Course Syllabus

Code - Course Title	**SER271 - Ceramic Technology and Applications I**
Course Type	III. SEMESTER
Laboratory + Practice	2+2
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	ÖĞR. GÖR. DR. ÇİĞDEM ÖNDER ER

Mode of Delivery	Face-to-face
Place of Delivery	On Campus
Used Educational Platforms	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	Ceramic TechnologyAteş Arcasoy, Hasan Başkırkan
Work Placement	None
Aims of the Course	To know the structural classification of ceramic raw materials, to be able to perform experiments applied to raw materials used in ceramic technology, and to recognize ceramic glazes and coloring oxides.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Ceramic glazes; definition, properties, glaze - temperature relations.	
Week - 2		Ceramic glaze formulations.	
Week - 3		Glaze forming oxides and properties.	
Week - 4		Glaze materials.	
Week - 5		Seger formula calculation.	
Week - 6		I. Examination	
Week - 7		Glaze batch formula calculation.	
Week - 8		Glaze calculation from batch formula to seger empirical formula.	
Week - 9		Ceramic glazes classification.	
Week - 10		Triaxial glaze blends.	
Week - 11		Triaxial glaze blends.	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 12		Laboratory Practice	
Week - 13		Glaze colarants (colarant oxides and carbonates).	
Week - 14		Colored Glaze Applications	

Learning Outcomes

#	Learning Outcome
1	Determine can be achieve glaze different mixing three materials which use in ceramic glazes at 1000 °C.
2	The student will be able to identify the coloring oxides and ceramic dyes used in glaze coloration based on their effects after firing.
3	The student will be able to evaluate the research they have conducted.
4	The student will be able to evaluate the research they have conducted.

Sustainable Development Goals

✓ Quality Education

Course Theme

✓ Media, Design and Creative Arts ✓ Innovation Skills

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	2.00	14	28
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	2.00	10	20
Ödevler	2.00	14	28
Proje - Rapor - Sunum Hazırlama	0.00	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	2.00	12	24
Final Sınavı Hazırlığı (sınav süresi dahil)	2.00	12	24
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	2.00	12	24
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Performance Assessment (Individual/Panel-Based) ✓ Project

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