GENERAL INFORMATION

Lecturer
Dr Jo Abrantes
Telephone Number: 4221 3872
Email: jo@uow.edu.au
Location: 3.212

Dr Abrantes’s Consultation Times During Session
Day       Time
Wednesday 14:30-16:30
Thursday  15:00-17:00

Subject Coordinator
Mr Peter Castle
Telephone Number: 4221 3837
Email: risque@uow.edu.au
Location: 3.102

Mr Castle’s Consultation Times During Session
Day       Time
Monday    14:30-16:30
Thursday  14:30-16:30

Subject Organisation
Session: Spring Session, Wollongong
Credit Points 6
Contact hours per week: 4 hours lectures, 2 hours lab/ tutorial
Lecture Times & Location:
Mon 08:30 - 10:30 20.5
Thu 10:30 - 12:30 38.G01
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
CSCI114 introduces the procedural approach to program design and implementation. Covers basic language constructs for defining variables of built-in types, flow control constructs and simple I/O. Explores functional decomposition as a design technique, and the implementation of functions. Introduces simple user-defined data types and aggregates.

Equivalence
CSCI114 is not to count with BUSS111 or CSCI111.
Objectives
On successful completion of this subject, students should be able to:
1. Effectively use basic C++ functionality to code simple algorithms
2. Analyse and explain the behaviour of simple programs
3. Design, implement, test and debug simple programs
4. Apply the techniques of structured decomposition to break a program into smaller pieces
5. Display a working knowledge of good programming style

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.

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

Method of Presentation
This subject comprises lectures and laboratory classes. Laboratory classes will relate to the lecture topics. Laboratory classes commence in week 2.
Lecture material and programming examples will be available from the subject’s e-Learning website (previously Vista site). Students are free to print their own copies of these slides and programs. However, as these slides, notes and programs will not necessarily include all of the examples and explanations given in lectures, attendance at lectures will be required. Students can greatly reduce the amount of note taking by printing the electronic copies of the material prior to the lectures and annotating as necessary.

Laboratory Procedures
• Students must abide by the laboratory rules posted on the wall of the Laboratory (and included in this document).
• Students may use the computers outside their designated laboratory times provided the laboratory is open and no other laboratory class is scheduled. If another class is scheduled for the laboratory, you may enter no earlier than 20 minutes after the scheduled starting time and ask the supervisor whether any vacant machines may be used.
• To complete the assignment component of the subject, students need to design and implement programs in C++ (using a C++ standard compiler). There is no requirement to carry out the assignment in the laboratories. You may still work at home to develop solutions. However, submissions are via the labs, and assistance in laboratories will be for programs demonstrable in a Linux/UNIX environment.
• Copying software from another person is in breach of copyright, as is selling original disks of software whilst retaining a copy. Exchanging disks also leads to the introduction of software viruses, which may corrupt the system.
• Students are advised to purchase a Zip Disk/flash disk. It can be used to keep current and archive copies of assignments. Loss or damage of disks is no excuse for failure to submit assignments. It is the student’s responsibility to make sure that their assignments can be submitted on time.
• Students must do their laboratory tasks during the laboratory time (see assessment for more detail).
• Assignments can be done in the lab if the laboratory work has been completed. However, it is the student’s responsibility to work outside the laboratory time and make sure that the assignments can be submitted on time.

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 website http://www.uow.edu.au/student/lol. Any information posted to the web site is deemed to have been notified to all students.
Lecture Schedule

A proposed Lecture schedule for the subject is as follows:

<table>
<thead>
<tr>
<th>Topics</th>
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<tr>
<td>1   Introduction to computing concepts.</td>
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<td>2   Introduction to computer programming languages.</td>
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<tr>
<td>3   Writing, editing, compiling and linking programs</td>
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<td>4   Internal representation of data.</td>
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<td>5   Numbering systems</td>
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<tr>
<td>6   Introduction to programming in C++</td>
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<td>7   Programming style</td>
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<tr>
<td>8   Introduction to algorithms</td>
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<tr>
<td>9   C++ Data Types, operators and expressions</td>
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<tr>
<td>10  Simple input/output</td>
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<td>11  Control Structures: Conditional</td>
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<tr>
<td>12  Control Structures: Repetition</td>
</tr>
<tr>
<td>13  Modular programming with functions</td>
</tr>
<tr>
<td>14  Variable Storage Classes</td>
</tr>
<tr>
<td>15  Arrays</td>
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<tr>
<td>16  C-Strings</td>
</tr>
<tr>
<td>17  Input/output formatting and files</td>
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<tr>
<td>18  User defined data types: typedef, structures</td>
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<tr>
<td>19  Recursion</td>
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</table>

CSCI114 and MCS9114 have a joint web site, which will be made available through the CSCI114/MCS9114 e-Learning website (http://www.uow.edu.au/student/elearning).

