2024 / 25

School of Science and Computing
+353 (0)51 302037
Eleanor.Reade@setu.ie
www.wit.ie/schools/science_computing

Ollscoil Teicneolaíochta an Oirdheiscirt

South East Technological University

Module Descriptor

HCI and Web Design (Computing and Mathematics)

HCI and Web Design (A13841)

Short Title: HCI and Web Design
Department: Computing and Mathematics
Credits: 5 **Level:** Advanced

Description of Module / Aims

This module introduces the student to the principles of good design for web interfaces. These principles are grounded in Cognitive Science and HCI (Human Computer Interaction) theories. Web Design introduces the student to the basic principles and development of web based applications, and examines related web accessibility guidelines. The student will become competent in raw HTML (HyperText Markup Language) and CSS (Cascading Style Sheets), demonstrated by the creation of a simple interactive website.

Programmes

		stage/semester/status
COMP-0390	Higher Diploma in Science in Business Systems Analysis (WD_KBUSY_G)	1 / 1 / M

Indicative Content

- Cognitive Science: Introduction; Memory; Attention; Perception
- HCI: Guidelines; User requirements; Usability; Interface Design; Evaluation
- Web Design: page layout and web design principles
- World-wide-web: Overview; accessibility; navigation; document construction
- HTML: structure; text; images; tables; forms; DIVs; audio; video
- CSS: text; images; tables; forms; positioning
- Responsive web design

Learning Outcomes

On successful completion of this module, a student will be able to:

1. Evaluate a website against cognitive science theories and HCI guidelines.
2. Critique interface design guidelines and design a usable web interface that adheres to accepted standards.
3. Develop an interactive website using HTML and CSS.
4. Evaluate the website developed in relation to accepted standards.

Learning and Teaching Methods

- The lectures will introduce the theory content to the student.
- The student will be encouraged to participate in class discussions and ask questions to support their learning process.
- The practical classes facilitate the student in implementing the theory learned in the lectures, and allow them to develop practical skills in web development.
- Supplementary material will be accessible online.

Learning Modes

Learning Type	F/T Hours	P/T Hours
Lecture	24	
Practical	24	
Independent Learning	87	

Assessment Methods

	Weighting	Outcomes Assessed
Continuous Assessment	100%	
Assignment	30%	1
Project	70%	2,3,4

Assessment Criteria

<40%: Unable to interpret and describe key concepts that relate to HCI and Web Design.

40%–49%: Be able to interpret and describe key concepts that relate to HCI and Web Design.

50%–59%: Ability to discuss key concepts that relate to HCI and Web Design and ability to discover and integrate related knowledge in other knowledge domains.

60%–69%: Be able to solve problems that relate to HCI and Web Design by experimenting with the appropriate skills and tools.

70%–100%: All the above to an excellent level. Be able to analyse HCI and Web Design solutions to a high standard for a range of both complex and unforeseen problems through the use and modification of appropriate skills and tools.

Essential Material(s)

- "CSS Tutorial." W3Schools. http://www.w3schools.com/css/
- "HTML Tutorial." W3Schools. http://www.w3schools.com/html/

Supplementary Material(s)

- Duckett, J. *HTML & CSS: Design and Build Websites.* 1st ed. Indiana: Wiley, 2011.
- Sharp, H., Y. Rogers and J. Preece. *Interaction Design: Beyond Human-Computer Interaction.* 4th ed. West Sussex: Wiley, 2015.

Requested Resources

- Room Type: Computer Lab