

Liverpool John Moores University

Title: INTERACTIVE SCRIPTING
Status: Definitive
Code: **5505DIGMED** (108421)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Screen School
Teaching School/Faculty: Liverpool Community College

Team	Leader
Sarah Haynes	Y

Academic Level: FHEQ5 **Credit Value:** 12.00 **Total Delivered Hours:** 36.00

Total Learning Hours: 120 **Private Study:** 84

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	4.000
Tutorial	6.000
Workshop	26.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Coursework Component 1 30% Short exercises	30.0	
Report	AS2	Coursework Component 2 70% Practical Interactive Project with supporting documentation (sketch-book and notes, programme specification)	70.0	

Aims

1. To expand on the students, knowledge of a scripting language and the nature of interactivity.

2. To provide the students with a thorough understanding of the basic components of program event handling, control and flow structures.

3. To familiarize students with the core Object Orientated Programming concepts common to many scripting languages.

4. To provide students with practical experience of problem solving techniques.

5. To allow students to apply these skills to real world problems, producing creative and original interactive media.

6. To enable students to produce supporting documentation for their programming solutions.

Learning Outcomes

After completing the module the student should be able to:

- 1 Utilise diagnostic skills in the formulation of effective programming solutions.
- 2 Apply core concepts of object orientated programming to a range of interactive scenarios.
- 3 Appraise and evaluate their own programming solutions and that of others.
- 4 Conceive and develop a piece of original work to a given brief.
- 5 Produce documentation that effectively communicates the rationale and specification behind their program structure.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Short exercises	1	2	3
Practical Interactive Project	1	4	5

Outline Syllabus

Lectures, tutorials and practical workshops will cover basic programming concepts: Object Orientated Programming as implemented in a scripting language:

Classes and instances

Properties and Methods

Dot syntax

Decision Branching

Repeat Loops

Variables

Functions

Optimisation, compression and delivery techniques

Program Documentation

Learning Activities

Using workshops, case studies and exercises that will explore the fundamental concepts of Object Orientated Programming as implemented in a scripting language, foster experimentation and encourage them to develop creative solutions.

References

Course Material	Book
Author	Bhargal, S
Publishing Year	2002
Title	Foundation ActionScript for Macromedia Flash MX
Subtitle	
Edition	
Publisher	Friends of ED
ISBN	190345073X

Course Material	Book
Author	Moock, C
Publishing Year	2003
Title	"Actionscript for Flash MX: The Definitive Guide"
Subtitle	
Edition	
Publisher	O'Reilly UK
ISBN	059600396X

Course Material	Website
Author	world wide web
Publishing Year	0
Title	http://www.macromedia.com
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Website
Author	world wide web
Publishing Year	0
Title	http://moock.org/webdesign/lectures/ff2001sfWorkshop/
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Website
------------------------	---------

Author	world wide web
Publishing Year	0
Title	http://www.actionscripts.org/tutorials.shtml
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Website
Author	world wide web
Publishing Year	0
Title	http://actionsript-toolbox.com/
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Website
Author	world wide web
Publishing Year	0
Title	http://www.flashkit.com/tutorials/
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Website
Author	world wide web
Publishing Year	0
Title	http://www.hotscripts.com/Flash/index.html
Subtitle	
Edition	
Publisher	
ISBN	

Notes

This module will build on students' experience of basic scripting language and delve much deeper into programming principles and practices in order to produce sophisticated interactive experiences. Studying a scripting language like Lingo will provide students with an understanding of the universal concepts underlying all programming languages while, at the same time, introduce them to the nuances of a particular industry standard scripting environment.

Using graphics based examples to illustrate each point, students will learn how to make use of logical constructions to control the flow of the program and enable

interactivity by providing the user with choices.

Building up the functionality of a program in gradual steps will demonstrate the way in which these control structures augment each other, providing the potential for ever more intricate interactive options. At the same time, this will illustrate how a complex programming problem can be broken down into a number of constituent parts, an essential skill required by a competent programmer.

A final project will assess their ability to apply these skills to a complete real world problem in response to a brief.