



*UCT Department of Computer Science*  
*Computer Science 1016S*

# Life beyond CS1

or putting aside ethics temporarily ...



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*October 2009*

# Highlights: Largest CS1 class

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▣ EVER!



# Highlights: First 100% in 1015F

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## □ EVER!

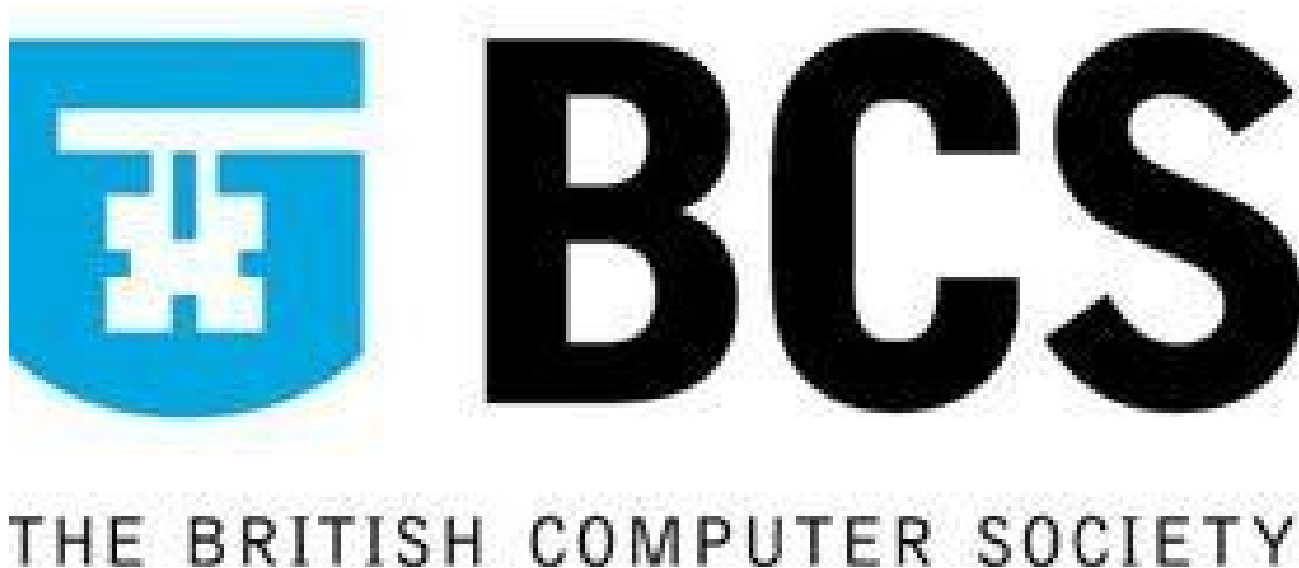
Test 1	90%
Test 2	100%
Test 3	100%
Assignment 1	100%
Assignment 2	100%
Assignment 3	100%
Assignment 4	100%
Assignment 5	100%
Assignment 6	100%
Assignment 7	100%
Assignment 8	100%
Assignment 9	100%
Prac test 1	100%
Prac test 2	100%
Final Exam	100%
Final Mark	100%



# Highlights: BCS Accreditation

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- Certified IT Professional after Honours



# Highlights: Worse CS Jokes

The screenshot shows a web browser window with the title "Computer Science • View topic - who says ac.sci students cant crack a joke? - Mozilla Firefox". The address bar shows the URL "http://moodle.cs.uct.ac.za/phpBB3/cs/viewtopic.php?f=6&t=336&sid=4fb8". The forum header is blue with the phpBB logo and the text "Computer Science the discussion forum". A search bar is on the right. Below the header, there are navigation links like "Board index", "2009", "CSC1015F", "Forums", and "General Discussion". A user control panel shows "User Control Panel" and "View your posts". On the right, there are links for "FAQ", "Members", and "Logout [ hussein ]".

