

MODULE SPECIFICATION

1. The title of the module

CO327 Web Applications

2. The Department which will be responsible for management of the module

School of Computing

3. The Start Date of the Module

September 2004

4. The cohort of students (onwards) to which the module will be applicable: 2009/2010

5. The number of students expected to take the module 130

6. The modules to be withdrawn on the introduction of this module

None

7. The level of the module

C

8. The number of credits which the module represents

15

9. Which term(s) the module is to be taught in (or other teaching pattern)

Spring

10. Prerequisite and co-requisite modules

None. This module is not available to students who have already taken CO525

11. The programmes of study to which the module contributes

BSc Computer Science (and variants). Applied Computing Programmes

12. The intended subject specific learning outcomes and, as appropriate, their relationship to programme learning outcomes

On successful completion of this module, students will:

S1. understand the basic principles of web page design and be able to write a basic web page using a web authoring tool. [A2, B4, C4]

S2. understand the basic principles of web site design and be able to construct a small site of interconnected pages with first and second level navigation [A4, C4]

S3. understand the basic concepts of data structuring [B1]

S4. have acquired the skills to be able to implement an application that uses a database and has a simple user interface [A2]

13. The intended generic learning outcomes and, as appropriate, their relationship to programme learning outcomes

On successful completion of this module, students will:

G1. Demonstrate comprehension of the trade-offs involved in design-choices. [B1]

G2. Recognise and be guided by social, professional and ethical issues and guidelines. [B6]

G3. Make effective use of IT facilities for solving problems. [D3]

G4. Be able to manage their own learning and development, through self-directed study and working on continuous assessment. [D5]

G5. Make effective use of a range of tools, such as a web browser and email client. [C4]

14. A synopsis of the curriculum

- Writing effective web pages
 - Principles of design
 - Introduction to XHTML and CSS
 - Making pages widely accessible
- Use of web authoring software
- Introduction to a programming language for writing dynamic web pages: an example is PHP
 - Simple variables, data structures such as arrays, control structures such as loops and conditionals.
- Control of data source using program code for example querying a database and displaying the results on a dynamically generated web page.
- Professional bodies and relevant codes of practice.

15. Indicative Reading List

Texts listed here are suitable at the time this document is being presented for approval. However books are revised very frequently in this area, sometimes as often as once a year. An up to date reading list will be provided each year before the start of the module for the use of students.

Williams, Robin, *The Non-Designer's Design Book* Peachpit Press, 2004 (or 2000)
Hughes, Cheryl M., *Web wizard's guide to XHTML*, Addison Wesley, 2005
Lash, David A., *Web wizard's guide to PHP*, Addison Wesley, 2003
Nielsen, Jacob, *Designing Web Usability*, New Riders Publishing, 2000
Raggett, Dave, et al *Raggett on HTML 4* Addison-Wesley, 1997
Meyer, Eric A., *Cascading Style Sheets: the definitive guide*, O'Reilly, 2000
Ullman, Larry, *PHP for the World Wide Web*, Peachpit Press, 2004
Butzon, Toby, *PHP by example*, QUE publishing, 2002
Lengel, James G., *Web wizard's guide to web design*, Addison Wesley, 2002
Castro, Elizabeth, *HTML, XHTML & CSS: visual quickstart guide*, Peachpit Press, 2007

16. Learning and Teaching Methods, including the nature and number of contact hours and the total study hours which will be expected of students, and how these relate to achievement of the intended learning outcomes

The module will be taught in the Spring term. A combination of formal and informal teaching will be used to introduce both generic principles of design as well as the implementation technology provided by a variety of application software. Each week students will attend two lectures and one class/workshop. In these terminal sessions the students will work either on their own or in small groups on exercises with lecturer support when requested. Examples and self-assessment exercises will be used to further develop practical design and software application skills.

17. Assessment methods and how these relate to testing achievement of the intended learning outcomes

This module will be assessed 50% coursework by practical exercises (S1, S2, S4), G1,G2,G3,G4,G5) and by 50% unseen written examination (S1,S3,S4).

18. Implications for learning resources, including staff, library, IT and space

Staff will be required to deliver this module, through teaching, supervision and marking. Materials from the reading list should be available through the library. IT resources will be required to support practical programming activities.

19. A statement confirming that, as far as can be reasonably anticipated, the curriculum, learning and teaching methods and forms of assessment do not present any non-justifiable disadvantage to students with disabilities:

The department recognises and has embedded the expectations of SENDA, and supports students with a declared disability or special (educational) need in its teaching, through the establishment of Inclusive Learning Plans agreed between student, department and the Disability Support Unit. We liaise with the Disability Support Unit in order to provide specialist support where needed.

Statement by the Director of Learning and Teaching: "I confirm I have been consulted on the above module proposal and have given advice on the correct procedures and required content of module proposals"

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Director of Learning and Teaching

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Date

Statement by the Head of Department: "I confirm that the Department has approved the introduction of the module and will be responsible for its resourcing"

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Head of Department

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Date