



Web Development Course Descriptor

Course Title	Web Development	Faculty	Philosophy
Course code	NCHCS764	Course Leader	TBA
Credit points	15	Teaching Period	Any
FHEQ level	Level 7	Date approved	September 2020
Compulsory/ Optional	Compulsory		
Pre-requisites	None		
Co-requisites	None		

COURSE SUMMARY

This course offers the fundamentals for understanding modern Web application design and development. It focuses on software development issues of integrating multiple modern software tools and technologies to produce websites that are dynamic, data-driven and interactive.

COURSE AIMS

The aims of the course are:

- Introduce students to Web development through practice
- Apply industry standards and best practice to Web application development
- Complete a full project using skill applications

LEARNING OUTCOMES

On successful completion of the course, students will be able to:

KNOWLEDGE AND UNDERSTANDING

- K1d Master practical methods and techniques of the Web development process, from inception to implementation and deployment.
- K2d Understand software development issues of integrating multiple scripting languages, tools, assorted data technologies, and Web interaction.
- K3d Evaluate the technical, social and management aspects of Web development using industry standards.

SUBJECT SPECIFIC SKILLS

- S1d Critically assess a Web-based software problem and recognise the correct components (JavaScript, CSS, Web services) suitable for solving it, and propose ways to integrate them into an existing project.
- S2d Become a sophisticated Web developer, familiar with the latest tools, libraries and industry standards.
- S3d Design and develop original software for data-driven, interactive websites.

TRANSFERABLE AND PROFESSIONAL SKILLS

- T1d Critically review and analyse key developments in Web development.
- T2d Create extensive documentation of goals, plans, design decisions, accomplishments, and user guidelines and communicate them to both technical and non-technical audiences.
- T2d Consistently apply an excellent level of technical proficiency in written English, using an advanced application of scholarly terminology, that demonstrates the ability to deal with complex issues both systematically and with sophistication
- T3d Lead or participate in team projects.

TEACHING AND LEARNING

Teaching and learning strategies for this course will include:

- 30 hours of full-cohort lectures
- 20 hours of lab-based tutorials
- 1 office hour per teaching week

There will be three 1-hour lectures per teaching week. Two 1-hour lab sessions will give students the opportunity to work on their assignments with the help of the course leader and teaching assistants.

Course information and supplementary materials are available on the College's Virtual Learning Environment (VLE).

Students will also attend the formal meeting, Collections, in which they will receive constructive and developmental feedback on their performance.

Students are required to attend and participate in all the formal and timetabled sessions for this course. Students are also expected to manage their directed learning and independent study in support of the course.

EMPLOYABILITY SKILLS

- Communication skills
- Team-based project skills
- Programming skills

ASSESSMENT

FORMATIVE

Students will be formatively assessed during the course by means of set assignments. These do not count towards the end of year results but will provide students with developmental feedback. Set assignments will also amplify problem-solving skills useful for the set exercises and develop software components that form part of the students' projects.

SUMMATIVE

Assessment will be in two forms:

AE:	Assessment Activity	Weighting (%)	Online submission	Duration	Length
1	Set exercises	50	Yes	N/A	Code and up to 2500-word explanation
2	Project	50	Yes	N/A	Code and up to 2500-word documentation

Both the set exercises and the project will be assessed in accordance with the assessment aims set out in the Programme Specification.

FEEDBACK

Students will receive formal feedback in a variety of ways: written (including via email correspondence); oral (within one-to-one tutorials or on an *ad hoc* basis) and indirectly through discussion during group tutorials.

Feedback is provided on summative assessment and is made available to the student either via email, the VLE or another appropriate method.

INDICATIVE READING

Note: Comprehensive and current reading lists for the course are produced annually in the Course Guide or other documentation provided to students, primarily based on the official documentation for the languages, libraries, tools, and frameworks used in class.

INDICATIVE TOPICS

Students will study the following topics:

- Web design and development best practices and industry standards
- Client-server software development
- HTML5, JavaScript and CSS
- JSON, Ajax and REST API
- Web application security and performance

Title: NCHCS764 Web Development Course Descriptor					
Approved by: Academic Board					
Location: Academic Handbook/Programme specifications and Handbooks/ Postgraduate Programme Specifications/MSc Computer Science Programme Specification/Course Descriptors					
Version number	Date approved	Date published	Owner	Proposed next review date	Modification (As per AQF4) & category number
2.0	January 2022	April 2022	Dr Alexandros Koliouisis	April 2025	Category 3: Changes to Course Learning Outcomes
1.0	September 2020	September 2020	Dr Alexandros Koliouisis	April 2025	