

SER-303 - COMPUTER AIDED 3D DESIGN I - Güzel Sanatlar Fakültesi - Seramik Cam Bölümü

General Info

Objectives of the Course

The aim of this course is to enable students to learn the basic principles of 3D design through computer-aided modeling software and to realize their own projects in a digital environment.

Course Contents

This course covers the concept of 3D modeling, introduction to interface, creation of basic shapes, modeling tools, surface modeling, solid modeling, dimensioning, rendering, and preparing output.

Recommended or Required Reading

Computer, modeling software (Blender, 3Ds Max, Rhino, etc.), graphics tablet (optional), USB flash drive or cloud storage. You can gain practice from online videos. Each topic will be explained on the computer by the instructor.

Planned Learning Activities and Teaching Methods

Theoretical lectures, live software demonstrations, individual project development, midterm evaluation presentations. Lecturing, demonstration, hands-on exercises, project-based learning, student presentations.

Recommended Optional Programme Components

Students are expected to submit an individual 3D modeling project at the end of the semester. Basic knowledge of the software is recommended.

Instructor's Assistants

There is no assistant teaching staff.

Presentation Of Course

Delivered face-to-face with practical sessions in the computer laboratory.

Dersi Veren Öğretim Elemanları

Assoc. Prof. Dr. Betül Aytepe Serinsu

Program Outcomes

1. Students will be able to give examples for CAD / CAM applications.
2. Students will be able to explain the three-dimensional drawing programs for ceramic industry.
3. Students will be able to use three-dimensional drawing programs.

Weekly Contents

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
1	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	*Providing information about three-dimensional drawing programs *General introduction to the program and its commands	Examining examples of three-dimensional drawing programs
2	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	Surface apps and basic commands	Surface applications and basic commands
3	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	Surface apps and basic commands	Surface applications and basic commands
4	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	Simple 3D drawing of ceramic objects such as bowls and plates	3D drawing of ceramic objects such as bowls and plates with simple commands
5	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	Simple 3D drawing of ceramic objects such as bowls and plates	3D drawing of ceramic objects such as bowls and plates with simple commands

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
6	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	Seramik nesnelerinden 3B bardak çizimi	3D cup drawing from ceramic objects
7	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	Seramik nesnelerinden 3B bardak çizimi	3D cup drawing from ceramic objects
8					Mid-term exam
9	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D handle drawing	3D handle drawing
10	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D drawings of cups and saucers with handles as ceramic objects	3D drawing of a cups and plates with handle as a ceramic object
11	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D drawings of cups and saucers with handles as ceramic objects	3D drawing of a cups and plates with handle as a ceramic object
12	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D ceramic dinnerware drawing, coloring commands	3D ceramic dinner set drawing, coloring commands
13	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D ceramic dinnerware drawing, coloring commands	3D ceramic dinner set drawing, coloring commands
14	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D ceramic dinnerware drawing, coloring commands	3D ceramic dinner set drawing, coloring commands
15	You can gain practical experience by watching online videos of the course material. Each topic will be explained on the computer by the instructor.		Lecture, Question-answer, Individual practice skills, Discussion	3D ceramic dinnerware drawing, coloring commands	3D ceramic dinner set drawing, coloring commands

Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Vize	0	0,00
Vize	1	1,00
Final	1	1,00
Uygulama / Pratik	8	1,00
Ara Sınav Hazırlık	1	2,00
Final Sınavı Hazırlık	1	2,00
Ödev	8	1,00
Uygulama / Pratik Sonrası Bireysel Çalışma	8	1,00
Gösterip yaptırma	8	1,00
Anlatım	5	1,00
Soru-Yanıt	5	1,00

Activities	Weight (%)
Final	60,00
Vize	40,00

Seramik Cam Bölümü / Seramik ve Cam X Learning Outcome Relation

	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	2	1	2		2	1	3	1	4	3	1	2	2
L.O. 2	4	4	3	1	3	1	1	2	3	2	4	4	2	2	3
L.O. 3	5	4	5	2	4	1	2	2	4	3	5	4	2	3	4

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 :** Students will be able to give examples for CAD / CAM applications.
- L.O. 2 :** Students will be able to explain the three-dimensional drawing programs for ceramic industry.
- L.O. 3 :** Students will be able to use three-dimensional drawing programs.