Course Syllabus

Code - Course Title	**MAT457 - Interdisciplinary Approaches in Mathematics Education and**
Course Type	VII. SEMESTER
Laboratory + Practice	3+0
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Area Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ AYŞEGÜL ERYILMAZ ÇEVİRGEN

Mode of Delivery	The mode of delivery of this course is face to face
Prerequisites	There is no prerequisite or corequisite for this course.
Courses Recomended	None
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		21st Century Skills and Their Importance	
Week - 2		Interdisciplinary Approach; Multidisciplinary Approach; Holistic Approach;	
Week - 3		STEM Education Approach: Science, Engineering, Technology, Art, Mathematics, Entrepreneurship; International Developments in STEM Education	
Week - 4		STEM and Technology Applications	
Week - 5		STEM and the 5-E Model	
Week - 6		STEM Education with Problem-Based Learning	
Week - 7		STEM Education with Project-Based Learning	
Week - 8		STEM Education with Art-Based Learning	
Week - 9		STEM Education with Effective Mathematics Teaching	
Week - 10		Interdisciplinary Approaches and Assessment-Evaluation	
Week - 11		Term project work	
Week - 12		Term project work	
Week - 13		Term project work	
Week - 14		Term project work	

Learning Outcomes

#	Learning Outcome
1	Define the concepts related to STEM – A education, contexts and systems
2	Criticize the contemporary issues related to STEM – A education, contexts and systems
3	Criticize the major theoretical and professional debates in STEM education as located within contemporary research studies.
4	Develops learning process based on STEM education

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	30
Final Exam	1	40
2.Midterm Exam	1	30
	Sum (%)	**100**