CSCI321 Project
Subject Outline
Spring Session 2008

Head of School – Professor Philip Ogunbona, Student Resource Centre, Tel: (02) 4221 3606

GENERAL INFORMATION

Subject Coordinator: Dr Koren Ward
Telephone Number: 4221 5322
Email: koren@uow.edu.au
Location: 3.110

Dr Ward’s consultation times during session:
Day          Time
Wednesday    11:30 - 13:30
Thursday     14:30 - 16:30

Subject Organisation
Session: Spring Session, Wollongong Campus
Credit Points: 12 credit points
Contact hours per week: 1 hour lectures
Lecture Times & Location: Thursday: 16.30 – 17.30 at 1.G05
Tutorial Day, Time and Location can be found at: http://www.uow.edu.au/student/timetables/index.html

Students should check the subject's web site regularly as important information, including details of unavoidable changes in assessment requirements will be posted from time to time via e-Learning space http://www.uow.edu.au/student/lol. Any information posted to the web site is deemed to have been notified to all students.

Subject Description
Working in groups, students design, implement, and document a software system. Involves: project planning and scheduling, seminars and individual presentations, group coordination, research of proposed application domain, use of design methodologies, design documentation, coding, module and system integration, testing, verification, and implementation. A small number of project topics have been proposed. Students will form teams, each of which will design, implement and document a solution to one of the proposed projects. Teams will meet weekly with supervisors to discuss progress and problems.

Objectives
This subject will develop the student's ability to handle the definition, design, programming and documentation of a non-trivial software project.

Graduate Qualities
All Schools in the Faculty of Informatics have adopted the UOW Graduate Qualities. On completion
of their course graduates will be informed, independent learners, problem solvers, effective communicators and responsible. Further information can be found at http://www.uow.edu.au/about/teaching/qualities/.

Attendance Requirements:
It is the responsibility of students to attend all lectures/tutorials/labs/seminars/ practical work for subjects for which you are enrolled. It should be noted that the amount of time spent on each 6 credit point subject should be at least 12 hours per week, which includes lectures/tutorials/labs etc.

Satisfactory attendance is deemed to be attendance at approximately 80%* of the allocated contact hours. Attendance rolls will be kept for lectures, tutorials and laboratories. If you are present for less than 80%* you need to apply for special consideration, otherwise a fail grade will be recorded.

Method of Presentation:
In order to maximize learning outcomes, it is strongly recommended that students attend all lectures.

Each staff member in the school has either proposed a project or is offering a generic project. The projects are available on Week 1 during the lecture time. Each lecturer in the department will supervise ONLY one project.

Students will form teams, each of which will design, implement and document a solution to one of the proposed projects. Teams will meet weekly with supervisors (see below) to discuss progress, project design issues and problems. Team size is typically around 5 but will vary with the project.

1 hour lecture will be given from Week 1 to Week 8 (Session 1 – Spring 2008). There may be some other future lectures that may be required. Students will be advised via SOLS mail when this happens. The lecture will involve the formation of groups, allocation of projects, description of deliverables, tutorials on project development and description of documentation. Attendance at lectures and group meetings is necessary. Any future information will be provided at the website: http://www.uow.edu.au/lol. Any information posted on the subject web site is deemed to have been notified to all students.

The team should conduct 2 x 1 hourly meetings per week. One of these meetings is to be held with the supervisor and is to be organised by the supervisor. The other involves only group members. It is advised that the group meeting should happen before the supervisor’s meeting.

On week 13 at the end of Autumn Session 2009, there will be a Trade Show that is used to display and demonstrate the result of each group

Lecture Schedule, Project Activities and Milestones

You should plan to spend about 12 hours per week during each session working on the project. Reports from previous years indicate that this is in fact about the average time committed by students. However, all too often the time distribution is badly skewed with 6 hours per week in session 1 and 18 hours per week in session 2 being the apparent norm. To avoid this it is highly recommended the following schedule be adhered to.

