Course Syllabus

Code - Course Title	**MTE603 - Concept Analysis in Mathematics**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. TANGÜL KABAEL

Mode of Delivery	The mode of delivery of this course is "face to face"
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Recommended Resources	Mathematics for High School Teachers An Advanced Perspective Advanced Mathematical Thinking
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		The concept definition and abstraction process of mathematical concepts.	
Week - 2		Development processes of mathematical concepts related to each other	
Week - 3		Conceptual, procedural and relational learning	
Week - 4		Development of language and concept	
Week - 5		Schema of concept	
Week - 6		Construction process of basic mathematical concepts' schemas	
Week - 7		Construction process of basic mathematical concepts' schemas	
Week - 8		To examine development of concept changing from primary education to higher education levels	
Week - 9		To examine development of concept changing from primary education to higher education levels	
Week - 10		To examine development of concept changing from primary education to higher education levels	
Week - 11		Concept development from arithmetic to algebra	
Week - 12		Concept development from arithmetic to algebra	
Week - 13		Development of geometric concepts	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		Development of geometric concepts	

Learning Outcomes

#	Learning Outcome
1	The researcher/student will be able to explain the define the concepts and abstraction process of mathematical concepts.
2	The researcher/student will be able to express the development processes of mathematical concepts related to each other.
3	The researcher/student will be able to explain conceptual, procedural and relational learning.
4	The researcher/student will be able to explain the relationship between development of language and concept.
5	The researcher/student will be able to explain schema of concept.
6	The researcher/student will be able to examine development of concept changing from primary education to higher education levels.
7	The researcher/student will be able to express concept development from arithmetic to algebra.
8	The researcher/student will be able to express development of geometric concepts.

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.