

Unit Outline

COMP1000 Unix and C Programming Semester 2, 2016

Unit study package code:	COMP1000										
Mode of study:	Internal										
Tuition pattern summary:	<p>Note: For any specific variations to this tuition pattern and for precise information refer to the Learning Activities section.</p> <p>Lecture: 1 x 2 Hours Weekly Computer Laboratory: 1 x 2 Hours Weekly</p> <p>This unit does not have a fieldwork component.</p>										
Credit Value:	25.0										
Pre-requisite units:	<p>1920 (v.0) Object Oriented Program Design 110 or any previous version OR 310207 (v.0) Engineering Programming 100 or any previous version OR COMP1001 (v.0) Object Oriented Program Design or any previous version OR COMP1004 (v.0) Engineering Programming or any previous version</p>										
Co-requisite units:	Nil										
Anti-requisite units:	Nil										
Result type:	Grade/Mark										
Approved incidental fees:	Information about approved incidental fees can be obtained from our website. Visit fees.curtin.edu.au/incidental_fees.cfm for details.										
Unit coordinator:	<table><tr><td>Title:</td><td>Mr</td></tr><tr><td>Name:</td><td>Mark Upston</td></tr><tr><td>Phone:</td><td>N/A</td></tr><tr><td>Email:</td><td>M.Upston@curtin.edu.au</td></tr><tr><td>Location:</td><td>Building: 314 - Room: 341</td></tr></table>	Title:	Mr	Name:	Mark Upston	Phone:	N/A	Email:	M.Upston@curtin.edu.au	Location:	Building: 314 - Room: 341
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Teaching Staff:	<table><tr><td>Name:</td><td>Mark Upston</td></tr><tr><td>Phone:</td><td>N/A</td></tr><tr><td>Email:</td><td>M.Upston@curtin.edu.au</td></tr><tr><td>Location:</td><td>Building: 314 - Room: 341</td></tr></table>	Name:	Mark Upston	Phone:	N/A	Email:	M.Upston@curtin.edu.au	Location:	Building: 314 - Room: 341		
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Administrative contact:	<table><tr><td>Name:</td><td>Mark Upston</td></tr><tr><td>Phone:</td><td>N/A</td></tr><tr><td>Email:</td><td>M.Upston@curtin.edu.au</td></tr><tr><td>Location:</td><td>Building: 314 - Room: 341</td></tr></table>	Name:	Mark Upston	Phone:	N/A	Email:	M.Upston@curtin.edu.au	Location:	Building: 314 - Room: 341		
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Learning Management System:	Blackboard (lms.curtin.edu.au)										

Acknowledgement of Country

We respectfully acknowledge the Indigenous Elders, custodians, their descendants and kin of this land past and present.

Syllabus

This unit introduces students to the C programming language and the related concepts and tools used to design, implement, test and debug C programs. Topics covered include: C Fundamentals. Functions and program structure. Designing programs with derived types. Pointers. Abstract data types. Strings, streams and input/output (I/O). Dynamic memory allocation and C programming utilities for program construction and diagnosis.











Introduction

Welcome to Unix and C programming.










Unit Learning Outcomes

All graduates of Curtin University achieve a set of nine graduate attributes during their course of study. These tell an employer that, through your studies, you have acquired discipline knowledge and a range of other skills and attributes which employers say would be useful in a professional setting. Each unit in your course addresses the graduate attributes through a clearly identified set of learning outcomes. They form a vital part in the process referred to as assurance of learning. The learning outcomes tell you what you are expected to know, understand or be able to do in order to be successful in this unit. Each assessment for this unit is carefully designed to test your achievement of one or more of the unit learning outcomes. On successfully completing all of the assessments you will have achieved all of these learning outcomes.

Your course has been designed so that on graduating we can say you will have achieved all of Curtin's Graduate Attributes through the assurance of learning process in each unit.

