

CSC 209F: Software Tools and Systems Programming

Fall 1999 (L0101)

Instructor:

W. James MacLean

- **Office:** D. L. Pratt Building 290F
- **E-mail:** maclean@cdf.utoronto.ca (please include "CSC209" in the subject line)
- **Phone:** 978-6277
- **Office hours:** Tuesday 4 – 5 pm

Timetable:

- lectures: Tuesdays and Thursdays 1:10pm–2:00pm, RW117
- tutorials: Fridays 1:10pm–2:00pm (*see below*)

<i>Tutorial</i>	<i>Who? (your "last" name)</i>	<i>Tutor</i>	<i>Room</i>	<i>E-Mail</i>
1	A — Hua	Jamie Ho	RW117	jamie@cs
2	Hui — Pre	Kevin Hui	SS2111	at209hui@cdf
3	Pu — Z	Olga Kundzich	SS1070	kundzich@interlog.com

Tutors lab hours:

- To be announced. They will likely be grouped near assignment due dates. All lab hours take place in EA107.

Course Description:

- Software development techniques in the UNIX environment. Particular emphasis on what happens in the system when programs run. Core topics: software utilities (*e.g.* pipes, filters), shell programming, system calls, signals, file processing, introduction to concurrency (*e.g.* synchronization, mutual exclusion, race conditions, producer/consumer problem), processes. Additional topics may include: scripting languages, Internet programming languages, network programming (*e.g.* sockets).

Exclusion: After taking any 400-level CSC/ECE course, you may not take CSC209H without departmental permission in writing.

Prerequisite: CSC148H

Co-requisite: CSC270H/proficiency in C

Texts (required):

- J.N. Clarke (ed.), *A Student's Guide to CDF* (most recent edition)

Texts (useful reference):

- W.R. Stevens, *Advanced Programming in the UNIX Environment* (Addison-Wesley, 1993)
- B.W. Kernighan & D.M. Ritchie, *The C Programming Language - second edition* (Prentice Hall, 1988)
- Paul S. Wang, *An introduction to UNIX* (PWS Publishing Co., 1997)

- G. Glass, *UNIX for Programmers & Users* (Prentice Hall, 1993)
- K. Haviland, D. Gray, B. Salama, *UNIX System Programming* ()
- D. Butenhof, *Programming with POSIX Threads* (Addison-Wesley 1997)

Assignments:

	<u>Handed Out</u>	<u>Due</u>	<u>% of Final Mark</u>
Assignment #1	Thu, Sep 16 th	Fri, Oct 8 th	5%
Assignment #2	Thu, Oct 7 th	Fri, Oct 29 th	10%
Assignment #3	Thu, Oct 27 th	Fri, Nov 19 th	10%
Assignment #4	Thu, Nov 18 th	Fri, Dec 10 th	15%

Exams:

	<u>When</u>	<u>% of Final Mark</u>
Midterm (<i>in tutorial time</i>)	Tue, October 26 th	20%
Final Exam	TBA	40%

Note: You must achieve at least 35 out of 100 on the final exam to pass the course.

Illness and other troubles:

- If you are too sick to write the midterm test or to hand in an assignment on time, you must contact your instructor (*not your tutor!*) as soon as possible. Use the telephone if you're stuck at home! You will need a doctor's note confirming your illness.
- If you are too sick for the final examination, phone your college registrar's office instead of your instructor.

Course notices:

- Announcements will also be made on-line in the course Web page (<http://www.cs.utoronto.ca/~maclean/csc209/Fall99/>) and course newsgroup (ut.cdf.csc209h).
- Assignments are due *at the beginning* of tutorials. Late assignments should be submitted to D.L. Pratt Bldg., room 283. Penalties for late submissions:
 - *Time of submission:*
 - by 5pm on due date - penalty = - 20% (of the maximum mark)
 - by 9am three days after due date - penalty = - 40%
 - after 9am three days after due date - penalty = - 100%
- The late penalties are only waived for a good reason such as a documented medical or other emergency. Discuss such excuses with the instructor, *not* with your tutor.
- *The work you submit must be your own*, done without participation by others. It is an academic offence to hand in anything written by someone else without acknowledgement.

Important Dates

- First Lecture: Tuesday, Sep 14th
- First Tutorial: Friday Sep 17th
- Last Day to Add: Friday Sep 24th
- Last Day to Drop: Friday Nov 5th
- Last Lecture: Thursday, Dec 9th (no term work accepted past December 9th)
- Exam Period: Dec 13th — 21st