GENERAL INFORMATION

Subject Coordinator: Dr Mark Sifer  
Telephone Number: 02 4221 4919  
Email: msifer@uow.edu.au  
Location: 39.219

Dr Sifer’s Consultation Times During Session
Day:  
Tuesday: 9.30 - 11.30  
Thursday: 9.30 - 11.30

Subject Organisation  
Session: Spring Session, Wollongong  
Credit Points: 6  
Contact hours per week: 2 hours lectures, 2 hours computer labs  
Lecture Times & Location: Tuesday 15.30 to 17.30 in 38.G01
Laboratory 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 aims to reinforce the principles, techniques and methodologies in the design of software systems using the object-oriented approach. The subject will provide the students with the opportunity to: understand and develop skills in advanced programming techniques and software engineering techniques in business applications; develop programs to satisfy business requirements by utilizing appropriate advanced techniques covered in this subject; solve realistic problems found in the workplace using appropriate techniques for development; broaden the use of Graphical User Interface in various business applications; further develop programming skills and good coding style with emphasis on modularisation; further develop skills and competency in the design and implementation of object-oriented software systems.

Objectives
On successful completion of this subject, students should be able to: describe the object-oriented paradigm and focus on how objects are declared, defined, used and organised into a coherent program design in an object-oriented programming environment; demonstrate an understanding and appreciation of the concepts of a well structured solution and good coding style within an object-oriented programming environment; define and use object-oriented programming concepts including inheritance, encapsulation, construction, access control, overloading and messaging in software design; define, construct and use objects of their own as building blocks in program development; write business standard object-oriented programs using advanced programming and software engineering techniques and write correct and maintainable object-oriented programs using an object-oriented programming language.


**Proposed Lecture schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics Covered</th>
<th>Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overview and review of C# and .NET</td>
<td>No Lab</td>
</tr>
<tr>
<td>2</td>
<td>Major project background (OLAP)</td>
<td>Lab 1</td>
</tr>
<tr>
<td>3</td>
<td>Exceptions &amp; Collections</td>
<td>Lab 2</td>
</tr>
<tr>
<td>4</td>
<td>Files &amp; Directories</td>
<td>Lab 3</td>
</tr>
<tr>
<td>5</td>
<td>Advanced interface building I</td>
<td>Lab 4</td>
</tr>
<tr>
<td>6</td>
<td>Advanced interface building II</td>
<td>Lab 5</td>
</tr>
<tr>
<td>7</td>
<td>Mid-term quiz</td>
<td>Assignment 1 assessed</td>
</tr>
<tr>
<td>8</td>
<td>ADO.NET (database I)</td>
<td>Lab 6</td>
</tr>
<tr>
<td>9</td>
<td>ADO.NET (database II)</td>
<td>Lab 7</td>
</tr>
<tr>
<td>10</td>
<td>ADO.NET (xml)</td>
<td>Lab 8</td>
</tr>
<tr>
<td>11</td>
<td>Multi-threading I</td>
<td>Lab 9</td>
</tr>
<tr>
<td>12</td>
<td>Multi-threading II</td>
<td>Lab 10</td>
</tr>
<tr>
<td>13</td>
<td>Review</td>
<td>Assignment 2 assessed</td>
</tr>
</tbody>
</table>

*Mid Semester Recess*

**Note:** This program is subject to change based on the progress of the class

**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 and will be kept for laboratories. If you are present for less than 80%* you need to apply for special consideration, otherwise a fail grade may be recorded.

Students MUST attend their allocated tutorial unless they have the written permission of the subject coordinator.

**Method of Presentation**

This is a project focused laboratory based subject. Concepts and examples are presented in lectures using the whiteboard or blackboard and computer based demonstrations and then practised in the laboratories.

