

ELEC 377 Operating Systems

Information Sheet September 2012

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| Professor | Matthew Stephan, 624 Goodwin Hall matthew.stephan@queensu.ca Office Hours: Wednesday 13:30 or by appointment |
| Lectures | Room 247 Goodwin Hall Mon 8:30, Tues 10:30, Thur 9:30 |
| Tutorials/ Labs | Mon 10:30 – 12:30, ILC 213 (Teaching Studio) |
| Textbook | <i>Operating System Concepts, 8th ed.</i> Silberschatz, Galvin, Gagne |
| Marking | 3 Quizzes 24% 5 Assignments 25% Final Exam 51% All quizzes and the final exam are closed book. |
| Quizzes | There will be three 25 minute quizzes given on the lecture material. Quizzes will be given at the beginning of the lecture. Each quiz will cover the lecture material up to and including the immediately preceding class. Tentative quiz dates are: Sept 25 Oct 16 Nov 6 |
| Labs | The labs are split into two parts. An initial design for the lab is due at the beginning of the lab. It is worth 1/2 of the documentation mark. The full write-up is due at the beginning of Thursday's class following the final Monday period for that lab. The programming portion of each assignment will be marked as follows: |

Documentation: 40%
This consists of a written report describing the problem and your solution. The purpose is to allow someone familiar with

the java programming language to understand what you have done. As mentioned previously, the initial design is due at the beginning of the lab and worth 20% of the mark of the lab.

Structure and Clarity: 20%
Code must be implemented simply and cleanly and structured to make it as readable as possible. Comments are as important as the code itself. Software Engineering is about communication as much as it is about coding.

Testing and Correctness: 40%
Each assignment is to be accompanied by test data and results designed to show the correctness of the program. It must be accompanied by a discussion of the test data indicating the purpose of the test. This discussion is separate from the documentation of the structure and approach to the problem.

An assignment may have extra questions. The above breakdown is only for the programming part of the assignment. For example an assignment with 4 questions and a programming assignment might be marked out of 12, with the 1/2 mark per question and 10 marks for the program part (3 marks for documentation, 3 marks for structure and clarity, 4 marks for testing and correctness)

Computing Language & Platform

GNU C on Slackware Linux

Course Outline

1. System Services and System Calls
2. Concurrent Processes
3. Scheduling
4. Synchronization
5. Deadlock
6. Memory Management and Virtual Memory
7. File Systems
8. Shell Programming
9. Device Management and Drivers
10. Intro to Distributed Systems
11. Protection and Security
12. Unix OS.