE LOAD	ECTS
MATHEMATICS	**ARC-1009**	**2**	**150**	**5**

Prerequisite(s)	None

Course Language	Turkish
Course Type	Required
Course Level	First Cycle
Course Lecturer	
Course Assistants	
Classroom	
Extra Curricular Office Hours and Location	**Meeting:** **Consultancy:**

Course Objectives	Mathematical induction, determinants and matrices, solving systems of linear equations with Cramer and Gauss methods, the equation of line and the plane in the space, sequences and derivatives.
Course Learning Outcomes	• To learn the concepts of mathematical induction • To analyze the system of linear equations • To define the vector and matrix • Learning Function
Course Contents	The solution of mathematical induction, as well as two equations and three unknowns, operations with matrix and vector, Examination of the plane and function.

WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Mathematical Induction	Related Chapters of Course Sources
2	Solution of the linear system of equations with two variables , third-degree determinants	Related Chapters of Course Sources
3	Solution of the linear system of equations with three variables. Gauss method	Related Chapters of Course Sources
4	Matrix. Transpose of matrix. Inverse Matrix	Related Chapters of Course Sources
5	Operations with vector given by coordinates	Related Chapters of Course Sources
6	Scalar and vector product of vectors, Mixed product of vectors	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Equation of plane in space	Related Chapters of Course Sources
9	Equation of line in space	Related Chapters of Course Sources
10	Conditions between shapes in the space	Related Chapters of Course Sources
11	Operations with the sequences and limits	Related Chapters of Course Sources
12	Functions	Related Chapters of Course Sources
13	Derivatives. Geometric interpretation of the derivative	Related Chapters of Course Sources
14	Review	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
Total Work Load			
ECTS	**8**		

GENERAL PRINCIPLE RELATED WITH COURSE

Dear students,

In order to be included, learn and achieve full success that you deserve in the courses you need to come well prepared by reading the basic and secondary textbooks. We are expecting from you carefully to obey to the course hours, not to interrupt the lessons unless is very indispensable, to be an active participant on the courses, easily to communicate with the other professor and classmates, and to be interactive by participating to the class discussions. In case of unethical behavior both in courses or on exams, will be acting in framework of the relevant regulations. The attendance of the students will be checked in the beginning, in the middle or at the end of the lessons. Throughout the semester the students who attend to all lectures will be given 15 activity-attendance points in addition to their exam grades.

SOURCES

COMPULSORY LITERATURE		
No	**Name of the book**	**Author's Name, Publishing House, Publication Year**
1	Mimarlık Matematiği	Aybeyan Selim, Muzafer Saracevic, Uluslararası Vızyon Üniversitesi, Gostivar, 2021
2		
3		

ADDITIONAL LITERATURE		
No	**Name of the book**	**Author's Name, Publishing House, Publication Year**
1	Matematik Analiz 1	Prof. Dr Mustafa Balcı, Sürat Üniversite Yayınları, 8. Baskı
2	Çözümlü Matematik Analiz Problemleri 1	Prof. Dr Mustafa Balcı, Sürat Üniversite Yayınları, 8. Baskı
3	Analiz I	Prof. Dr Ali Nesin, Nesin Yayıncılık A.Ş, 2012

EVALUATION SYSTEM

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

ETHICAL CODE OF THE UNIVERSITY

In case of the students are cheating or attempt to cheat on exams, and in the case of not to reference the sources used in seminar studies, assignments, projects and presentations, in accordance to the legislations of the Ministry of Education and Science of Republic of Macedonia and International Vision University, will be applied the relevant disciplinary rules. International Vision University students are expected never to attempt to this kind of behavior.