Module Descriptor

Title	Web Server Technology		
Session	2025/26	**Status**	Published
Code	COMP09023	**SCQF Level**	9
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	S Bagheri		

Summary of Module

In this module gain practical experience of running a web server and working with the associated technologies for server scripting and database connectivity that are essential for current web applications. A software bundle which includes PHP and MySQL is used so that students can concentrate on achieving results rather than the installation process. Students also learn about and experiment with HTTP (the fundamental technology of the world wide web) that underpins all web applications.

 Formal lectures and tutorials introduce the concepts and discuss the technologies. Timetabled computer laboratories are used reinforce the learning with hands-on experience.

The software used for this module is generally open source or public domain. Many students have installed the software on their home computers with few or no problems for independent study and work towards assessments to supplement to the timetabled laboratories.

This module will work to develop a number of the key 'I am UWS' Graduate Attributes to make those who complete this module:

Universal

•   Critical Thinker

•   Ethically-minded

•   Research-minded

Work Ready

•   Problem-Solver

•   Effective Communicator

•   Ambitious Successful

Successful

- Autonomous
- Resilient
- Driven

Module Delivery Method	On-Campus[1] ☒	Hybrid[2] ☐	Online[3] ☐	Work -Based Learning[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London ☒ Paisley	☐ Online / Distance Learning ☐ Other (specify)	
Terms for Module Delivery	Term 1 ☐	Term 2 ☒	Term 3 ☐	
Long-thin Delivery over more than one Term	Term 1 – Term 2 ☐	Term 2 – Term 3 ☐	Term 3 – Term 1 ☐	

	Learning Outcomes
L1	Demonstrate understanding integrating the main concepts of HTTP, web server operation and web server scripting (including database connectivity).
L2	Demonstrate a detailed knowledge of some selected implementations of current web server technologies.
L3	Use a range of the key skills for implementing web server applications using scripting and databases.
L4	N/A
L5	N/A

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	**SCQF 9** Demonstrate understanding integrating the main concepts of HTTP, web server operation and web server scripting (including database connectivity).

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Practice: Applied Knowledge and Understanding	**SCQF 9** Use a few of the key skills for implementing web server applications with scripting and databases. Deployment on LAMP and cloud.
Generic Cognitive skills	**SCQF 9** Draw on arrange of information when making judgments about how to implement and debug web server technologies.
Communication, ICT and Numeracy Skills	**SCQF 9** This subject area is entirely computer based so ICT skills feature heavily in the practice of the subject area.
Autonomy, Accountability and Working with Others	**SCQF 9** Exercise autonomy and initiative to work with the selected software at a professional level.

Prerequisites	**Module Code** COMP09006	**Module Title** Web Site Development
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours. Starting in week one of the semester there is a weekly a three hour laboratory for practical work and a lecture. In the labs student install, configure and use web server and related software which the students then use as a development environment. Students are expected to record key stages of their laboratory or practical achievements for later assembly into computer documents that are assessed. Each week there is timetabled one hour lecture or tutorial in which reference is often made to current issues in the subject area. Students are encouraged to install and use the module software on home or laptop PCs to consolidate their laboratory experience and engender a spirit of independent study and confident experimentation.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	12
Laboratory / Practical Demonstration / Workshop	36
Independent Study	152
Please select	
Please select	
Please select	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes:
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Students can find comprehensive online resources about web server technologies, including PHP, MySQL, etc., on 3Schools.com. https://www.w3schools.com/php/default.asp Students need to run Xampp local server to execute server-side languages like PHP.
(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the [Student Attendance and Engagement Procedure](#), Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:**   The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will login to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your studies.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: [UWS Equality, Diversity and Human Rights Code.](#) Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	Computing
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No**

	If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.
School Assessment Board	Business and Applied Computing
Moderator	G McRobbie
External Examiner	R Khusainov
Accreditation Details	This module is accredited by BCS as part of a number of specified programmes.
Module Appears in CPD catalogue	☐ Yes ☒ No
Changes / Version Number	2.1

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Class Test - a practical examination worth 50% of the final mark.
Assessment 2
Portfolio of practical work (project) - a practical development project (40%) and ten class exercises (10%).
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.) |

Component 1							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class Test	☒	☒	☒	☐	☐	50	4

Component 2							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Project	☒	☒	☒	☐	☐	50	

Component 3							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
	☐	☐	☐	☐	☐		

Combined total for all components	100%	hours

Change Control

What	When	Who
Attendance and EDI Regulations	20/01/2025	L Cunningham