

- Use software that is appropriate to the task

Overview of material:

- **Introduction:** Simulation with MS Excel, review of relevant material from statistics, random number generation.
- **Monte Carlo Simulation:** Use of the @Risk Excel add-in, applications in finance, marketing, operations, and project management.
- **Discrete Event Simulation:** Use of Arena software package, applications in manufacturing and service operations. Wait-time applications can be done with Excel simulation as well, limitation(s) will be discussed in comparison with Arena.

Evaluation: Important dates are provided at the end of this syllabus

- **Assignments:** 30% (4 assignments)
- **Group projects:** 30% (2 projects, 15% each)
- **Quizzes:** 40% (2 quizzes worth 20% each)

Both quizzes will be online and remotely executed by virtual [LabConnect](#). To pass the course, a student must obtain an average of at least 40% on the two quizzes.

System requirements during each exam:

All the exams in this course will be monitored Using Smart Exam Monitor (SEM). SEM requires the following for use:

- Chrome browser
- Webcam
- Functional microphone
- Device: Laptop, desktop, or Chromebook (tablets and iPads are not supported)
- Operating system: OSX, Windows, ChromeOS
- Fully charged device and/or power supply

To ensure the integrity of the exam taking environment, you must check in advance that your device meets all the SEM requirements.

Important notes on online exam policy: The following behaviours are undesirable and will be considered as ‘cheating’. Any evidence found will result in a score of zero for you with further consequences.

- Accessing a smartphone or other communication device during an examination;
- Accessing any web pages other than those approved for the examination;
- Turning the camera away or disabling any part of the software;
- Using the washroom or leaving the computer during the exam;
- “[Inappropriate Collaboration](#)” during exam;
- Communicating about the exam after finished but before all students have completed the examination.

Final grades will be based on the overall class performance. The class average for OM 422 has historically been between 3.0 and 3.2.

Further instructions for the two group projects will be available from eClass before the end of January. Both projects will require a written report or memo as well as a computer model.

Students in OM 622 will be graded separately from students in OM 422.

Group Work: The two course projects are to be completed in groups of 4 to 5. One purpose of the group work is preparation for working on teams after graduation. In the working world, people typically don't get to pick who they work with, and managers who form groups don't do so randomly. Therefore, I will form the groups. My primary goal in forming the groups will be to have approximately equal prior useful background (for example, prior courses on related subjects). Requests from students to be in a group with another student will be accommodated as long as doing so does not conflict with the primary goal. MBA student groups will be separate from BComm student groups as long as the final enrolment numbers support this.

Learning Outcomes: This course incorporates the Learning Goals of the BCom program, in particular:

- **Quantitative Skills** – throughout the course, you will learn new tools for solving quantitative problems, while also learning the technical limitations of those tools;
- **Written Communication** – homework assignments, quizzes, and projects will all have a written component, where you will be challenged to communicate ideas in a clear and concise manner, with proper report structure and grammar, and with the right tone and technical level for the intended audience.
- **Teamwork** – project work will be completed in groups, giving you an opportunity to exercise your teamwork skills.

There is a similar set of MBA learning goals, which also align with this course.

Classroom and Lab Etiquette during live Zoom-sessions:

Please note that live classes for this course will be recorded. Recordings of this course will be used for the purposes of asynchronous learning and will be disclosed to other students enrolled in this section of the class and the Teaching Assistants and other instructors.

Students will be asked to keep their cameras turned off during the live classes. However, students have the right to not participate in the recording and are advised to turn off their cameras and audio prior to recording; they can still participate through text-based chat. It is recommended that students remove all identifiable and personal belongings from the space in which they will be participating.

Recordings will be made available until the end of term, Apr. 30, 2021, and accessible by Google drive.

Conversations: Do participate in class/lab discussions and active learning exercises, as prompted by your instructor. While interacting with lecturer, please turn-on your camera (**strongly recommended**). Do not engage in sidebar conversations to avoid distracting other students or the instructor.

Academic Misconduct:

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at www.governance.ualberta.ca) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts

and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

Students who commit any act of plagiarism, cheating, or misrepresentation in this course will be penalized. All assignments (except for the group projects) are to be completed individually. However, I recognize the value of studying together and comparing notes when working on assignments. To help you judge what I consider acceptable and non-acceptable collaboration, consider the following:

Do:

- Discuss the course material with other students.
- Ask classmates for help when you are stumped.
- Offer help to other students.
- Do your own work.

Don't:

- Discuss numerical answers with other students.
- Use someone else's words without proper attribution.
 - The best way to avoid using another student's words is to never look at another student's written answers to an assignment.
 - If you cite an article, book, web page, or any other source in your project report, then you must include complete information about that source.
- Copy another student's spreadsheet file, Arena file, or other computer file.
 - There are no exceptions to this rule. Copying another student's file for an assignment (or another group's work, for the group project) is not acceptable, under any circumstances. It is immaterial whether the copying is done electronically or manually.

Marking and Grade Disputes: The instructor will be available to discuss with students their concerns about grading and marking. Policies regarding appeals and late penalties for assignments, projects, and quizzes will be posted on eClass.

In the case of a dispute over a final grade, the student is required to discuss the matter first with the instructor. If the student remains unsatisfied, he/she may discuss the dispute further with the Department Chair. Should the student still be unsatisfied, the matter may be taken to the Assistant Dean, Undergraduate or the Associate Dean, MBA, as appropriate.

There will be no classes during the week of February 16 - 19 (Reading Week).

Students who require accommodations in this course due to a disability affecting mobility, vision, hearing, learning, or mental or physical health are advised to discuss their needs with Student Accessibility Services, 1-80 Students' Union Building, sasrec@ualberta.ca, phone 780-492-3381.

Policy about course outlines can be found in §23.4(2) of the University Calendar.

Audio or video recording of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Recorded material is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the instructor.

Course deadlines (important dates)

- HW0: 6 PM on Friday, Jan 15
- HW1: 6 PM on Friday, Jan 29
- HW2: 6 PM on Friday, Feb 26
- Quiz 1: In class on Tuesday, Mar 2 (remote delivery with SEM and [LabConnect](#))
- Group project 1: 6 PM on Friday, Mar 12
- HW3: 6 PM on Friday, Mar 19
- HW4: 6 PM on Friday, Apr 2
- Quiz 2: In class on Tuesday, April 13 (remote delivery with SEM and [LabConnect](#))
- Group project 2: 6 PM on Friday, Apr 16