

# CS139-15 Web Development Technologies

**24/25**

**Department**

Computer Science

**Level**

Undergraduate Level 1

**Module leader**

Andrew Hague

**Credit value**

15

**Module duration**

10 weeks

**Assessment**

Multiple

**Study location**

University of Warwick main campus, Coventry

---

## Description

### Introductory description

To introduce students to contemporary technologies used for web design and development, and to equip them with the basic technical skills required to deploy such technologies. This module is only available to students based in the Computer Science Department and cannot be taken as an unusual option by external students.

### Module aims

To introduce students to contemporary technologies used for web design and development, and to equip them with the basic technical skills required to deploy such technologies.

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Concepts in web design

- Usability

- Standards
- Web systems

### Web development technologies

- Server programming languages and frameworks (such as Python, Flask, Jinja)
- Configuration and maintenance of web servers (such as Apache)
- Client programming languages and libraries (such as JavaScript, JQuery)
- Asynchronous technologies (such as AJAX)
- Markup languages (including HTML5, CSS, XML, JSON)

### Cloud computing and software as a service (SaaS)

## Learning outcomes

By the end of the module, students should be able to:

- Demonstrate a critical appreciation of usability, accessibility and adherence to standards in the design of dynamic web sites.
- Configure and maintain a web server.
- Understand the technologies used to support dynamic web sites.
- Design and code functional web server applications.

## Indicative reading list

Please see Talis Aspire link for most up to date list.

[View reading list on Talis Aspire](#)

## Subject specific skills

- Designing and coding web server applications with an appreciation of usability, accessibility, and adherence to standards
- How to configure and maintain a web server

## Transferable skills

- Programming in various languages (Python, JavaScript, HTML/CSS, etc.)
- Present and managing information from a database (ORM)
- Recommendation for usability, accessibility and cultural awareness in web design

---

## Study

## Study time

<b>Type</b>	<b>Required</b>
Lectures	20 sessions of 1 hour (13%)
Practical classes	10 sessions of 2 hours (13%)
Private study	110 hours (73%)
Total	150 hours

### **Private study description**

Private study will entail:

- Background reading of recommended texts
- Independent program design and programming related to the assignment
- Revision of lecture slides and past exam papers

### **Costs**

No further costs have been identified for this module.

---

### **Assessment**

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

#### **Assessment group D**

	<b>Weighting</b>	<b>Study time</b>
Web Server Application Coursework	40%	
Unsupervised practical assignment. This assessment is worth more than 3 CATS and is, therefore, ineligible for self-certification.		
In-person Examination	60%	
Examination		

---

- Answerbook Pink (12 page)

#### **Assessment group R3**

	<b>Weighting</b>	<b>Study time</b>
On-campus Examination - Resit	100%	
Resit Examination		

- Answerbook Pink (12 page)

## Feedback on assessment

Written feedback on practical assignment

[Past exam papers for CS139](#)

---

## Availability

### Courses

This module is Optional for:

- UCSA-G500 Undergraduate Computer Science
  - Year 1 of G500 Computer Science
  - Year 1 of G500 Computer Science
- UCSA-G503 Undergraduate Computer Science MEng
  - Year 1 of G500 Computer Science
  - Year 1 of G503 Computer Science MEng
  - Year 1 of G503 Computer Science MEng
- Year 1 of UCSA-I1N1 Undergraduate Computer Science with Business Studies
- Year 1 of UCSA-G406 Undergraduate Computer Systems Engineering
- Year 1 of UCSA-G408 Undergraduate Computer Systems Engineering
- UCSA-G4G1 Undergraduate Discrete Mathematics
  - Year 1 of G4G1 Discrete Mathematics
  - Year 1 of G4G1 Discrete Mathematics
- Year 1 of UCSA-G4G3 Undergraduate Discrete Mathematics