

Identification	Subject	DSN Application Software — 3 (3ds Max Visualization – 1) – 6 ECTS
	Department	Architecture and Design
	Program (Undergraduate, Graduate)	Undergraduate
	Term	Fall 2027
	Instructor(s)	Aygun Mustafayeva
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	Classroom/hours	Neftchiler campus
Prerequisites		None — this course is designed for students with no prior experience in 3ds Max or any 3D visualization software.
Language		English
Compulsory/Elective		Elective
Textbooks and course materials		Arch Viz Champ. (n.d.). Arch Viz Champ. Retrieved from: https://www.youtube.com/@archvizcamp 2. Nikita, M. (2024). Create Stunning Renders Using Corona in 3ds Max: Guiding the Next Generation of 3D Renderers. CRC Press. 3. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications. 4. Murdock, K. (2024). Autodesk 3ds Max 2025 Basics Guide. SDC Publications. 5. Jones, S. (2013). 3ds Max in 24 Hours, Sams Teach Yourself. Sams Publishing. 6. Cardoso, J. (2021). V-Ray 5 for 3ds Max 2020: 3D Rendering Workflows Volume 1. CRC Press. 7. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK 8. Chaos. (n.d.). Learn Corona – 3ds Max: Getting Started. Retrieved from: https://www.chaos.com/corona/3ds-max/getting-started
Course description		Application Software – 3 (3ds Max Visualization) introduces interior designers to the computer-graphics tools and workflow used to visualize interior spaces, which plays a key role in presenting design projects developed during their studies and later professional practice. 3ds Max is a computer graphics program used for creating 3D models, materials, lighting,

		cameras and photorealistic renders. The course follows the practical workflow of an interior designer step by step: building the architectural shell of a room (walls, doors, windows), modeling furniture and decorative elements, applying materials and finishes, setting up lighting and camera, rendering, and preparing the final visualization and presentation board. Chaos Corona is used as the course's primary rendering engine. The basis of the course designed to provide visualization of interior projects is practical teaching and assignments.	
Course objectives		The purpose of teaching computer graphics software (3ds Max) to interior designers is to ensure that students learn to visualize any interior project they will work on, both during their studies and in their future professional practice. In addition to visualizing projects, students will learn how to model architectural elements and furniture and the principles required for obtaining high-quality interior renders. During the training period, the principles that the subject instructor teaches through practical, in-class examples are applied by the students in parallel on their own project, which allows for the immediate and full absorption of the material.	
Learning Outcomes		As a result of the educational process, the student will learn: • principles of 3D modeling; • architectural modeling of interior spaces (walls, doors, windows); • modeling of furniture and decorative interior elements; • material preparation and application; • necessary principles for the complete preparation of interior visualization; • scene setup; • light and camera setup; • rendering principles; • post-production of renders; • presentation board preparation.	
Teaching methods	Lecture	x	
	Practical tasks	x	
	Analysis of practical issues	x	
Evaluation	Components	Date/Deadline	Percentage (%)
	Task 1		10

	Task 2		10
	Attendance		5
	Activity		10
	Midterm exam		30
	Final exam		35
	Total		100
Class Policy	Task 1 Task 1 should be designed based on the application of the modeling principles taught during Weeks 1–7 of the course. The assignment requires the student to model an interior architectural element or piece of furniture shared with them by the instructor, using only the taught 3ds Max modeling tools. The purpose of the task is for students to demonstrate that they can model interior design elements by applying the modeling principles taught in class. Screenshots of the model from different views should be submitted through the assignment section created by the instructor in the Teams application. Deadline: Task 1 should be prepared and submitted by the time of the midterm exam (end of Week 8). Task 2 Task 2 involves creating close-up renders. Students prepare renders of a close-up interior design element of their choice, applying the principles taught by the instructor regarding materials, lighting and scene preparation. The purpose of this task is to fully master the principles of scene creation and rendering covered during Weeks 9–11. Screenshots of the close-up scene from different views, together with the final renders, should be submitted through the assignment section created by the instructor in the Teams application. Deadline: Task 2 should be prepared and submitted 2 weeks before the final exam (by Week 13). Attendance: The maximum score for attending classes is 5 points. The number of points is based on: if the student attends all classes on the subject during the semester, he/she is given 5 points; 1 point is deducted for every 2 classes not attended. If the total number of lessons missed during the semester for the subject is more than 25% of the norm (illness, family situation, etc.), the student is not admitted to the exam session, and a certain decision is made about it. Activity: The activity component monitors the progress of each student's individual interior room-design project throughout the semester. In Week 1, the class is divided into groups of 3–4 students; each group is assigned a different apartment floor plan by the instructor and selects one interior design style, with no two groups repeating the same style, and every student is responsible for designing one room of the apartment in that style. Each student must come prepared to class every week during the 15-week semester and present the current status of their room design to the instructor. If there is sufficient progress, the		

	activity is evaluated with 1 point for that week. This encourages the student to work continuously on the project, and the parallel application of the learned knowledge on the project ensures the consolidation of this knowledge. Midterm Exam: On the day and time of the midterm exam set by the department, students sit a supervised, individual practical exam. Within 3 (three) hours, each student must complete, in 3ds Max, a modeling task assigned by the instructor on the exam day, appropriate to the modeling principles (primitives, spline and poly editing, moldings, architectural elements) covered during the first half of the semester. Final exam: On the day and time of the final exam set by the department, students sit a supervised, individual practical exam. Within 3 (three) hours, each student must model a small interior room based on a task assigned by the instructor on the exam day, and bring the scene through to the render stage – applying the material, lighting, camera and rendering principles covered throughout the semester – delivering one final rendered image as the exam output. Completion of the course: The student's knowledge is evaluated with a maximum of 100 points. An overall success rate of 61% and above is considered to complete the course. A failed student can take this subject again in the next semester or the next year. Rules of conduct of the student: A student is not allowed to violate the University's internal disciplinary rules and use a mobile phone.
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Schedule (subject to change)

