جامعة الإسراء
ISRA UNIVERSITY

COURSE Syllabus
According to JNQF

Course Name: Multimedia Programming

Course Number: 06023158

General Course Information:

Course title	Multimedia Programming
Course number	06023158
Credit hours	3
Contact hours	3 [Face-to-Face]
Prerequisites/corequisites	Object Oriented Paradigms (605225)
Academic Program	Computer Multimedia Systems
Program code	0602
Awarding institution	Isra University
Faculty	Faculty of Information Technology
Department	Computer Science / Multimedia
Level of course	3
Academic year /semester	3 /1
Awarded qualification	
Other department(s) involved in teaching the course	None
Language of instruction	English
Date of production/revision	2021-2022

Course Coordinator:

Coordinator's Name: Dr. Jamal Zraqou
Office No.: 4126
Office Phone:
Office Hours: [10:00-11:00] Sun, Tue, [1:00-2:00] Thur. [11:00-12:30] Mon, Wed
Email: jamal_sam@iu.edu.jo

Other Instructors:

Instructor's Name:
Office No.:
Office Phone:
Office Hours:
Email:

Course Description *(English/Arabic)*:

English	*The main objective of this course is to introduce the student to the basic programming tools of Multimedia systems. This course provides students with a comprehensive study of the C# Programming Language which is the basic block for all multimedia programming. The course stresses the object paradigm including classes, inheritance, virtual functions, and templates in the development of C# programs. Lab exercises reinforce the lectures.*
Arabic	الهدف الرئيسي من هذا المقرر الدراسي هو تعريف الطالب بأدوات البرمجة الأساسية لأنظمة الوسائط المتعددة. يزود هذا المساق الطلاب بدراسة شاملة للغة البرمجة سي شارب والتي تعد اللبنة الأساسية لجميع برامج الوسائط المتعددة. يعتمد المقرر على مادة أساليب كائنية المنحى بما في ذلك اللبنات والتوارث والاقترانات الافتراضية والقوالب. التدريبات المعملية تعزز المحاضرات.

Text Book: ***Author(s), Title, Publisher, Edition, Year, Book website.***

1. Fundamentals of Multimedia, Ze-Nian Li and Mark S. Drew, 2014.

References: ***Author(s), Title, Publisher, Edition, Year, Book website.***

1. Required book (s), assigned reading and audio-visuals:
   a. Tay Vaughan, Multimedia: Making It Work, McGraw-Hill Osborne Media, 2014-9th ed
   b. Ze-Nian Li & Mark S. Drew, Fundamentals of Multimedia, Springer, 2014/ 2nd Ed.
2. Recommended books, materials, and media:
   a. Stupeflix Studio http://studio.stupeflix.com/
   b. One True Media http://www.youtube.com/create/spotmixer goanimate http://goanimate.com/

Course Educational Objectives (CEOs):

1.	Introduce students to advanced programming multimedia concepts
2.	Students will also learn how to utilize more advanced multimedia programming capabilities
3.	Writing challenging multimedia applications
4.	
5.	

Intended Learning Outcomes (ILO's):

	Intended Learning Outcomes (ILO's)	**Relationship to CEOs**	**Contribution to PLOs**
A	**Knowledge and Understanding:**		
A1	Develop student's ability to understand the types of multimedia files and applications	1	B
A2	Understand how to implement a software to manage images, sound, and video	1	C
A3			
B	**Intellectual skills:**		
B1	Gain familiarity with implementing the multimedia applications	2	C
B2			
B3			
C	**Subject specific skills:**		

C1	Providing the ability to developing a multimedia project using a programming tool	1	A
C2			
C3			
D	**Transferable skills:**		
D1			
D2			
D3			

Weekly Schedule *(please chose the type of teaching)*

✓ (3 hrs Face – To - Face)