**Subject Materials**

### Assessment

#### Assessment 1:

<table>
<thead>
<tr>
<th>Topic</th>
<th>An individual assignment. Students will develop a C# .NET solution for a scenario (a report and software).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking criteria</td>
<td>Based on the correctness, quality and comprehensiveness of the solution (report and software). Students will be required to modify and demonstrate their software in the week 7 laboratory. It is the modified software that will be marked. The assignment mark is subject to the student being able to explain their submission upon request otherwise a mark of zero may be awarded.</td>
</tr>
<tr>
<td>Weighting</td>
<td>20%</td>
</tr>
<tr>
<td>Due date</td>
<td>At the start of the week 7 laboratory</td>
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</tbody>
</table>

#### Assessment 2:

<table>
<thead>
<tr>
<th>Topic</th>
<th>An individual assignment. Students will develop a C# .NET solution for a scenario (a report and software) that includes database access.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking criteria</td>
<td>Based on the correctness, quality and comprehensiveness of the solution (report and software). Students will be required to modify and demonstrate their software in the week 13 laboratory. It is the modified software that will be marked. The assignment mark is subject to the student being able to explain their submission upon request otherwise a mark of zero may be awarded.</td>
</tr>
<tr>
<td>Weighting</td>
<td>20%</td>
</tr>
<tr>
<td>Due date</td>
<td>At the start of the week 13 laboratory</td>
</tr>
</tbody>
</table>

#### Mid term quiz

<table>
<thead>
<tr>
<th>Topic</th>
<th>Will test the understanding of the material covered in weeks 1 to 6. It will require C# software to be developed. Material allowed in the quiz will include the C# textbook (or other C# reference approved by the coordinator prior to the quiz).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighting</td>
<td>10%</td>
</tr>
<tr>
<td>Due date</td>
<td>During the week 7 lecture</td>
</tr>
</tbody>
</table>

#### Final Examination

| Weighting | 50% |
| Date | The final examination date will be confirmed during the course of the subject and published on SOLS 3 to 4 weeks before the examination period. |
| Time allowed | The examination will be of three hours (3 hrs plus 15 minutes of reading time) duration. |
| Structure of paper | Developing a C# software solution for one or more scenarios. Material allowed in the exam will include the C# textbook (or other C# reference approved by the coordinator before week 8). |

### Notes on Assessment

Assignment 1 and 2 will include both a report and a complete source code listing that are submitted at the start of the laboratory. The report must include a Faculty cover sheet. All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment. Assignment 1 will be returned in a following laboratory or lecture. Assignment 2 can be picked up from the subject co-ordinator or other location as advised.

Attendance at the Week 7 mid-semester test is required to achieve an overall pass for this subject. In the event of illness or misadventure special consideration should be sought for this.

To be eligible to pass this subject, students must achieve an overall mark of at least 50%, and at least 40% on the final exam.
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: http://www.uow.edu.au/handbook/courserules/specialconsideration.html

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:

<table>
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<tr>
<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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<tbody>
<tr>
<td>Plagiarism will not be tolerated</td>
<td><a href="http://www.uow.edu.au/handbook/courserules/plagiarism.html">http://www.uow.edu.au/handbook/courserules/plagiarism.html</a></td>
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<table>
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<tr>
<th>Code of Practice-Honours</th>
<th>Informatics Faculty SEDLO (Student Equity and Diversity Liaison Officers) Virginia Schmelitschek, Virginie Schmelitschek, phone 4221 3833, <a href="mailto:virginie@uow.edu.au">virginie@uow.edu.au</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.uow.edu.au/handbook/honourscode.html">http://www.uow.edu.au/handbook/honourscode.html</a></td>
<td>Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, <a href="mailto:ameldrum@uow.edu.au">ameldrum@uow.edu.au</a></td>
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<tr>
<th>Non-Discriminatory Language Practice and Presentation</th>
<th>Intellectual Property Policy</th>
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<th>Occupational Health and Safety</th>
<th>SCSSS SISAT Internet Access &amp; Student Resource Centre</th>
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<thead>
<tr>
<th>SCSSS SISAT Student Guide</th>
<th>SCSSS SISAT Subject Outlines</th>
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