



" عراقة وجودة" "Tradition and Quality"

| Detailed Course Description - Course Plan Development and Updating Procedures/<br>Computer Information Systems Department | QF01/0408-3.0E |
|---|----------------|
|   |                |

| Faculty              | Faculty of Science and<br>Information Technology | Department        | Computer Information<br>Systems |
|----------------------|--|-------------------|---------------------------------|
| <b>Course Number</b> | 0113326  | Course Title      | Ready Packages                  |
| Number of Credit     | 3  | Pre-Requisite/Co- | Introduction to                 |
| Hours                | 3  | Requisite         | Information Technology          |

## **Brief Course Description**

This course introduces the tools and techniques for building Multimedia applications. Students will be taught how use Flash in developing interactive application in the aspect of animation cop concepts and how to use Cinema 4D tools to develop three dimension movie.

|                             | Course Goals and Learning Outcomes   |  |  |
|-----------------------------|--|--|--|
| Goal 1                      | Working with and creating vector artwork Flash Professional CS6.   |  |  |
| Learning<br>Outcomes        | <ul><li>1.1 Identifying interactive media design elements.</li><li>1.2 Understanding the Adobe Flash Professional interface.</li></ul>   |  |  |
| Goal 2                      | Using the Flash CS6 timeline – and creating animated elements.   |  |  |
| Learning<br>Outcomes        | <ul> <li>2.1 Building interactive media elements by using Flash Professional CS6.</li> <li>2.2 Adding behavior's to a button.</li> <li>2.3 Working with imported multimedia assets.</li> <li>2.4 Exporting Flash CS6 content.</li> </ul> |  |  |
| Goal 3                      | Working with 4D Cinema interface.  |  |  |
| Learning<br>Outcomes        | <ul><li><b>3.1</b> Understanding the <b>4D Cinema</b> interface.</li><li><b>3.2</b> Working with material editor</li></ul>   |  |  |
| Goal 4                      | Designing and modelling with Cinema 4D.  |  |  |
| Learning<br>Outcomes        | 4.1 Designing and modelling with Cinema 4D   |  |  |
| Goal 5                      | Building animations by using Cinema 4D.  |  |  |
| Learning<br>Outcomes        | <ul><li>5.1 Understanding the rendering strategy in 4D Cinema.</li><li>5.2 Create animations by using Cinema 4D.</li></ul>   |  |  |
| Textbook                    | <ol> <li>Flash Professional CS6: Visual QuickStart Guide (Visual QuickStart Guides)<br/>by Katherine Ulrich (Aug 25, 2012)</li> <li>Cinema 4D Beginner's Guide Model, animates, and render By Jen Rizzo<br/>(November 2012).</li> </ol>  |  |  |
| Supplementary<br>References | <ol> <li>Adobe Flash Professional CS6 Classroom in a Book by Adobe Creative<br/>Team (May 24, 2012).</li> <li>Cinema 4D R13 Cookbook Elevate your art to the fourth dimension By Michael<br/>Szabo (February 2012).</li> </ol>           |  |  |

**Course Timeline** 





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| Week      | Number of<br>Hours  | <b>Course Topics</b>   | Pages<br>(Textbook) | Notes |
|-----------|---|--|---------------------|-------|
| 01 1<br>1 |   | Chapter 1 :The Flash Authoring Tool-Working with Flash Documents-Modifying Document Properties-Working with Template Documents-About the Workspace-Using Panels-Using Rulers, Grids, and Guides-Working with SnappingChapter 2 :Creating Simple Graphics-Touring the Tools | 2-22                |       |
|           |   | <ul> <li>Creating Solid Colors and Gradients</li> <li>Setting Fill Attributes</li> <li>Setting Stroke Attributes</li> <li>Making Geometric Shapes</li> <li>Creating Free-form Shapes<br/>Adding Strokes and Fills</li> </ul>   | 26-52               |       |
| 02        | Adding Strokes and Fills         Adding Strokes and Fills         Adding Strokes and Fills         Chapter 3: Working with Text         - Creating TLF Text Fields         - Creating Linked Text Fields         - Setting Character Attributes         - Setting Paragraph Attributes         - Setting Container Attributes         - Setting Selection Preferences         - Making Selections         - Resizing Graphic Elements |  | 58-79<br>88-124     |       |
|           |   | Chapter 5: Complex Graphics on a Single Layer-Working with Groups-Editing Groups-Controlling Stacking Order-Combining Drawing-Objects and Primitives   | 129-133             |       |
| 03        | 1<br>1<br>1   | <ul> <li><u>Chapter 6: Graphics on Multiple Layers</u></li> <li>– Touring the Timeline's Layer Features</li> <li>– Creating and Deleting Layers and Folders</li> <li>– Setting Layer Properties</li> </ul>   | 136-147             |       |





