جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية كلية العلوم وتكنولوجيا المعلومات
Faculty of Science & Information Technology

" عراقة وجودة"
"Tradition and Quality"

Detailed Course Description - Course Plan Development and Updating Procedures/ Computer Science \ Multimedia Systems Department	QF01/0408-3.0E

Faculty	Science & Information Technology	Department	Computer Science \ Multimedia Systems
Course number	**0105336**	**Course title**	**Multimedia Tools & Packages**
Number of credit hours	3	Pre-requisite/co-requisite	0105232

Brief course description

This course is designed to help you learn everything you need to create 3D content using 3ds Max. Throughout the course, students will be taught the basics of modeling, material creation, animation, and scene generation. Learn the capabilities of the interface, how to work efficiently, and how to apply toolset in the workplace. This course will take you past the basic level into an intermediate skill-set.

What you will learn...
- How to work in a production environment
- Understand the mechanics of 3ds Max
- Be able to create 3d models using a variety of techniques
- Work with materials to texture your models
- Understand how to light a scene
- Be able to create animations and stage a scene
- Understand cinematography

	Course goals and learning outcomes
Goal 1	Provide students with the knowledge and understanding needed to produce interactive computer systems and various multimedia applications
Learning outcomes	1.1 Students can use multimedia tools to produce and design various digital, 2D and 3D applications and audio and video effects.
Goal 2	Understand the basic functionality, features and principles behind 3ds Max.
Learning outcomes	2.1 understand the major functional areas of 3ds Max 2.2 navigate the 3ds Max interface and access all its commands
Goal 3	Use 3ds Max to create 3D models using a range of techniques.
Learning outcomes	3.1 segment models for downstream compositing 3.2 Basic animation techniques
Goal 4	Create and manipulate 3D data in 3ds Max.
Learning outcomes	4.1 how to carry out mesh and surface modeling 4.2 able to create any animal or building model
Goal 5	Create lighting for your environments and Understand texturing, materials and lighting
Learning outcomes	5.1 Scene creation, materials and texturing, lighting, and rendering. 5.2 use texture mapping
Goal 6	Create and manipulate cameras.
Learning outcomes	6.1 Able to create camera and move it.

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Textbook	Beginner's Guide to Create Models in 3ds Max® 2016 , Raavi O'Connor
Supplementary references	1. 3D photorealistic rendering. Volume 1, Interiors & exteriors with V-Ray & 3ds Max-A K Peters_CRC Press (2017) Cardoso, Jamie 2. 3ds Max 2018 - Getting Started with Standard Materials and Lights-Rising Polygon (2017) Ravi Conor, Elizabeth VT, Gordon Fisher 3. Autodesk 3ds Max 2013 Bible, Kelly Murdock, (2013) 4. Autodesk 3ds Max 2014 Essentials, Randi L . Derakhshani, Dariush Derakhshani, (2014).

Course timeline					
Week	**Number of hours**	**Course topics**	**Pages (textbook)**	**Notes**
01	1 1 1	Unit M1 - Introduction to 3ds Max - I • Navigating the workspace • Customizing the interface • Understanding various UI components • Working with the file management commands • Setting preferences for 3ds Max • Understanding workspaces	10-18	
02	1 1 1	• Understanding the enhanced menu system • Working with viewports • Setting preferences for the viewports • Creating objects in the scene	24-35	
03	1 1 1	• Selecting objects • Using the navigational gizmos • Moving, rotating, and scaling objects • Getting help	42-68	
04	1 1 1	Unit M2 - Introduction to 3ds Max - II • Working with templates • Creating clones and duplicates • Understanding hierarchies • Working with the Scene and Layer Explorers	69-80	
05	1 1 1	• Understanding the Mirror tool, the Select and Place tool, and the Select and Manipulate tool • Working with the Align tool and the Array tool • Working with precision and drawing aids • Understanding modifiers, and normals	81-102	
06	1 1 1	**General Review, Exercises, and First Exam 20%**		
07	1 1 1	• Unit M3 - Working with Geometric Primitives and Architectural Objects • Creating and modifying Standard Primitives • Creating and modifying Extended Primitives	103-120	

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		• Working with the Architectural objects • Setting the project folder • Using the Align and Mirror tools		
08	1 1 1	• Creating clones • Using the Scene Explorer • Creating a group • Setting grid spacings • Using Transform Type-In dialog • Using Array dialog • Specifying units for the scene	121-131	
09	1 1 1	Unit M4: Working with Polygons • Working with the polygon modeling tools • Using the polygon modeling techniques	132-150	
10	1 1 1	• Selecting polygon sub-object • Transforming sub-objects • Soft selecting sub-objects	151-179	
11	1 1 1	Unit M5: Graphite Modeling Tools • Working with the Graphite Modeling Tools • Selecting sub-objects • Creating models using the tools available in the Ribbon	180-194	
12	1 1 1	**Second Exam 20%**		
13	1 1 1	Unit M6: Working with Shapes • Generate planar and 3d surfaces • Paths and shapes for the loft components	195- 208	
14	1 1 1	• Generate extrusions • Generate revolved surfaces • Define motion path for animations	209-235	
15	1 1 1	Unit M7: Modifiers • Using modifiers • Stack display • Object-space modifiers vs World-space modifiers • How transform affects modifiers	236-355	
16	1 1 1	**Final Exam 50%**		

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Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	**Practical (clinical) course evaluation methods**	Semester students' work = 50% (Reports, research, quizzes, etc.) Final exam = 50%

Approved by head of department		Date of approval	

Extra information (to be updated every semester by corresponding faculty member)

Name of teacher	Mousa Salah	Office Number	**119**
Phone number (extension)		Email	mosa.salah@ zug.edu.jo
Office hours			