Course Syllabus

Code - Course Title	**MAT299 - Mathematics Learning and Teaching Approaches**
Course Type	III. SEMESTER
Laboratory + Practice	4+0
ECTS	**4.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ BAŞAK BARAK, PROF. DR. TANGÜL KABAEL

Mode of Delivery	Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	None.
Work Placement	N/A

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Mathematics’s structure and learning	
Week - 2		Learning and teaching approaches: Philosophies in learning and related approaches	
Week - 3		Behavioral approach: Classical conditioning, Operant conditioning, Gagne’s learning approach	
Week - 4		Cognitive approach: Bruner’s approach, Ausubel’s approach, Dienes’s approach	
Week - 5		Cognitive approach: Bruner’s approach, Ausubel’s approach, Dienes’s approach	
Week - 6		Constructive approach: Piaget’s learning theory	
Week - 7		Constructive approach: Piaget’s learning theory	
Week - 8		Associated development of mathematical concepts	
Week - 9		Conceptual-Procedural-Relational learning	
Week - 10		Constructive teaching principles	
Week - 11		Constructive teaching methods: Realistic mathematics education	
Week - 12		Constructive teaching methods: Problem-based teaching	
Week - 13		Constructive teaching methods: Cooperative teaching	
Week - 14		Constructive teaching methods: Project-based teaching	

Learning Outcomes

#	Learning Outcome
1	Explains mathematics's structure and learning.
2	Explains philosophies in learning and related approaches.
3	Explains learning and teaching approaches.
4	Explains associated development of mathematical concepts
5	Explains conceptual-procedural-relational learning.
6	Expresses constructive teaching principles.
7	Uses constructive teaching methods.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**