

UNIVERSITY OF WESTERN ONTARIO

Computer Science 3305b, Winter Term 2011-2012
Operating Systems

GENERAL INFORMATION

INSTRUCTOR

Yuan Gao, 123 Western Science Centre, Tel.: (519) 661-2111 ext. 86278
Office hour: 2:30pm-4:30pm Wednesday

CLASS MEETINGS

1:30pm-3:30pm Tuesday and 2:30pm-3:30pm Thursday, MC-105B

TEXTBOOK

Operating Systems Internals and Design Principles by William Stallings, 7th edition, Prentice Hall, 2011.

PREREQUISITES

CS 2212, CS 2208 or CS 2210, 2211, ECE 3375 and registration in the fourth year of the BESC program in Computer Engineering.

COURSE DESCRIPTION

This course is about the design and implementation of operating systems. Topics include basic operating system structure, processes, threads, mutual exclusion and synchronization, deadlock and starvation, memory management, virtual memory, scheduling, input/output management, and file systems.

COURSE STRUCTURE

1. Computer System and Operating System Overview
2. Processes and Threads
3. Concurrency
4. Memory
5. Scheduling
6. Input/Output and Files
7. Others

ASSIGNMENTS

There will be four assignments in this course. Assignments will be graded according to their correctness, preciseness, and elegance. Each assignment weighs 10% of the course grade. All assignments are to be handed in to the Computer Science 3305 assignment locker. All assignments are due by 10pm of the due date. Late assignments will be accepted for up to four days after the due date, with weekends (Saturday and Sunday) counting as a single day; the late penalty is $n \cdot 10\%$, where n is the number of days late.

TESTS

There will be a midterm test and a final exam. The midterm test is tentatively scheduled for Tuesday, Feb 14 at 1:30pm-3:30pm and the location will be announced. The final exam will be scheduled by the university. Midterm test weighs 25% of the course grade and final exam 35%.

ACCESSIBILITY

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

ACADEMIC ACCOMMODATION FOR MEDICAL ILLNESS

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean's office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see:

https://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

A student requiring academic accommodation due to illness should use the *Student Medical Certificate* when visiting an off-campus medical facility or request a *Record's Release Form* (located in the Dean's Office) for visits to *Student Health Services*. The form can be found here:

https://studentservices.uwo.ca/secure/medical_document.pdf

PLAGIARISM AND CHEATING

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: <http://www.uwo.ca/univsec/handbook/appeals/scholooff.pdf>.

Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a

major academic offence.

All assignments in this course are individual assignments. Solutions to each question of the assignments have to be obtained by each student individually. Copying solutions from other students or from other sources or allowing your own solutions to be copied will result in negative marks of the weights of the problems.

Cheating in exams, e.g., copying answers of another student or communicating in any way with another student, will result in failure of the course.

COURSE WEBSITE

<http://www.csd.uwo.ca/courses/CS3305b/>

IMPORTANT DATES

Jan. 10	Tue.	First meeting of the class
Jan. 26	Thu.	Assignment 1 is due.
Feb. 9	Thu.	Assignment 2 is due.
Feb. 14	Tue.	Midterm Test (tentative)
Mar. 15	Thu.	Assignment 3 is due.
Mar. 29	Thu.	Assignment 4 is due.
Apr. ?	?	Final Exam.