Carleton University
Department of Economics

ECON 2210 A
Introductory Statistics for Economics
2019 SUMMER

Instructor: Valerie Rochester

Classes: Tuesdays & Thursdays, 6:05pm – 8:55 pm
Tutorials: Tuesdays & Thursdays, 4:35pm – 5:55 pm

Office: B-840 Loeb
Office Hours: by appointment
E-mail: valerie.rochester@carleton.ca
TA: TBA

Calendar Description
Basic statistical methods for the study of economics. Topics include descriptive statistics, elementary probability theory, sampling distributions, estimation and hypothesis testing for one and two population parameters.
Precludes additional credit for BIT 2000, BIT 2100 (no longer offered), BIT 2300 (no longer offered), ECON 2200 (no longer offered), ECON 2201 (no longer offered), STAT 2507, STAT 2606, and STAT 3502.
Prerequisite(s): ECON 1401 (or equivalent) with a grade of C- or higher; ECON 1402 (or equivalent), which may be taken concurrently with ECON 2210.
*A grade of C- or higher is required to qualify for ECON 2220 and 3706; a grade of C+ or higher is required to qualify for ECON 3900, 3920, 4002, and 4706.


Course Outline
I: Descriptive Statistics and Basic Probability
   Chapter 1: The Where, Why, and How of Data Collection
   Chapter 2: Graphs, Charts, and Tables-Describing Your Data
   Chapter 3: Describing Data Using Numerical Measures
   Chapter 4: Using Probability and Probability Distributions

II: Important Probability Distributions
   Chapter 5: Discrete Probability Distributions (except for the discussion of the Hypergeometric Distribution in Section 5.3)
   Chapter 6: Introduction to Continuous Probability Distributions

III: Statistical Inferences Based on Single Samples
   Chapter 7: Introduction to Sampling Distributions - Sections 7.1 and 7.2 only
   Chapter 8: Estimating Single Population Parameters - Sections 8.1 and 8.2 only
   Chapter 9: Introduction to Hypothesis Testing - Sections 9.1 and 9.3 only
   Chapter 10: Estimation and Hypothesis Testing for Two Population Parameters - Sections 10.1, 10.2, and 10.3 only
   Chapter 11: Hypothesis Testing for One and Two Population Variances - Section 11.1
Data Analysis and Microsoft Excel
The students are assumed to be able to use and access to Excel at home, school, or work. Some problems in the final assignment will allow the students to have the opportunity to apply chapter techniques to and use a computer to solve the problems.

All relevant materials such as notes, slides, practice assignments, and solutions will be posted to cuLearn. "All materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author."

NOTE:
For verification and security purposes, I will not reply to emails originating from non-Carleton e-mail accounts, and which are not signed with a student’s name and student number. Assignments and changes to schedules will be made available on cuLearn only. Please ensure that you have a Carleton email account.

Tutorials
Tutorials will be held before every class each week according to the University timetable beginning on May 9. During these tutorials additional examples and problems related to the current topic will be presented and solved. In addition any questions on the material may be raised.

Course Evaluation

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<tr>
<td>Two , 80-minute in class tests worth 20% each</td>
<td>40%</td>
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<td>One hand-in assignment</td>
<td>15%</td>
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<tr>
<td>Final Examination – 3 hours (to be scheduled by the University)</td>
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****IMPORTANT EVALUATION CRITERION PLEASE READ CAREFULLY****

Tests will be held in class and will last 80 minutes. There are no deferred tests. For students who can document a compelling reason for missing a test within one week of the missed test, the assigned weight of 20% will be added to the weight of the final exam; otherwise a mark of zero is assigned. Only ONE test will be treated in this way as the maximum weight of the final exam will be 65%. A maximum weight of 65% will be given to the final examination in the event that a test is missed and valid documentation is provided. Failure to submit the final assignment on time will result in a mark of zero. NO late assignments will be accepted. The weight of the assignment cannot be shifted to the final exam. Students must fulfil all of the preceding course requirements in order to achieve a passing grade (D- or higher).

Two Tests (Total 40%)

The following references are expected to hold, however if for any reason a topic is not completed prior to the test, you will be informed through cuLearn of the change and you will be responsible ONLY for what has been covered in class.

TEST 1: Tuesday, May 21 – Chapters 1-5
TEST 2: Tuesday, June 6 – Chapters 6-9
Practice questions and solutions are posted on cuLearn before each test, and reflect the type of questions you can expect. Study groups are useful to discuss solutions.

**Assignment (15%) – due in the final class by 8:00pm Tuesday, June 18, OR EARLIER**

**NO LATE ASSIGNMENTS WILL BE ACCEPTED**

The assignment will be posted on cuLearn, will cover all the course material. The assignment may be submitted to me before the final class. Failure to submit this assignment results in an F in the course as described above. Please keep a copy of your assignment, as your graded assignment may not be available for pick-up prior to the final examination. Students may wish to work together on assignments, but each student must submit his/her assignment independently.

**Final Examination (45%)**

The final exam covers the entirety of the course material – Chapters 1-11, lasts 3 hours, and will be scheduled by the University to take place during the official final examination period. Failure to write the final exam will result in a grade ‘F’ until an appeal to write the deferred final exam is granted. A change of grade will be submitted when the deferred final exam has been written and the marks are available. In order to write a deferred final exam, students must contact the Registrar’s Office.

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**Course Standing**

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that course grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

**Plagiarism**

Please be aware that plagiarism is a serious offense and one that should be recognized and avoided. Please see “Pammett on Plagiarism and Paraphrasing” at www.carleton.ca/economics/courses/writing-preliminaries.

**Academic Accommodation**

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

**Pregnancy obligation:** 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. For more details visit the Department of Equity Services website: http://www.carleton.ca/equity/

**Religious obligation:** 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. For more details visit the Department of Equity Services website: http://www.carleton.ca/equity/

**Academic Accommodations for Students with Disabilities:** The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), 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 in-class scheduled test or exam requiring accommodation (if applicable). Requests made within two weeks will be reviewed on a case-by-case basis. After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made.
Please consult the PMC website (www.carleton.ca/pmc) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

You can visit the Department of Equity Services website to view the policies and to obtain more detailed information on academic accommodation at http://www.carleton.ca/equity/