# CS2281: Programming in UNIX

Semester 3, 2004/05

## Syllabus

- C Programming
- UNIX Shell Programming
- UNIX Systems Call
- Programming Tools

#### Goals

- Get familiar with UNIX programming environment
- Learn the philosophy of UNIX

## Teaching Style

- Student centered learning
- No lecture notes
- Lots of demo source code and video recording will be distributed.

## **Learning Style**

- Nothing to remember (open book tests and exams).
- Learning by doing and refering to references.
- When in doubt, write small program to test.
- Get your hands dirty!

#### Time Table

- **Lecture**: Mon and Thu, 10am 12noon, SR1
- **Lab**: Fri, 10am 12noon, PL3
- **Office Hours**: Tue, 10am 12noon, SOC1, 04-20

#### Continuous Assessments

- 50%: Programming Assignments
- 30%: Two Practical Tests
- 20%: Final Exam

## Plagiarism Warning

- I practice zero-tolerance policy for plagiarism.
- School's policy: zero mark for assignment and final grade lowered by one grade point.

#### **Assessment Principles**

- Ability to write and debug programs in UNIX
- Understand the basic concepts of programming in UNIX
- Will NOT test on obfuscated language syntax such as char (\*(\*x())[])() or "weird" statement such as i = i++.

## **Working Environment**

- Official programming environment: sunfire
- In class demonstration using Intel machine and Linux.

#### Website

- Not using IVLE.
- Use newsgroup SoC.acad.level2 on bbs instead of IVLE forum for discussion.
- Main website will be

http://www.comp.nus.edu.sg/~cs2281

## Background

- Java
- Basic knowledge of using UNIX (1s, cd, mkdir etc.)
- Knowledge of a programmer's editor, vim or emacs recommended. No pico please.

#### C and UNIX

- Invented together at Bell Labs.
- C: low-level language for implementing UNIX
- UNIX: a simple and elegent OS
- See "Bell Lab's History of UNIX".