AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
LANDSCAPE ARCHITECTURE
LANDSCAPE ARCHITECTURE
LANDSCAPE ARCHITECTURE MASTER
COURSE INFORMATION FORM

Course Title	Advanced Computer Aided Design Applications								
Course Code	ZPM509		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	To give detailed information about the AutoCAD, Artlantis, SketchUp ve 3DStudio Max material, coating, lighting, camera, rendering, and animation settings.								
Course Content	Material editor, material types, properties of materials, creation and implementation of materials, kinds of light, and light features, the use of lights and shadows, the sun and the sky, camera types and, camera settings, Selecting a different rendering engines, V-Ray rendering settings, Mental-Ray rendering settings								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Chiang, C.F., Alomar, D., Barrero, J., Rentas, F., User Manual: A Rendering Plug-In for Designers, V-Ray for SketchUp, 101 pages.
2	Legrenzi, F., 2010. VRay, The Complete Guide, second edition, 1052 pages
3	Derakhshani, R.L., Derakhshani, D., 2013. Autodesk 3ds Max 2014: Essentials, John Wiley & Sons, Inc., Indianapolis, Indiana, Canada, 396 pages.
4	Mental Ray Architectural and Design Visualization Shader Library, 2008. Document version 1.7.6, Mental Images, Berlin, Germany, 117 pages.
5	Mental Ray: Using 3ds Max and Mental Ray for Architectural Visualization, 2007. 35 pages.
6	Livny, B.,2008. Mental Ray for Maya,3ds Max and XSI, a 3D Artist's Guide to Rendering, Wiley Publishing, Inc., Indianapolis, Indiana, USA, 850 pages.
7	Smith, B.L., 2006. Foundation 3ds Max 8 Architectural Visualization, Friendsofed, USA, 546 pages.
8	Boughen, N. 2005. 3ds Max Lighting, Wordware Publishing, Inc. Texas, USA, 406 pages.
9	van der Steen, J., 2007. Rendering with Mental Ray & 3ds Max, Focal Press, MA, USA, 245 pages.
10	Cusson, R., Cardoso, J., 2007. Realistic Architectural Visualization with 3ds Max and Mental Ray, Focal Press, MA, USA, 330 pages.
11	Çelik, E., 2006. 3ds Max 9 ile Görselleştirme, Değişim Yayınları, 693 sayfa.
12	Bonne, S., Anzovin, S., 2006. 3 ds max 7 Uzmanlar İçin (Çev. Koray Al), Alfa Yayınları, 880 sayfa.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction, scope and general information about the lesson
2	Theoretical	Study with materials, the material editor
3	Theoretical	Material types:-emitting materials, two-sided materials
4	Theoretical	The properties of materials: brightness, reflection, refraction
5	Theoretical	The properties of materials: transparency, roughness, swelling
6	Theoretical	The creation, reproduction, and implementation of new material
7	Theoretical	Types and properties of light, techniques of light adjustment
8	Intermediate Exam	Mid-term exam
9	Theoretical	Ambient lighting: the interior
10	Theoretical	Ambient lighting: outdoor
11	Theoretical	Characteristics of the sun and sky, hour and view of the sun
12	Theoretical	Light and shadow: shadow quality, shadow, color, depth of field
13	Theoretical	Physical camera, camera types and camera settings
14	Theoretical	V-Ray render

15	Theoretical	Mental-Ray render
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	2	84
Lecture - Practice	14	4	2	84
Midterm Examination	1	15	1	16
Final Examination	1	15	1	16
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To compare the differences between software, advanced materials, lighting, camera, rendering, and animation settings of different Computer Aided Design
2	To evaluate material types and the properties of materials
3	To understand on the creation and implementation of materials
4	To compare the different types and properties of light,
5	To adjust light and shadow,
6	To adjust the camera,
7	Selecting and using different rendering engines

Programme Outcomes *(Landscape Architecture Master)*	
1	e
2	e
3	e
4	e
5	e

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5	L6	L7
P1	3	3	3	3	3	3	3
P2	2	2	2	2	2	2	2