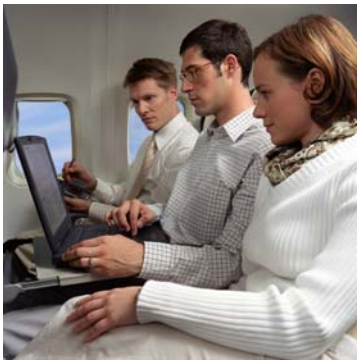
THE UNIVERSITY OF
NEW SOUTH WALES

Australian School of Business
Information Systems, Technology and Management

INFS3605
Project Workshop



COURSE OUTLINE
SESSION 1, 2008

1. COURSE STAFF

Unit Coordinator:	A/Prof Fethi Rabhi	Quad 2099	f.rabhi@unsw.edu.au
Lecturer in charge:	Decler M Hague	Quad 2114	decler@unsw.edu.au

Email is the preferred mode of contact. Please note that it is school policy that only emails from bona fide accounts, such as your student email account will be read.

Consultation with the lecturer will be during the laboratory session before the lecture and on during specified lecture times. Appointments can be made to meet at other times should the need arise.

If you experience problems during the course that are likely to interrupt your attendance in class or delay submission of assignments please discuss this with the lecturer-in-charge at the earliest opportunity.

2. INFORMATION ABOUT THE COURSE

2.1 Teaching Times and Locations

Lectures:	Thursdays 10:00-11:00, Quadrangle Building G031
Lab Sessions:	Thursdays 11:00-13:00 (QUAD Lab 3) and Thursdays 13:00-15:00 (QUAD Lab 3)

2.2 Units of Credit

This course is worth 6 Units of Credit (UOC).

2.3 Parallel Teaching in the Course

There is no parallel teaching associated with this course.

2.4 Relationship of This Course to Other Course Offerings

This course is a capstone focusing on the implementation of a realistic information system. The general concepts of analysis, design and implementation have been considered in INFS2603 and INFS2609.

3. COURSE AIMS AND LEARNING OUTCOMES

3.1 Course Aims

This implementation workshop considers in detail the issues of coding and implementing quality information systems in an organisational context. These issues include: identifying attributes of quality, project management (resource management), project effort estimation, software testing, maintenance, evaluation of software products and processes. Quality is an overarching issue that is a consideration within the domain of all the above issues and is a unifying theme throughout the whole course.

3.2 Student Learning Outcomes

On Completion of this course, students are expected to have:

1. an appreciation of the concepts and principles of software development associated with the **implementation** of quality Information Systems within an organisational context.

2. an understanding of the issues and skills involved in working as part of project team implementing a quality information system. Students will develop interpersonal communication skills by:
    - preparing correctly formatted and structured business reports
    - presenting professional presentations using effective communication techniques
    - negotiating technical, management and interpersonal issues within their teams
    - resolving problems within their development teams using effective conflict resolution techniques.
3. an understanding of management tools in the control and implementation of a quality information system, including project management and quality assurance of information systems development.
4. experienced the process of implementing a quality information system in a programming language.

3.3 Approach to Learning and Teaching

This course adopts a project-based approach to Learning and Teaching where students learn through applying their knowledge in situations inspired from real-life. Software development in a group situation is encouraged with the lecturer guiding and providing continuous feedback to each group.

3.4 Teaching Strategies

To achieve the objectives of the course the concepts, principles and theoretical approaches outlined in the weekly lectures/assistance are reinforced by the practical components of the course. The vehicle for the practical component is a specification of a non-trivial information system which will be implemented by teams of students in a student's choice of programming language. The vast majority of the lecture material and lecture assistance will be directly related to the practical component of the course.

4. CONTINUAL COURSE EVALUATION AND IMPROVEMENT

Each year feedback is sought from students and other stakeholders about the courses offered in the School and continual improvements are made based on this feedback. UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process is one of the ways in which student evaluative feedback is gathered. Significant changes to courses and programs within the School are communicated to subsequent cohorts of students. Based on previous feedback for this course, it has been redesigned so that all practical activities (project and labs) build on each other as well as encourage self-learning using Web resources.

