1. **Title of the module**

COMP3230 (CO323) - Databases and the Web

1. **Division or partner institution which will be responsible for management of the module**

Division of Computing, Engineering, Mathematical Sciences (CEMS)

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 4

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

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

Autumn or Spring

1. **Prerequisite and co-requisite modules**

Prerequisite: COMP3200: Introductory Programming

1. **The course(s) of study to which the module contributes**

BSc Computer Science (and variants), Computing, Business Information Technology, plus the year in industry versions of these courses.

BSc Artificial Intelligence, BSc Data Science, BSc Software Engineering, plus the year in industry versions of these courses.

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 Understand the basic principles of web page design and be able to write a basic web page.

8.2 Understand the basic principles of web site design and deployment, and be able to construct a small site of interconnected pages with first and second level navigation.

8.3 Understand the basic concepts of data structuring relational databases.

8.4 Specify, design, implement and evaluate simple database solutions.

8.5 Plan and perform basic data manipulation and information retrieval operations using SQL.

8.6 Have acquired the skills to be able to implement an application that uses a database and has a simple (web) user interface.

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**

9.1 Demonstrate comprehension of the trade-offs involved in design-choices.

9.2 Recognise and be guided by social, professional and ethical issues and guidelines.

9.3 Make effective use of IT facilities for solving problems.

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

9.5 Make effective use of a range of tools, such as a web browser and database query browser.

1. **A synopsis of the curriculum**

An introduction to databases and SQL, focussing on their use as a source for content for websites. Creating static content for websites using HTML(5) and controlling their appearance using CSS. Using PHP to integrate static and dynamic content for web sites. Securing dynamic websites. Using Javascript to improve interactivity and maintainability in web content.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Jon Duckett HTML & CSS: Design and Build Web Sites, John Wiley & Sons, 2011

Robin Nixon Learning PHP, MySQL, and JavaScript: A Step-by-Step Guide to Creating Dynamic Websites, O’Reilly, 2009

1. **Learning and teaching methods**

Total contact hours:33

Private study hours: 117

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Coursework 50%

(Assignment 1) HTML and Javascript (25%)

(Assignment 2) Databases & PHP (25%)

       2-hour unseen examination 50%

13.2 Reassessment methods

Like for like.

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | **Hours Allocated** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *9.1* | *9.2* | *9.3* | *9.4* | *9.5* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Private Study** | 128 | X | X | X | X | X | X | X | X | X | X | X |
| **Lectures** | 22 | X | X | X | X | X | X | X | X |  |  |  |
| **Practical classes** | 10 | X | X | X | X | X | X |  |  | X |  | X |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Practical assessments** | 50 | X | X | X | X | X | X | X | X | X | X | X |
| **Examination** |  |  |  | X | X | X |  | X |  |  |  |  |

1. **Inclusive module design**

The Division recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

The topics addressed by this module relate to a field which is of international importance, given the global role of computers in today's technological innovation.  The topics covered by this module are international in nature, being identical worldwide and independent of traditional spoken language. Within the teaching and delivery, we aim to promote a diversity of international experience through use of worldwide examples and perspectives on the use of data analysis in the international context.

**DIVISIONAL USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 10/11/2020 | Minor |  | 1, 6, 7, 16 | No |
|  |  |  |  |  |