On successful completion of this unit students can:		Graduate Attributes addressed
1	Implement algorithms in the C programming language	 
2	Write and interpret standard C pointer expressions	 
3	Implement C code which dynamically allocates/deallocates memory	 
4	Employ standard Unix/C tools to diagnose problem faults	 
5	Employ standard Unix/C tools to build software	 

Curtin's Graduate Attributes

	Apply discipline knowledge		Thinking skills (use analytical skills to solve problems)		Information skills (confidence to investigate new ideas)
	Communication skills		Technology skills		Learning how to learn (apply principles learnt to new situations) (confidence to tackle unfamiliar problems)
	International perspective (value the perspectives of others)		Cultural understanding (value the perspectives of others)		Professional Skills (work independently and as a team) (plan own work)

Find out more about Curtin's Graduate attributes at the Office of Teaching & Learning website: ctl.curtin.edu.au

Learning Activities

On a weekly basis, you are expected to:

- Attend the lecture (2 hours) (preferred) or watch the iLecture.
- Attend and participate in a practical session (2 hours).
- Complete the practical work, outside of class if necessary (and it almost certainly will be).
- Have your practical work signed off (in the next practical session). See Assessment.
- Read the relevant sections of the text book, or other material, as advised by the lecturer (in your own time).

Lecture notes, practical worksheets and mock tests will be provided on Blackboard (lms.curtin.edu.au).

Learning Resources

Recommended texts

You do not have to purchase the following textbooks but you may like to refer to them.

- Hanly, J. R. & Koffman, E. B. (2013), Problem Solving and Program Design in C, 7th ed., Prentice Hall (ISBN/ISSN: ISBN 0132936496)

Assessment

Assessment schedule

	Task	Value %	Date Due	Unit Learning Outcome(s) Assessed
1	Test	15 percent	Week: 6 Day: Tuesday Time: 10am	1
2	Test	15 percent	Week: 11 Day: Tuesday Time: 10am	2,3
3	Assignment	20 percent	Week: 13 Day: Friday Time: 10am	1,2,3,4
4	Exam	50 percent	TBA	1,2,3,4,5

Detailed information on assessment tasks

1. Tests are marked for adherence to the principles discussed in the lectures and practical sessions. Mock tests for test 1 are available on blackboard. Students who wish to pass are advised to download, attempt and seek feedback on these mock tests as part of their test 1 preparation.
2. Tests are marked for adherence to the principles discussed in the lectures and practical sessions. Mock tests for test 2 are available on blackboard. Students who wish to pass are advised to download, attempt and seek feedback on these mock tests as part of their test 2 preparation.
3. Assignments are marked for adherence to the principles discussed in the lectures and practical sessions. Your assignment mark will take into account your work sheet marks (see assignment specification for details), which will be assessed in the weekly practical sessions. You will be asked to participate in a short oral interview for each worksheet. For each interview, you will receive a mark of zero (0), one (1), or a fraction in between. If you are absent for an interview, you will receive a mark of zero for that worksheet interview. If you do the exercises this should be a straight forward process. Finally the sum of your interview marks will be used to weight the mark for your assignment. Please see the assignment specification on Blackboard for more detail.
4. The final examination will test all unit content, and will be held in the scheduled examination period.

Pass requirements

Students must achieve a final mark of 50 or greater, submit a valid attempt for the assignment (min 15%) and achieve 45% or greater in the final examination to pass this unit.

Fair assessment through moderation

Moderation describes a quality assurance process to ensure that assessments are appropriate to the learning outcomes, and that student work is evaluated consistently by assessors. Minimum standards for the moderation of assessment are described in the Assessment and Student Progression Manual, available from policies.curtin.edu.au/policies/teachingandlearning.cfm

Late assessment policy

This ensures that the requirements for submission of assignments and other work to be assessed are fair, transparent, equitable, and that penalties are consistently applied.