A proposed Lecture schedule for the subject is as follows:

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
<th>Lecture Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1, Week 1</td>
<td>Start group formation (groups of 4-6) &amp; Select Topic</td>
<td>Introduction</td>
</tr>
<tr>
<td>Week 2</td>
<td>Finalise groups and topics</td>
<td>Group management</td>
</tr>
<tr>
<td>Week 3</td>
<td>Commence design and project schedule</td>
<td>Project management</td>
</tr>
<tr>
<td>Week 4</td>
<td>Commence manuals, prototyping and web site</td>
<td>Documentation</td>
</tr>
<tr>
<td>Week 5</td>
<td>Continue with manuals, prototyping and web site</td>
<td>Prototyping and backups</td>
</tr>
<tr>
<td>Week 6</td>
<td>Submission of project diary</td>
<td>Software development</td>
</tr>
<tr>
<td>Week 7</td>
<td>Continue with manuals, prototyping and web site</td>
<td>Software Engineering</td>
</tr>
<tr>
<td>Week 8</td>
<td>Continue with manuals, prototyping and web site</td>
<td>Development Tools</td>
</tr>
</tbody>
</table>
### Week 11
Submit preliminary technical manual and user manual. Look at finalizing aspects of the systems design.

### Week 12
Start coding the final product, submit diary.

### Week 13
Demo project web site with product description and documentation to supervisor. Once this is done you can finalise your design of the system.

### Session II, Week 6
Submission of project diary.

### Week 8
Demonstrate first round working system.

### Week 11
Refine product and submit final documentation.

### Week 12
Finalise the project web site, submit diary and advise supervisor.

### Week 13
Trade Show.

**Note:** Session I = Spring session; Session II = Autumn session

Changes to the above schedule will be posted via e-Learning space http://www.uow.edu.au/student/lol. Any information posted to the web site is deemed to have been notified to all students.

### Subject Materials:
Any readings/references are recommended only and are not intended to be an exhaustive list. Students are encouraged to use the library catalogue and databases to locate additional readings.

### Textbook(s):
There is no textbook for this subject.

### Other Resources:
The following reference books are recommended reading:


Purchasing the above reference books is not mandatory. Students are encouraged to use the University’s library, the ACM/IEEE digital libraries, and other online resources to locate additional reading material.

### Assessment:
This subject has the following assessment components:

<table>
<thead>
<tr>
<th>ASSESSMENT ITEMS &amp; FORMAT</th>
<th>% OF FINAL MARK</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session I</strong></td>
<td>Total Marks: 20 marks</td>
<td></td>
</tr>
<tr>
<td><strong>Project Diary:</strong></td>
<td>5</td>
<td>Week 6 and 12 of Session I. The document should be submitted to the supervisor. Refer to point (e) for further information.</td>
</tr>
<tr>
<td>Preliminary Project Documents. Preliminary User Manual and</td>
<td>10</td>
<td>Week 11 of Session I. The document should be</td>
</tr>
<tr>
<td><strong>Preliminary Technical Design Manual</strong></td>
<td>submitted to the supervisor. Refer to point (f) and (i) for further information.</td>
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<tr>
<td>----------------------------------------</td>
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<tr>
<td><strong>Project Website.</strong></td>
<td><strong>5</strong> Week 13 of Session I. Students should advise the supervisor of the page. Refer to point (g) for further information.</td>
<td></td>
</tr>
<tr>
<td>With online preliminary manuals in HTML or PDF.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Session II * Total Marks: 80</strong></td>
<td>**Session II ***</td>
<td></td>
</tr>
<tr>
<td><strong>Project Diary.</strong></td>
<td><strong>5</strong> Week 6 and 12 of Session II. The document should be submitted to the supervisor. Refer to point (e) for further information.</td>
<td></td>
</tr>
<tr>
<td>Minutes of meetings, records of milestone, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prototype and Demonstration.</strong></td>
<td><strong>10</strong> Week 8 of Session II. Groups are to demonstrate to the project supervisor the initial version of their project. Refer to point (h) for further information.</td>
<td></td>
</tr>
<tr>
<td>Must demonstrate to the supervisor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Final Product.</strong></td>
<td><strong>20 marks for Code</strong>  <strong>25 marks for Documentation</strong> Week 12 of Session II. Students should provide both the supervisor and assessor with a hard copy of the code and project documentation including diaries. Refer to point (i) for further information.</td>
<td></td>
</tr>
<tr>
<td>Code and Documentation to be submitted to both assessor and supervisor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Web Site.</strong></td>
<td><strong>10</strong> Week 12 of Session II. The supervisor should be advised of the location of the final website. Refer to point (g) for further information.</td>
<td></td>
</tr>
<tr>
<td><strong>Trade Show and Assessor/Supervisor Discussions.</strong></td>
<td><strong>10</strong> Week 13 of Session II. Refer to points (j) and (k) for further information.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Session I = Spring session; Session II = Autumn session

Notes on Assessment:
All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment.

