Module Code: 21CSCI03P	**Title:** Principles of Web Programming	
Level: P	**Modular weight:** 10	**Faculty/Dept:** ICS
Prerequisite modules: None		
Reassessment: No restrictions		
Module Leader: Dr. Nivin Atef		
Semester taught: Two		
Date of latest revision:		

Aims

The aim of this module is to provide the student with the essentials of web design principles using latest version of mark-up and styling languages and to present web design concepts and techniques that form the underlying aspects of web design.

Intended Learning Outcomes

On completion of the module, students should be able to:

Knowledge and Understanding

1. Demonstrate knowledge and understanding of mark-up and styling languages with their standards, as well as latest recommended design techniques. [A1, A2, A3, A6]

Intellectual Skills

2. Analyse a website with specific objectives design. [B2, B3]

3. Appraise the planned design into styled and themed web pages, following the latest recommended design techniques.[B4, B5, B6]

Practical and Professional Skills

4. Design the structure of a complete website (creating site map) and apply latest recommended design techniques (creating wireframe).[C1]

5. Interpret the designed and styled pages against the latest published standards.[C3,C4,C5]

6. Use coding and visual editing tools to create web pages, as well as developer tools for debugging.[C6,C7,C8]

General and Transferable Skills

7. Develop basic information retrieval skills; by adding meta data.[D3]

Employability

This module will provide opportunities for students to:

1. Understand the importance of providing constructive criticism as well as responding appropriately to criticism. [A.4]
2. Find information in different formats from a range of local or remote data sources. [B.3.2]

3. Keep up to date with developments in own areas of professional specialisation. [C.1.1]

Indicative Content

Topics from, but not restricted to:
- Internet and Web concepts overview
- Website analysis, planning and structuring tools (Site Map, Wireframe)
- Create web pages with XHTML and HTML (latest version),
- Configure colour, text, page layout, images and multimedia using Cascading Style Sheet
- Apply Web Design techniques and Best Practices following the latest W3C recommendations.
- Design accessible and usable web pages
- Design for search engine optimization
- Web servers and online publishing

Methods of Learning, Teaching and Assessment

Total student effort for the module: 100 hours on average over one semester.

Type of session	ILOs Assessed	Typical Student Effort		
		Number in the Semester/s	Hours per week normally	Total hours
Lecture	1-7	12	2	24
Tutorial	-	-	-	-
Laboratory	4-7	12	2	24
Private study	1-7			52

Assessment

Assessment Type	Weight %	ILOs Assessed	Exam Semester	Exam/ Written Coursework Length (words)
Two in-class tests 25% each	50	1-7	2	1 hour each
Group project (3-4 students) to be completed into two phases. The project includes sequential tasks: site planning, layout designing, site map, pages development, and website final publishing. These activities should be accomplished and delivered in their appropriate phases.	50	1-7	2	

Methods of Feedback

In response to assessed work:

- Feedback will be provided for each phase in the project in written form as appropriate. Such written form is based on a rubric that covers all marking criteria. In addition, an oral feedback is given to the students during their project phases' discussion.
- Generic exam feedback will be given on the e-learning system.

Developmental feedback generated through teaching activities

Real life case study covering the whole process of a website development till online publishing

Indicative Reading List

- Terry Felke-Morris - "Basics of Web Design: HTML5 & CSS3, 2nd Edition, 2013 ISBN-10: 0133128911
- "HTML5 & CSS3 For The Real World" Estelle Weyl, Louis Lazaris, Alexis Goldstein, SitePoint 2011.
- "Web Development and Design Foundations with HTML5 (6th Edition)" Terry Felke-Morris, Pearson, 2012.
- Students will also be directed to various web based tutorials to assist their learning and build their skills.