

# CS 3305A: Operating Systems

## The University of Western Ontario Course Outline – Fall 2019

### 1. General Course Information

#### Course Information

CS 3305A: Operating Systems

Monday: 10:30am – 11:30am, WSC-55; Wednesday: 4:30pm – 6:30pm, WSC-55

#### Prerequisites

Either (Computer Science 2208A/B and 2211A/B) or (Computer Science 2101A/B and 2208A/B) or (Computer Science 2210A/B, 2211A/B, ECE 3375A/B, and registration in the fourth year of a BESC program in Computer Engineering or Mechatronic Systems Engineering.)

Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Students who have special permission from their Dean to enroll in this course may not have been exposed to some of the background material expected for this course; It is the responsibility of these students to gain familiarity with the material on their own.

### 2. Instructor

Name – Dr. Anwar Haque

Office Location – Middlesex College: MC 415

Phone Number – 519-661-2111 Ext. 87428

E-Mail – [ahaque32@uwo.ca](mailto:ahaque32@uwo.ca)

Office Hours (Instructor): Monday 11:30am – 12:30pm. Wednesday: 3pm-4pm

Office hours (Teaching Assistants- TAs): To be announced on the course website.

### 3. Course Description

This course presents fundamental concepts related to the design and implementation of operating systems. Topics includes basic operating system structure, process scheduling, process and thread synchronization and concurrency, memory management, file systems and storage servers, and if time permits a few “hot” topics.

## 4. Course Materials

**Suggested Textbook:** One book is recommended for this course and is available for purchase from the University Bookstore.

- A. Silberschatz, P. Galvin, and G. Gagne *Operating System Concepts (Ninth Edition)*, John Wiley & Sons. Inc, Dec 2012; ISBN: 978-1-118-06333-0

**Lecture Notes:** Lectures notes will be made available on the course website.

**Course Website:** Students should check the course website and OWL (<https://owl.uwo.ca>) on a regular basis for news and updates. Course website will be the primary method by which information will be disseminated to all students in the class. Students are responsible for checking the course website on a regular basis. The course website is <http://www.csd.uwo.ca/courses/CS3305a/>

## 5. Methods of Evaluation

There are two basic components (Assignments and Exams) that will be used to determine a student's mark in the course:

- A final exam worth 40% of the overall mark
- One midterm exam worth 20% of the overall mark
- Three programming assignments worth 40% of the overall mark

The following rules are designed to ensure that students meet certain minimum standards:

- To be eligible to pass the course, a student must receive at least 40% in the exam components (i.e., 40% of 60) and at least a 40% in the assignments (i.e., 40% of 40).
- To be eligible to receive an overall grade of 60% or higher in the course, a student must receive at least 50% in the exam component (i.e., 50% of 60) and at least 50% in the assignments (i.e., 50% of 40).

### • Exams

There is a final exam that is scheduled by the Registrar. This will be closed book / closed notes exam; and no electronic devices are allowed except regular calculator. There is one midterm on October 16. There will be no makeup Midterm Exam, except for students requesting a special midterm exam for religious reasons. These students must have notified the course instructor and filed documentation with their Dean's office at least 2 weeks prior to the Midterm Exam. If you miss the Midterm Exam for any other reason, follow the procedure for Academic Accommodation for Medical Illness given above. If accommodation is approved by your Dean's office, your Final Exam mark will be reweighted to include the weight of the Midterm Exam.

- **Assignments**

- Students must submit their assignments through OWL systems.
- To be eligible for marks, assignments must run on the departmental computing equipment (details will be available on the course website). Assignments that work on your own computer but not on departmental equipment will not be eligible for marks.
- Assignments will be made available on the course home page. Students are responsible for checking the course web page on a regular basis.
- There will be three assignments (worth 40% of the final mark). Submission instructions will be provided for each assignment.

Table 1: Programming Assignment Workload

Assignment	Due Date	Expected Load	Weight
1	Oct 7	Medium	10%
2	Oct 28	High	15%
3	Nov 25	High	15%

- All assignments are due by midnight (electronically) of the due date. Late assignments may be handed in, but with a penalty of 20% a day.
- Every effort will be made to have assignments marked and handed back within 2 weeks of the hand-in date, preferably sooner.

## **6. Accommodation and Accessibility**

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a self-reporting of absence or via the Dean's Office/Academic Counselling unit of your Home Faculty. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in NCB 280, and can be contacted at [scibmsac@uwo.ca](mailto:scibmsac@uwo.ca).

For further information, please consult the university's policy on academic consideration for student absences: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Consideration\\_for\\_absences.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf).

If you miss the Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see [http://www.registrar.uwo.ca/examinations/exam\\_schedule.html](http://www.registrar.uwo.ca/examinations/exam_schedule.html)).

## 7. Academic Policies

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

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/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

Assignments may be subject to submission for similarity review by MOSS that will check for similarity for detecting plagiarism that may indicate cheating.

## 8. Support Services

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Student Accessibility Services (SAS) at 661-2147 if you have any questions regarding accommodations.

The policy on Accommodation for Students with Disabilities can be found here: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic%20Accommodation disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic%20Accommodation%20disabilities.pdf)

The policy on Accommodation for Religious Holidays can be found here: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_religious.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf)

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western ([http://www.health.uwo.ca/mental\\_health](http://www.health.uwo.ca/mental_health)) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, <https://westernusc.ca/your-services/>