
SCSSE

School of Computer Science and Software Engineering
Faculty of Informatics

CSCI192 Engineering Programming 2

Subject Outline

Spring Session 2009

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

GENERAL INFORMATION

Subject Coordinator

Telephone Number:

Email:

Location:

Dr Igor Kharitonenko

02 4221 4825

igor@uow.edu.au

3.108

Dr Kharitonenko's consultation times during session:

Day

Time

Monday

12:30 – 14:30

Tuesday

10:30 – 12:30

Lecturer

Telephone Number:

Email:

Location:

Dr Wanqing Li

02 4221 5410

wanqing@uow.edu.au

3.101

Dr Li's consultation times during session:

Day

Time

Monday

8:30– 10:30

Tuesday

10:30 – 12:30

Subject Organisation

Session:

Spring Session, Wollongong Campus

Credit Points

6 credit points

Contact hours per week:

3 hours lectures, 1hr lecture/tutorial, 2 hours Computer lab

Lecture Times & Location:

Lecture\Tutorial A 15:30–17:30 Mon, 40-131

Lecture\Tutorial B 17:30-18:30 Mon, 38-G01

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/>. Any information posted to the web site is deemed to have been notified to all students.

Subject Description

The primary topic areas in this course include, but are not limited to; use of pointers in C, dynamic memory management, multi-file programs and make, testing and verification of software, problem solving strategies, the role of algorithms in the problem solving process, implementation of algorithms and the properties of algorithms. Basics of C++, classes, function overloading.

Subject Objectives

On successful completion of this subject, students should be able to:

1. Write and understand complex C programs
2. Implement well know algorithms in the C programming language
3. Build complex programs from simple blocks
4. Identify the differences between C and C++.

Graduate Qualities

This subject will continue to the following graduate qualities:

Informed
Problem Solvers

Further information can be found at:

<http://www.uow.edu.au/informatics/scsse/current/SubjectInformation/UOW049401.html>

Attendance Requirements:

It is the responsibility of students to attend all lectures/tutorials/labs 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 by the University, to be attendance at approximately 80% of the allocated contact hours.

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

Method of Presentation:

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

Lecture Schedule:

A proposed Lecture schedule for the subject is as follows:

Week	Topic	Reading
1	Subject Overview. C compilation model. Binary system	
2	Variables and Memory Allocation. Binary Operations	Hanly & Koffman. <i>Chpt 3</i>
3	Pointers	Hanly & Koffman. <i>Chpt 3</i>
4	Dynamic Memory Allocation	Hanly & Koffman. <i>Chpt 7</i>
5	Assembly Language	
6	Introduction to Numeric Methods	Hanly & Koffman. <i>Chpt112</i>
7	Numeric methods and Algorithms	Hanly & Koffman. <i>Chpt 12</i>
8	Numeric Methods and Algorithms	Hanly & Koffman. <i>Chpt 12</i>
9	Introduction to C++	Hanly & Koffman. <i>Chpt 12</i>
10	<i>Public holiday</i>	
11	Introduction to C++	Hanly & Koffman. <i>Chpt 13</i>
12	Introduction to C++	Hanly & Koffman. <i>Chpt 13</i>
13	Revision	

Changes to the above schedule will be posted via e-Learning space <http://www.uow.edu.au/student/>. 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):

Jeri Hanly & Elliot Koffman. *C Program Design for Engineers*. Addison Wesley.

Lecture notes

The lecture notes will be available on e-Learning (previously e-learning space) Students are encouraged to print their copies. However, the lecture notes may not include all examples and explanations given in lectures. 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.

ASSESSMENT ITEMS & FORMAT	% OF FINAL MARK	GROUP/ INDIVIDUAL	DUE DATE
Lab sessions	20 marks	Individual	Earned during weeks 3 - 12
Assignments	20 marks	Individual	As scheduled
Final Examination	60 marks	Individual	Exam week as per schedule
Total	100 marks		The total mark must be ≥ 50 to pass the subject

Notes on Assessment:

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

To pass the subject you must achieve an overall score of at least 50%. However, to be eligible for a Pass in this subject a student must achieve a mark of at least 40% (24 out of 60) in the exam, at least 30% (6 out of 20) in the assignments and at least 40% (8 out of 20) in the labs. Students who fail to achieve this minimum mark will be given a TF (Technical Fail) for this subject.