□ *(**2 hrs** Face – To - Face **+1 hr** Asynchronous)* **(Hybrid)**

□ *(**3 hrs** Online)*

Week	First Hour (……..)	Second Hour (……..)	Third Hour (……..)	Ach. ILOs	Ach. PLOs	Descriptors*
1	Overview of Multimedia Specifications	Overview of Multimedia Specifications	Overview of Multimedia Specifications	A1	PLO2	
2	Overview of Multimedia Specifications	Overview of Multimedia Specifications	Overview of Multimedia Specifications	A1	PLO2	
3	Color Control	Color Control	Colour Control	A1	PLO2	
4	Loading Control	Displaying	Scaling Images	A2	PLO3	
5	Font Control	Font Control	Font Control	A2	PLO3	
6	Playing Videos and Media player control	Playing Videos and Media player control	Playing Videos and Media player control	A2	PLO3	
7	Playing Videos and Media player control	Playing Videos and Media player control	Playing Videos and Media player control	A2	PLO3	
8	Playing Videos and Media player control	Playing Videos and Media player control	Playing Videos and Media player control	A2	PLO3	
9	Animation	Animation	Animation	A1	PLO2	
10	Applying equations on shapes drawing	Applying equations on shapes drawing	Applying equations on shapes drawing	A2	PLO3	
11	Applying equations on shapes drawing	Applying equations on shapes drawing	Applying equations on shapes drawing	A2	PLO3	
12	Rich Text Control	Rich Text Control	Rich Text Control	A2	PLO3	
13	Rich Text Control	Rich Text Control	Rich Text Control	A2	PLO3	
14	Image Compression	Image Compression	Image Compression	B1	PLO3	

15	Image Compression	Image Compression	Image Compression	B1	PLO3	
16	Image Processing	Image Processing	Image Processing	C1	PLO5	

* **K: Knowledge, S: Skills, C: Competency**

Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

- ✓ **(3 hrs Face – To - Face)**
- **(2 hrs. Face – To - Face +1 hr Asynchronous) (Hybrid)**
- **(3 hrs Online)**
- **Course Videos**
- **Practice Labs**
- **Discussion Forums**
- ✓ **Quizzes**
- **Other Interactive online activities**

Course Policies:

A- Attendance policies:

The maximum allowed absences is 15% of the lectures.

B- Absences from exams and handing in assignments on time:

Midterm exam can be retaken based on approval of excuse by the instructor's discretion.

Not handing assignment on time will incur penalties.

C- Academic Health and safety procedures

D- Honesty policy regarding cheating, plagiarism, and misbehaviour:

Cheating, plagiarism, misbehaviour will result in zero grade and further disciplinary actions may be taken.

E- Grading policy:

- All homework is to be posted online through the e-learning system.
- Exams will be marked within 72 hours and the marked exam papers will be handed to the students.
- Online Activities (Course Videos, Practice labs, Discussion Forums, Quizzes) **___%**
- Midterm **___%**
- Final Exam **___%**

F- Available university services that support achievement in the course: **E-Learning Platform, Labs, Library.**

Required equipment:

- **PC / Laptop with webcam and mic**
- **Internet Connection**
- **Access to Online Course:**
  https://elearn.iu.edu.jo/course/view.php?id=2252&notifyeditingon=1

Assessment Tools implemented in the course:

✓Final Exam
✓Midterm Exam
✓Quizzes
Practice Labs
Discussion Forums

Program Learning Outcome (PLOs):

	Program Learning Outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviours that students acquire as they progress through the program. A graduate of the (_____) program will demonstrate	Bloom Taxonomy Levels*
a	An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline	Knowledge
b	An ability to analyse a problem, and identify and define the computing requirements appropriate to its solution	Analysis
c	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs	Analysis
d	An ability to function effectively on teams to accomplish a common goal	Evaluation
e	An understanding of professional, ethical, legal, security and social issues and responsibilities	Knowledge
f	An ability to use current techniques, skills, and tools necessary for computing practice.	Knowledge
g		
h		
i		
m		
n		
o		

***Bloom Taxonomy Levels**

Level #	1	2	3	4	5	6
Level Name	Knowledge	Comprehension	Application	Analysis	Evaluation	Synthesis

Responsible Persons and their Signatures:

Course Coordinator	**Dr. Jamal Zraqou**	**Completed Date**	**17/ 10 / 2021**
		Signature	

Received by (Department Head)		**Received Date**	**17/ 10 / 2021**
		Signature	