SER-303 - COMPUTER AIDED 3D DESIGN I - Güzel Sanatlar Fakültesi - SERAMİK VE 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.

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	
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 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 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		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		3D drawing of ceramic objects such as bowls and plates with simple commands
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		3D cup drawing from ceramic objects

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
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		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
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 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 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 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 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 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.				Final exam

Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Vize	1	1,00
Final	1	1,00
Uygulama / Pratik	10	1,00
Ders Öncesi Bireysel Çalışma	13	1,00
Ders Sonrası Bireysel Çalışma	10	2,00
Ara Sınav Hazırlık	2	2,00
Final Sınavı Hazırlık	3	3,00

Assesments

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

Seramik Cam Bölümü / SERAMİK 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 : Sanat, tasarım ve seramik alanına yönelik donanıma sahip olma ve edindiği bilgileri uygulama becerisi

P.O. 2 : Araştırma, deneyimleme, analiz, değerlendirme ve yorumlama becerisi

P.O. 3 : Seramik alanının gerektirdiği kısıtlamaları göz önünde bulundurarak, ortaya konan sorun ve gereksinimleri karşılayacak bir ürünü/yapıtı ya da süreci tasarlama ve yaratma becerisi

P.O. 4 : Kendi alanını diğer disiplinlerle ilişkilendirerek bireysel ve grup içinde çalışma becerisi

P.O. 5 : Sanat ve tasarım sorunlarını belirleme, tanımlama ve çözme becerisi

P.O. 6 : Fikir ve sanat eserleri alanlarında mesleki ve etik sorumluluk bilinci

P.O. 7 : Etkin iletişim kurma ve kendini ifade edebilme becerisi

P.O. 8 : Sanat/tasarım çözümlemelerinin,evrensel ve toplumsal boyutlarda etkilerini anlamak için gerekli genişlikte eğitim

P.O. 9 : Yaşam boyu öğrenmenin gerekliliği, bilinci ve bunu gerçekleştirebilme becerisi

P.O. 10 : Çağın sorunları hakkında kendini geliştirebilme bilinci

P.O. 11 : Sanat ve tasarım uygulamaları için gerekli olan teknikleri ve yenilikleri kullanma becerisi

P.O. 12 : Araştırma yönü kuvvetli, teknolojik gelişmeleri takip eden ve alanına adapte edebilme bilinci

P.O. 13 : Sanat ve tasarım bilincini toplumla paylaşarak sosyal, kültürel ve toplumsal sorumlulukları kavrama, benimseme bilinci

P.O. 14 : Yaratıcılık sürecinde mesleki özgüvenle birlikte kavramsal bilgi birikimi ve becerileri pekiştirme bilinci

P.O. 15 : Sanatı ve tasarımı toplumsal bir sorumluluk boyutunda kavrayan ve alanına yönelik uluslararası gelişmeleri takip eden bireyler yetiştirmek

L.O. 1 : CAD/CAM uygulamalarına örnek verebilir.

L.O. 2 : Seramik endüstrisinde kullanılan üç boyutlu çizim programlarını açıklayabilir.

L.O. 3 : Üç boyutlu çizim programlarını kullanabilir.