SCSSE
School of Computer Science & Software Engineering
Faculty of Informatics

MCS9318 Software Engineering Practices & Principles
Subject Outline
Spring Session 2007

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

GENERAL INFORMATION

Subject Coordinator: Dr Zhiquan Zhou
Telephone Number: 02 4221 5399
Email: zhiquan@uow.edu.au
Location: 3.208

Dr Zhou’s Consultation Times During Session
Day: Tue
Time: 14:00 to 16:00
Thur: 11:00 to 13:00

Subject Organisation
Session: Spring Session, Wollongong Campus
Credit Points: 6
Contact hours per week: 3 hours lectures
Lecture Times & Location:
Tue: 10:30 12:30 67.102
Thur: 09:30 10:30 35.G20

Tutorial Day, Time and Location can be found at: http://www.uow.edu.au/student/sols/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. Any information posted to the web site is deemed to have been notified to all students.

Content
This subject examines the current state of software engineering both as an academic discipline and as a profession. The subject focuses on issues of requirements engineering, system procurement, and professional practice, and through case studies, the subject considers reasons for the failure and success of various software engineering projects. Topics which may be covered include: Requirements Elicitation, Functional and Non-Functional Requirements, Design Patterns and Refactoring, Reverse Engineering, Software Quality Assurance, Analysis and Verification of Specification and Design, Examples of Formal Techniques in Software Engineering.

Objectives
At the completion of this subject students should be able to:
1. Demonstrate an understanding of an existing Requirement Specification
2. Derive design criteria from an implemented system
3. Evaluate quality of existing software specification, design and implementation
4. Identify appropriate formal techniques for a range of Software Engineering problems

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 may 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 may be recorded.

**Method of Presentation**

This subject involves 3 hours of classroom time every week. These will involve a combination of lectures, student presentations and seminar-style discussions.

**Subject Materials**

**Textbooks:**

**Reference:**

Purchasing a textbook is recommended but not compulsory. A wide range of texts on software engineering, as well as on more specialized areas such as requirements engineering, software specification and software verification are available in the university library and in online digital libraries such as those of IEEE and ACM. The homepages of various large software projects are also a good source with links to related papers, which can often be downloaded for free. The CiteSeer web site ([http://citeseer.ist.psu.edu](http://citeseer.ist.psu.edu)) is another source of computer science and software engineering papers that can be downloaded for free. These readings will usually involve research papers, survey papers, tutorials, case studies, and practitioner-oriented articles. These 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.

**Assessment**

This subject has the following assessment components.

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<tr>
<th>Assessment Items &amp; Format</th>
<th>Percentage of Final Mark</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Individual assignment and seminar</td>
<td>10%</td>
<td>Each student will conduct a case study on one of the various software engineering topics and present it in the class during the semester (starting from week 2). Submit a hardcopy of the presentation slides to the lecturer in the class on the day of his/her presentation. Remarks will be given to students within one week.</td>
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<tr>
<td>Group project report</td>
<td>40%</td>
<td>Due in the first lecture in Week 12. Submit to the lecturer a folder enclosing both a hardcopy report and its softcopy in a CD. No late submission. Individual group members may receive different marks according to their contributions.</td>
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<tr>
<td>Final exam</td>
<td>50%</td>
<td>During university exam period.</td>
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Notes on Assessment
The individual assignment is expected to be completed independently. Plagiarism may result in 0 marks being recorded for that assignment, and may also result in further penalties.

Return of Assessment Items
Remarks on individual assignments will be given to students by email within one week. Results of group projects will also be sent to students by emails.

Penalties for late submission of Assessment Items
Penalties apply to all late assignments, except if special consideration has been granted. Late submissions of individual assignments will attract a penalty of 25% of the assessment mark per day including weekends. Work more than 4 days late (including weekends) will be awarded a mark of zero. There is no late submission for group project.

Special consideration
An extension of time for the completion of an assignment may be granted in certain circumstances. A request for an extension must be made to the Subject Coordinator via SOLs before the due date.

Remarks on Assessment
Detailed descriptions of the project and assignment will be given to students in the lecture.

Scaling
Final results in this subject may be scaled. The scaling method that will be used in this subject is as follows.
If E is the student exam mark, and A is the student assignment mark, the student final mark will be determined as follows:

- if E >= 40% of the maximum exam mark: then student final mark is E + A;
- if 35% <= E < 40% of the maximum exam mark: then student final mark is min(E+A, 47)

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 special consideration in order to complete all assessable work.

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

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.

Additional Information
Students must refer to the Faculty Handbook or online references which contains a range of policies on educational issues and student matters.

Supplementary Exams
Supplementary Exams will be dealt with in accordance with Special 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.
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.
4. Plagiarism will not be tolerated.
5. 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 Calendar under University Policies, 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 or 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 judgement of the lecturer and can only review the grievance to ensure proper procedure has been followed.

For more information, please consult the UOW policy in full at http://www.uow.edu.au/handbook/courserules/studacgrievpol.html

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

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<th>Code of Practice - Teaching and Assessment</th>
<th>Key Dates</th>
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<tr>
<th>Code of Practice - Students</th>
<th>Information Literacies Introduction Program</th>
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<tr>
<th>Acknowledgement Practice</th>
<th>Student Support Services:</th>
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<tr>
<td>Plagiarism will not be tolerated</td>
<td><a href="http://www.uow.edu.au/student/services/">http://www.uow.edu.au/student/services/</a></td>
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<tr>
<td><a href="http://www.uow.edu.au/handbook/courserules/plagiarism.html">http://www.uow.edu.au/handbook/courserules/plagiarism.html</a></td>
<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>
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<th>Code of Practice-Honours</th>
<th>Intellectual Property Policy</th>
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<th>Non-Discriminatory Language Practice and Presentation</th>
<th>SCSSE SISAT Internet Access &amp; Student Resource Centre</th>
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<tr>
<th>SCSSE SISAT Computer Usage Rules</th>
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<tr>
<th>SCSSE SISAT Student Guide</th>
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