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|------------|--|---|----------------|--|
|            | Cor  | mputer Information Systems Department                       |                |  |
|            |  | <ul> <li>Organizing Layers</li> </ul>                       |                |  |
|            |  | <ul> <li>Cutting and Pasting Between Layers</li> </ul>      |                |  |
|            |  | <ul> <li>Distributing Graphic Elements to Layers</li> </ul> |                |  |
|            |  | <ul> <li>Working with Guide Layers</li> </ul>               |                |  |
|            |  | <ul> <li>Working with Mask Layers</li> </ul>                |                |  |
|            |  | Chapter 7: Working with Symbols                             | 150-162        |  |
|            |  | <ul> <li>Using the Library Panel</li> </ul>                 |                |  |
|            |  | <ul> <li>Creating Master Symbols</li> </ul>                 |                |  |
|            |  | <ul> <li>Using Symbol Instances</li> </ul>                  |                |  |
|            |  | <ul> <li>Modifying Symbol Instances</li> </ul>              |                |  |
|            |  | <ul> <li>Editing Master Symbols</li> </ul>                  |                |  |
|            |  | <ul> <li>Converting Symbol Instances to Graphics</li> </ul> | 165-191        |  |
|            |  | <ul> <li>Swapping Symbols</li> </ul>                        | 103-171        |  |
|            |  | Chapter 8: Frame-by-Frame Animations                        |                |  |
|            |  | <ul> <li>Choosing Frame Views</li> </ul>                    |                |  |
|            |  | <ul> <li>Creating Keyframes</li> </ul>                      |                |  |
|            |  | <ul> <li>Creating In-between Frames</li> </ul>              |                |  |
|            |  | <ul> <li>Selecting Frames in Keyframe Spans</li> </ul>      |                |  |
|            |  | <ul> <li>Manipulating Frames in a Layer</li> </ul>          |                |  |
|            |  | <ul> <li>Removing Frames</li> </ul>                         |                |  |
|            |  | <ul> <li>Making a Simple Frame-by-Frame</li> </ul>          |                |  |
|            |  | Animation   |                |  |
|            |  | <ul> <li>Previewing the Action</li> </ul>                   |                |  |
|            |  | <ul> <li>Varying Frame-by-Frame Rate</li> </ul>             |                |  |
|            |  | <ul> <li>Using Onion Skinning</li> </ul>                    |                |  |
|            |  | <ul> <li>Editing Multiple Keyframes</li> </ul>              |                |  |
|            |  | Chapter 9: Animation with Classic Tweening                  |                |  |
|            |  | <ul> <li>Creating a Bouncing Ball with Classic</li> </ul>   |                |  |
|            |  | Tweening  |                |  |
|            |  | <ul> <li>Adding Keyframes to Classic Tweens</li> </ul>      |                |  |
|            |  | <ul> <li>Moving Symbols in Straight Lines</li> </ul>        | 195-210        |  |
|            |  | <ul> <li>Moving Symbols Along a Path</li> </ul>             |                |  |
|            |  | <ul> <li>Animating Size Changes</li> </ul>                  |                |  |
|            | 1  | <ul> <li>Rotating and Spinning Graphics</li> </ul>          |                |  |
| 04         | 1  | <ul> <li>Animating Color Effects</li> </ul>                 |                |  |
| 04         | 1  | Chapter 10: Animation with Shape Tweening                   |                |  |
|            | 1  | <ul> <li>Creating a Bouncing Ball with Shape</li> </ul>     | 212-219        |  |
|            |  | Tweening  | -              |  |
|            |  | <ul> <li>Morphing Simple Strokes and Fills</li> </ul>       |                |  |
|            |  | <ul> <li>Shape-Tweening Multiple Shapes</li> </ul>          |                |  |
|            |  | <ul> <li>Transforming a Simple Shape into a</li> </ul>      |                |  |
|            |  | Complex Shape   |                |  |
|            |  | Chapter 11: Animation with Motion Tweening                  |                |  |
|            |  | <ul> <li>Creating a Bouncing Ball with Motion</li> </ul>    |                |  |





