

Course Code	Course Name	Year/Semester	Theory	Practice	Credits	ECTS
IAED 3105	Computer Aided Modelling	2021-2022 / Fall	1	2	2	3

Level of Course: Undergraduate

Course Type: Must Course

Language of Instruction: English

Instruction:

Course time: Sec.1: Monday 13.30-16.300, Sec. 2: Thursday 10.00 – 13.00

Course classroom:

Mode of Delivery: Online Teaching, Presentation, Assignments

Prerequisites and IAED 1102

Co-requisites: None

Course Coordinator:

Name of Lecturer(s): Instructor Dr. Başak KARADUMAN

Course Teaching Rsch. Asst. Dürdane Aksoy

Assistant: Rsch. Asst. Emre Bakır

Course Objectives: Introduction and providing comprehensive knowledge with practices to 3D Modelling and Rendering Software and media applications.

Course Description: Just as 3D presentation the focus is on digital architectural presentation, and the aim is to help students present their design to their customers or audiences by developing visual documents and communication. Teaching the basic principles of 3D architectural presentation and visual communication to graduates of interior architecture and environmental design department is the primary purpose.

Learning Outcomes: Upon successful completion of the course, students will be able to:

- Students will be able to recognize the 3DSMax's advanced modelling tools' interface
- Students will be able to use 3DSMax as the modeling software and rendering engine.
- Students will use modeling techniques in expert level within the context of spatial modelling.
- Students will be able to present 3 dimensional digital models by using the software.
- Students will have advanced knowledge about different 3D modeling and rendering packages.

Language: The studio classes and discussions will be in English. Developing your verbal language skills will be very important in acquiring the disciplinary terminology as well as daily communication at the class.

Text Books: -

Recommended Text Books:

- Architectural Rendering with 3ds Max and V-Ray: Photorealistic Visualization, Markus Kuhlo, 2010.
- Kalay Y. E., (2004), Architecture's New Media: Principles, Theories and Methods of Computer-Aided Design, MIT Press

For the terminology: -

Reading Text books: -

Planned Learning Activities and Teaching Method:

Learning/Teaching Method: The expected learning outcomes for the course will be assessed through: Class hour submissions, a Midterm Exam, Final Project and Class discussions and feedback.

Assignments: Students are required to complete and submit assignments for both in class exercise and home works according to syllabus.

Class Participation: Regular attendance of all enrolled classes is expected. Do not be late to the class. Attendance will be taken through your signature within the first 15 minutes of the class; if you come later you will be considered absent. At the end of the Semester, your attendance will be reported on UBS system. Attendance is compulsory and in case of absenteeism of more than 20% for the practice and %30 for the theory, the system will automatically grade you "FF". If you miss a class, it is your responsibility to 'make up' all work, including items discussed in class. Class contribution will be measured in terms of quality not quantity. If you need to leave early for whatever reason, you should exercise politeness and notify your professor at the commencement of the session.

Academic integrity & plagiarism: Academic integrity is the pursuit of scholarly activity based on the values of: honesty, trust, fairness, respect and responsibility. Practicing academic integrity means never plagiarizing or cheating, never misrepresenting yourself, never falsifying information, never deceiving or compromising the work of others. Basically this means, either intentionally or unintentionally, using the words or ideas of someone else without giving credit, it's strictly forbidden.

Course Text books: There is no specific textbook for this course.

Key Works: In this studio course lectures and assignments mainly focuses on preparing students to the professional life and designing a portfolio

Specific Rules:

1. **Be punctual. Punctuality is a sign of respect toward yourself and the others.**
2. Show respect for all the people and property around you.
3. Be responsible for your actions and meet all expectations.

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4. Follow directions the first time they are given.
5. Students should raise their hand to signal a question or to answer a question.
6. Students should use the Internet at school for academic purposes only.
7. It is forbidden to record classes with any type of device.

Communication: Students are encouraged to visit the professor during their Office Hours. If you cannot make it to announced office hours, please make individual arrangements via e-mail. However, do not expect the professor and the research assistant to respond at length via e-mail to questions of content, definition of terms, grading questions etc. If you have a question that requires a substantive response please set up an appointment to speak with one of us.

**Course Contents*:
(Weekly Lecture Plan)**

Date	Week	Chapter Topic	Take-home exercise
13.09/ 16.09. 2021	1	Introduction to 3Ds Max -Layout -Units -Mouse – Keyboard	Further Research, online tutorials
20.09/ 23.09. 2021	2	Creating and editing objects -Create Menu -Edit, Position, Move, Rotate, Scale -Pivot -Object Views -Groups	Further Research, online tutorials
27.09/ 01.10. 2021	3	Spline Modelling -Snaps -Copy, Array, Mirror, Align -2D Objects -Extrude -Geometry Menu: Vertex, Segments, Spline	Ass 1: Will be announced during the course Further Research, online tutorials
04.10/ 07.10. 2021	4	2D Modifiers -Edit Spline -Extrude, Bevel, Lathe, Fillet, Chamfer, Bevel profile, Trim, Extend	Further Research, online tutorials
11.10/ 14.10. 2021	5	Polygon/ 3D modelling tools -Edit Polly: Vertex, Edge, Border, Polygon, Element	Ass 2: Will be announced during the course Further Research, online tutorials
18.10/ 21.10. 2021	6	Polygon modelling menus -Edit Polly: Geometry Menu	Further Research, online tutorials
25.10/ 28.10. 2021	7	Compound Objects -Proboolean General Practice before Midterm	Further Research, online tutorials



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	8	MIDTERM EXAM WEEK	
08.11/ 11.11. 2021	9	Modifiers -Bend, Noise, Slice, Turbo Smooth, Taper, Twist, FFD	Ass 3: Will be announced during the course Further Research, online tutorials
15.11/ 18.11. 2021	10	Materials -Material Editor -UVW Map	Further Research, online tutorials
22.11/ 25.11. 2021	11	Lights	Further Research, online tutorials
29.11/ 02.12. 2021	12	Cameras	Ass 4: Will be announced during the course Further Research, online tutorials
06.12/ 09.12. 2021	13	Render Operations	Further Research, online tutorials
13.12/ 16.12. 2021	14	Pre Final critiques	Further Research, online tutorials
			FINAL PROJECT

* PLEASE NOTE: Details of the syllabus and course schedule are subject to minor changes that will be announced in class and posted on Blackboard website.

Grading: Midterm and final exam responses will be evaluated for accuracy, thoughtfulness and clarity. Assignments will be evaluated for content, quality of ideas and clarity of presentation (including both writing and graphics).

**Assessment Methods
and Criteria :**

METHODS	EFFECTS ON GRADING
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Assignments	%20
Midterm Exam	%30
Final Project	%50
	%100

ECTS Workload Table :

ACTIVITIES	NUMBER	HOUR	WORKLOAD
Course Teaching Hours	13	1	13
Practical	13	2	26
Homeworks	4	3	12
Self-study for Midterm Project	1	10	10
Self-study for Final Project	1	15	15

Total Workload	0	0	75
Total workload/30			75/25
ECTS			3

GRADING AND EVALUATION

The students' progress will be evaluated throughout the semester.

Grade Scale:

GRADE	MARKS	VALUE
A+	100	4.00
A	95-100	4.00
A-	85-94	3.70
B+	80-84	3.30
B	75-79	3.00
B-	65-74	2.70

GRADE	MARKS	VALUE
C+	60-64	2.30
C	55-59	2.00
C-	50-54	1.70
D+	45-49	1.30
D	40-44	1.00
F	0-39	0.00