

## **Department of Computer Science**

### **CS 4478Y - Master the Mainframe**

#### **Course Outline - Fall 2020**

**Course duration: September to April (of the following year)**

#### **Course Description**

The mainframe remains a critical piece of infrastructure for enterprise computing, with experts highly sought after by industry. Top insurance organizations, banks, airline companies, and the like, use mainframes. Mainframe computers are used primarily by large corporations for critical applications; bulk data processing, such as census, industry and consumer statistics, enterprise resource planning; and transaction processing.

Through this course, students will be exposed to real-world development and usage scenarios through hands-on projects, gaining valuable experience and skills for working with modern mainframe systems. IBM provides access to mainframe hardware and software through their annual “Master the Mainframe” program. As an added bonus, this program is organized as a competition too, so there are prizes based on your performance at the same time.

Students interested in pursuing this course **must first register** (sign up) with IBM in order to take on the problem solving challenges. Further details on the structure of the challenges and registration can be found here: <https://mastertheframe.com/>

Additional information on the mainframes can be found here:  
<http://www.ibm.com/systems/z/mastertheframe>.

**Prerequisites:** Computer Science 3307A/B/Y or permission of the Department.

**Antirequisites:** Computer Science 4434A/B/Y if taken during Fall/Winter 2014.

**Class Time:** 9:30 - 10:30pm, Wednesdays, Online.  
(Note: no formal lectures; and classes are held as announced by the instructor)

*Note: Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you may 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.*

## **Instructor Information**

**Instructor:** Nazim Madhavji  
**Office:** MC 381  
**Office Hours:** anytime via email.  
**E-Mail:** [madhavji <at> gmail <dot> com](mailto:madhavji@gmail.com)

## **Course Text**

There are no required texts for this course. To assist with project development, there are many excellent references available online

## **Lectures**

Lecture time will not be used for the delivery of lectures in the traditional sense. Instead, this time will be primarily used for organizing and tracking the status of projects. Consequently, classes will be held as necessary and will be announced via OWL or through emails.

## **Course Website**

Besides this course webpage, the rest of the Western-related communications and resources will be through the OWL system: <http://owl.uwo.ca>. You are responsible for reading this information frequently. The mainframe challenge-specific information will be through the coordinator at IBM

## **Computing Facilities**

Each student will have access to an account on the Computer Science Department server. In accepting the account, a student agrees to abide by the department's [Rules of Ethical Conduct](#).

***Note:** After-hours access to certain Computer Science lab rooms is by student card. If a student card is lost, a replacement card will no longer open these lab rooms, and the student must bring the new card to the Systems Group. Likewise, if a student card ceases to provide access where it should, it should be brought to the Systems Group as well.*

## **E-Mail Contact**

We will occasionally need to send e-mail messages to the whole class, or to students individually. E-Mail will be sent to the UWO e-mail address assigned to students by Information Technology Services (ITS), i.e. your e-mail address @uwo.ca. It is each student's responsibility to read this e-mail on a frequent and regular basis, or to have it forwarded to an alternative e-mail address if preferred. See the ITS website for directions on forwarding e-mail.

However, you should note that e-mail at ITS (your UWO account) and other e-mail providers may have quotas or limits on the amount of space they can use. If you let your e-mail accumulate there, your mailbox may fill up and you may lose important e-mail from your instructors. Losing e-mail that you have forwarded to an alternative e-mail address is not an excuse for not knowing about the information that was sent.

Wherever you receive e-mail, be sure to configure your spam filter to allow e-mail from the instructor's e-mail address given above. Otherwise, important messages could get trapped by your spam filter and missed. This is also not an excuse for not knowing about information that has been sent.

## Student Evaluation

Your course grade will be based on the performance in the IBM Master the Mainframe program. The CS4478Y instructor will receive from the IBM coordinator, for each registered student, the number of challenges successfully carried out. This will be converted by the course instructor into a course grade for CS4478Y.

## Projects

As described above, project work will be assigned through the IBM Master the Mainframe program. Students are expected to adhere to deadlines and standards set in this program.

## 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](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. Please note, however, that students are not allowed to make use of the work of others unless explicitly instructed to do so in the description of an assignment.

All projects are to be exclusively your own work. While project work requires you to work in teams, each team is expected to act individually. You may discuss approaches to problems among yourselves; however, the actual details of the work (coding, documentation, etc.) must be an individual effort. Incidents that are judged to be the result of academic dishonesty will be reported to the [Undergraduate Chair](#). The selection of penalty to be applied is up to the Chair, with consultation of the instructor.

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 Department of Computer Science's policy on [Scholastic Offenses](#), 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.

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/>).

## **Accommodation and Accessibility**

### **Accommodation Policies**

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf)

### **Academic Consideration for Student Absence**

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the semester, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs, see:

[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)

and for the Student Medical Certificate (SMC), see:

[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf)

### **Religious Accommodation**

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar:

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>

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)).

[optional] If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See Academic Calendar for details (under [Special Examinations](#)).

## Support Services

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 counseling.

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.

Link to policy on Accommodation Consideration for Student Absences  
[www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Consideration\\_for\\_absences.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf)  
(which includes a link to the Student Medical Certificate)

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

Link to services provided by the University Students' Council: <http://westernusc.ca/services/>

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 the Academic Counselling office of your home Faculty 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. For further information please see: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/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 an Accommodation Certificate from Student Health Services. The Student Medical Certificate form can be found here: [https://studentservices.uwo.ca/secure/medical\\_document.pdf](https://studentservices.uwo.ca/secure/medical_document.pdf).