5. LEARNING ASSESSMENT

5.1 Formal Requirements

To receive a passing grade in this course, you must meet ALL of the following criteria:

- Attain an overall mark of at least 50%;
- Make a satisfactory attempt at all assessment tasks (see below)
- Attend at least 80% of all laboratories (Approx to 10 labs)

5.2 Assessment Details

The assessable components for the course are divided into three distinct categories:

Assessable Component	Percentage	Learning Outcomes Assessed
I. Coding and demonstrations Initial demonstration Final demonstration Team Presentation	**60%**	**1,2,4**
II. Reports Project Management Report Testing Documentation Testing Other Teams Report	**40%**	**2,3**

- Additional details about these components, submissions procedure and marking criteria will be on the course's Web site.
- Attendance at laboratories is compulsory. The roll will be taken in each lab. Students are reminded that they are required to attend 80% of all classes or a failure in the course will be recorded.
- Any number of the assessment components may be scaled to a mean of 60%.
- All components of assessment must be completed at a satisfactory level (normally a minimum mark of 40%). If this level of performance is not achieved in any component a UF will be awarded.
- Team members are expected to work in a harmonious and professional manner.
- **This subject will be assessed in accordance with the School's assessment policies that can be found at: wwww.sistm.unsw.edu.au**

5.3 Late Submission

Late submission of assignments will incur a penalty of 10% of the maximum assessment per day. An extension in the time of submission will only be granted under exceptional circumstances by the lecture-in-charge. In all cases documented evidence must be provided

5.4 Special Consideration and Supplementary Examinations

It is recommended that you familiarise yourself with the School policies regarding:
Post Examination Student Consultation
Application for Special Consideration
Plagiarism & Failure to Acknowledge Sources

These policies can be found at the SISTM web site:
http://www2.sistm.unsw.edu.au/nps/servlet/portalservice?GI_ID=System.LoggedOutInheritableArea&maxWnd=_Current_Policies

UNSW Policy and Process for Special Consideration
(see https://my.unsw.edu.au/student/atoz/SpecialConsideration.html)

- Applications for special consideration (including supplementary examinations) must go through UNSW Central administration (within 3 working days of the assessment to which it refers) – applications will **not** be accepted by teaching staff;
- Applying for special consideration does not automatically mean that you will be granted additional assessment or that you will be awarded an amended result;
- If you are making an application for special consideration (through UNSW Central Administration) please notify your Lecturer in Charge;
- Please note that a register of applications for Special Consideration is maintained. History of previous applications for Special Consideration is taken into account when considering each case.

ASB Policy and Process for Special Consideration and Supplementary Exams in Undergraduate Courses

In the ASB, requests for special consideration are determined by a Faculty wide panel which will advise the Lecturer in Charge of appropriate action.

If the Faculty panel (see above) grants a special consideration request, this may entitle the student to sit a supplementary examination. In such cases the following procedures will apply:

- Supplementary exams will be scheduled centrally and will be held approximately two weeks after the formal examination period. Actual date will be advised by mid-semester.
- Where a student is granted a supplementary examination as a result of a request for special consideration, the student's original exam (if completed) will not be marked and only the mark achieved in the supplementary examination will count towards the final grade.

Further information concerning supplementary examinations is available on the 'Policies and Guidelines for Current Students' page of the ASB website: www.business.unsw.edu.au/currentstudents.

6. ACADEMIC HONESTY AND PLAGIARISM

The University regards plagiarism as a form of academic misconduct, and has very strict rules regarding plagiarism. For full information regarding policies, penalties and information to help you avoid plagiarism see:

http://www.lc.unsw.edu.au/plagiarism/index.html

Plagiarism is the presentation of the thoughts or work of another as one's own.* Examples include:

- direct duplication of the thoughts or work of another, including by copying work, or knowingly permitting it to be copied. This includes copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and,
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

Submitting an assessment item that has already been submitted for academic credit elsewhere may also be considered plagiarism.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Undergraduate and Postgraduate Handbooks, and are encouraged to seek advice from academic staff whenever necessary to ensure they avoid plagiarism in all its forms.

The Learning Centre website is the central University online resource for staff and student information on plagiarism and academic honesty. It can be located at:

www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne.

7. STUDENT RESPONSIBILITIES AND CONDUCT

All students are expected to adhere to university policies in relation to class attendance and general conduct and behaviour. In addition, students are expected to understand their obligations in relation to workload and keeping informed. Information and policies on these topics can be found at: www.my.unsw.edu.au .

7.1 Workload

It is expected that you will spend at least ten hours per week studying this course. This time should be made up of reading, research, working on exercises and problems, performing computer tasks and attending classes. In periods where you need to complete assignments or prepare for examinations the workload may be greater.

