Department of Mathematics & Statistics
Concordia University

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MAST 333
Applied Statistics
Winter 2023

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Instructor: Dr. L. Kakinami, Office: LB 927-7 (SGW), Phone: 514-848-2424, Ext. 3397
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Text: *Introduction to Probability and Statistics*, 4th Canadian Edition, by William Mendenhall, S. Ejaz Ahmed, Robert J. Beaver and Barbara M. Beaver.

Calculators: Only calculators approved by the Department (with a sticker attached as proof of approval) are permitted in the class test(s) and final examination. The preferred calculators are the **Sharp EL 531** and the **Casio FX 300MS**, available at the Concordia Bookstore. A list of approved calculators can be found at https://www.concordia.ca/artsci/math-stats/services.html#calculators.

Final Grade: (a) Assignments (20%)
(b) Midterm Test (32%) (**Friday, February 24, 2023**)
(c) Final Exam (48%)

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

Notes: (1) Assignments will be collected in class. Late assignments will not be accepted.
(2) There will be no make up test. The final examination will cover everything taught in the course.
(3) In order to obtain a good grade, you have to demonstrate a THOROUGH understanding of the subject and should be capable of PROVIDING basic results.
(4) Please note that there are no supplemental privileges in this course.

Week	Chapters	Sections
1	Describing Data with Graphs	1.1-1.5
2	Describing Data with Numerical Measures	2.1-2.7
3	Introduction to Minitab & Describing Bivariate data	3.1-3.4
4	The Normal (Gaussian) Distribution	6.1-6.4
5	Sampling Distribution	7.1-7.6
6	Large Sample Estimation	8.1-8.9
7	Large Sample Tests of Hypothesis	9.1-9.7 **MIDTERM TEST**
8	Inference from Small Sample	10.1-10.8
9	The Analysis of Variance	11.1-11.9
10	Linear Regression & Correlation	12.1-12.8
11	Correlation & Multiple Regression Analysis	13.1-13.4
12	Multiple Regression & Analysis of Categorical data	13.5-13.7, 14.1-14.3
13	Categorical Data Analysis & Review	14.4-14.7

Academic Integrity and the Academic Code of Conduct
This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: concordia.ca/students/academic-integrity." *[Undergraduate Calendar, Sec 17.10.2]*

Use of Zoom
Note: Zoom is included as an institutionally-approved technology. This means we have been assured of the privacy protections needed to use freely within the classroom)

Zoom might be used in this course to facilitate learning at a distance. It may be used to record some or all of the lectures and/or other activities in this course. If you wish to ensure that your image is not recorded, speak to your instructor as soon as possible.

Also, please note that you may not share recordings of your classes and that the instructor will only share class recordings for the purpose of course delivery and development. Any other sharing may be in violation of the law and applicable University policies, and may be subject to penalties.

Behaviour
All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

Concordia students are subject to the Code of Rights and Responsibilities which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in University activities must respect this Code when engaging with any members of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

Intellectual Property

Content belonging to instructors shared in online courses, including, but not limited to, online lectures, course notes, and video recordings of classes remain the intellectual property of the faculty member. It may not be distributed, published or broadcast, in whole or in part, without the express permission of the faculty member. Students are also forbidden to use their own means of recording any elements of an online class or lecture without express permission of the instructor. Any unauthorized sharing of course content may constitute a breach of the Academic Code of Conduct and/or the Code of Rights and Responsibilities. As specified in the Policy on Intellectual Property, the University does not claim any ownership of or interest in any student IP. All university members retain copyright over their work.

Extraordinary circumstances

In the event of extraordinary circumstances and pursuant to the Academic Regulations the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the change.