

MODULE MULTIMEDIA & INTERNET DEVELOPMENT

CODE	BSCH-2-2-09
STAGE	II
NUMBER OF CREDITS	4 semester credits / 6 quarter units
STATUS	CORE
THEMES	Software Development
ASSESSMENT	Continuous Assessment 50%
	Examination 50%

Aims

This module aims to examine the complex techniques involved in multimedia production, and the programming skills required for website development and e-commerce.

Learning Outcomes

Upon completion of this module a student should be able to:

- Recount multimedia fundamentals and the role of multimedia.
- Identify delivery methods and components used to deploy multimedia.
- Apply a design methodology to the implementation of a website.
- Recognise and employ image and compression techniques.
- Demonstrate an ability to analyse, design and create a website.
- Use current technologies to assist in the production of multimedia.
- Employ different multimedia tools in harmony.
- Discuss current technologies and differentiate between system architectures.
- Distinguish between client-side from sever-side processing.
- List and explain the use of internet protocols.
- Appraise Internet and WWW resources.

Indicative Content

Topic	Description
Multimedia Concepts	Multimedia overview; History of multimedia; Multimedia delivery systems; Software and Hardware components; Colour theory;

Multimedia Design	Development Techniques; Requirements Analysis & Specification; Design principles, requirements and documentation; Structure design: navigation maps, storyboards; HCI & User Interaction Design; Screen Design, Colour, Text, Graphics; Evaluation & Testing;
Multimedia Creation	Computer Technology; Static images and digital photography; Computer Graphics; Digital Audio and Video; Bandwidth , storage and compression techniques;
Website Creation	Websites and multimedia; HTML implementation: basics, lists, tables, hyperlinks, frames, multimedia insertion; HTML editors/generators; Testing; Uploading;
Web Development	Cascading Style Sheets; Streaming: audio and video; Dynamic websites: client-side/server-side programming; DHTML: Dynamic Object Model; Scripting;
Web Technologies	Current technology overview; Web Servers; HTTP requests; Security introduction; Internet Protocols; System Architecture; Internet and World-Wide Web Resources;

Teaching and Learning Methods

Students will be taught using a combination of lectures, tutorials and practicals. Practical sessions will be based on lab workbooks. These will build on design issues and creation concepts introduced in lectures and how to apply these to web development and implementation. A number of graded assignments will also be given as part of the course.

Assessment Methods

Assessment will use both a continuous component and an end of semester examination. The continuous assessment component is used to develop practical skills of multimedia development techniques and will be based both on the lab workbooks and graded

assignments. Students will be expected to design, create and develop web applications, meeting accepted quality standards.

Primary Reading

Title	Author	Publisher
HTML for the World-Wide Web	Elizabeth Castro	Peachpit press, 2002
PC Multimedia & Web Handbook	David Dick	Dumbreck Publishing, 2002

Recommended Reading

Title	Author	Publisher
Multimedia Concepts and Practice	Stephen McGloughlin	Prentice Hall, 2001
E-Business & E-Commerce – How to Program	Deitel, Deitel & Neito	Prentice Hall, 2000
Internet & World-Wide Web: How to Program	Deitel, Deitel & Neito	Prentice Hall, 2001
Multimedia-Based Instructional Design: Computer-Based training, Web-Based Training and Distance Learning	William W Lee, Diana L Owens	Jossey-Bass, 2002
HTML Goodies	Joe Burns	Que, 2002