Over-commitment has been a cause of failure for many students. You should take the required workload into account when planning how to balance study with employment and other activities.

7.2 Attendance

Your regular and punctual attendance at lectures and seminars is expected in this course. University regulations indicate that if students attend less than eighty per cent of scheduled classes they may be refused final assessment.

7.3 General Conduct and Behaviour

You are expected to conduct yourself with consideration and respect for the needs of your fellow students and teaching staff. Conduct which unduly disrupts or interferes with a class, such as ringing or talking on mobile phones, is not acceptable and students may be asked to leave the class. More information on student conduct is available at: www.my.unsw.edu.au

7.4 Keeping Informed

You should take note of all announcements made in lectures, tutorials or on the course web site. From time to time, the University will send important announcements to your university e-mail address without providing you with a paper copy. You will be deemed to have received this information. It is also your responsibility to keep the University informed of all changes to your contact details.

8. STUDENT RESOURCES

8.1 Course Resources

Recommended Textbook

Pfleeger S.L., 2001, *Software Engineering Theory and Practice*, ISBN: 0-13-093129-2, Prentice Hall, NJ.

Subject web page

Vista

References

Beizer B., *Black Box Testing: Techniques for Functional Testing of Software and Systems*, S005.14/33.

Spilllner, A. Linz, T., & Schaefer, H., *Software Testing Foundations: A Study guide for the Certified Tester Exam*, RockyNook Computing, 2nd Ed., Santa Barbara, 2007. ISTQB Certification Exam Preparation.

Fenton N.E., and Pfleeger S.L., *Software Metrics: A Rigorous Approach*, 2nd ed., S005.14/46A

Jorgensen P.C., *Software Testing: A Craftsman's Approach*, P005.14/29.

Sommerville I., *Software Engineering*, 5th ed., 1996. P005.1/4F

Perry, W., *Effective methods for Software Testing*, P005.14/28

Pressman R.S., 1998, *Software Engineering: A Practitioner's Approach,* McGraw Hill, 0201548097, Addison-Wesley:CA

Electronic Resources

http://www.swebok.org/
http://www.sei.cmu.edu/

8.2 Other Resources, Support and Information

The University and the Faculty provide a wide range of support services for students, including:

Learning and Study Support:

- **ASB Education Development Unit**

The Education Development Unit (EDU) provides learning support and assistance to all students in the ASB, to enable them to enhance the quality of their learning. The EDU services are free, and tailored to meet the academic needs of students in the Australian School of Business.

The role of the EDU is to provide

- A range of support initiatives for students from the Australian School of Business in relation to their transition to university;
- Learning skills development, resources and activities for Business students
- Academic writing and skills workshops throughout the session;
- Printed and online study skills resources, such as referencing guides, report writing and exam preparation;
- A drop-in EDU Office containing books and resources that can be borrowed;
- A limited consultation service for students with individual or small group learning needs.

The EDU website www.business.unsw.edu.au/edu contains information, online resources and useful links as well as providing information and dates for workshops. More information about the EDU services including resources, workshop details and registration, and consultation request forms are available from the EDU Office.

EDU Contact Details

Location	Room GO7Ground Floor, West Wing, Australian School of Business Building
Telephone:	02 9385 5584
Email:	Edu@unsw.edu.au
Website	www.business.unsw.edu.au/edu

UNSW Learning Centre (http://www.lc.unsw.edu.au)
In addition to the EDU services, the UNSW Learning Centre provides academic skills support services for all UNSW students. The Learning Centre is located on Level 2 of the Library and can be contacted by phone: 9385 3890 or through their website.

Technical support: For any technical support issues (difficulty logging in to websites, problems downloading documents, etc) you can contact the UNSW IT Service Desk at:
(02) 9385 1333 ; Email: servicedesk@unsw.edu.au

Counselling support - http://www.counselling.unsw.edu.au
Students experiencing problems of a personal or academic nature are encouraged to contact the Counselling Service at UNSW. This consultation service is free and confidential and run by professional counsellors. The Counselling Service also conducts workshops on topics such as 'Coping With Stress' and 'Procrastination'. The Counselling Service is located on Level 2, Quadrangle East Wing, and can be contacted on 9385 5418.