Electronic Submission of Assessment Items:
Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically.

Other Procedures for the submission of assessment items:
In addition to electronic submission students are required to submit assignments in hard copy to their project supervisor.

All assessment items will be returned within 2 weeks of their submission.

Weightings (shown above) are subject to variation and intended mainly as a guide for assessing the final result. Any changes will be notified via the subject website. Each student’s final result will be evaluated on his or her individual efforts and contributions.

a) Groups seeking an extension past the due date for the submission of required assessment items should consult the Guide for Student’s document (see link below). This also specifies the penalties imposed for the late submission of assessment items, copying and plagiarism.
Further information can be found at:

b) Failure to complete assessable tasks may result in a FAIL grade being recorded.
c) All assessable documents must be submitted according to the format specified in lectures.
d) Feedback on submitted assessable items will be provided through your supervisor in meetings.
e) Project diaries are due in Week 6 and 12 of Sessions 1 and 2. The diaries should contain minutes from all meetings along with a description of activities performed by member. It is recommended that students use a weblog (blog) to store diaries. Diaries should be submitted to the supervisor in hardcopy form on the due dates.
f) Preliminary project documentation is due Week 11 of Session 1. The documentation should consist of a technical manual containing architectural and design aspects of the project. In addition to this a preliminary user manual should be provided. The user manual should outline what the functionality of the software is and how a user may interact with it. It should be noted that this documentation is to be submitted to the supervisor in hardcopy form. A softcopy should be placed on your website.
g) Each project group will be allocated a website by the school. If a group requires additional resources e.g. storage they should advise the 321 Project coordinators. Students should provide their supervisor with a link to a functional version of the website by Week 13 of Session 1 (if not earlier). This site should be maintained for the duration of the project. Information regarding projects as a collective can be found at http://www.itacs.uow.edu.au/tradeshow.
h) Students should demonstrate an initial version of their software by Week 8 of Session 2 to the supervisor. The supervisor should provide feedback to the students on where things should be changed/improved. A similar meeting is held in Week 13 of Session 1 (naturally there would be no demonstration of software at that stage) – this meeting only occurs with your supervisor.
i) Final project documentation is due week 12 of session 2. Final documentation should be accompanied with the programs code and binaries. All documentation should be submitted in hardcopy form to both the supervisor and assessor. A copy of all documentation should be made available on the project site in PDF or Postscript formats. ALL group members must contribute a reasonable amount determined by the supervisor to the implementation i.e. code of the project and documentation. Failure to do so may result in a FAIL grade being assigned to students who do not comply.
j) All groups and members are expected to participate in the tradeshow. The date and setup procedure for the tradeshow will be announced in week 10 of session 2. Your participation in the tradeshow and discussion with supervisor and assessor will also be assessed. It is expected that groups coordinate with their supervisor and assessor to demonstrate their final product during the tradeshow (an alternative time may be arranged if necessary).
k) After the project, each group member will be required to review other group members’ performance. This information is used by the supervisor and assessor to get an idea of individual participation and contribution towards the project.
l) The above points should be read in conjunction with the sections below.

Meetings & Resources
The supervisor's job is mainly to describe the product at a high level, resolve design issues and assess the work. The supervisor can be asked for advice; however the supervisor should not be expected to do any substantial part of the design or implementation. Each group should run its own meetings. It is advised that groups meet weekly. Minutes of each meeting should be recorded. As suggested previously a Weblog may be used to hold minutes of meetings with supervisors and other members. The Weblog should be accessible from the project's web site.

The needs of different groups and supervisors may vary. So if any special needs are identified, which require special software or hardware, a request must be made to one of the subject coordinators to determine if the request can be fulfilled. The subject coordinators will liaise with groups on this matter during the first semester (by the end of week 5 with infrastructure/software arriving a few weeks later)

Group Project Web Sites
Each group will be provided with a website for portraying information on their project. The project web site need not be sophisticated. However, it should promote a “corporate” image and product to its intended customers, including:
a) home page with project name, group members & their tasks, supervisor, assessor and date last modified
b) product description page(s)
c) documentation page (including user manual and technical manual links)
d) an MPEG video demonstration of the project
e) contact us page, FAQ page, etc

The MPEG video should basically provide a demonstration of your product and its functionality. It is common practice to integrate a PowerPoint Presentation into the video. Further information on how to create such a video will be provided during lectures. Some project groups may opt to put their project diaries up on the site (a weblog so to speak).

