MISCONCEPTIONS IN MATHEMATICS TEACHING

1	Course Title:	MISCONCEPTIONS IN MATHEMATICS TEACHING	
2	Course Code:	İMÖ4003	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	7	
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:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç. Dr. HATİCE KÜBRA GÜLER SELEK	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	rezentas@uludag.edu.tr 0224 2942287 Uludağ Üniversitesi Eğitim Fakültesi, E Blok, Matematik ve Fen Bilimleri Bölümü, Matematik Eğitimi ABD.	
17	Website:		
18	Objective of the Course:	The main aim of this study is to examine misconceptions associated with different mathematics concepts and to discuss contemporary teaching strategies to overcome these misconceptions.	
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	Defines misconception
		2	Exemplifies common misconceptions associated with different mathematics concepts
		3	Implements inquiry techniques that reveal the thinking process of elementary school students
		4	Suggests solution proposals for conceptual misconceptions
		5	Prepares lesson plans for overcoming misconceptions
		6	
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21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	Semester plan, Mathematical error, difficulty and misconception	

2	Cause of misconception and types	
3	misconceptions regarding basic operations	
4	misconceptions regarding exponents and roots	
5	misconceptions regarding fractions	
6	misconceptions regarding integers, rate and ratio	
7	misconceptions regarding algebra	
8	misconceptions regarding measurment	
9	misconceptions regarding geometry	
10	misconceptions regarding data and probability	
11	Investigating students' practices on misconceptions	
12	Investigating students' practices on misconceptions	
13	Investigating students' practices on misconceptions	
14	Investigating students' practices on misconceptions	

22	Textbooks, References and/or Other Materials:	Hatice Akkoç, Mehmet Fatih Özmantar, Erhan Bingolbali (2008) MATEMATİKSEL KAVRAM YANILGILARI VE ÇÖZÜM ÖNERİLERİ, Pegem Akademi

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	11	1.00	11.00
Homeworks	1	10.00	10.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	20.00	20.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			89.00
Total work load/ 30 hr			2.97
ECTS Credit of the Course			3.00

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	2	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ÖK5	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**