

**Jerash University**

**Faculty of Computer Science and Information Technology**

**Computer Sciences Department**

**Semester**: Fall Semester 2018/2019

|  |  |
| --- | --- |
| **Course symbol and number:** 1003340 | **Course Name:** وسائط متعددة |
| **Teaching Language:** English | **Prerequisites:** 1002130 |
| **Credits:** 3 hours**.** | **Course Level:** 300 |

|  |
| --- |
| **Course Description**  |
| This course is designed for students interested in careers in the Media and Design Arts Pathway, in the Arts, Media and Entertainment industry sector. Students will be introduced to industry-standard tools, skills, and materials that they can manipulate as the primary means of creative expression. Students will explore basic applications of various multimedia tools to create visual, aural, and written projects in both digital and print format. Every student will have the opportunity to:* Learn more advanced Flash features for drawing and animating at their own pace.
* Create authentic Flash projects that incorporate drawing, animation, interaction, and multimedia elements.
* Participate in class discussion and activities.
* Participate in an online class environment for the purpose of learning, sharing resources and ideas, and communication.
* Work as a team to complete real-world Flash projects.
* Plan and create a meaningful final project.
 |

|  |
| --- |
| **Course Objectives**  |
| The student will use Adobe Flash CS3 to:1. Draw and create a variety of illustrations
	1. Create a cartoon character based on a sketch
		1. Use basic shapes and lines to draw cartoons
		2. Use basic tools and menus
		3. Create and use color gradients
		4. Create shadows and other effects by using advanced color options
		5. Distinguish when to use specific tools to draw an object
	2. Draw background images
	3. Make technical illustrations
	4. Create text and logos
	5. Draw a caricature
2. Plan and Create different types of animation
	1. Use motion tweening to create animation
		1. Create and use frames and keyframes
		2. Use the Timeline and ActionScript to control actions
	2. Control animation with motion guides
	3. Create run cycles
	4. Use masking for animation
	5. Create animated logos
	6. Plan and create frame-by-frame character animation
		1. Identify events and actions
		2. Add ActionScripts to Frames
		3. Add ActionScripts to Symbols
	7. Set up Flash for longer animation scenes
	8. Incorporate and use audio in animations
3. Plan and create multimedia Flash content
 |

|  |
| --- |
| **Learning Outcomes**  |
| Students should be able to:* Understand data representations.
* Understand and differentiate between Images (Types, Colors, Computer Models, Formats, Applications, 3D animation tools).
* Understand the use of texts, fonts, faces, styles, metrics, leading and kerning.
* Differentiate between Multimedia Authoring metaphors, Multimedia production, Multimedia presentation, and automatic authoring.
* Know how to develop Flash Basics via Creating Masks, Motion, Motion guides, Animations, and buttons.
* Develop a complete action scripts using ActionScript 3 to handle events and manipulate a Flash via functions and arrays.
 |

|  |  |
| --- | --- |
|  | **Text Book(s)**  |
| **Title**  | An Introduction to Digital Multimedia |
| **Author(s)**  | [T.M. Savage](https://www.amazon.com/s/ref%3Ddp_byline_sr_book_1?ie=UTF8&text=T.M.+Savage&search-alias=books&field-author=T.M.+Savage&sort=relevancerank) and [K.E. Vogel](https://www.amazon.com/s/ref%3Ddp_byline_sr_book_2?ie=UTF8&text=K.E.+Vogel&search-alias=books&field-author=K.E.+Vogel&sort=relevancerank) |
| **Publisher**  | Jones & Bartlett Learning |
| **Year**  | 2013  |
| **Edition**  | Second Edition  |

|  |  |
| --- | --- |
|  | **References** |
| **Books**  | The Design Collection Revealed: Adobe InDesign CS4, Photoshop CS4, And Illustrator CS4, Chris Botello and Elizabeth Eisner Reding, Delmar, Cengage Learning, 2010, ISBN: 1435441907. |
| **Internet links**  | http://www.jpu.edu.jo/lms |
| **Course link**  | [Click here](http://www.jpu.edu.jo/lms) |

|  |  |
| --- | --- |
|  | **Instructors**  |
| **Instructor**  |  Dr. Ghaith M. Jaradat |
| **Office Location**  | الطابق السادس - 612 |
| **Office Phone**  | 189 |
| **E-mail**  | g.jaradat@jpu.edu.jo |

|  |
| --- |
| **Topics Covered**  |
| **Topics**  | **Chapters in Text**  | **Week number**  | **Teaching hours**  |
| **Fundamentals of Multimedia:*** Introduction and Multimedia data representations.
* A taste of Multimedia (Tasks and Concerns).
* Images (Types, Colors, Computer Models, Formats, Applications, 3D animation tools).
 | Chapter 1, 2, 3 | 1, 2, 3, 4, 5 | 15 |
| **Text in Multimedia:** * Use texts, fonts, faces, styles, metrics, leading and kerning, cases, etc.
 | Chapter 4 | 6 | 3 |
| **Assignment 1** |  |  |  |
| **Multimedia Authoring and Tools:** * Multimedia Authoring metaphors,
* Multimedia production,
* Multimedia presentation,
* automatic authoring.
 | Chapter 5 | 7  | 3  |
| **Assignment 2** |  |  |  |
| **First Exam** |  |  |  |
| **Flash CS3:** * Flash Basics
* Create Masks,
* Motion,
* Motion guides,
* Animations,
* buttons, etc.
 | Chapter 6, 7 | 8, 9, 10, 11 | 12  |
| **ActionScript programming:** * Event Handler.
* ActionScript 3 basics.
 | Chapter 8  | 12, 13  | 6  |
| **Assignment 3** |  |  |  |
| **Second Exam** |  |  |  |
| **ActionScript programming:** * ActionScript 3 Functions.
* ActionScripts Arrays.
 | Chapter 9  | 14, 15  | 6  |
| **Assignment 4** |  |  |  |
| **Final Exam** |  |  |  |

|  |  |  |
| --- | --- | --- |
|  | **Evaluation**  |  |
| **Assessment Tool**  | **Expected Due Date**  | **Weight**  |
| Programming assignments and LMS |  | 20 %  |
| First Exam  |  | 20 %  |
| Second Exam  |  | 20 %  |
| Final Exam  | According to the University final examination schedule  | 40 %  |

|  |  |
| --- | --- |
|  | **Policy**  |
| **Attendance**  | Attendance is very important for the course. In accordance with university policy, students missing more than the allowed absence rate of total classes are subject to failure. Penalties may be assessed without regard to the student's performance. Attendance will be recorded at the beginning or end of each class.  |
| **Exams**  | All exams will be CLOSE-BOOK; necessary algorithms/equations/relations will be supplied as convenient. |

|  |
| --- |
| **Class Schedule & Room**  |

|  |
| --- |
| **Office Hours**  |
|  Sun: 11-12:30  Mon: 9:30-11  Tues: 11-12:30  Wed: 9:30-11 |
|  | \* Or by an appointment through email |  |

|  |  |
| --- | --- |
|  | **Teaching Assistant**  |
| To announced later on. |  |

|  |  |
| --- | --- |
|  | **Prerequisites**  |
| **Prerequisites by course** | 1002130  |