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|--------|--|--|--------------------|--|
|        | Co   | mputer Information Systems Department  | QF01/0400-5.0E     |  |
|        |  | Tweening-Working with Motion-Tween Paths-Orienting Tween Targets to Curves-Swapping Tween Elements-Motion Editor Basics-Adding More Motion-Animating Other Property Changes-Modifying Tween Spans  | 224-263            |  |
|        |  | <ul> <li>Copying Frames and Properties</li> <li>Chapter 12: Intermediate Animation Tasks</li> <li>Working with Frames in Multiple Layers</li> <li>Animating on Multiple Layers</li> <li>Reversing Animation</li> <li>Saving Animations As Symbols</li> <li>Using Animated Graphic Symbols</li> <li>Using Movie-Clip Symbols</li> <li>Using Easing in Tweens</li> </ul>   | 266-296            |  |
| 05     |  | <ul> <li>Re-creating Classic and Motion Tweens</li> <li><u>Chapter 13: Intro to Inverse Kinematics</u></li> <li>Using Armatures to Connect Symbols</li> <li>Creating IK Shapes</li> <li>Working with Poses</li> <li><u>Chapter 14: Building Buttons for Interactivity</u></li> <li>Creating Button Symbols</li> <li>Using Button Components</li> <li>Modifying Button Components</li> </ul>  | 300-308<br>313-326 |  |
| 06     | 1<br>1<br>1  | <ul> <li>Creating Movie-Clip Buttons</li> <li><u>Chapter 15: Basic Interactivity</u></li> <li>Touring the Actions Panel</li> <li>Adding Frame Actions</li> <li>Programming Buttons with Frame Scripts</li> <li>Previewing Actions at Work</li> <li>Modifying and Extending Button Scripts</li> <li>Choosing Events</li> <li>Button Components</li> <li>Using One Event Handler for Multiple Events</li> <li>Scripting Movie Clips to Act As Buttons</li> <li>Using Buttons to Control Timelines</li> <li>Linking to Other Web Pages</li> <li><u>Chapter 16: Adding Sound and Video</u></li> <li>Importing Sounds</li> <li>Adding Sounds to Frames</li> <li>Adding Sounds to Buttons</li> </ul> | 332-380            |  |





| Detail |             | iption - Course Plan Development and Updating Procedures/<br>mputer Information Systems Department  | QF01/0408-3.0E |
|--------|-------------|---|----------------|
|        |             | <ul> <li>Using Event Sounds</li> <li>Using Start Sounds</li> <li>Using Stream Sounds</li> <li>Stopping Sounds</li> <li>Editing Sounds</li> <li>Adding Video to Flash</li> <li>Working with Embedded Video</li> <li>Working with the FLV Playback Component<br/>First Exam 20%</li> </ul>  | 386-414        |
| 07     | 1<br>1<br>1 | Chapter 1: The Fundamentals         – Introduction         – Exploring the interface         – Moving around in Cinema 4D         – Meeting the managers         – Setting keyframes         – Utilizing the Content Browser         – Adjusting the scale of your objects  | 5-38           |
| 08     | 1<br>1<br>1 | Chapter 2: Super Modeling         – Introduction         – Working with primitives         – Subdividing, selecting, and editing polygons         – Creating from splines: Extrude NURBS         – Using Lathe NURBS         – Using Sweep NURBS         – Modeling with Loft NURBS         – Punching holes with Boole         – Using the Atom Array tool         – Best modeling advice—just go for it | 41-89          |
| 09     | 1<br>1<br>1 | Chapter 3: The Deformers-Introduction-Getting started with the Taper deformer-Animating with deformers: Bend-Custom italics with Shear-Over-animation with Squash and Stretch-Making an asteroid with FFD and Displacer-Unconventional animations with deformers-Breaking objects with deformers-Using Spline Wrap versus Sweep NURBS-Applying the Collision deformer                                     | 99-132         |
| 10     | 1<br>1<br>1 | Chapter 4: Cameras are Rolling-Introduction-Keyframing cameras-Moving a camera along a path-Locking cameras down with the protection  | 137-168        |





