PROBLEM SETTING IN MATHEMATICS

1	Course Title:	PROBLEM SETTING IN MATHEMATICS
2	Course Code:	İMÖ0022
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	4.00
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:	Prof. Dr. ÇİĞDEM ARSLAN
15	Course Lecturers:	yok
16	Contact information of the Course Coordinator:	arslanc@uludag.edu.tr
17	Website:	
18	Objective of the Course:	The aim of this course is to support the development of pre-service mathematics teachers' problem solving and posing skills in the field of mathematics education, based on the "Teaching with Problem Posing" approach, which has increased in importance in the field of mathematics education recently. In addition, by addressing the problem posing and solving discussions in the literature on mathematics education, it will be tried to increase the awareness of pre-service teachers on this subject.
19	Contribution of the Course to Professional Development:	Mathematics teacher candidates will gain the competence to teach problem posing methods and to evaluate the posed problems.
20	Learning Outcomes:	
	1	Understanding the significance of problem posing
	2	Understanding meaning of problem posing
	3	Understanding problem posing strategies
	4	Evaluation of problem posing
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21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	What is problem and problem posing?	
2	The importance of teaching problem posing	
3	Recent developments in problem posing	

4	The place of problem posing in the mathematics curriculum	
5	Problem posing strategies	
6	Free problem posing	
7	Semi-structured problem posing	
8	Structured problem posing	
9	Posing non routine problems	
10	Posing a mathematical literacy problem	
11	Evaluation of problem posing	
12	Problem posing rubrics	
13	Discussing examples of problem posing	
14	General evaluation	

22	Textbooks, References and/or Other Materials:	Van De Wale (2012). İlkokul ve Ortaokul Matematiği Gelişimsel Yaklaşımla Öğretim (Çev. Ed. Soner Durmuş), Nobel Akademik Yayıncılık, Ankara. Polya,G.(2017). Nasıl Çözmeli, Tübitak, Ankara
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work project	0	0.00
Contribution of Term (Year) Learning Activities to Success Grade	14	60.00
Contribution of Final Exam to Success Grade	1	40.00
Measurement and Evaluation Techniques Used in the Course		written examination

24 ECTS / WORK LOAD TABLE

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	14	5.00	70.00
Homeworks	1	20.00	20.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	1.00	1.00
Others	0	0.00	0.00
Final Exams	1	1.00	1.00
Total Work Load			121.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

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	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	4	4	0	0	0	0	0	0	5	0	0
ÖK3	0	5	0	0	0	4	0	0	0	0	0	0	0	4	0	0
ÖK4	4	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0

LO: Learning Objectives PQ: Program Qualifications

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