ECON 2613 A1 EMPIRICAL ANALYSIS IN BUSINESS & ECONOMICS 1

FALL 2017

Core Information:

TIME: Mon, Wed at 1:00pm – 2:20pm **CLASSROOM**: CAR 203

INSTRUCTOR: Dr. C. Burç Kayahan

OFFICE LOCATION: BAC340

OFFICE TEL: (902) 585 14 92

EMAIL ADDRESS: ckayahan@acadiau.ca

OFFICE HOURS: Monday and Wednesday: 2:30pm–4:00pm, other times by appointment

Course Description:
This course is concerned with the practical techniques of analysis common in Economics and Business. It covers topics such as descriptive statistics, an introduction to probability, and statistical inference which will include large and small sample hypothesis testing, one-way analysis of variance and regression analysis.

Course Objectives:
In today's world, which is becoming increasingly dependent upon quantitative information, an educated citizen must have a fundamental understanding of the statistical tools. The purpose of 2613 is to introduce students to many of the important concepts and procedures they are likely to need in order to:

1. evaluate such daily inputs as organizational reports, websites, newspaper and magazine articles, and radio and television commentaries;
2. improve their ability to make better decisions over a wide range of topics;
3. improve their ability to measure and cope with changing conditions at home and on the job.

But the purpose of this course is not to make professional statisticians out of the students, because it is recognized that most Econ 2613 students will be consumers rather than producers of statistical information. Therefore, the emphasis has been rather placed on explaining the statistical procedures and interpreting the results obtained from these procedures.

We shall be making extensive use of the Microsoft EXCEL software in presenting tabular and graphical information, and in performing most of the actual statistical calculations. I will make every effort during class time to introduce and explain the important features of this software.

Required Materials:

- ✓ D. Levine, D. Stephan, K. Szabat, *Statistics for Managers Using Microsoft Excel*, 7th Edition, Pearson, 2014. (Preferred)

- ✓ Departmental Workbook (Fall 2017) - Available for purchase from the Departmental Office at 3rd floor

There are very minor differences between the new (7th) and previous (6th and 5th) editions, hence, student can also use the previous edition as a textbook for this course. Hence, campus bookstore will carry limited number of previous editions.

Evaluation:
Assignments (@ 2.5 each) **10%**
Dates:
- 1st Assignment: Handed out at 20th of September, Due back at 27th of September
- 2nd Assignment: Handed out at 4th of October, Due back at 13th of October
- 3rd Assignment: Handed out at 30th of October, Due back at 17th of November
- 4th Assignment: Handed out at 27th of November, Due back at 4th of December

Midterm 1 **25%** (Date: 18th of October in class)
Midterm 2 **25%** (Date: 22nd of November in class)
Final **40%** (Date: TBA)

Each assignment is to be handed in class at the due dates. Late assignments WILL NOT BE accepted and will be graded as zero.

There will be NO make-up for a missed assignments and/or midterms. If you are unable to write an exam due to illness or for compassionate reasons, please advise me in writing (along with a doctor's note, if applicable) stating your name, your student id and an e-mail address where you may be contacted AT LEAST 2 days prior to the day of the exam. The weight of any missed test will be added towards your final exam.

Student Resources:
If you are a student with a documented disability who anticipates needing supports or accommodations, please contact Dr. Abu Kamara, Coordinator, Accessible Learning Services at 902-585-1291, abu.kamara@acadiau.ca or Kathy O'Rourke, Disability Resource Facilitator at 902-585-1823, disability.access@acadiau.ca. Accessible Learning Services is located in Rhodes Hall.

Books and journal articles from the library can improve your assignments, labs, and papers. Visit the library at http://library.acadiau.ca.

View resources specifically selected for your course at http://libguides.acadiau.ca/economics and contact the Economics Librarian at britanie.wentzell@acadiau.ca for research help.

The Writing Centre offers free help to all students wishing to improve their writing skills. You can sign up online today:

To book a one-to-one appointment with a writing tutor, click here:
writingcentre.acadiau.ca/writing-tutorials.html

To see which helpful presentations and workshops you can attend this year, click here:
writingcentre.acadiau.ca/workshops-and-presentations.html

Requirements:
I expect my students to attend the classes in a regularly and organized manner. **The first month is especially crucial** in developing a good understanding of statistics and its methodology.

Due to the quantitative nature of the course and time limitations, students will be expected to supply out-of class preparation time by solving exercises in order to digest the information provided in the lectures. Only via solving sufficient number of exercises you can truly understand and enjoy statistics.

The course website will be available via Acadia Courseware & Online Resource Network (ACORN) at http://acorn.acadiau.ca. Make sure to check this site every week for course related materials and announcements that will be available as we progress throughout the course.

Academic Ethics:
It is the responsibility of students to familiarize themselves with the University's policy on academic ethics. Copying, plagiarism and other academic offences will not be tolerated. Penalties are severe and may result in suspension from a program/course and expulsion. A complete list of Academic Regulations can be found on the Policies page of the University's website. I strongly recommend that all class members review the sections found on pages 58 of the 2017-18 academic calendar dealing with **Academic Integrity**. It is a serious offence to engage in **academic misconduct.**

Data Analysis and Statistical Software:
Students are assumed (and very much expected) to be able to use and access to Excel at home, at school, or at work. Some problems related to the data files are included on the CD-ROM packaged with the textbook that allow students to have the opportunity to apply chapter techniques to large blocks of data and use computers to solve problems.

Important Notes:
Memorization of formula and models will not produce good results in this course. The only way to learn statistics is by **DOING** exercises and **SOLVING** questions. The exercises in the departmental workbook are designed for precisely this purpose. You are encouraged (indeed, expected) to work through these independently.

Working through lots of examples provides the best means for developing an understanding of statistics and problem solving skills. I would encourage you to first try doing exercises on your own and then go over them with a study partner so that you can help each other master the material.

Reading List:

1. **Introduction and Data Collection,** Chapter 1

2. **Presenting Data in Tables and Charts**, Chapter 2.

3. **Numerical Descriptive Measures**, Chapter 3.

4. **Basic Probability**, Chapter 4.

5. **Some Important Discrete Probability Distributions**, Chapter 5.

6. **The Normal Distribution and Other Continuous Distributions**, Chapter 6.

7. **Sampling and Sampling Distributions**, Chapter 7**.**

8. **Confidence Interval Estimation**, Chapter 8.

9. **Fundamentals of Hypothesis Testing: One Sample Tests**, Chapter 9.

10. **Two-Sample Tests**, Chapter 10