1. All assessments students are required to submit will have a due date and time specified on this Unit Outline.
2. Late submission of assessments is not accepted in this unit. Students will receive a zero mark for any assessment item submitted late.

Assessment extension

A student unable to complete an assessment task by/on the original published date/time (eg examinations, tests) or due date/time (eg assignments) must apply for an assessment extension using the Assessment Extension form (available from the Forms page at students.curtin.edu.au/administration/) as prescribed by the Academic Registrar. It is the responsibility of the student to demonstrate and provide evidence for exceptional circumstances beyond the student's control that prevent them from completing/submitted the assessment task.

The student will be expected to lodge the form and supporting documentation with the unit coordinator before the assessment date/time or due date/time. An application may be accepted up to five working days after the date or due date of the assessment task where the student is able to provide an acceptable explanation as to why he or she was not able to submit the application prior to the assessment date. An application for an assessment extension will not be accepted after the date of the Board of Examiners' meeting.

Deferred assessments

If your results show that you have been granted a deferred assessment you should immediately check OASIS for details.

Deferred examinations/tests will be held from 15/02/2017 to 17/02/2017 . Notification to students will be made after the Board of Examiners' meeting via the Official Communications Channel (OCC) in OASIS.

Supplementary assessments

Supplementary assessments, if granted by the Board of Examiners, will have a due date or be held between 15/02/2017 and 17/02/2017 . Notification to students will be made after the Board of Examiners' meeting via the Official Communications Channel (OCC) in OASIS.

It is the responsibility of students to be available to complete the requirements of a supplementary assessment. If your results show that you have been granted a supplementary assessment you should immediately check OASIS for details.

Reasonable adjustments for students with disabilities/health circumstances likely to impact on studies

A [Curtin Access Plan](#) (CAP) is a document that outlines the type and level of support required by a student with a disability or health condition to have equitable access to their studies at Curtin. This support can include alternative exam or test arrangements, study materials in accessible formats, access to Curtin's facilities and services or other support as discussed with an advisor from [Disability Services](http://disability.curtin.edu.au) (disability.curtin.edu.au). [Documentation](#) is required from your treating Health Professional to confirm your health circumstances.

If you think you may be eligible for a CAP, please contact [Disability Services](#). If you already have a CAP please provide it to the Unit Coordinator at the beginning of each semester.

Referencing style

The referencing style for this unit is Chicago.

More information can be found on this style from the Library web site:

<http://libguides.library.curtin.edu.au/referencing>.

Copyright

© Curtin University. The course material for this unit is provided to you for your own research and study only. It is subject to copyright. It is a copyright infringement to make this material available on third party websites.

Academic Integrity (including plagiarism and cheating)

Any conduct by a student that is dishonest or unfair in connection with any academic work is considered to be academic misconduct. Plagiarism and cheating are serious offences that will be investigated and may result in penalties such as reduced or zero grades, annulled units or even termination from the course.

Plagiarism occurs when work or property of another person is presented as one's own, without appropriate acknowledgement or referencing. Submitting work which has been produced by someone else (e.g. allowing or contracting another person to do the work for which you claim authorship) is also plagiarism. Submitted work is subjected to a plagiarism detection process, which may include the use of text matching systems or interviews with students to determine authorship.

Cheating includes (but is not limited to) asking or paying someone to complete an assessment task for you or any use of unauthorised materials or assistance during an examination or test.

From Semester 1, 2016, all incoming coursework students are required to complete Curtin's Academic Integrity Program (AIP). If a student does not pass the program by the end of their first study period of enrolment at Curtin, their marks will be withheld until they pass. More information about the AIP can be found at:

<https://academicintegrity.curtin.edu.au/students/AIP.cfm>

Refer to the Academic Integrity tab in Blackboard or academicintegrity.curtin.edu.au for more information, including student guidelines for avoiding plagiarism.