Library training and support services - http://info.library.unsw.edu.au

Disability Support Services – Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the Course Coordinator or the Equity Officer (http://www.studentequity.unsw.edu.au/disabil.html). Early notification is essential to enable any necessary adjustments to be made.

In addition, it is important that all students are familiar with University policies and procedures in relation to such issues as:

- **Examination procedures** and advice concerning illness or misadventure https://my.unsw.edu.au/student/academiclife/assessment/examinations/examinationrules.html

- **Occupational Health and Safety** policies and student responsibilities; **https://my.unsw.edu.au/student/atoz/OccupationalHealth.html**

9. COURSE SCHEDULE

Week	Lecture	Laboratory
1	Course Outline. Workshops Schedule. Introduction to Case Study. Teams Formation.	Activities ▪ Team Formation ▪ Initial Project Management ▪ Analysing case study Documents released ▪ Case study description
2	Overview of Project Management. Software Design Concepts. Quality Information Systems.	Activities ▪ Familiarisation with programming environment ▪ Preparing Initial ***Project Management Plan Report*** Documents released ▪ ***Project Management Plan Report*** Specification
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3	Software Testing I. Test Planning.	Activities: ▪ Implementation for first demonstration ▪ Preparing Initial ***Testing Documentation*** (Planning) Documents released ▪ ***Testing Documentation*** Specification Submissions ▪ Initial ***Project Management Plan Report***
4	Software Testing II. Test Management.	Activities: ▪ Implementation for first demonstration ▪ Preparing Initial ***Testing Documentation*** Documents released ▪ ***Testing Other Teams Report*** Specification
5	Software Testing III Testing Scripts.	Activities: ▪ Implementation for first demonstration Submissions ▪ Initial ***Testing Documentation*** Due
6	Guest Lecturer ?	Activities: ▪ Implementation for First Demonstration ▪ Preparing First Demonstrations
7	Software Delivery and Evaluation I	Activities: ▪ **Initial Demonstration: Testing Other Teams' Implementations** ▪ Testing Results Documenting (Assessment Report) Assessments ▪ Testing Against Requirements
8	Software Delivery and Evaluation II	Activities: ▪ ***Testing other Teams' Implementations*** (overflow) ▪ Implementation for final demonstration ▪ Preparing Team Presentation
9	Consultation for Final work and Presentation	Activities: ▪ Implementation for final demonstration ▪ Preparing Team Presentation Submissions ▪ **Testing Other Teams Reports** Due
10	Team Presentations	Activities: ▪ Implementation for final demonstration ▪ Preparing Final Demonstrations ▪ Preparing Final **Project Management Report** ▪ Preparing Final **Testing Documentation**

11	Team Presentations	Activities: ▪ Preparing Final Project Management Report ▪ Preparing Final Testing Documentation Assessments ▪ Final Demonstrations
12	Feedback session	Activities: ▪ Final Demonstrations [overflow] Submissions ▪ Final Project Management Report Due ▪ Final Testing Documentation Due

Summary of Documents

Project Management Plan

A formal description of the whole project, including Business Analysis & Requirements Summary. Gant Charts, Milestones, etc.

As well as final and updated versions of all documents, the Final Project Management Report [Week 12] includes a reflection on the Project Management process. A team self-evaluation report via gap analysis between initial expectations and real or final outcomes, including changes/modification to activities and/or processes.

Testing Documentation

Test Planning and Documents associated with the Testing Activity, including testing scripts and Testing Data as well as evaluation rules. Testing Against Requirements. Testing Results Documenting is an update to Testing Documents based on the Testing Plan and its outcome. This includes an Assessment Report.

As well as final and updated versions of all documents, the Final Testing Documentation [Week 12] includes a reflection on the Testing Process. A team self-evaluation report via gap analysis between initial expectations and real or final outcomes, including changes/modification to activities and/or processes.

Testing Other Team's Report

A formal description of the outcome of the testing process, including an "Assessment Report" which contains the points/marks given to the tested team.

Summary of Activities

Initial Demonstration

Formal Test Process carried out by a team on another team's work

Final Demonstration

Carried out for A/P Fethi Rabhi & Decler Hague in the final two weeks of the course. The emphasis is against the requirement specification and taking into account changes/modification suggested in the report from the team who tested the system in week 7.

Team Presentation

A final walkthrough the system with emphasis in functionality, usability and GUI Design. Carried out in lectures and presented to the class. Treated as a formal System Review Meeting. A reflection on the overall process would also be required.