AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Teacher as Researcher in Mathematics Education								
Course Code	MTE518		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	At the end of this course students will gain knowledge about qualitative teacher research and will be able to conduct research on this subject.								
Course Content	Action research, teaching experiment, design experiment, teacher development experiment, classroom experiment, design experiment, lesson study, learning study, video clubs								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70

Recommended or Required Reading	
1	1. Cobb, P., Confrey, J., DiSessa, A., Lehrer, R., & Schauble, L. (2003). Design experiments in educational research. Educational researcher, 32(1), 9-13.
2	2. Stringer, E. T. (2004). Action research in education. Upper Saddle River, NJ: Pearson/Merrill/Prentice Hall.
3	3. Steffe, L. P., & Thompson, P. W. (2000). Teaching experiment methodology: Underlying principles and essential elements. Handbook of research design in mathematics and science education, 267-306.
4	4. Cobb, P., & Steffe, L. P. (2010). The constructivist researcher as teacher and model builder. In A journey in mathematics education research (pp. 19-30). Springer Netherlands.
5	5. Hart, L. C., Alston, A., & Murata, A. (2011). Lesson study research and practice in mathematics education. The Netherlands: Springer.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the role of teacher as researcher
2	Theoretical	Action research, definition and characteristics of the method
3	Theoretical	Examining action research
4	Theoretical	Design research, definition and characteristics of the method
5	Theoretical	Examining design research
6	Theoretical	Teaching experiments, classroom experiments and teacher development experiments, definitions and characteristics of the methods
7	Theoretical	Examining teaching experiments, classroom experiments and teacher development experiments
8	Intermediate Exam	Midterm Exam
9	Theoretical	Lesson study and learning study, definition and characteristics of the methods
10	Theoretical	Examining lesson studies and learning studies
11	Theoretical	Video club research, definition and characteristics of the method
12	Theoretical	Examining video club research
13	Theoretical	Designing a research on teaching
14	Theoretical	Analyzing the designed teacher research
15	Theoretical	Presenting the research
16	Final Exam	General assessment, Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	5	3	112
Midterm Examination	1	38	2	40

Final Examination	1	46	2	48
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. To be able to identify qualitative teacher research.
2	2. To be able to comprehend the teacher as researcher role in the area of mathematics education.
3	3. To be able to conduct research in the area of mathematics education.
4	4. To be able to report a research implemented in qualitative design.
5	5. To be able to write academically specific to the field.

Programme Outcomes *(Mathematics Education Master)*	
1	Learns sufficient theoretical knowledge in the field of mathematics education
2	Uses theoretical knowledge in educational settings
3	Integrates mathematics education knowledge with the other disciplines and products functional knowledge
4	Uses information and communication technologies efficiently in conceptual learning
5	Finds scientific solutions to the problems in the field of mathematics education
6	Evaluates the knowledge critically in the field
7	Participates team projects in the mathematics education field
8	Shares national and international data in the field of mathematics education
9	Comprehends and evaluates science-technology-society and mathematics interactions
10	Comprehends mathematics under the ethical values and takes account of ethical considerations
11	Follows the current development in the mathematics education field
12	Develops strategical plans and evaluates them in the context of quality processes
13	Adopts lifelong learning strategies to his/her studies

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	4	4	4	4	4