Week	Date /Day (tentative)	Topics	Textbook/Assignments
1		3ds Max Interface & Main Toolbar Introduction to the syllabus, evaluation and the semester project. Getting familiar with the 3ds Max interface, viewport navigation and project/unit setup.	1. Jones, S. (2013). 3ds Max in 24 Hours, Sams Teach Yourself. Sams Publishing, 85–108. 2. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications.
2		Standard & Extended Primitives Practical application of the topics taught during the class: building basic 3D forms and practicing the Move, Rotate and Scale tools and pivot-point placement.	1. Jones, S. (2013). 3ds Max in 24 Hours, Sams Teach Yourself. Sams Publishing, 109–130. 2. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications.

3		2D Shapes & Edit Spline Practical application of the topics taught during the class: drawing floor-plan outlines and profile curves to be used later for walls and moldings.	1. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications. 2. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
4		Edit Poly – Architectural Modeling (Walls, Doors, Windows) Practical application of the topics taught during the class: converting the floor plan into 3D walls and cutting door and window openings with Edit Poly.	1. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications. 2. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
5		Modelling Moldings & Decorative Elements (Sweep Modifier) Practical application of the topics taught during the class: modeling cornices, skirting boards and decorative wall panels.	1. Jones, S. (2013). 3ds Max in 24 Hours, Sams Teach Yourself. Sams Publishing, 61–70.
6		Furniture & Custom Object Modeling Practical application of the topics taught during the class: modeling simple interior furniture and objects using Edit Poly together with the Bevel, Shell and TurboSmooth modifiers.	1. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications. 2. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
7		Preparing Floor & Wall Finishes (FloorGenerator, UVW Mapping) Practical application of the topics taught during the class: generating realistic floor patterns and preparing UVW mapping for floor and wall finishes.	1. Arch Viz Champ. (n.d.). Arch Viz Champ. Retrieved from: https://www.youtube.com/@archvizchamp
8	Midterm exam		

9		Material Library – Corona Materials Practical application of the topics taught during the class: creating and applying interior materials (wood, fabric, metal, glass, stone) with the Slate Material Editor and Corona shaders.	1. Jones, S. (2013). 3ds Max in 24 Hours, Sams Teach Yourself. Sams Publishing, 145–156. 2. Nikita, M. (2024). Create Stunning Renders Using Corona in 3ds Max: Guiding the Next Generation of 3D Renderers. CRC Press. (Ch. 6–7: Material Editor, Materials)
10		Lighting Setup (Interior) Practical application of the topics taught during the class: setting up natural light (Corona Sun & Sky) and artificial light (Corona Light) for an interior scene.	1. Jones, S. (2013). 3ds Max in 24 Hours, Sams Teach Yourself. Sams Publishing, 145–156. 2. Nikita, M. (2024). Create Stunning Renders Using Corona in 3ds Max: Guiding the Next Generation of 3D Renderers. CRC Press. (Ch. 4–5: Natural Lighting, Artificial Lighting)
11		Camera Setup (Corona Camera) & Composition Practical application of the topics taught during the class: framing interior shots and adjusting exposure, depth of field and composition with the Corona Camera.	1. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications. 2. Nikita, M. (2024). Create Stunning Renders Using Corona in 3ds Max: Guiding the Next Generation of 3D Renderers. CRC Press. (Ch. 3: Cameras) 3. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
12		Interior Design Practice I Applying the modeling, material, lighting and camera principles learned so far to assemble the student's own assigned room design.	1. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max 2021 Complete Reference Guide. SDC Publications. 2. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
13		Interior Design Practice II	1. Murdock, K. (2020). Kelly L. Murdock's Autodesk 3ds Max

		Continued development of the student's own interior scene: refining materials, lighting and camera composition ahead of Task 2 and the final exam.	2021 Complete Reference Guide. SDC Publications. 2. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
14		Render Setup (Corona Renderer) Practical application of the topics taught during the class: configuring render settings and render elements and optimizing the scene for a final-quality output.	1. Nikita, M. (2024). Create Stunning Renders Using Corona in 3ds Max: Guiding the Next Generation of 3D Renderers. CRC Press. (Ch. 2: Rendering Settings) 2. Cardoso, J. (2021). V-Ray 5 for 3ds Max 2020: 3D Rendering Workflows Volume 1. CRC Press. (supplementary) 3. Chaos. (n.d.). Learn Corona – 3ds Max: Getting Started. Retrieved from: https://www.chaos.com/corona/3ds-max/getting-started
15		Post-Production & Presentation Board Preparation Practicing post-production techniques on the existing renders and assembling the final printed presentation board.	1. VizAcademy Uk. (n.d.). VizAcademy Uk. Retrieved from: https://www.youtube.com/@VizAcademyUK
Final exam			