GENERAL MATHEMATICS II

1	Course Title:	GENERAL MATHEMATICS II
2	Course Code:	FEN1008
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Dr. Ögr. Üyesi BAHTİYAR BAYRAKTAR
15	Course Lecturers:	Prof.Dr. M. Emin Özdemir
16	Contact information of the Course Coordinator:	E-mail: bbayraktar@uludag.edu.tr, İş Tel: +90(224) 294 22 98. Adres: UÜ, Eğitim Fakültesi, Matematik ve Fen Bilimleri Bölümü, Matematik Eğitimi Anabilim Dalı, 16059 Görükle / BURSA
17	Website:	
18	Objective of the Course:	The purpose of the course is to comprehend the importance of mathematics and the basic notions of the mathematical concepts, plus to gain practice skills in this specialty.
19	Contribution of the Course to Professional Development:	Creates and develops the knowledge base of the prospective teacher. Comprehends the concepts related to the field and the relations between concepts based on the competencies gained in secondary education. Have defines and analyzes problems related to his field, and develops solutions based on evidence and research.
20	Learning Outcomes:	

1	Ascending and descending intervals of the function can be found. The critical points of a function can be found. The critical points of the function can be found.
2	Points of extreme of a function can be found.
3	Analyzing of graphs and function drawing can be done.
4	Indefinite integral can be defined. Techniques of integration are learnt. Different types of integral function can be taken with the help of methods of integration.
5	Definitions and properties of the definite integral can be done. Techniques of calculation are learnt. Practice is made with the help of the specific integral.
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21	Course Content:

Course Content:

Week	Theoretical	Practice
1	Some applications of the derivative (exponential uncertainty, increasing and decreasing intervals, extreme points). Exercises.	
2	Maximum-minimum problems. Exercises.	
3	Critical points of a function. Asymptotes and graphs. Exercises.	
4	Definition of indefinite integral. Rules of integration. Differential equations and their solutions.	
5	Some transformations of the indefinite integral. Integration of rational functions. Exercises	
6	Partial integration. Exercises.	
7	Integration of rational functions. Exercises.	
8	Integrals of trigonometric functions. Exercises.	
9	Integral.	
10	Area and volume calculations using the definite integral.	
11	Arc length calculations using the definite integral.	
12	Improper integral.	
13	Improper integrals and their practice.	
14	Midterm exams	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self-study and preparation	14	2.00	28.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	15.00	15.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			106.00
Total work load/ 30 hr			3.03
ECTS Credit of the Course			3.00

22	Textbooks, References and/or Other

1. Prof. Dr. Hilmi HACISALİHOĞLU, Assoc. Dr. M. Balci. Ankara, 1988.
2. Prof. Dr. Mustafa BALCI, General Mathematics. 5th Volume 1,2 , 4th Edition, 1985.

23	Assesment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00

Measurement and Evaluation Techniques Used in the Course	Techniques such as lecture, discussion, question-answer, 3E are used in the teaching of the course. Midterm and final exams are taken into consideration in the measurement and evaluation of the course.

24 ECTS / WORK LOAD TABLE

25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	1	3	1	5	1	1	5	1	4	1	4	1	1	1	1
ÖK2	5	1	3	1	4	1	1	4	1	4	1	4	1	1	1	1
ÖK3	5	1	3	1	3	2	1	3	1	4	1	4	1	1	1	1
ÖK4	4	1	3	1	3	1	1	1	1	4	1	4	1	1	1	1
ÖK5	5	1	3	1	5	3	1	4	1	3	1	4	1	1	1	1
ÖK6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**