Computer Science O’Week Lecture 2016
Talk outline

• About the school
• Studying at university – how does it work?
• School assessment policies
• Academic honesty policies
• Occupational health and safety
• What’s it like to do Computer Science?
About the school
Where is the school?

Ingkarni Wardli Building, “Place of Learning or Enquiry”
Some Stats

• School is 51 years old
• 1500+ students enrolled in our courses this semester
  – 500+ enrolled in our programs (3 undergraduate programs + 7 postgrad)
  – 50+ postgraduate research students
• We teach nearly 60 different courses.
• 30 staff involved in teaching
  + Many sessional staff, markers and lab demonstrators
• Major research centres in Visual Technologies, Educational Research, Optimisation and Logistics, RFID and Internet of things, Software Technologies.
Some news

• New staff: Dr Christoph Treude
• $6.9 Funding from Department of Education and Training to Support Digital Technologies curriculum rollout.
• CS Graduate, Matt Trobbiani produces one of the best games in 2015!
• Prof Ian Reid named in the inaugural “Knowledge Nation 100” in the new economy.
• Team from Computer Science Wins Telstra Internet of Things Challenge
• “Think, Create, Code” MOOC from school attracts over 25,000 enrollments!
• For more news see our school home page:
  – cs.adelaide.edu.au or our facebook page.
Leadership Team

- Associate Professor Katrina Falkner – Head of School
- Associate Professor Michael Sheng – Deputy Head
Staff relevant to assessment policies

Dr Brad Alexander
Director of Teaching

Dr Tat-Jun Chin
Assessment Coordinator
The front desk

- For general information and making appointments with other staff (if for some reason your email broke down).

- Remember to be polite and patient – there are over 50 staff and postgrads in the school and only 4 admin staff.
Course advisors

• You must see a course advisor for advice relating to your programme of study, e.g., which courses to choose, how to organise study plan.

  Dr Cruz Izu  Prof Hong Shen  Dr Amali Weerasinghe

• Email the advisors directly to make an appointment, or ask the staff at the front desk.
Student Activities Coordination

• Cheryl Pope

• Plus many student mentors.
School homepage – bookmark this!
General info for students

Undergraduate Students

A wide range of resources and support services available to you in the school and across the University.

- Undergraduate Information and Resources
  The list below provides links to a variety of resources offered by the school.
  - Honours Projects 2014
  - Glossary of Terms
  - Course Forums
  - Web Submission
  - Student Handbook - Adelaide
  - Student Handbook - Singapore
  - Computer Science Club
  - Student Representation

- Faculty and University Support

Real world Projects

Projects
Grand Challenges in Computer Science is one of the project-oriented subjects that students enjoy. Computer science features a lot of problem solving and solution implementation.
Staff contact details
Moodle Forums

The School Uses Moodle to host most of its courses
• forums.cs.adelaide.edu.au
• Subscribe to the front page
  – And the “Careers and Industry Information” Forum
• These forums are where we announce industry visits, competitions, scholarships, admin and events.
Studying at university – how does it work?
Studying at university – how does it work?

• You take a few courses every semester.
• Each course relevant to your program has credit points.
• Once you have accumulated enough credit points, you apply to graduate.
• All first year courses in CS are 3 points:
  – Introduction to Programming
  – Object Oriented Programming
  – Algorithm Design and Data Structures
  – Puzzle Based Learning
  – Scientific Computing
  – Web and Database Computing
  – Introduction to Software Engineering
How do you “take a course”?

• A 3-unit course is equivalent to 25% of a full time week of 40 hours.
• This means **10 hours per week per course**.
• You spend the hours doing these:
  – Attending lectures
  – Attending tutorials/tutes
  – Attending workshops
  – Completing assignments/pracs
  – Consulting lecturers

**Make sure you do all these!**
Course timetable and other info
Assignments, workshops, tutorials

• Each course will have a number of practical assignments
  – Details to be announced in the first two weeks of each course.
  – Take advantage of the help on offer by lecturers/tutors/prac
demonstrators.

• Workshops
  – Group work at the lab.
  – Supervised by staff.
  – Really useful for discussions.

• Tutorials
  – Consult timetables for schedule.
  – These can really help you pass the exam.
  – Turn up to all of these.
  – Do them early for feedback on your answers.
Facilities

• Main first year student labs:
  – Lab EM105
  – Lab EM108/109
  – Collaborative Learning Suite (Level 2 Ingkarni Wardli)

• All 1st year students have access to all CAT Suites within the faculty.
  – Open 24/7. Arrange at front counter for after hours access.

