Identification	**Subject**	Math 224, Mathematics for elementary teachers-2, 6 ECTS	
	Department	Mathematics	
	Program	Undergraduate	
	Term	Fall, 2023	
	Instructor	Yetar Ferhadova	
	E-mail:	ferhadova.yeter@gmail.com	
	Phone:	(+994)70-969-87-02	
	Classroom/hours	Monday: 09:00-10:30, Monday:10:40-12:10	
Prerequisites	Math-223: Mathematics for elementary teachers-1		
Language	English		
Compulsory/Elective	Required		
Required textbooks and course materials	***Core Textbooks:*** **1. International Mathematics for Middle year 4 --- Alan McSeveny, Rob Conway, Steve Wilkes, Michael Smith 2009** **2. Complete math for Cambridge IGCSE--- David Rayner, Ian Bettison, Mathew Taylor 2018**		
Course website			
Course outline	Topics include: • Sets • Quadratic Equations • Ratio, proportion, percent • Angles, parallel lines • Triangles • Equations with single variables • System of equations • Coordinate plane. Vectors • Statistics		
Course objectives	The concepts of Sets; Fractions and decimals*;* Natural and real numbers; Simplifying expressions, special products; Circle; Equations with single variables; Coordinate plane, vectors; Statistics		
Learning outcomes	By the end of the course the students should be able: • To do operations on sets • To solve some simple and hard problems in geometry • To simplify hard expressions • To solve some problems in statistics		
Teaching methods	**Lecture**		x
	Group discussion		x
	Experiential exercise		x
	Simulation		
	Case analysis		
	Course paper		x

<table>
<tr><td></td><td colspan="2">Others</td><td></td></tr>
<tr><td rowspan="10">Evaluation</td><td>Methods</td><td>Date/deadlines</td><td>Percentage (%)</td></tr>
<tr><td>Midterm Exam</td><td></td><td>30</td></tr>
<tr><td>Case studies</td><td></td><td></td></tr>
<tr><td>Class Participation</td><td></td><td>5</td></tr>
<tr><td>Quizzes</td><td></td><td>20(3 quizzes)</td></tr>
<tr><td>Activity</td><td></td><td>5</td></tr>
<tr><td>Laboratory work</td><td></td><td></td></tr>
<tr><td>Final Exam</td><td></td><td>40</td></tr>
<tr><td>Others</td><td></td><td></td></tr>
<tr><td>Total</td><td></td><td>100</td></tr>
<tr><td>Policy</td><td colspan="3">

Preparation for class

The structure of this course makes your individual study and preparation outside the class extremely important. The lecture material will focus on the major points introduced in the text. Reading the assigned chapters and having some familiarity with them before class will greatly assist your understanding of the lecture. After the lecture, you should study your notes and work relevant problems and cases from the end of the chapter and sample exam questions.
Throughout the semester we will also have a large number of review sessions. These review sessions will take place during the regularly scheduled class periods.

Quizzes and examinations

Quizzes may be given unannounced throughout the term. There will be no make-up quizzes.
No make-up exams. If students miss an exam, a zero score will be assigned to the missed exam.

Withdrawal (pass/fail)

This course strictly follows grading policy of the School of Humanities, Education and Social Sciences. Thus, a student is normally expected to achieve a mark of at least 60% to pass. In case of failure, he/she will be required to repeat the course the following term or year.

Cheating/plagiarism

Cheating or other plagiarism during the Quizzes, Mid-term and Final Examinations will lead to paper cancellation. In this case, the student will automatically get zero (0), without any considerations.

Professional behavior guidelines

The students shall behave in the way to create favorable academic and professional environment during the class hours. Unauthorized discussions and unethical behavior are strictly prohibited.
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	▪ **Ethic** Use of any electronic devices is prohibited in the classroom. All devices should be turned off before entering class. This is a university policy and violators will be reprimanded accordingly! Students should not arrive in late to class!

Tentative Schedule

Week	Date/Day (tentative)	Topics	Textbook/ Assignments
1	18.09.23 18.09.23	• Sets • Operations on sets	**[2] 280-288**
2	25.09.23 25.09.23	• Natural Numbers • Problem solving	
3	02.10.23 02.10.23	• Quadratic Equations • Problems solved by quadratic equations	**[2] 87-93**
4	09.10.23 09.10.23	• Ratio, proportion, percent • Problem solving	**[2] 21-35**
5	16.10.23 16.10.23	• Angles, parallel lines • Problem solving	**Quiz (6 pts)** **[1] 294-299**
6	23.10.23 23.10.23	• Real numbers • Problem solving	**[1] 115-134**
7	30.10.23 30.10.23	• Triangles • Problem solving	**[2] 104-107**
8	06.11.23 06.11.23	• Simplifying expressions, special products • Problem solving	**[1] 175-178**
9	13.11.23 13.11.23	• **Midterm Exam** • Circle; Problem solving	**[2]108-117, 158-165**
10	20.11.23 20.11.23	• Speed, distance and time. Mixed problems • Problem solving	**Quiz (7 pts)** **[2]67-76,115-134**
11	27.11.23 27.11.23	• System of equations • Problem solving	**[1] 244-261**
12	04.12.23 04.12.23	• Quadrilaterals • Problem solving	**[2] 310-324**
13	11.12.23 11.12.23	• Transformations, enlargement • Problem solving	**Quiz (7 pts)** **[1] 200-233**
14	18.12.23 18.12.23	• Coordinate plane. Vectors • Problem solving	**[2] 232-262**
15	25.12.23 25.12.23	• Statistics • Problem solving	**[1] 468-482**
	TBA	**Final Exam**	

This syllabus is a guide for the course and any modifications to it will be announced in advance.