

## University of the West of Scotland

## Module Descriptor

Session: 2024/25

<b>Title of Module: Web Server Technology</b>			
<b>Code: COMP09023</b>	<b>SCQF Level: 9 (Scottish Credit and Qualifications Framework)</b>	<b>Credit Points: 20</b>	<b>ECTS: 10 (European Credit Transfer Scheme)</b>
<b>School:</b>	School of Computing, Engineering and Physical Sciences		
<b>Module Co-ordinator:</b>	Sajjad Bagheri		
<b>Summary of Module</b>			
<p>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 Apache, 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.</p> <p>Formal lectures and tutorials introduce the concepts and discuss the technologies. Timetabled computer laboratories are used reinforce the learning with hands-on experience.</p> <p>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.</p> <p>This module will work to develop a number of the key 'I am UWS' Graduate Attributes to make those who complete this module:</p> <p><u>Universal</u></p> <ul style="list-style-type: none"> <li>• Critical Thinker</li> <li>• Ethically-minded</li> <li>• Research-minded</li> </ul> <p><u>Work Ready</u></p> <ul style="list-style-type: none"> <li>• Problem-Solver</li> <li>• Effective Communicator</li> <li>• Ambitious Successful</li> </ul> <p><u>Successful</u></p> <ul style="list-style-type: none"> <li>• Autonomous</li> <li>• Resilient</li> <li>• Driven</li> </ul>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
See Guidance Note for details.					

Campus(es) for Module Delivery						
The module will <b>normally</b> be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	Term 2	Term 3	Other:	Distance/Online Learning:	Other:
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes: (maximum of 5 statements) These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module. At the end of this module the student will be able to:	
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.

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 Level <b>9</b>  Demonstrate understanding integrating the main concepts of HTTP, web server operation and web server scripting (including database connectivity).

Practice: Applied Knowledge and Understanding	SCQF Level <b>9</b> 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 Level <b>9</b> Draw on arrange of information when making judgments about how to implement and debug web server technologies.	
Communication, ICT and Numeracy Skills	SCQF Level <b>9</b> 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 Level <b>9</b> Exercise autonomy and initiative to work with the selected software at a professional level.	
<b>Pre-requisites:</b>	Before undertaking this module the student should have undertaken the following:	
	<b>Module Code:</b> COMP09006	<b>Module Title:</b> Web Site Development
	<b>Other:</b>	
<b>Co-requisites</b>	<b>Module Code:</b>	<b>Module Title:</b>

\*Indicates that module descriptor is not published.

<b>Learning and Teaching</b>	
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.	
<b>Learning Activities</b> During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	<b>Student Learning Hours</b> (Normally totalling 200 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
	200 Hours Total
<b>**Indicative Resources: (eg. Core text, journals, internet access)</b>	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>Students can find comprehensive online resources about web server technologies, including PHP, MySQL, etc., on 3Schools.com.</p> <p><a href="https://www.w3schools.com/php/default.asp">https://www.w3schools.com/php/default.asp</a></p> <p>Students need to run Xampp local server to execute server-side languages like PHP.</p>	
(**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)	
<b>Attendance and Engagement Requirements</b>	
<p>In line with the <a href="#">Student Attendance and Engagement Procedure</a>: 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.</p>	
<b>Equality and Diversity</b>	
<p>The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: <a href="#">UWS Equality, Diversity and Human Rights Code</a>.</p> <p>This module is suitable for any student. The assessment regime will be applied flexibly so that a student who can attain the practical outcomes of the module will not be disadvantaged. When a student discloses a disability, or if a tutor is concerned about a student, the tutor in consultation with the School Enabling Support coordinator will agree the appropriate adjustments to be made.</p>	
(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

<b>Divisional Programme Board</b>	Computing
<b>Assessment Results (Pass/Fail)</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>School Assessment Board</b>	Business & Applied Computing
<b>Moderator</b>	Graeme McRobbie
<b>External Examiner</b>	R Khusainov
<b>Accreditation Details</b>	This module is accredited by BCS as part of a number of specified programmes.
<b>Changes/Version Number</b>	2.09

<b>Assessment: (also refer to Assessment Outcomes Grids below)</b>
Two assessments are grouped under a single assessment component. One of these assessments comprises a multiple-choice class test, which accounts for 10% of the final mark, and a practical examination worth 40% of the final mark. The other assessment consists of a practical development project (40%) and ten class exercises (10%).
Assessment 1 – Class Test
Assessment 2 – Portfolio of practical work (project)
(N.B. (i) <b>Assessment Outcomes Grids</b> 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 <b>indicative schedule</b> listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

### Assessment Outcome Grids (See Guidance Note)

Component 1						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)		Weighting (%) of Assessment Element	Timetable Contact Hours
Class test	✓	✓	✓		50	4

Project	✓	✓	✓		50	0
<b>Combined Total for All Components</b>					<b>100%</b>	<b>4 hours</b>