CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Web Programming					
UFCFB3-30-1	UFCFB3-30-1		Level	1	Version	1
Owning Faculty	FET		Field	CSCT		
Contributes towards	BSc (Hons) Forensic Computing and Security, BSc (Hons) Computer Systems Integration, BSc (Hons) Computing, BSc (Hons) Enterprise Computing					
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard	
Pre-requisites	None		Co- requisites	None		
Excluded Combinations	None		Module Entry requirements	None		
Valid From	September 2012		Valid to	September 2018		

CAP Approval Date	21 May 2012

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: 1. Identify and define common Internet/WWW concepts (A1); 2. Understand, select and use a range of relevant web development tools to facilitate the development of basic websites (B1); 3. Install and use Unix-based operating systems in a WWW context (B1) 4. Install and use web servers efficiently and securely to host small websites (B1); 5. Consider human factors such as accessibility requirements when designing websites (B1); 6. Work as an effective team member to develop a small website (B2) 7. Reflect on their experiences during the development process (B1).
Syllabus Outline	*N.B. It is not intended that the following list of topics be in chronological order of presentation. For example the programming stream could be presented over the whole year as part of the bi-weekly lectures.*

Introduction to the module: WWW, web programming and web development

Future trends for the WWW

Development issues (covered as appropriate throughout module)
    Usability and Accessibility issues, Testing, Version control

Introduction to search engine optimisation

LAMP stack
    Overview, then each component individually covered and integrated

Unix and Linux
    Introduction to Unix/Linux
      Modern Linux variants (e.g. Ubuntu)
      Linux Installation, administration and security basics
    OS Scripting
      bash
      grep, sed, awk

Web clients
    Browsers
    Email
    Chat/Skype
    Multiplayer online games

Web servers
    Apache
    Internet and WWW basics
      TCP/IP stack concepts, HTTP, FTP
      HTML/CSS
        HTML 4.01/5
        CSS/2/3

Client-server interaction
  CGI, FastCGI
  mod_php
  mod_perl
  mod_python

Database
    DB fundamentals
    SQL – basic commands
    mySQL – using phpMyAdmin to create and administer DBs

Programming and scripting languages
    e.g. PHP, Perl (using Mason), Python, Bash, Javascript

Contact Hours/Scheduled Hours	This module will involve 6 hours contact time per fortnight. The time will be more or less equally divided between lecture sessions and laboratory sessions

Activity	hrs
Contact time	72
Assimilation and development of knowledge	148
Exam preparation	20
Coursework preparation	60
Total study time	**300**

Teaching and Learning Methods	**Scheduled learning** Lectures are used to present basic concepts and context and provide an introduction to the laboratory work and independent learning. Laboratory sessions provide space for students to initiate practice on the materials deriving from the lectures whilst being able to receive personal support as required. Later in the year the laboratory sessions provide a space for teams and tutors to interact during the website development process. **Independent learning** Students are expected to work outside scheduled classes on practice and assignment work. During the team-based assignment, students are also expected to self-manage their teams in terms of arranging meetings, allocating work and monitoring progress.
Reading Strategy	There are no recommended books for this module. Lectures will provide appropriate up-to-date online references forming the essential reading for this module – lists of these will also be available through Blackboard. For further readings, students will be assisted in formulating strategies for searching for relevant online information and support. In addition students will also be encouraged to access the extensive range of traditional books available physically or electronically via the UWE library.

Indicative Reading List	*The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, CURRENT advice on readings will be available via other more frequently updated mechanisms.*
	
	Indicative reading list –
	The prime indicative reference is:
	    w3schools.com (2012) *Learn to Create Websites*. Available from: http://www.w3schools.com [Accessed 1 February 2012]
	
	UWE eLibrary resources are available at
	    UWE eLibrary (2012). Available from http://www.uwe.ac.uk/library/elibrary/ [Accessed 1 February 2012]

Part 3: Assessment

Assessment Strategy	The bulk of assessment is concentrated around a year-long group-based development of a small website. This assessment strategy provides continual formative and summative assessment and feedback opportunities and allows students to develop their skills with the materials being presented in the lectures and laboratory sessions. The group-based working also provides numerous peer-learning opportunities. Members of the group normally share the mark awarded for group-based activities. Individual assessment and feedback is also provided within the continual assessment strategy. The aggregate continual summative assessments will be approximately 3000 words in length. Each group will be expected to present their finished website to their peers and tutors in a controlled-conditions environment. A relatively short examination (2 hours) tests the core understanding of basic

	web concepts and tools under controlled conditions.		
Identify final assessment component and element	**A1**		

% weighting between components A and B (Standard modules only)	**A:**	**B:**
	25	**75**

First Sit	

Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Examination (2 hours)	100
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Continual assessment by means of group and individual written reports which reflect on the tasks developed during the module.	80
2. Group presentation/demonstration event of the artefact produced during the module.	20

Resit (further attendance at taught classes is not required)	

Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Examination (2 hours)	100
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Individual written report into the processes undertaken during the module and the product developed.	100

If a student is permitted an **EXCEPTIONAL RETAKE** of the module the assessment will be that indicated by the Module Description at the time that retake commences.