

Vanier College Faculty of Applied Technologies

Business Administration Department

Business Data Analysis

Course: 201-316-VA

Course Description

The course is designed for students who plan to make a career in business. The presentation of topics, examples and problems is driven by what the Business Administration Department believe is necessary to make a future business person literate in Business Data Analysis. At the end of the course the student will:

- Be able to think critically about any business data issue covered in the business courses.
- Make informed decisions on quantitative issues that will confront her/him in a future business career.
- Ready to use data analysis skills needed for subsequent endeavours.
- Develop the ability to reason quantitatively, and to clearly explain and present her/his reasoning so as to meet the challenges of business.

Prerequisite: Bus Comp Applications I and II

Specific Learning Competencies

To use statistical methods for management purposes.

1. To determine an appropriate statistical method for the situation.
 - 1.1 Careful analysis of the situation to be treated.
 - 1.2 Establishment of the objective of the statistical application.
 - 1.3 Choice of an appropriate statistical method.
2. To collect and organize data.
 - 2.1 Determination of an appropriate sample.
 - 2.2 Methodical data collection.
 - 2.3 Effective organization of data.
3. To process data.
 - 3.1 Determination of appropriate calculations.
 - 3.2 Description and estimate of the parameters of the population.
 - 3.3 Effective use of software, tables and calculators.
 - 3.4 Precise calculations.
4. To present results.
 - 4.1 Careful selection of the format for presenting information.
 - 4.2 Clear and orderly presentation of results.
 - 4.3 Presenting tables, graphs and reports within standards.
5. To interpret results.
 - 5.1 Highlighting the most important elements of a business situation.
 - 5.2 Establishing relevant connections between different elements.
 - 5.3 Logical synthesis of the results.

Methodology

A lecture/workshop approach to classroom work accompanied by frequent homeworks and quizzes will prepare the student for three longer examinations. One hour per week will be spent in a computer lab working with Excel software. The students will be required to have the standard calculator for the Business Administration Department, and to bring it class.

Textbooks and Supplies

- *Contemporary Business Statistics with Canadian Applications* (3rd ed.) by S.A. Hummelbrunner, L.J. Rak, P. Fortura and P. Taylor, Pearson, PrenticeHall, Toronto 2004

- Students must bring their calculator to class and to the Lab. This should be the standard calculator required by the Business Administration Department.
- Students must have a floppy disk labelled with their name, course and semester for use in the lab. These will be collected from time to time for evaluation purposes.

Content

1. Graphs and charts.	Ch.1
2. Frequency distributions.	Ch.2
3. Graphical representations.	Ch.2
4. Measures of location.	Ch.3
5. Variation.	Ch.4
6. Grouped data.	Ch.3 and Ch.4
7. Permutations and combinations.	Ch.7
8. Probability.	Ch.7
9. Events.	Ch.7
10. Addition and multiplication of probabilities.	Ch.7
11. Conditional probabilities.	Ch.7
12. Binomial distribution.	Ch.8
13. Means and standard deviation.	Ch.9
14. Normal distribution, normal curve.	Ch.9
15. Binomial approximation to the normal.	Ch.9
16. Samples, sampling distribution.	Ch.10
17. Point estimation.	Ch.10
18. Confidence intervals.	Ch.11
19. Hypothesis testing.	Ch.12
20. One tailed tests.	Ch.12
21. Regression.	Ch.13
22. Correlation.	Ch.14

Supplementary Readings

Students are encouraged to take note of statistical information presented in the media, and to interpret it in view of what they learn in class.

Attendance

Students are expected to regularly attend all classes and labs. Lateness to class, or leaving class early is unacceptable. Cell phones, pagers, disk players and all such devices must be off and out of sight. In case of missed examinations students must supply acceptable medical documentation to be eligible for exemption or make-up.

Student Faculty Mediation

All departments have a Student Faculty Mediation Committee to mediate in cases where a student feels he/she has been treated unjustly or has a problem which cannot be resolved between student and teacher. This committee exists in the Department of Mathematics and could be summoned if needed. Should you wish to contact the Student Faculty Mediation Committee, the student development office has a list of its members.

College Policies

Any form of cheating or plagiarism will result in a grade of zero on the test and a letter from the teacher will be placed in your file. Please consult *The Vanier Student Writing Guide*, *The Student Handbook* and your teacher for more information.