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|        |   | The second s |         |
|        |   | tag  |         |
|        |   | <ul> <li>Using target cameras</li> </ul>   |         |
|        |   | <ul> <li>Adjusting focal lengths</li> </ul>  |         |
|        |   | <ul> <li>Matching your camera to footage</li> </ul>  |         |
|        |   | <ul> <li>The Physical tab</li> </ul>   |         |
|        |   | <ul> <li>Creating a handheld-style camera</li> </ul>   |         |
|        |   | <ul> <li>Setting up stereoscopic cameras</li> </ul>  |         |
|        |   | Chapter 5: Let there be Lights   |         |
|        |   | – Introduction   |         |
|        | 1   | <ul> <li>Picking the right type of light</li> </ul>  |         |
| 11     |   | <ul> <li>Exploring shadow types</li> </ul>   |         |
| 11     | 1   | <ul> <li>Applying volumetric lighting</li> </ul>   | 173-200 |
|        | 1   | – Hot and cold: Adjusting the temperature of   |         |
|        |   | the light  |         |
|        |   | <ul> <li>Lighting specific objects</li> </ul>  |         |
|        |   | Second Exam 20%  |         |
|        | 1   | <ul> <li>Applying Global Illumination</li> </ul>   |         |
| 12     | 1   | <ul> <li>Lighting using the Luminance channel</li> </ul>   | 204-222 |
|        | 1   | <ul> <li>Lighting with Sky objects</li> </ul>  | 204-222 |
|        |   | <ul> <li>Creating a light studio</li> </ul>  |         |
|        |   | Chapter 6: A Material World  |         |
|        |   | – Introduction   |         |
|        |   | <ul> <li>Using an Alpha channel to model</li> </ul>  |         |
|        |   | <ul> <li>Using video as materials</li> </ul>   |         |
|        |   | <ul> <li>Using multiple materials on one object</li> </ul>   |         |
|        | 1   | <ul> <li>Using shaders</li> </ul>  |         |
| 13 1   |   | <ul> <li>Make adjustments with the Layer shader</li> </ul>   | 223-271 |
|        | 1   | <ul> <li>Using different Projection methods</li> </ul>   |         |
|        |   | <ul> <li>Reflective materials with the Fresnel shader</li> </ul>   |         |
|        |   | <ul> <li>Creating a glass material</li> </ul>  |         |
|        |   | <ul> <li>Adding relief: Bump and Displacement</li> </ul>   |         |
|        |   | channels   |         |
|        |   | – Applying subsurface scattering   |         |
|        |   | Chapter 7: Rendering Strategy  |         |
|        |   | – Introduction   |         |
|        |   | <ul> <li>Render settings overview</li> </ul>   |         |
|        |   | - Creating a batch of renders  |         |
| 14     | 1   | <ul> <li>Previewing renders with Render Region</li> </ul>  |         |
| 14     | 1   | <ul> <li>Comparing different renders</li> </ul>  | 277-223 |
|        | 1   | <ul> <li>Using anti-aliasing effectively</li> </ul>  |         |
|        |   | <ul> <li>Exploring the Physical Renderer</li> </ul>  |         |
|        |   | <ul> <li>The Compositing tag</li> <li>Setting any model</li> </ul>   |         |
|        |   | - Setting up multi-pass renders  |         |
|        |   | <ul> <li>The External Compositing tag and After</li> </ul>   |         |





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|---|--|---------|---------|---------|--|
|   |  |         |         |         |  |
|   |  | Effects |         |         |  |

|    |   | Effects   |         |  |
|----|---|---|---------|--|
|    |   | <ul> <li>Projecting shadows</li> </ul>                    |         |  |
|    | Chapter 8: The Awesome Power of MoGraph |   |         |  |
|    |   | – Introduction  |         |  |
|    |   | <ul> <li>MoGraph basics: Cloners and effectors</li> </ul> |         |  |
|    |   | <ul> <li>Making text with MoText</li> </ul>               |         |  |
|    | 1                                       | <ul> <li>Using selections with cloners</li> </ul>         |         |  |
| 15 | 1                                       | <ul> <li>Applying deformation with effectors</li> </ul>   | 337-390 |  |
|    | 1                                       | <ul> <li>Creating abstract shapes</li> </ul>              | 337-390 |  |
|    |   | <ul> <li>Applying random textures to clones</li> </ul>    |         |  |
|    |   | <ul> <li>Combo #1: 3D logo build</li> </ul>               |         |  |
|    |   | <ul> <li>Combo #2: Dynamic stage lighting</li> </ul>      |         |  |
|    |   | <ul> <li>Combo #3: Dancing music orb</li> </ul>           |         |  |
|    | 1                                       |   |         |  |
| 16 | 1                                       | Final Exam 50%  |         |  |
|    | 1                                       |   |         |  |

| Theoretical Course<br>Evaluation Methods<br>and Weight | Participation = 10%<br>First Exam 20%<br>Second Exam 20%<br>Final Exam 50% | Practical (Clinical)<br>Course Evaluation<br>Methods | Semester Students'<br>Work = 50%<br>(Reports, Research,<br>Quizzes, Etc.)<br>Final Exam = 50% |
|--|--|--|---|
|--|--|--|---|

| Approved By Head of<br>Department |  | Date of Approval |  |
|-----------------------------------|--|------------------|--|
|-----------------------------------|--|------------------|--|

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

| Name Of Teacher             | Office Number |             |
|-----------------------------|---------------|-------------|
| Phone Number<br>(Extension) | Email         | @zuj.edu.jo |
| Office Hours                |               |             |