• Password
  – Your username and password will be the same as for your university account.
Computer Science Learning Centre

- Dedicated First-Year Centre
- Trained consultants on hand
- Interaction with later-year student mentors
- Computer pool
- Relaxed environment
- Location: EM110
Prizes

- Google Prize
- ACS Prize
- Accenture Marketing Sciences Prize
- BankSA Prize
- IBM Rational Prize
- Australian Oracle User Group Prize
The first lecture

• Most administrative information related to courses will be presented in the first few lectures of each course.
• It is very important to attend these.
School assessment policies
Assessment

• At the beginning of each course you will see:
• This course has **XX** components:
  – Written examination, worth **XX%**.
  – **XX** practical assignments, :
    • Assignment 1, worth **XX%**.
    • ...
    • Assignment **XX**, worth **XX%**.
  – Tutorials, worth **XX%**.
• You are expected to participate in all activities, attend lectures and submit your assignments on time.
# Grades

<table>
<thead>
<tr>
<th>Mark</th>
<th>Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>85-100%</td>
<td>High Distinction</td>
<td>HD</td>
</tr>
<tr>
<td>75-84%</td>
<td>Distinction</td>
<td>D</td>
</tr>
<tr>
<td>65-74%</td>
<td>Credit</td>
<td>C</td>
</tr>
<tr>
<td>50-64%</td>
<td>Pass</td>
<td>P</td>
</tr>
<tr>
<td>0-49%</td>
<td>Fail</td>
<td>F</td>
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<td>FNS</td>
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<td>Result Pending</td>
<td>RP</td>
</tr>
</tbody>
</table>

If you see an RP on your transcript, it means that your mark is not currently available. If you don’t know why, you should contact your course coordinator.
Minimum Performance

• Many courses will have minimum performance requirements.
• This means that you will need to get above 40% in some components (e.g. the exam) to get a pass in the course.
  – See the course outline for each course in week 1 of semester for details.
• If you get less than 40% in these components then your mark will be capped at 44F with additional assessment granted at the discretion of the school.
• If in doubt about a course please talk to us.. (me or the lecturer).
Courses with multiple codes

- A single course may include students enrolled in different course codes (UGRD, PGRD, etc.).
- The assessment requirements for students at the postgraduate level will be higher than that for undergraduates.
- The different requirements may take the form of extra coursework or different exam papers.
Late submission policy

• You should hand your coursework in on time.
• If you hand in your work late, your mark will be capped, based on how many days late it is.
  – 1 day late – mark capped at 75%
  – 2 days late – mark capped at 50%
  – 3 days late – mark capped at 25%
  – more than 3 days late – no marks available
• If you handed in something on time, and it is worth more than something that you handed in late, you will get the higher mark.
• Hand in early!
Examinations

• Go to the University Examinations Site for information on Examinations:

• This includes timetable information, and information on what you can take with you into the exam.

• Also includes policies for examinations and additional/replacement examinations
Examinations – timetable

Welcome to Examinations

Student's personalised timetable available on Access Adelaide once published.

Allocated seating at Wayville Pavilion

Allocated seating instructions

Exam Timetables

Exam Timetables
View the exam timetables for 2014.

See also: Academic Year Dates

You are required to bring with you to the exam venue:
- your student ID (or other photo identification)
- reasonable supplies of all required writing materials, erasers, etc.

Materials not normally permitted:
- writing or other paper
- dictionaries, textbooks, notes or other reference material
- calculators
- electronic devices including: diaries, organisers, laptop or palm top computers
- mobile telephones or other communication devices

Results

Results will be available on Access Adelaide. If your results have not been posted, or you need to apply for a RAA, contact your School or Faculty for advice.

Alternative Examination Arrangements & Timetable Clashes
- Students with a medical condition or disability who require special arrangements may apply for Alternative
Repeating Students

• Students who repeat a course are expected to attempt all of the aspects of the course again. This includes making fresh attempts at all coursework assessment items.
• You may apply to the course coordinator to have your previous work counted but this is not usually granted.
• Make sure that you attend all of the lectures, do all of the work and study hard for the exam – you don’t want to get stuck repeating the same course over and over.
Modified arrangements
Assignment extensions

• Extensions will not be granted for circumstances including minor ailments; travel, employment, family, customary, sport or leisure commitments; problems with balancing workloads; normal exam stress or anxiety.

• If you think your situation is exceptional, contact your lecturer ASAP, who will then consult the Head of School.

• Students who deliberately submit false or fraudulent documentation may be referred to the Student Misconduct Tribunal.