Information and Communications Technology (ICT) Expectations

Curtin students are expected to have reliable internet access in order to connect to OASIS email and learning systems such as Blackboard and Library Services.

You may also require a computer or mobile device for preparing and submitting your work.

For general ICT assistance, in the first instance please contact OASIS Student Support:

oasisapps.curtin.edu.au/help/general/support.cfm

For specific assistance with any of the items listed below, please contact The Learning Centre:

life.curtin.edu.au/learning-support/learning_centre.htm

- Using Blackboard, the I Drive and Back-Up files
 - Introduction to PowerPoint, Word and Excel
-

Additional information

Enrolment

It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the eStudent option on OASIS, where you can also print an Enrolment Advice.

Student Rights and Responsibilities

It is the responsibility of every student to be aware of all relevant legislation, policies and procedures relating to their rights and responsibilities as a student. These include:

- the Student Charter
- the University's Guiding Ethical Principles
- the University's policy and statements on plagiarism and academic integrity
- copyright principles and responsibilities
- the University's policies on appropriate use of software and computer facilities

Information on all these things is available through the University's "Student Rights and Responsibilities" website at: students.curtin.edu.au/rights.

Student Equity

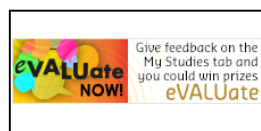
There are a number of factors that might disadvantage some students from participating in their studies or assessments to the best of their ability, under standard conditions. These factors may include a disability or medical condition (e.g. mental illness, chronic illness, physical or sensory disability, learning disability), significant family responsibilities, pregnancy, religious practices, living in a remote location or another reason. If you believe you may be unfairly disadvantaged on these or other grounds please contact Student Equity at eesj@curtin.edu.au or go to http://eesj.curtin.edu.au/student_equity/index.cfm for more information

You can also contact Counselling and Disability services: <http://www.disability.curtin.edu.au> or the Multi-faith services: http://life.curtin.edu.au/health-and-wellbeing/about_multifaith_services.htm for further information.

It is important to note that the staff of the university may not be able to meet your needs if they are not informed of your individual circumstances so please get in touch with the appropriate service if you require assistance. For general wellbeing concerns or advice please contact Curtin's Student Wellbeing Advisory Service at: http://life.curtin.edu.au/health-and-wellbeing/student_wellbeing_service.htm

Recent unit changes

Students are encouraged to provide unit feedback through **eVALUate**, Curtin's online student feedback system. For more information about **eVALUate**, please refer to evaluate.curtin.edu.au/info/.



To view previous student feedback about this unit, search for the Unit Summary Report at https://evaluate.curtin.edu.au/student/unit_search.cfm. See <https://evaluate.curtin.edu.au/info/dates.cfm> to find out when you can **eVALUate** this unit.

Recent changes to this unit include:

No changes have been made this semester

Program calendar

Program Calendar – Semester 2 2016

Week	Begin Date	Lecture	Tutorial	Assessment
Orientation	25 July	Orientation Week		
1.	1 August	Basics		
2.	8 August	Environments	Basics	
3.	15 August	Pointers	Environments	Prac signoff
4.	22 August	Arrays & Strings	Pointers	Prac signoff
5.	29 August	Tuition Free Week		
6.	5 September	Test 1	Revision for Test 1	Test 1, Prac signoff
7.	12 September	Input/Output	Arrays & Strings	
8.	19 September	Structs	Input/Output	Prac signoff
9.	26 September	Tuition Free Week		
10.	3 October	Shell Scripting	Structs	Prac signoff
11.	10 October	Test 2	Revision for Test 2	Test 2, Prac signoff
12.	17 October	Testing and Debugging	Shell Scripting	
13.	24 October	Miscellaneous C	Testing and Debugging	Assignment, Prac signoff
14.	31 October	C++	Miscellaneous C	Prac signoff
15.	7 November	Study Week		
16.	14 November	Examinations		
17.	21 November	Examinations		