**Documentation**

The precise format and content of the final project documentation may vary from project to project. Consequently, the requirements of documentation should be discussed in detail with your supervisor. The final submitted project must include the following items (at least) to achieve a pass grade or better:

- a user manual
- a technical report (including minutes of meetings)
- the source code
- the web site

These documents are to be submitted to the supervisor in hardcopy and on CD ROM. An additional copy should be provided to the assessor where appropriate. Where the source code or web site is considered too large to be printed, these items may be submitted on CD only. A copy of the CD must also be submitted to the coordinator for archives. Students should also advise the supervisor and assessor as to the URL of the website.

**Tradeshow & Final Assessment**

The product must be demonstrated to both the supervisor and assessor either at the tradeshow or at a suitable time. In Weeks 11/12 of session 2, each group will be allocated to a bay in the project lab for participating in the tradeshow. Groups are also required to submit 5 - 8 power point slides detailing the project and product. These will be put on display at the tradeshow via a data projector.

All students are expected to participate in the tradeshow and remain in the vicinity of their bay to answer questions about their project. It is the responsibility of each group to install and configure the machines appropriately. Each group is also required to display an A2 size poster on their project in the bay. Students will be assessed on their efforts during the tradeshow. It is each group’s responsibility to backup their work, in the case of emergency, (the project lab machines are not in the School’s backup cycle). After the tradeshow students should remove any equipment and posters not belonging to the project lab. The subject coordinator will advise students as to any organizational changes with the 321 Tradeshow if required.

**Project Support & Student Contact**

The following staff members are available for assistance:

<table>
<thead>
<tr>
<th>Name</th>
<th>Room Number</th>
<th>Support</th>
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<tbody>
<tr>
<td>David Wilson</td>
<td>3.228</td>
<td>Unix, C</td>
</tr>
<tr>
<td>Yuan Tian</td>
<td>3.228</td>
<td>Unix, C</td>
</tr>
<tr>
<td>Michael Milway</td>
<td>3.228</td>
<td>PC related</td>
</tr>
<tr>
<td>Kathy Lyon</td>
<td>3.228A</td>
<td>Tradeshow and other administrative matters.</td>
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<td></td>
<td>Monday-Friday 10.30 - 14.30</td>
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</tbody>
</table>

Questions about project design should be referred to the project supervisor. Problems with team
administration should be discussed first with the project supervisor. If the problem cannot be resolved
at this level, it should be referred to the subject coordinator. Appointments to see the subject
coordinator outside consultation times can be made via email.

Project Team Rules
The following rules apply to team members:

a) Team members will co-operate to achieve a common goal. Often, each team member will
work on a different sub-problem, so that the success of the team as a whole will depend on the
individual work of all of its members. Sometimes several team members will independently
solve a crucially important problem, so that a "best" or "correct" solution can be established
by comparison.

b) Each team will elect a leader for the project or each phase of it. The project leader will be
responsible for the co-ordination of the design, programming and background reading tasks
performed by members of the group and communicating instructions from the supervisor to
appropriate group members.

c) Each team member will write a significant portion of the code. The code must include clear
documentation about who wrote it and who modified it. This will influence your coding
assessment component.

d) The team leader is to ensure that team members contribute equally to the project.

e) Any problems must be discussed with the project supervisor as soon as they arise, NOT at a
later stage when the problem cannot be resolved.

All project team members must attend the tradeshows and provide project demonstrations to the
assessor and supervisor.

Procedures for the return of assessment items:
Any submitted assessment items will be returned to the group members by the project supervisor.

Penalties for late submission of assessment items:
Penalties apply to all late work, except if special consideration has been granted. Late submissions will
attract a penalty of 10% of the assessment mark per day including weekends. Work more than seven
(7) days late will be awarded a mark of zero.

Supplementary Exams
Supplementary Exams will be dealt with in accordance with student academic consideration policy
(http://www.uow.edu.au/handbook/courserules/specialconsideration.html) 6.2 Timing of
Supplementary Exams.

While the School normally grants supplementary exams when the student does not sit the standard
exam for an acceptable reason, each case will be assessed on its own merit and there is no guarantee a
supplementary exam will be granted. If a supplementary exam is granted, you will normally be
notified via SOLS Mail the time and date of this supplementary exam. You must follow the
instructions given in the email message.

