

<b>Department</b> Department of Mathematics			<b>Academic Year</b> 2022-2023	<b>Date</b> 01/12/2022	
<b>Course Unit Code</b> MATH4113	<b>Course Unit Title</b> Scientific Research and Document Preparation Techniques		<b>Semester/Year</b> Fall / 4	<b>Number of ECTS Credits</b> 3	
<b>Language of Instruction</b>	Turkish				
<b>Type of Course Unit</b>	Elective				
<b>Prerequisites and co-requisites</b>	-				
<b>Address of course</b>	-				
<b>Local Credit</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Laboratory</b>	<b>Presentati on</b>	<b>Project</b>
2	2	0	-	-	-
<b>Name of Lecturers</b>	Professor Mehmet BEKTAŞ				
<b>Assistants</b>	-				

<b>Course content</b>	Document provisioning systems, and MathSciNet, Zentralblatt MATH, ScienceDirect, and so on the use of databases, the creation of any documents that may be required for academic work with LATEX and Scientific Work Place, and the preparation of presentations using the Beamer program.
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Weekly Detailed Course Contents	
Week	Topic
1	MathSciNet, ZBMATH, ScienceDirect etc. search and retrieve mathematical documents in databases, Google, Google Academic, etc. reaching a document with search engines, ULAKBİM Document Provisioning and the use of YOK National Thesis Service
2	MiKTEX, WinEdt, Introduction and Installation of Scientific Work Place Programs
3	Creating Documents with Scientific Work Place
4	Layout of a document, document classes, packages, page formats, line and page truncation, spelling, special characters, titles, chapters and sections, page settings
5	Mathematical formulas, building blocks of a mathematical formula, list of mathematical symbols
6	List of mathematical formulas and mathematical symbols
7	Assign internal reference and equation number in the file
8	Articles and thesis writing
9	General application
10	MiKTEX - WinEdt - Quick and easy document creation with Scientific Work Place triple
11	Graphing with Microsoft Word and transferring these graphics to Scientific work Place file
12	Presentation packages: Beamer
13	Presentation packages: Beamer and PowerPoint
14	A brief evaluation of the course content and topics

<b>Course Researches</b>	<ol style="list-style-type: none"> <li>1. Introduction to scientific workplace, E.S. Al-Aidarous, 2007</li> <li>2. Syropoulos A., Tsolomitis A., Sofroniou N., Digital Typography Using L<sup>A</sup>T<sub>E</sub>X, Springer, 2003, ISSN: 0-387-95217-9.</li> <li>3. Hubert T.O., Hyna I., Schlegl E.(çev.Karaoglu B.), İnce bir L<sup>A</sup>T<sub>E</sub>X 2ε Elkitabı, Sürüm 4.20, Mayıs 2006, <a href="http://akgul.bilkent.edu.tr/Yunus/short.pdf">http://akgul.bilkent.edu.tr/Yunus/short.pdf</a></li> </ol>
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<b>Assessment Methods and Criteria</b>	<b>In-Term studies</b>	<b>Quantity</b>	<b>Percentage (%)</b>
	<b>Mid-Term Exams</b>	1	40
	<b>Quizzes</b>	-	-
	<b>Assignments</b>	-	-
	<b>Projects</b>	-	-
	<b>Term assignment</b>	-	-
	<b>Laboratory</b>	-	-

	<b>Other</b>	-	-
	<b>Final exam</b>	1	60
<b>On Assessment Methods and Criteria</b>	A grade of success; the relative evaluation system or evaluation of the instructor. In order to be taken into consideration in the courses in which the relative evaluation system and teaching staff's discretion are applied, the final exam score of the student must be at least YSAS. Students who fall below this score are considered to fail directly. For the courses that cannot be evaluated with the relative evaluation system, the letter grades of the success grades are determined by the consent of the instructor teaching the table by 100 points by the Senate using the distribution of the final grade of success. A student who has received a grade AA, BA, BB, CB or CC grade is deemed to have completed that course. A student who has received one of the grade DC or DD grades is deemed to have fulfilled that course condition. In order for a student who takes DD and DC letters to be counted as successful, the GMS (General Mean Score) must be at least 2.00. A student who receives a graded FF grade is considered to have failed that course.		

<b>Percentage of Course Category (%)</b>	<b>Mathematics and Basic Sciences</b>	80
	<b>Computer Sciences</b>	20
	<b>Programming Design</b>	0
	<b>Social sciences</b>	0

<b>Course Outcome</b>	Students who have successfully completed this course; <ul style="list-style-type: none"> <li>• Know how to access a scientific document via the web.</li> <li>• LATEX editor / compiler programs can install and use some LATEX-based word processors, especially LATEX-compatible graphics programs.</li> <li>• Create a scientific paper using the Scientific Work Place program effectively. He can quickly edit a story according to the template of the magazine it will send.</li> <li>• Write books and lecture notes in the Scientific Work Place environment.</li> <li>• Write or edit documents such as thesis, seminar in the desired format.</li> <li>• Can make effective presentations</li> </ul>
<b>Aims of the course</b>	Using databases and search engines effectively to search, find and find scientific documents (articles, theses, seminars, papers, posters, brochures, books, lecture notes etc.), scientific documents of LATEX and Scientific Work Place to teach you how to prepare.
<b>The way of processing course</b>	Face to face

<b>Relation of the course with program outcomes</b>				
Learning outcomes		1	2	3
1	To have advanced theoretical and applied knowledge in a way to prioritize the scientific approach supported by textbooks containing up-to-date information in the field, application tools and other resources		X	
2	Adapting and transferring the knowledge gained in the field to secondary education			
3	Ability to independently carry out an advanced study in the field		X	
4	Be aware of the necessity of lifelong learning and continuously improve their professional knowledge and skills.			X
5	Using a foreign language at least at the European Language Portfolio B1 General Level, following the information in the field and being able to communicate with colleagues			
6	To be able to use information and communication technologies together with computer software at minimum advanced level of European computer license required by the field.			
7	Have the ability to make oral and written presentation in native language			
8	Having the ability to understand spoken English and use English at reading level			
9	To have the ability to assimilate mathematical concepts and understand the relationships between them, to recognize different aspects of the same concepts and relationships			
10	To have the ability to define and formulate the relationships between items in non-mathematical disciplines in the language of mathematics.			
11	To have the ability to use mathematical knowledge in different problems			
12	Having the ability to develop computer programs using mathematical knowledge			
<b>Contribution of the course: 1:No 2:Partially 3:Completely</b>				

**Preparer:** Professor Mehmet BEKTAŞ  
**Preparation date:** 01/12/2022