Computer Science Practice and Experience: Operating Systems (COMP SCI 3SH3), Winter 2022 Course Outline

January 12, 2022

Instructor: Dr. Neerja Mhaskar

Email: pophlin[at]mcmaster[dot]ca

Office Hours: TBA

Course URL: http://avenue.mcmaster.ca/

Lectures:

Weds, Thurs: 4:30pm - 5:20pm, virtual on MS Teams till Feb 4th. Starting the week of Feb 7th in-person lectures will take place in TSH B105

Tutorials:

T01: We 3:30PM - 4:20PM, BSB 104, headed by Holly T02: Fr 3:30PM - 4:20PM, ITB 139, headed by Akshobhya T03: Tu 9:30AM - 10:20AM, BSB 138, headed by Jatin

Labs:

L01: TuFr 11:30AM - 12:20PM, ITB 237, headed by Jatin

L02: MoWe 11:30AM - 12:20PM, ITB 237, headed by Akshobhya on Monday and by Holly on Wednesday

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m L}03$: MoWe 1:30PM - 2:20PM, ITB 237, headed by Akshobhya on Monday and by Holly on Wednesday

Tutorials and Labs will be held virtually on MS Teams till Feb 4th. Starting the week of Feb 7th in-person lectures will take place

in TSH B105

This lecture/tutorial/lab schedule is based upon current university and public health guidelines and may be subject to changes during the term. Any changes to the schedule or course delivery will be communicated on the course announcements section on Avenue to Learn. Please check the announcements prior to attending class/tutorial/labs.

Teaching Assistants:

- [-] Holly Koponen: koponeh@mcmaster.ca
- [-] Akshobhya Madhusudana: madhusua@mcmaster.ca
- [-] Jatin Chowdhary: chowdhaj@mcmaster.ca

Calendar Description:

Processes and threads, synchronization and communication, scheduling, memory management, file systems, resource protection, structure of operating systems, protection and security.

Prerequisites: COMPSCI 2SD3 or 3SD3, COMPSCI 2C03, and COMPSCI 2GA3.

In addition to the above prerequisite(s), you need to know C programming language.

Antirequisites: SFWRENG 3SH3

Textbook:

• A. Silberschatz, G. Gagne, and P.B. Galvin. Operating System Concepts, 10th edition, John Wiley & Sons, Inc. (9th edition acceptable)

The course may not always follow the text-book closely.

Grading Scheme:

- Mid-term: 20%
- Labs: 15% (3 lab tests worth 5% each)
- Assignments: 30% (3 assignments worth 10% each)

• Final Exam: 35%

Announcements:

All announcements and course related communications will be posted on the course website. It is your responsibility to check the course website (in particular the Announcements section) on a regular basis.

Tutorials:

Graduate TAs will lead the tutorials.

Assignments:

Assignments are 30% of your grade. You will have three assignments worth 10% each of your grade. Assignments may be done in groups of two or individually.

No late assignments are accepted.

You may discuss the general ideas and concepts of the course material with your classmates. However, your assignments/lab tests must be your individual effort or your group effort. You may consult other sources, such as textbooks, but all such sources must be documented. Failure to do so will result in academic dishonesty charges.

Labs:

The labs consists of practice labs and lab tests. Lab tests may be done in groups of two or individually. TAs will assist students with the practice labs. You will have three Lab tests each worth 5% of your grade. These tests will be conducted during lab hours. Practice labs are not mandatory, but highly recommended as Lab tests are based on these practice labs. Additionally, they are designed to help you with your assignment.

Exams:

Mid-term constitutes 20% of your grade, and the final exam constitutes 35% of your grade.

Important:

• Missed work will be given a mark of zero, unless an MSAF is provided.

- If you MSAF an assignment or a lab test, or the mid-term, its weight will be moved to the final.
- Any issues with your marks/grade for labs/assignments/mid-term/final exam must be reported and discussed within one week of the distribution of marks. Any re-grading request after this period will not be considered.

Please note:

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes. All students are expected to adhere to McMaster University's academic integrity policies.

Policy Reminder:

ACADEMIC INTEGRITY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. It is your responsibility to understand what constitutes academic dishonesty.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/.

The following illustrates only three forms of academic dishonesty:

1. plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.

- 2. improper collaboration in group work.
- 3. copying or using unauthorized aids in tests and examinations.

AUTHENTICITY/PLAGIARISM DETECTION

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. A2L, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to www.mcmaster.ca/academicintegrity.

COURSES WITH AN ON-LINE ELEMENT

Some courses may use on-line elements (e.g. e-mail, Avenue to Learn (A2L), LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

ONLINE PROCTORING

Some courses may use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/ software during tests or exams. This software may be required to be installed before the test/exam begins.

CONDUCT EXPECTATIONS

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the Code of Student Rights & Responsibilities (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, whether in person or online.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Students with disabilities who require academic accommodation must contact Student Accessibility Services (SAS)at sas@mcmaster.ca or 905-525-9140 ext. 28652 to make arrangements with a Program Coordinator. For further information, consult McMaster University's Academic Accommodation of Students with Disabilities policy.

REQUESTS FOR RELIEF FOR MISSED ACADEMIC TERM WORK

McMaster Student Absence Form (MSAF): In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work".

ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students should submit their request to their Faculty Office normally within 10 working days of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to

make alternative arrangements for classes, assignments, and tests.

COPYRIGHT AND RECORDING

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, including lectures by University instructors. The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

EXTREME CIRCUMSTANCES

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.