ADIYAMAN UNIVERSITY
ARTS AND SCIENCE FACULTY
DEPARTMENT OF MATHEMATICS

DESCRIPTION BOOKLET

2023-2024

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Department of Mathematics

Adıyaman University Department of Mathematics, was established in 1998, affiliated with İnönü University Adıyaman Faculty of Arts and Sciences and started accepting students in the academic year 1999-2000. In 2006, Department of Mathematics was affiliated to Adıyaman University Faculty of Arts and Sciences.

Head of Department

Prof. Dr. Manaf MANAFLI

Vice Chair

Assoc. Prof. Dr. Mustafa UÇKUN

Academic Staff

Department of Applied Mathematics

Prof. Dr. Manaf MANAFLI

Assoc. Prof. Dr. Merve AVCI ARDIÇ

Assoc. Prof. Dr. Özlem AK GÜMÜŞ

Asst. Prof. Dr. Esen HANAÇ DURUK

Department of Analysis and Functions Theory

Prof. Dr. Seyit TEMİR

Prof. Dr. İbrahim Halil GÜMÜŞ

Assoc. Prof. Dr. Faik GÜRSOY

Assoc. Prof. Dr. Mehmet ŞENGÖNÜL

Lec. Dr. Fatma BOZKURT

Department of Algebra and Number Theory

Assoc. Prof. Dr. Mehmet Ali ÖZTÜRK

Assoc. Prof. Dr. Mustafa UÇKUN

Assoc. Prof. Dr. Şener YANAN

Rsc. Asst. Dr. Özlem TEKİN

Department of Geometry

Assoc. Prof. Dr. Bilal Eftal ACET

Rsc. Asst. Gülden MÜLAYİM

Department of Topology

Prof. Dr. Selcen YÜKSEL PERKTAŞ

Assoc. Prof. Dr. Müzeyyen ERTÜRK

Department of Fundamentals of Mathematics and Mathematical Logic

Assoc. Prof. Dr. Ebubekir İNAN

Department Secretary

Fatma NANIR

- **Mission & Vision**

Mission

The aim of Mathematic Department is to raise indivisuals who are able to conduct scientific research at the international level, who are self-confident, who can follow new developments, who have absorbed basic academic mathematics and mathematical thinking and who will gain resectable places both in the science life of our country and in the society and business life.

Vision

The vision of the Mathematics Deparment is to become a nationally and internationally recognized and preferred department in the field of mathematics.

Importance of Departments of Mathematics

The rapid progress in science and technology in our age brings new knowledge, skills, technical and technological tools to the agenda in every field. Especially great developments in computer technology have led to the emergence of new mathematical disciplines. Therefore, it is in need of people who know, understand and interpret mathematics shows the importance of mathematics and mathematics departments.

Why Department of Mathematics?

Mathematics, which is the basis of science, enable us to expand our horizons and look at the events around us from various angles as we descend into the endless depths of its unique world.

Job Oportunities for Our Graduate Students

Graduates of the Department of the Mathematics continue to work in applied mathematics, computer, education in public institutions and private sector, and some of them in universities and research institutions. Today, in many different areas such as credit card security including encryption and coding, security in other banking transactions, communication security, enviromental problems, imaging of DNA sequences, aircraft modeling, climate and cosmology, molecular dynamics, integrated circuit design, investment planning, stock market risk analysis, Mathematics finds applications and creates increasing employment opportunities for our graduates.

Our graduates have the opportunity to work as teachers in secondary education and private high schools by provide the requirements stipulated by the Ministry of National Education. In addition, there is a need for mathematicians in areas such a data mining and cryptology, which is an increasingly popular, profession, which requires statistics and database knowledge. Our students can significantly expand their job opportunities after taking elective courses or graduate studies in these fields.

Highest and Lowest Placement Scores According to Central Placement

According to results of ÖSYS placement announces by the Directorate of Assessment, Selection and Placement Center in 2019, the student has been placed in our department with the highest score 340,98382, while the student has been placed with the lowest 249,00923 score. All of the 40 students quotas opened in total have been filled. 190 students continue their education in our department.

Course Catalogue

	1. Class				
Code	Course Name	ECTS	WCH T+A/C	C/E	La.
First Semester					
FZ101	Physics I	5	4+0/4	C	T
MT103	Analysis I	6	4+2/5	C	T
MT105	Abstract Mathematics I	6	3+0/3	C	T
MT107	Analytical Geometry I	6	3+0/3	C	T
TD101	Turkish Language I	2	2+0/2	C	T
YD101	Foreign Language (English) I	3	3+0/3	C	T
AİT101	Ataturk Principle's and History of Turkish Revolution I	2	2+0/2	C	T
	Fall Semester Total :	**30**	21+2/**22**		
Second Semester					
FZ102	Physics II	5	4+0/4	C	T
MT104	Analysis II	6	4+2/5	C	T
MT106	Abstract Mathematics II	4	3+0/3	C	T
MT108	Analytical Geometry II	4	3+0/3	C	T
TD102	Turkish Language II	2	2+0/2	C	T
YD102	Foreign Language (English) II	3	3+0/3	C	T
AİT102	Ataturk Principle's and History of Turkish Revolution II	2	2+0/2	C	T
ENF102	Basic Information Technology	4	2+2/3	C	T
	Spring Semester Total :	**30**	23+4/**25**		
	YEAR TOTAL :	**60**			