The main topic is "who says ac.sci students cant crack a joke?". It has 8 posts and is on page 1 of 1. The first post is by "mngtsh016" on Tue Jun 02, 2009 7:18 pm. The text of the post is: "this guy parks his car and goes into a bar, after a few wiskeys he gets up and leaves. he finds that his car has been stolen so he storms back into the bar, takes out his pistol, fires a few shots at the ceiling and says 'who ever took my car better bring it back or i'll be forced to do what i did in England'". The second post is a reply by "ngclaz001" on Tue Jun 02, 2009 9:44 pm, saying "they really cnt bode 😊😊". The third post is another reply by "yanlv\_amar" on Tue Jun 02, 2009 10:22 pm, saying "I didn't think there was anything worse then that last joke, but you proved me wrong 😊".



# SO ...

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- ❑ you survived the class
- ❑ you baked the cupcakes
- ❑ you joined the FB group
- ❑ you picked on the ac sci students
- ❑ now what?
- ❑
- ❑ (besides the exam of course)



# The Big Picture

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undergraduate

PhD

CS Masters

CS Honours

CSC3002+CSC3003

CSC2001+CSC2002

CSC1015/18+16    CSC1010+11

postgraduate



# Computer Science 2

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- ❑ Unix operating systems (4)
- ❑ C++ (12)
- ❑ Advanced Data Structures (20)
- ❑ Human Computer Interaction (HCI) (3)
- ❑ Databases (12)
- ❑ Software Engineering (21)
- ❑ Computer Architecture (24)
  
- ❑ Pair Project





# Computer Science 3

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- ❑ Operating Systems (30)
- ❑ Networking (30)
- ❑ Compiler Design (30)
- ❑ Algorithms (30)



# Computer Games Programming

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- ❑ Optional, but good solid Computer Science
  - Game Design
  - 2D and 3D Graphics
  - Artificial Intelligence
  - Interaction Design
  - Multi-Agent Systems
  - Distributed Computing



# Computer Science Honours

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- ❑ All kinds of weird and wonderful topics ... and a very significant project (that often gets published internationally!)

- Research Methods
- Professional Communication Unit
- New Venture Planning
- Advanced Computer Graphics
- Computer Graphics for Gaming
- Digital Libraries
- Intelligent System Design
- Wireless Sensor Networks
- Modeling of Computer Systems
- Games and Virtual Environments

- Mobile Interaction Design
- Introduction to Genetic Algorithms
- Introduction to Image Processing and Computer Vision
- Network and Internetwork Security
- Parallel and Multi-Core Computing
- Database Systems
- Information and Communications Technology for Development



# Thoughts on CS2

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- ❑ Its new for just about everyone!
  - No more high school advantage
- ❑ Its faster and more work
  - So are all senior courses!
- ❑ Give yourself a head start in 2010
  - Learn C++ over the vacation
  - Learn to use Linux
- ❑ It is not a first year course
  - But you will not be first year students



# Open Evening

- ❑ Annual showcase of postgraduate research and honours projects.
- ❑ 18 november?



# Research/Vac Jobs

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- ❑ Research assistants help with many research projects in CS
  - Work with ~100 Masters/PhD students
  - A good programmer and a good researcher are not the same person!
  
- ❑ If you do well in CS1, you have many of the skills you need to work on exciting research projects already!
  
- ❑ Look out for advertisements.



# Tutoring Computer Science

- ❑ Help others to learn CS.
- ❑ Get paid (money).
- ❑ Get experience on your CV.
- ❑ Get to be called “staff”.
- ❑ Be a role model.
- ❑ Be cool(er).
- ❑ Push around 1<sup>st</sup> year :)
- ❑ Training and support provided.
- ❑ Establish a close working relationship with academics.
- ❑ Apply by Friday!



## 2009 TEACHING ASSISTANTS AND TUTORS

### CSC1015F

#### Teaching Assistants



Lebeko Poulou  
lpoulou at cs.uct.ac.za



Lekometsa Mokhesi  
lmokhesi at cs.uct.ac.za

#### Tutors



Alexander van Olst



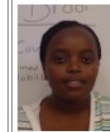
Amani Mbara



Andrew Flower



Christopher Scholl



# Questions, Comments, ...

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□ (there will be an online evaluation)

