

## **BNM803 Developing Business Systems Workshop**

Number of Aston Credits: 15

Number of ECTS Credits: 7.5

### **Staff Member Responsible for the Module:**

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Availability: See office hours on door  
Or Contact the Group Administrator, John Morley, ABS3236

### **Pre-requisites for the module:**

None.

### **Mode of Attendance:**

On Campus

### **Module Objectives and Learning Outcomes:**

This workshop will provide students with a practical understanding of the key elements of an IT system (including hardware and software) sufficient to take responsibility for developing computer-based solutions to business problems in commercial organisations. Students will understand and develop the necessary skills to design and implement computer systems to support target aspects of commercial activity. These skills will be developed while working for a simulated company whose aim is to become more competitive by using information technology more effectively. It will be necessary to match technical design details to the requirements of business use and to select appropriate applications from a range of possibilities. At the end of the module students will have sufficient knowledge and understanding to be able to guide system development in commercial organizations and be well prepared for undertaking a summer project of that type.

**Module Content:**

**Workshop Task:**

The key target for this workshop is the development of prototype system, including a network, for a client organisation. The workshop will take place in the e-Business Design Studio and will introduce the basic elements of computer to computer communication, the way in which the World Wide Web depends on this and the relationship between the technical mechanisms and the provision of business support. The development task will involve discussions with the client, the selection purchase and connection of hardware and the selection, specification and prototype development of the necessary software.

The workshop schedule will be determined in large measure by group planning decisions related to the project development tasks required to satisfy the client's requirements. It will be based on the following development sequence:

- Stage 1:** Introduction to the workshop, the development tasks and the client's requirements
- Stage 2:** Establish the business requirements of the IT system required by the client.
- Stage 3:** Design the prototype in terms of its performance and business capabilities.
- Stage 4:** Design the physical prototype to meet the performance specification of stage 3.
- Stage 5:** Plan the creation of the prototype and implement the plan.
- Stage 6:** Test the prototype and demonstrate it to the client or the client's representative.

During stages 1-4 the students will complete a series of practical laboratory exercises to prepare them for the build phases (stages 5 & 6)

### **Corporate Connections:**

The case used is closely based on a real local company. In order to make the environment as realistic as possible the role of the client will be taken by someone not known to the student group who is an experienced manager (where possible).

### **International Dimensions:**

The module is firmly international in nature in both the nature of the technologies being taught and the business context of the work.

### **Contribution of Research:**

Elements of the design methodology used are based on the application of Quality Function Deployment (QFD) in e-Business strategy development as developed by Nelson Tang when he was a member of the O&IM research group.

### **Method of Teaching:**

There will be 5 hours of lectures, 8 hours of laboratory exercises and 25 hours of workshops and tutorial support. These contact hours will be supported by self-organised practical work and individual study. The essential theoretical topics will be introduced in the lecture sessions. A wider range of topics will be explored through small group inquiry and the sharing of information gathered. This activity is designed to prepare students to be able to continue their learning as their responsibilities and the available technologies change.

In addition to the theoretical studies, students will undertake a series of other tasks intended to help them acquire or develop further some of the professional skills needed by consultants and developers.

### **Method of Assessment and Feedback:**

Module assessment will be based on three group activities (worth 50%) and an exam (also worth 50%). Peer review will be used to redistribute the group marks if required. The three group activities will consist of:

**Group Item 1** - A development proposal prepared for the client that outlines the proposed system specification and capabilities and the mechanisms by which target business benefits will be achieved. This item is worth 15%.

**Group Item 2-** A presentation (with supporting paperwork) to colleagues that describes the design of the prototype system and the development plan. This item is also worth 15%.

**Group Item 3** - A final demonstration of the prototype system to the client or the client's representative. This item is worth 20%.

There will be a redistribution of the group marks based on peer review. Failure to agree within a team will result in an assessment being made based on the evidence presented in a daybook. A 'daybook' must be maintained by each team and should document the contribution made by each student to the development, preferably in relation to the team development plan.

### **Examination**

The final element of the module assessment is a one hour short answer examination paper worth 50%. The questions will be chosen to relate to all aspects of the case and the development process.

### **Required Coursework**

As well as the assessed coursework there are additional requirements which although not part of the formal assessment are designed to be an integral part of the development process. The first of these has been mentioned already and that is the Daybook. In addition there will be student-led investigations that result in "how to" guides that can be distributed to the rest of the group. The aim of these is to ensure that team members have an up-to-date if basic understanding of the aspects of IT that will be important for their development. This process is also viewed as an introduction to the searching and scanning of sources that is an important skill for those working in the area of business IT.

Students lacking basic technical skills will be asked to complete some practical laboratory exercises. These exercises will not be assessed but completion will be required. The nature of these will change with the developments in technology and in the case study but would typically involve setting up network components or installing and configuring an operating system.

Feedback will be available via feedback sheets, annotated copies of the submitted documents and verbal comments on the presentation and demonstration.



### Learning Hours:

Lecture	7
Practical exercises	8
Workshops	35
Private study	40
Coursework	60
<b>Total</b>	<b>150</b>

### Essential Reading

A small library of key books is available for workshop students.

It is not possible to identify key books for this module as they depend very much on student experience and background. A range of resources is available for loan during the module

### Indicative Bibliography:

Chambers, M. (2009) Build Your Own PC Do-it-yourself For Dummies, John Wiley & Sons

BILL (1999) Upgrading and Fixing Networks for Dummies, John Wiley & Sons

Lowe, D. (2010) Networking All-in-One For Dummies, John Wiley & Sons

Tanenbaum, A. (2010) Computer Networks, Prentice Hall

Ludlow, D. (2010) Build a Better PC, Dennis Publishing

Valade, J., Ballad, T. & Ballad, B. (2008) PHP and MySQL Web Development All-in-one Desk Reference For Dummies. John Wiley & Sons Inc

Laudon K & Traver C (2008), E-Commerce 2009: Business, Technology, Society, (International Version), Pearson Education

Papazoglou M & Ribbers P (2006), e-Business - Organisational And Technical Foundations, John Wiley & Sons