CMPT481 Course Outline

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Materials To Be Covered Chapters 1 through 13 of Operating System Design—The XINU Approach, by Douglas Comer.

- An overview of the operating system that we will study in this course—XINU.
- A brief review of our old XINU computer LSI 11/2. The concept of cross-development.
- A brief introduction to the new XINU environment implemented on SUN SPARC workstations. Using XINU on SPARC workstations.
- Concurrent processing, process scheduling and context switching.
- Coordination among processes. Inter-process communications.
- Memory management: Allocating and releasing memory spaces.
- The concept of interrupt and how to handle them.
- Real-time clock management.
- Management and driving of abstract input/output devices. An example device driver.
- Initialization of operating systems.

Class Schedule

Class meets on Wednesday and Friday, at 1:00–2:15PM, in room RI-117 and RI-118, respectively. Class notes are very important supplement to the text. Students’ attendance is required.

Office Hours

2:30–3:30PM, Wednesday. Other times by appointment.

Homeworks, Exams and Grades

There will be project assignments at appropriate stages of the course. You will be asked to implement the ideas and techniques learned in the class. You are also supposed to add new features or modify some existing features of XINU. The finished projects will all be graded and will be part of your course grades.

There will be two examinations—Midterm and Final. Final Examination will be held on Wednesday, April 30, at 3:15–5:15PM. Midterm is before or after spring break. The final grades are decided based on projects (30%), midterm (30%) and final exams (40%). Study attitude is also a factor in some cases. There will be no makeup exams. So make every effort to take them.