• You will normally only receive an extension equivalent to the number of days covered by your documentation. Don’t expect to get an extra week because you lost a day.
More information on Modified Arrangements

- Presented at the beginning of each course.
- See: Modified Arrangements, see:  
  https://www.adelaide.edu.au/policies/3303
  (long but highly recommended).
- Key points are
  - You must be here for the additional/replacement exam period
  - Replacement exams are for compassionate and medical reasons.
  - Except under very specific circumstances you cannot sit a replacement exam if you sit the main exam.
  - Additional exams are a second chance if you get close to passing
    • Your course mark is capped at 50P in this case.
- The additional/replacement exam timetable is published in the exams web page.
Academic honesty policies
Academic Honesty Policies

• The University has strict policies prohibiting students from presenting other people’s work as their own, whether that of students or from outside the University.
• You may not copy code from another student or give another student your code to copy from, unless specifically authorised to do so by a staff member.
• You may not copy code from anywhere else, without permission.
• If caught, you may receive zero for the assignment, zero for the course or be expelled.
• If you don’t do the work yourself, you won’t be able to do it in the examination and you won’t be able to do it in the work force.
• Full policy available at the university webpages.
Violations to policy

• Plagiarism
  – Using another person’s ideas, designs, words or works without appropriate acknowledgment.

• Collusion
  – Another person assisting in the production of an assessment submission without the express requirement, or consent, or knowledge of the assessor.
Plagiarism follows you

- German Defence Minister Karl-Theodor zu Guttenberg
- Had to resign from post as German defence minister in 2011 after it was revealed that he plagiarised parts of his PhD thesis
- His degree from 2007 was revoked.
For a long time..

• In 2009 Silvana Koch-Mehrin vice-president of the European Parliament had to resign after revelations of plagiarism in her PhD dissertation from 2001.

• In 2011 the University of Heidelberg cancelled her doctorate.
What should you do to avoid plagiarism

• Start early
• In individual assignments share only ideas at conceptual level – never share code or algorithms.
• Acknowledge all the help that you got from other sources clearly and accurately.
  – Though, of course you will only get marks for the value you add.
• If in doubt ask the lecturer.
Occupational health and safety
Occupational health and safety

• Things you need to know:
  – Fire alarm and evacuation system and exit routes from the building.
  – Emergency contact number.
• Check info at university webpages.
Key points about Computer Science

• **Computing is a creative discipline**
  – There are huge variety of solutions to any one problem.
  – There is an infinite variety of things you can build.

• **The key foundational skill in Computing is Coding**
  – When you code you start with very small building blocks
  – And combine them into successively larger units to make a software machine.

• **Every time you code you make a new machine!**
How to code

• Coding is one of the first things you do in Computing
  – It is interesting, and creative but sometimes challenging.
  – You will learn to code in a variety of languages
    • When you learn a new concept or building block make sure you write the smallest piece of code that you can run (program) that tests it.
    • Save your working pieces of code so you can borrow from them later.
    • Always have an expectation of how your program will behave.
    • Always look for ways to test your expectations.
    • Always look for ways to minimise the time till your next test.
Mistakes

- Even if you do everything right
- Things will go wrong
  - Mistakes in code are called bugs.
- Computers will sometimes report in bugs in unhelpful ways
  - So you need to think about what you have done since the last time you tested your code.
  - Start simplifying that bit of code until the bug disappears.
    - (save your work in a safe place before doing this)
  - Again. You need to always have a guess at what the cause of the bug is... a wrong guess is way better than no guess!
The rest of Computer Science

• As you learn more coding you will be introduced to a larger variety of topics.
• These concern
  – Algorithms and Structures
  – How Computer Systems are put together
  – How Computers interact with each other and the world
• No matter what concept you are learning
  – Always start with your own theory/guess about how that concept works.
  – Then constantly refine your theory as you go
  – Test your understanding
  – Ask questions!
Remember

• There will be a lot of new concepts as you start each topic
• If you don’t understand them all at first then revise and work with them one at a time.
  – Reflect on ideas and test them against the information you have.
  – Seek clarification if there is still ambiguity.
• Revise throughout the semester
  – Remember that it will get easier to pick up new ideas as you become fluent with the old ones.
  – If this takes effort it usually means you are learning.
  – People who are best in their field focus on refining the skills that need work.
Other things

• If you subscribe to our forums front page, join our Facebook page and join the CS Club you will see a number of opportunities to engage with CS in creative ways.

• You will sometimes see career talks, internship opportunities, research scholarships etc.

• Take the chance to explore these – it will help you decide what you want to do.

• Computing is one of the most exciting fields for a career.
  – Take a chance to explore!
Above all...

- University is a chance to really extend your abilities
- Concentrate, ask questions
- Take the time to create, imagine and enjoy!
- Good luck! ... and keep thinking of ways you can improve the world.