	2. Class				
Code	Course Name	ECTS	WCH T+A/C	C/E	La.
Third Semester					
MT201	Linear Algebra I	6	4+0/4	C	T
MT203	Probability and Statistics I	6	3+0/3	C	T
MT205	Advanced Analysis I	6	4+0/4	C	T
MT207	Coding I	6	2+2/3	C	T
MT209	Numerical Analysis I	6	3+0/3	C	T
	Fall Semester Total:	**30**	16+2/**17**		
Fourth Semester					
MT202	Linear Algebra II	6	4+0/4	C	T
MT204	Probability and Statistics II	6	3+0/3	C	T
MT206	Advanced Analysis II	6	4+0/4	C	T
MT208	Coding II	6	2+2/3	C	T
MT210	Numerical Analysis II	6	3+0/3	C	T
	Spring Semester Total:	**30**	16+2/**17**		
	YEAR TOTAL :	**60**			

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3. Class					
Code	Course Name	ECTS	WCH T+A/C	C/E	La.
Fifth Semester					
MT301	Algebra I	5	4+0/4	C	T
MT303	Differential Equations I	5	3+0/3	C	T
MT305	Complex Functions Theory I	5	4+0/4	C	T
MT307	Topology I	5	3+0/3	C	T
MT3xx	Elective	5	3+0/3	E	T
MT3xx	Elective	5	3+0/3	E	T
	Fall Semester Total:	**30**	20+0/**20**		
Sixth Semester					
MT302	Algebra II	5	4+0/4	C	T
MT304	Differential Equations II	5	3+0/3	C	T
MT306	Complex Functions Theory II	5	4+0/4	C	T
MT308	Topology II	5	3+0/3	C	T
MT3xx	Elective	5	3+0/3	E	T
MT3xx	Elective	5	3+0/3	E	T
	Spring Semester Total:	**30**	20+0/**20**		
	YEAR TOTAL:	**60**			

4. Class					
Code	Course Name	ECTS	WCH T+A/C	C/E	La.
Seventh Semester					
MT401	Partial Differential Equations	5	3+0/3	C	T
MT403	Differential Geometry I	5	3+0/3	C	T
MT405	Functional Analysis I	5	3+0/3	C	T
MT451	Graduation Study I	5	0+2/1	C	T
MT4xx	Elective	5	3+0/3[*]	E	T
MT4xx	Elective	5	3+0/3[*]	E	T
	Fall Semester Total:	**30**	15+2/**16**		
Eighth Semester					
MT402	Computer Aided Mathematics	5	3+0/3	C	T
MT404	Differential Geometry II	5	3+0/3	C	T
MT406	Functional Analysis II	5	3+0/3	C	T
MT452	Graduation Study II	5	0+2/1	C	T
MT4xx	Elective	5	3+0/3[*]	E	T
MT4xx	Elective	5	3+0/3[*]	E	T
	Spring Semester Total:	**30**	15+2/**16**		
	YEAR TOTAL:	**60**			
	ECTS TOTAL :	**240**			
	NATIONAL GRADUATION CREDIT:	**153**			

[*] For elective courses determined by the Rectorate T+A/C → 2+0/2 .

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Elective Courses					

3. Class

Code	Course Name	ECTS	WCH T+A/C	C/E	La.
Fifth Semester					
MT309	Linear Programming	5	3+0/3	E	T
MT311	Transformations and Geometries	5	3+0/3	E	T
MT313	Mathematics and Analysis	5	3+0/3	E	T
MT315	Professional English	5	3+0/3	E	T
MT317	Metric Spaces	5	3+0/3	E	T
Sixth Semester					
MT310	Difference Equations	5	3+0/3	E	T
MT312	Fuzzy Mathematics	5	3+0/3	E	T
MT314	Foundations of Geometry	5	3+0/3	E	T
MT316	History of Mathematics	5	3+0/3	E	T
MT318	Real Analysis	5	3+0/3	E	T

4. Class

Code	Course Name	ECTS	WCH T+A/C	C/E	La.
Seventh Semester					
MT407	Discrete Mathematics	5	3+0/3	E	T
MT409	Scientific Text Preparation	5	3+0/3	E	T
MT411	Fourier Analysis	5	3+0/3	E	T
MT413	Convexity and Optimization	5	3+0/3	E	T
MT415	Module Theory	5	3+0/3	E	T
İDL453	Sign Language	5	2+0/2	E	T
Eighth Semester					
MT408	Field Extensions	5	3+0/3	E	T
MT410	Financial Mathematics	5	3+0/3	E	T
MT412	Combinatorial	5	3+0/3	E	T
MT414	Measurement Theory	5	3+0/3	E	T
MT416	Finite Difference Methods	5	3+0/3	E	T
AHL454	Ahi and Professional Ethics	5	2+0/2	E	T

WCH: Weekly Course Hours

T+U/K: Theorical + Application/Credit

ECTS: European Credit Transfer System

C/E: Compulsory/Elective

La.: Language   (T: Turkish)

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Activities

As the Department of Mathematics, we regularly organize Mathematics Days under the name of Mathematics Society every year. As part of this event, our faculty members, academic staff/members of our department and our students, who are well-known in their fields, make presentations. In this activity, it was aimed to increase the relationship between students and academic personel in academic terms by giving responsibility to each student and each academic member/staff member of the Mathematics Society. Besides undergraduate students, there are also secondary education students as the audience. Therefore, within the scope of this activity, it was aimed to reach a wider audience and introduce the Mathematics Department at the undergraduate and graduate level. In addition, academic cooperation is

developed by organizing events such as trips and dinner for guest faculty members.

ARTS AND SCIENCE FACULTY

DEPARTMENT OF MATHEMATICS

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