

SER-311 - PLASTER DESIGN AND MOULDING TECHNIQUES III - Güzel Sanatlar Fakültesi - Seramik Cam Bölümü

General Info

Objectives of the Course

The aim of this course is to improve students' ability to design ceramic products suitable for both individual artistic production and industrial manufacturing using plaster. Students will model functional objects such as vases and teapots on the plaster lathe and learn to prepare moulds suitable for mass production. The course includes practices oriented toward both artistic expression and industrial design.

Course Contents

Students will produce symmetrical forms using the plaster lathe while also learning mould-making techniques suitable for mass production. Forms such as vases and teapots are developed for both artistic and industrial use. Students will experience the production of two-part plaster moulds, locking systems, planning of separation lines, and the design of prototypes intended for production. In the design of industrial products, considerations such as functionality, ergonomics, and mouldability will be emphasized.

Recommended or Required Reading

Plaster lathe Plaster scrapers Plaster knife Plaster rasp Mould boards Baldudak plaster Silicone support surfaces (optional) Measuring containers and mould bands for scaled production

Planned Learning Activities and Teaching Methods

Hands-on studio work Technical demonstrations Individual project development Industrial product prototyping Artistic and product evaluation presentations

Recommended Optional Programme Components

Students are recommended to attend class with aprons, safety glasses, and masks. Due to the fast setting nature of plaster, time-sensitive work discipline is essential. While working with industrial production logic, students are also expected to consider aesthetic values.

Instructor's Assistants

Teaching assistants provide technical support and guidance during moulding processes, especially for industrial product applications, and supervise students' production stages.

Presentation Of Course

The course is delivered face-to-face in a studio environment through weekly practical sessions. Students enhance both their manual skills and product development capabilities through practice-based learning.

Dersi Veren Öğretim Elemanları

Dr. Öğr. Üyesi Serkan Tok

Program Outcomes

1. Can model basic ceramic forms symmetrically using a plaster lathe.
2. Can evaluate and model functional ceramic objects such as vases and teapots from both aesthetic and technical perspectives.
3. Can plan and apply appropriate separation surfaces to create two-part plaster moulds.
4. Can develop prototype designs and prepare production-oriented moulds for both artistic and industrial products.
5. Can design and produce a functional industrial ceramic product suitable for mass production using plaster forming techniques.

Weekly Contents

Order	PreparationInfo	Laboratory TeachingMethods	Theoretical	Practi
1	Review course materials and references Read about mixing ratios and setting times https://dergipark.org.tr/tr/download/article-file/3491048 (s.115-124) https://dergipark.org.tr/tr/download/article-file/1578743 (s.60-62) https://earsiv.anadolu.edu.tr/xmlui/bitstream/handle/11421/26687/681751.pdf?sequence=1&isAllowed=y (s.22-24) https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/611996/yokAcikBilim_10181365.pdf?sequence=-1 (s.9-24)	Demonstration-based teaching and individual guidance	History and applications of plaster forming. Types and properties of plaster	Mixing using plaster introduced & material overview
2	Review course materials and references Read about mixing ratios and setting times https://dergipark.org.tr/tr/download/article-file/3491048 (s.115-124) https://dergipark.org.tr/tr/download/article-file/1578743 (s.60-62) https://earsiv.anadolu.edu.tr/xmlui/bitstream/handle/11421/26687/681751.pdf?sequence=1&isAllowed=y (s.22-24) https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/611996/yokAcikBilim_10181365.pdf?sequence=-1 (s.9-24)	Demonstration-based teaching and individual guidance	History and applications of plaster forming. Types and properties of plaster	Mixing using plaster introduced & material overview
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4	Review course materials and references Read about mixing ratios and setting times https://dergipark.org.tr/tr/download/article-file/3491048 (s.115-124) https://dergipark.org.tr/tr/download/article-file/1578743 (s.60-62) https://earsiv.anadolu.edu.tr/xmlui/bitstream/handle/11421/26687/681751.pdf?sequence=1&isAllowed=y (s.22-24) https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/611996/yokAcikBilim_10181365.pdf?sequence=-1 (s.9-24) Watch videos about using the plaster lathe. Sketch and design different vase forms	Demonstration-based teaching and individual guidance	Basics of modeling with plaster lathe. Technical and aesthetic analysis of vase forms	Vase forms on the cylindrical work on the lathe

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Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Vize	3	4,00
Final	3	4,00
Uygulama / Pratik	3	7,00
Ders Öncesi Bireysel Çalışma	3	7,00
Ders Sonrası Bireysel Çalışma	3	7,00
Uygulama / Pratik Sonrası Bireysel Çalışma	3	7,00

Assesments

Activities	Weight (%)
Ara Sınav	40,00
Final	60,00

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14	P.O. 15
L.O. 1	5	3	4	2	3	3	3	2	2	1	5	3	2	3	3
L.O. 2	5	3	4	2	3	3	3	2	2	1	5	3	2	3	3
L.O. 3	4	3	4	2	3	3	4	2	2	1	5	3	2	3	3
L.O. 4	4	3	4	2	3	3	4	2	2	2	5	3	2	3	3
L.O. 5	5	3	4	2	3	4	5	2	2	1	5	3	2	3	3

Table :

- P.O. 1 :** Have knowledge in the fields of art, design and ceramics, as well as the skills to put this knowledge in practice
- P.O. 2 :** Have research, experimentation, analysis, evaluation and interpretation ability
- P.O. 3 :** Design and create a product / a work / a process that will meet the needs or propose a solution to a problem, taking into account the restrictions arising in the field of ceramics
- P.O. 4 :** Have the ability to working groups or individually relating their field knowledge with other disciplines
- P.O. 5 :** Determine, describe and propose solutions to problems in the art and design of ceramics
- P.O. 6 :** Have professional and ethical responsibility in intellectual and artistic works
- P.O. 7 :** Communicate effectively and express themselves verbosely
- P.O. 8 :** Understand the impact of art and design solutions at a global and societal level
- P.O. 9 :** Have a full understanding of the necessity of life long learning and are equipped with the skills and an awareness of sustaining it
- P.O. 10 :** Develop a self-awareness of contemporary issues
- P.O. 11 :** Use the necessary techniques and innovations required for art and design applications
- P.O. 12 :** Sustain a strong research orientation, and show determination and willingness to adapt technological developments in ceramics
- P.O. 13 :** Share an awareness of art and design in the community with an understanding and adaption of social and cultural responsibilities
- P.O. 14 :** Show professional self-confidence with a conceptual knowledge in creativity processes
- P.O. 15 :** Follow international developments, realize art and design as a social responsibility
- L.O. 1 :** Can model basic ceramic forms symmetrically using a plaster lathe.
- L.O. 2 :** Can evaluate and model functional ceramic objects such as vases and teapots from both aesthetic and technical perspectives.
- L.O. 3 :** Can plan and apply appropriate separation surfaces to create two-part plaster moulds.
- L.O. 4 :** Can develop prototype designs and prepare production-oriented moulds for both artistic and industrial products.
- L.O. 5 :** Can design and produce a functional industrial ceramic product suitable for mass production using plaster forming techniques.