IMPORTANT: Successful completion of CSCI192 is a pre-condition to undertake other subjects, such as CSCI213 and CSCI204. Since CSCI192 is offered only in the spring session, failing the subject you introduce a one-year delay in your education process.

Electronic Submission of Assessment Items:

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

- (a) There will be 3 programming assignments, which will be assessed. There is no requirement to carry out this work in the laboratories. You may work at home to develop solutions. Your completed solutions must be submitted electronically via the UNIX/Linux submit system. **No submission via email will be accepted.**
- (b) Copying software from another person is a serious offence. **All students involved in plagiarism may have zero marks.**
- (c) Assignments are to be submitted electronically during the scheduled week. It is student's responsibility to keep a backup of his/her work. There will be no extension granted due to any circumstance related to the failure of students' own equipment.
- (d) As assignments are to assess students' understanding of the subject material covered in the lectures, each assignment must be solved using only material covered up to that point in the lectures (unless otherwise stated in the question).

- (e) Programs which do not produce the correct result (s) may receive at most half of the allocated mark for the task. Programs which do not compile due to syntax errors may receive at most half of the allocated mark for the task, but will still be commented on.
- (f) Since two weeks are allocated for implementation and one week is allocated for submission (to resolve possible technical problems with electronic submission), **late assignments will not be accepted without a granted special consideration**. The exact time after which the submitted assignment will not be accepted by the system will be indicated in every assignment specification.
- (g) Requests for extensions should be made electronically by logging on to SOLS at, <http://www.uow.edu.au/student/index.html>, and following the Special Consideration link. All such requests must be made prior to the due date and supporting documentation (e.g. medical certificates) should be lodged with administration. Please note that such requests are not necessarily granted. In particular, no extension will be allowed after model solutions have been released or discussed in class. The following advice, which forms part of the Special Consideration application process, should also be noted.

“Please be aware that your Subject Coordinator(s) may not be able to consider your application for special consideration immediately. If the nature of assistance sought is urgent, or you are seeking a short extension of time to submit your assessment item, please approach your Subject Coordinator directly, soon after submitting the form.”

Thus you should not assume your application has been granted. You should discuss the situation with your subject coordinator or lecturer as soon as possible after submitting your application and prior to the due date for the assessment item.

Lab sessions and tutorial lectures

- 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 must ask the supervisor whether any vacant machines may be used.

The lab sessions will be one week behind the lectures to provide sufficient time for preparation. To get prepared, students need to go through lecture notes, suggested chapters of the textbook and complete the questions in the textbook that are specified in the lecture. Lab sheets will be distributed at the beginning of the lab session. Lecture notes and textbooks may be needed for reference during the labs.

Students are required to attend all tutorial lectures. Students are required to complete the lab tasks within the first 80 minutes of the 2 hour lab session and then demonstrate their program to the tutor. The lab tasks are published at the subject web site and may be completed at home prior the session. The tutor will give a mark according to the number of tasks completed and understanding of the material covered.

Students, who are not able to attend a lab session and would like to get the marks for the task completed at home, must apply for special considerations through SOLS.

Recommended Self-Directed Study Process

The amount of time spent on this subject should be at least 12 hours per week. Therefore, successful participation means at least 7 hours allocated for self-directed study and preparation besides 5 contact hours.

