Course Description

This course presents fundamental concepts related to the design and implementation of operating systems. Topics include 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.

Prerequisites

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

Instructor

Name – Dr. Hanan Lutfiyya
Office Location – Middlesex College: MC355 and MC418
Phone Number – 661-2111 Ext. 86888
E-Mail – hanan@csd.uwo.ca
Office Hours – In the week that assignments are due, office hours will be announced; otherwise by appointment.

Course Materials

Required Textbook:
One book is required for this course and is available for purchase from the University Bookstore.
Lecture Notes: Lectures notes will be made available on the course website.
Course Website: The course website is http://www.csd.uwo.ca/courses/CS3305b/.

Email Contact

We will occasionally need to send email messages to the whole class, or to students individually. Email will be sent to your ITS email address (depending on which one comes with the class list). You must make sure that you read your email on ITS on a frequent and regular basis, or have it forwarded to an alternative email address if you prefer to read it there. However, you should note that email at ITS (your UWO account) and other email providers such as hotmail.com or yahoo.com may have quotas or limits on the amount of space they can use. If you let your email accumulate there, your mailbox may fill up and you may lose important email from your instructors. Losing email that you have forwarded to an alternative email address is not an excuse for not knowing about the information that was sent.

Other Means of Contact

The course web page will have announcements.

Student Evaluation

• There are three basic components 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 15% of the overall mark
  – Four programming assignments worth 45% 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 component and at least a 40% in the assignments.
  – 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 and at least 50% in the individual assignments.
• **Exams and Quizzes**

There is a final exam that is scheduled by the Registrar. There is one in-class midterm on February 9. 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**

  – To be eligible for full marks, assignments must run on the departmental computing equipment. You may develop assignments on your home computer, but you must allow for the amount of time it will take to get the final product working on Computer Science’s machines. Assignments that work on your own computer but not on departmental equipment will be eligible for part marks.

  – Assignments will be made available on the departmental computing system through the 3305 home page. Students are responsible for checking the CS305 web page on a regular basis.

  – There will be four assignments (worth 45% of the final mark). Submission instructions will be provided for each assignment.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Expected Load</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>February 5</td>
<td>High</td>
<td>12%</td>
</tr>
<tr>
<td>2</td>
<td>March 4</td>
<td>Medium</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>March 18</td>
<td>High</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>April 6</td>
<td>Medium</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 1: Programming Assignment Workload

If we cannot keep to this schedule, marks will be pro-rated as necessary, within the 45% allotment for assignments.

The student evaluation procedure cannot be changed from that given in the course outline without prior consultation with the Undergraduate Chair and approval of the Dean of Science.

  – All assignments are due by midnight (electronically) of the due date. Late assignments may be handed in, but with a penalty of 5 marks a day. Saturday and Sunday together count as one day. Assignments more than 5 days late will not be accepted.

  – Every effort will be made to have assignments marked and handed back within 3 weeks of the handin date, preferably sooner. Midterm exam marks will be available within 2 weeks of the exam at the latest.
To guard against the possibility of lost assignments and errors in recording marks, students are advised to retain all assignments that are handed back to them, as well as disk copies of all materials they hand in, at least until final marks for the course are posted. (Otherwise, we have no evidence that a mark should be revised.)

**Late Coupons:** Each student are given 3 “late coupons”.

Each coupon can be thought of as a potential one-day assignment extension. It is entirely up to you to decide when to use your coupons; more than one coupon may be used per assignment. You will hand in the coupon(s) together with the assignment, and the number of coupons you use will be recorded.

The intent of late coupons is to give you some “free” days in case of minor illness, work overload, etc.; no extensions will be given in such cases.

The rules for late coupons are the following:

* Coupons are not transferable to another student.
* Once a coupon has been used, you cannot “take it back” to use for another assignment instead.
* Coupons cannot be redeemed retroactively. (If an assignment has been marked, a coupon cannot later be used to reduce the late penalty.)
* Unused coupons are not redeemable for extra marks.
* Using a late coupon does not change the final date on which an assignment will be accepted. Whether or not coupons are used, the assignment must be handed in within 5 days of the original due date.

**Tutoring**

The role of tutoring is to help students understand course material. Tutors should not write part or all of an assignment for the students who hire them. Having employed the same tutor as another student is not a legitimate defense against an accusation of collusion, should two students hand in assignments judged similar beyond the possibility of coincidence.

**Accessibility Statement**

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.

**Rules of Ethical Conduct**

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.

Plagiarism: 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.

If assignments are to be individual assignments: You may discuss approaches to problems among yourselves; however, the actual details of the work (assignment coding, answers to concept questions, etc.) must be an individual effort.

The standard departmental penalty for assignments that are judged to be the result of academic dishonesty is, for the student’s first offence, a mark of zero for the assignment, with an additional penalty equal to the weight of the assignment also being applied. You are responsible for reading and respecting the Computer Science Department’s policy on Scholastic Offences and Rules of Ethical Conduct.

The University of Western Ontario uses software for plagiarism checking. Students may be required to submit their written work and programs in electronic form for plagiarism checking.

If written work will be assigned in the course and plagiarism-checking software might be used, the following statement must be included: All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com/).

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

Mental Health

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain help.