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.

Subject Materials

Textbook:
- D. S. Malik

Laboratory Manual:
- CSCI114 Laboratory Manual – students must bring their Lab Manual to all lab sessions.

Reference Books
- Tony Gaddis
- Judy Scholl
  C++ Programming: From Problem Analysis to Program Design, Lab Manual, 2005
- Walter Savitch
- Gary J. Bronson
- Bjarne Stroustrup
- Forouzan and Gilberg
- Dean DeFino and Michael Bardzell

These may be available from UniCentre Bookshop

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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<thead>
<tr>
<th>Assessment Items &amp; Format</th>
<th>Percentage of Final Mark</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>4 Assignments</td>
<td>36%</td>
<td>See notes below. Assignments are due in weeks 5, 7, 10 and 13 respectively</td>
</tr>
<tr>
<td>4 Laboratory Online Tests</td>
<td>4%</td>
<td>See notes below.</td>
</tr>
<tr>
<td>Mid Term Test</td>
<td>15%</td>
<td>Week 7 on Thursday, during lecture time</td>
</tr>
<tr>
<td>Final Examination</td>
<td>45%</td>
<td>Examination Period</td>
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Notes on Assessment
Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically. All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment.

Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically.

(a) There will be 4 programming assignments, which will be assessed. These will contain programming problems and/or complete programs that exercise particular skills as you learn them. Your completed attempts must be submitted electronically via the UNIX/Linux submit system. **No submission via email will be accepted.**

(b) All assignments are to be completed independently. Plagiarism may result in a zero mark being recorded for that assignment.

(c) Any changes to assignment due dates will be posted on the e-Learning website of the subject. It is each student’s responsibility to regularly check the subject’s website.

(d) Assignments are to be submitted electronically before the scheduled time, normally by Monday, 11.59pm.

(e) As assignments are to assess a student's understanding of course material, each assignment must be solved using only material covered up to that point in the course (unless otherwise explicitly stated in the assignment).

(f) Any assignment program submitted which does not produce the required result on the laboratory Linux system cannot be awarded more than half marks. Programs that do not compile on the laboratory Linux system due to syntax errors may receive no marks, but feedback on the student’s errors will still be provided.

(g) Late assignments will be marked but the mark awarded will be reduced by 1 for each day late. Assignments will not be accepted more than four days late.

(h) Assignments will be returned in laboratory classes. Enquiries about the marks can only be made to the tutors during the laboratory class time, with a maximum of 1 week after the assignment is handed back. After 1 week, no marks can be changed.

(i) Penalties may apply to all late work, except if special consideration or an extension has been granted by your subject coordinator or lecturer.

(j) Under some circumstances, an assignment extension may be granted by the subject coordinator/lecturer. The subject coordinator/lecturer has the full right to deny/award the extension. Each student must apply for the extension through the SOLS system before the assignment due date. In many circumstances, students may be asked to produce documentation to support his/her case.

(k) Each student must complete **at least four online tests** - six of these tests will take place throughout the session (in weeks 3, 5, 7, 9, 11 and 13). These tests will be made available for 15 minutes during each student’s allocated lab.

(l) Each set of weekly Lab Manual exercises starts with one exercise labeled **Task 0** which must be completed before the respective lab class, most of the other exercises are to be completed in the lab class. Any remaining weekly exercises not completed in class must be completed during the student’s own study time.
There is no supplementary test available for the mid term test. The test will be conducted in Thursday’s lecture time in Week 7. The venue will be arranged and published via SOLS. You must ensure that you attend this test to avoid losing 15% of the total marks in this subject.

Special consideration
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.

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 \( \min\{E+A, 47\} \)
- if E < 35% of the maximum exam mark: then student final mark is \( \min\{E+A, 42\} \)

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 view 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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<th>Code of Practice - Students</th>
<th>Information Literacies Introduction Program</th>
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<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>
</tr>
<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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<tr>
<th>Code of Practice-Honours</th>
<th>Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, <a href="mailto:ameldrum@uow.edu.au">ameldrum@uow.edu.au</a></th>
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<th>Non-Discriminatory Language Practice and Presentation</th>
<th>Intellectual Property Policy</th>
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<th>Occupational Health and Safety</th>
<th>SCSE SISAT Internet Access &amp; Student Resource Centre</th>
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<tr>
<th>SCSE SISAT Student Guide</th>
<th>SCSE SISAT Subject Outlines</th>
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