Module Title **Dynamic Web Programming** **Keywords** Internet Systems, Web Design, Web Development, Client-side Scripting Technologies	Reference CM2003 SCQF Level SCQF 8 SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved April 2005 Amended November 2011 Version No. 5

This Version is No Longer Current

The latest version of this module is available here

Prerequisites for Module

None, in addition to SCQF 8 course entry requirements or equivalent.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To introduce students to the concepts and technologies that underly web programming and to provide them with the ability to design, construct and test simple interactive systems running over the World Wide Web.

Indicative Student Workload

Contact Hours	Full Time
Assessment	23
Laboratories	24
Lectures	18
Tutorials	6
Directed Study	
Directed reading	37
Private Study	
Private Study	42

Mode of Delivery

Key concepts are introduced and illustrated through the medium of lectures. However the main emphasis of the course is focused on the laboratory sessions in which the student will progress through a series of graded exercises which are intended to test the student's understanding of the lecture content and to develop proficiency in the practical application of web

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1. Analyse a set of requirements and design an interactive web system.
2. Demonstrate proficiency with individual technologies required for web programming.
3. Develop an interactive web client using client-side scripting.

Indicative Module Content

Key concepts of internet systems including client side scripting, http, TCP/IP and associated protocols, network addressing and naming conventions. Design and implementation of web based interactive clients involving dynamic user interface, data capture, data validation and computation within a host environment. Case studies of applications, demonstrating important solutions and approaches used in practice. Review of current web programming technologies and standards including emerging developments. Review of web design methodologies, technologies. Tutorials will be utilised to support understanding by exploring particular examples in detail.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2,3

Component 1 - Coursework

Indicative Bibliography

1. HAVERBEKE,M.2014,Eloquent JavaScript; A modern Introduction to Programming. No Starch Press.
2. OLSSON,M.2015. JavaScript Quick Syntax reference. Apress
3. CHAUDHRY.M, 2015. Practical JQuery. Apress.

tools and techniques. Review of integrated development environments for web development.