For successful completion of this subject, it is recommended you complete the following tasks in each week:

- Download lecture notes from e-Learning, print a copy and look through the lecture notes prior to a lecture
- Attend the lecture, taking notes and adding explanations on the printed copy
- Read related chapters in the textbook together with lecture notes and attend consultations for clarification if required

- Attend lab sessions and complete the lab tasks in time. At the end of each lab session, your tutor will give a mark according to the level of participation of the lab.
- When an assignment is released, download the assignment description from e-Learning. Read carefully the assignment task specifications and make sure you understand what you are required to do. Attend consultations if something is not clear about the tasks. Start working on the assignment as soon as possible, taking into account that you can get a good mark only if your answers meet the specifications.
- Keep all lecture notes, assignment, tutorial and lab task solutions in one folder that can be a very useful collection of materials for exam preparation.
- Sign up to attend PASS program sessions (if available). PASS (Peer Assisted Study Sessions) is an academic mentoring program where experienced senior students are available to help you with CSCI192. In a one-hour PASS session each week you can learn strategies and concepts that will save you many hours struggling at home with broken code. You will also get a chance to learn more deeply in this subject, which will form the foundations for many of your later-year subjects. For more information about PASS visit the website: <http://www.uow.edu.au/student/services/pass>

Penalties for late submission of assessment items:

Penalties apply to all late work, except if student academic consideration has been granted. Late submissions will not be accepted and a mark of zero will be granted.

Tutorial/Lab Closure Policy

If for any reason, the number of students in a tutorial or lab falls below a sustainable enrolment level, as determined by the Head of School, tutorials/labs offered for that subject may be collapsed or deleted.

You will have to attend the new tutorials/lab if this closure affects the one you are attending.

We will endeavour to make this decision no later than Week 4 of session.

Supplementary Exams

Supplementary Exams will be dealt with in accordance with student academic consideration policy (<http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf>) 9.2 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.

Student Academic 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 academic consideration in order to complete all assessable work.

The University applies strict criteria to the granting of student academic consideration. Before applying for student academic consideration, students should carefully read the University's policy which can be found at: <http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf>.

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.

- 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/studacgrievpol.html> which contains a range of policies on educational issues and student matters.

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

Code of Practice - Teaching and Assessment http://www.uow.edu.au/handbook/codesofprac/teaching_code.pdf	Code of Practice - Students http://www.uow.edu.au/handbook/codesofprac/cop_students.html
Code of Practice-Honours http://www.uow.edu.au/handbook/CodeofPractice-Honours.pdf	Acknowledgement Practice Plagiarism will not be tolerated: http://www.uow.edu.au/handbook/courserules/plagiarism.html
Key Dates http://www.uow.edu.au/student/dates.html	Student Academic Consideration Policy: http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf
Course Progress Requirements: http://www.uow.edu.au/student/mrp/index.html	Graduate Qualities Policy: http://www.uow.edu.au/about/teaching/qualities/index.html#_The_new_UOW
Academic Grievance Policy (Coursework and honours students) http://www.uow.edu.au/handbook/courserules/studacgrievpol.html	Non-Discriminatory Language Practice and Presentation http://staff.uow.edu.au/eed/nondiscrimlanguage.html
Occupational Health and Safety http://staff.uow.edu.au/ohs/commitment/ohspolicy/index.html	Ownership of Work & Intellectual Property Policy: http://www.uow.edu.au/handbook/generalcourserules/UOW028651.html
Human Research Ethics Committee: http://www.uow.edu.au/research/rso/ethics/human/	Rules for student conduct: http://www.uow.edu.au/handbook/generalrules/StudentConductRules.pdf
Independent Learners' Introductory Program http://www.uow.edu.au/student/attributes/ilip/	Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, email: ameldrum@uow.edu.au
Student Support Services: http://www.uow.edu.au/student/services/ Informatics Faculty SEDLO (Student Equity and Diversity Liaison Officers) Virginie Schmelitschek, phone 4221 3833, virginie@uow.edu.au	SCSSE Internet Access & Student Resource Centre http://www.uow.edu.au/informatics/common/uow024466.html

This subject outline can be found at: <http://www.uow.edu.au/informatics/scsse/current>

SCSSE Computer Usage Rules http://www.uow.edu.au/informatics/common/uow024457.html	SCSSE Subject Outlines http://www.uow.edu.au/informatics/scsse/current
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