Please note that if this is your last session and you are granted a supplementary exam, be aware
that your results will not be processed in time to meet the graduation deadline.

Special Consideration Policy
The School recognises that it has a responsibility to ensure equity and consistency across its subjects
for all students. Sometimes, in exceptional circumstances, students need to apply for student special
consideration in order to complete all assessable work.

The University applies strict criteria to the granting of special consideration. Before applying for
student special consideration, students should carefully read the University’s policy which can be found

As an example: If a student requires an extension of time for the completion of an assignment this may
be granted in certain circumstances. A request for an extension must be made to the Subject
Coordinator via SOLs before the due date.

**Plagiarism**

When you submit an assessment task, you are declaring the following:

1. It is your own work and you did not collaborate with or copy from others.
2. You have read and understand your responsibilities under the University of Wollongong's policy on plagiarism.
3. You have not plagiarised from published work (including the internet). Where you have used the work from others, you have referenced it in the text and provided a reference list at the end of the assignment.

Students must remember that:

- Plagiarism will not be tolerated.
- Students are responsible for submitting original work for assessment, without plagiarising or cheating, abiding by the University’s policies on Plagiarism as set out in the University Handbook under University Policy Directory and in Faculty handbooks and subject guides. Plagiarism has led to the expulsion from the University.

**Student Academic Grievance Policy**

The School aims to provide a fair, equitable and productive learning environment for all its students. The Student Academic Grievance Policy seeks to support the achievement of this goal by providing a transparent and consistent process for resolving student academic grievances.

Any student who has a grievance over a result should obtain a Faculty of Informatics Appeal Against Decision or Action Affecting Academic Experience form from the Informatics Student Enquiry Centre. (http://www.uow.edu.au/content/groups/public/@web/@inf/@faculty/documents/doc/uow017433.pdf) The student should firstly take the form to the marker/lecturer to discuss the matter and, if the student is still not satisfied, s/he should take the next step as outlined on the form.

Once the grievance has been considered by the Faculty, if the student still feels the situation has not been fully resolved s/he may consult the Dean of Students. However, the Dean of Students can have no input into the academic judgment of the lecturer and can only review the grievance to ensure proper procedure has been followed.

**Relevant University Policies, procedures and students services:**

For more information students must refer to the Faculty handbook, online references or consult the UOW policy in full at http://www.uow.edu.au/handbook/courserules/studagrievpol.html which contains a range of policies on educational issues and student matters.

This outline should be read in conjunction with the following documents:

<table>
<thead>
<tr>
<th>Code of Practice - Teaching and Assessment</th>
<th>Code of Practice - Students</th>
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<table>
<thead>
<tr>
<th>Code of Practice-Honours</th>
<th>Acknowledgement Practice Plagiarism will not be tolerated:</th>
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<table>
<thead>
<tr>
<th>Key Dates</th>
<th>Special Consideration Policy:</th>
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<th>Course Progress Policy:</th>
<th>Graduate Qualities Policy:</th>
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<tr>
<th>Academic Grievance Policy (Coursework and honours students)</th>
<th>Non-Discriminatory Language Practice and Presentation</th>
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<tr>
<th>Occupational Health and Safety</th>
<th>Intellectual Property Policy</th>
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<thead>
<tr>
<th>Human Research Ethics:</th>
<th>Rules for student conduct and discipline:</th>
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</thead>
<tbody>
<tr>
<td>Information Literacies Introduction Program</td>
<td>Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, email: <a href="mailto:ameldrum@uow.edu.au">ameldrum@uow.edu.au</a></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><a href="http://www.uow.edu.au/student/attributes/ilip/">http://www.uow.edu.au/student/attributes/ilip/</a></td>
<td>Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, email: <a href="mailto:ameldrum@uow.edu.au">ameldrum@uow.edu.au</a></td>
</tr>
<tr>
<td>Student Support Services:</td>
<td>SCSSE Internet Access &amp; Student Resource Centre</td>
</tr>
<tr>
<td>Informatics Faculty SEDLO (Student Equity and Diversity Liaison Officers) Virginie Schmelitschek, phone 4221 3833, <a href="mailto:virginie@uow.edu.au">virginie@uow.edu.au</a></td>
<td>SCSSE Internet Access &amp; Student Resource Centre</td>
</tr>
<tr>
<td>SCSSE Computer Usage Rules</td>
<td>SCSSE Subject Outlines</td>
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</tbody>
</table>