

Carleton University
School of Mathematics and Statistics
STAT 2606 A (online) – *Business Statistics I* – Summer 2020

Instructor Masoud Nasari, mmnasari@math.carleton.ca

Office Hours: TBA

Lectures: Mondays and Wednesdays from 18:00 - 19:30. From May 4th to August 14th.

Location: The class will be held online using BigBlueButton platform available on culearn.

Accessing BigBlueButton: A notification will be emailed to you. The first notification will be sent out on Sunday May 3rd.

Textbook: *Business Statistics in Practice*, Third Canadian Edition, Bowerman et al.

Computer Labs: To be held online using BigBlueButton platform available on culearn.

Days for computer labs: Thursdays 18:00 – 18:50 starting from May 21st.

Software: The Statistical software MINITAB will be used for this course. You can access MINTAB remotely by following the next five steps:

- (i) Go to “<https://cudesktop.carleton.ca/>”
- (ii) Select “Vmware Horizon Client HTML Access”
- (iii) Login
- (iv) Select “Mathematics” image
- (v) Open “Minitab”

Prerequisites: MATH 1009.

Assignments: There will be four assignments all of which are to be submitted electronically. Each assignment will have a specific due date and time. No late assignments will be accepted.

Midterm: There will be a two-hour online midterm exam held on **Monday, June 15th, 18 – 20**. There will be no make up exam. The grade of students who miss the midterm for legitimate and documented reasons will be shifted towards their final exam.

Final Exam: The final exam is a cumulative three hour closed book exam scheduled by the university. The exam period runs from **August 17-23, 2020**.

Marking Scheme:	Assignments	20% (4 assignments each 5%)
	Midterm	30%
	Final Exam	50%

Calculators: Only non-programmable calculators are allowed for the midterm and the final exam.

Withdrawal: The last day for academic withdrawal is **July 17, 2020**.

Academic Accommodations: You may need to request special arrangements to meet your academic obligations. The circumstances and procedures for such requests are as follows:

1. Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities, psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder, Autism Spectrum Disorders, chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or PMC@Carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first scheduled test or exam requiring accommodation (if applicable). After requesting

accommodation from PMC, contact me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally.

2. Religious Obligations: Students with religious obligations must write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

3. Pregnancy Obligations: Students with pregnancy related obligations must write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

Academic Integrity: I have a zero-tolerance policy on plagiarism. Students who are convicted of plagiarism on any piece of work will, at a minimum, automatically receive a zero on that piece of work. Students will also be required to meet with the Associate Dean of Science for further disciplinary action.

ADDITIONAL POINTS:

1. Students who need to miss an assignment deadline or the midterm examination must provide a copy of the original supporting documentation. Such documentation will be verified from the source and documentation that cannot be verified will not be accepted.
2. Any student wishing to review their final examination paper must make an appointment within a two week period following the submission of the final grades. These appointments are solely for educational purposes and are not to be treated as an opportunity to debate your mark.
3. Students who fail to achieve a term mark of at least 50% and a final exam mark of at least 50% will automatically receive a letter grade of **FND** in the course.

TENTATIVE LECTURE SCHEDULE

WEEK	SECTIONS	TOPICS
1	1.1 – 1.4	Introduction, Populations and Samples, Levels of Measurement.
2	1.5-1.6 2.1 – 2.5	Survey Sampling , Describing the Shape of a Distribution, Graphs for Quantitative and Qualitative Data, Measures of Central Tendency, Measures of Variation, Percentiles
3	3.1 – 3.3	Sample Spaces, Events, Elementary Probability Rules
4	3.4 – 3.5, Appendix B	Conditional Probability, Independence, Bayes' Theorem, Counting Rules
5	4.1 – 4.5	Discrete Random Variables, The Binomial, Poisson, and Hypergeometric Probability Distributions
6	5.1 – 5.6	Continuous Random Variables, The

		Uniform Distribution, The Normal Distribution, The Normal Approximation to the Binomial Distribution, The Exponential Distribution
7	6.1 – 6.2	Sampling Distributions
8	7.5 – 7.8	Confidence Intervals for Comparing Two Populations
9	8.1 – 8.4	Introduction to Hypothesis Testing, Type I and Type II Errors, Tests about a Population Mean (σ known)
10	8.5 – 8.6	Tests about a Population Mean (σ unknown), Tests about a Population Proportion
11	9.1 – 9.5	Hypothesis Tests for Comparing Two Populations
12	N/A	Review