



CEGEP CHAMPLAIN - ST. LAWRENCE
201-510-LW : Business Statistics
Fall 2008

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Ponderation: 3-2-3

Credits: 2 2/3

Prerequisite : None

Course Context : Compulsory course usually taken in the 5th semester

Competency

To use statistical methods for management purposes (objective 01HC of the P. W. SIMS Business Program)

Learning Objectives

To introduce the students to the methods of modern statistics as they are used in different fields and, in so doing, to help them understand the real meaning of the results of such things as surveys and opinion polls. To meet this objective, the student will learn:

1. To determine an appropriate statistical method for the situation.
2. To collect and organize data.
3. To process data.
4. To present results.
5. To interpret results.

Teaching Method

The course is given in an interactive lecture form, with frequent interludes for you to try out the ideas being considered.

Textbooks

No textbook is required for this course.

Additional References

Understanding Basic Statistics (4th edition) by Charles Henry Brase and Corrinne Pellillo Brase, Houghton-Mifflin, 2007.

Just the Essentials of Elementary Statistics (9th edition) by Robert Johnson and Patricia Kubly, Thomson Brook/Cole 2005.

Analyzing Data and Making Decisions: Statistics for Business by Judith. Skuce, Pearson Prentice Hall 2008

Course Content

Descriptive Statistics: Types of Data, Frequency Distributions, Types of Charts, Measures of Central tendencies, Measures of Dispersion, Measures of Position

Probability: Introduction to Probability, Rules of Probability, Conditional Probability, Random Variables, Expected Values, Probability Distributions: binomial, Poisson, Normal

Inferential Statistics: Sampling and Sampling Distribution, Confidence Intervals, Estimation of the Population Mean (large and small samples) and Proportion, Hypothesis Testing (mean, proportion, from two samples, variances), Chi-Square Tests, Introduction to Statistical Process Control, Linear Regression and Correlation

Evaluation

The performance criteria for this course are:

- Careful analysis of the situation to be treated.
- Establishment of the objectives of the statistical application.
- Choice of an appropriate statistical method.
- Determination of an appropriate sample.
- Methodical data collection.
- Effective organization of data.
- Determination of appropriate calculations.
- Correct application of a scientific procedure.
- Description and estimate of the parameters of a population.
- Efficient use of the functions of software, tables and calculators
- Precise calculations.
- Careful selection of the format for presenting information.
- Clear and orderly presentation of results.
- Rigorous application of the standards for presenting tables, graphs and reports.
- Attention to accuracy and detail.
- Highlighting of significant elements concerning the situation to be resolved.
- Establishment of relevant connections between different elements to be treated.
- Logical synthesis of results.

There will be formative evaluations in the form of exercises in almost every class.

There will be four term tests (12 % each), four assignments (3% each) and a final evaluation consisting of a final exam examination (40%). The mid-term evaluation will consist of the first two tests (40% each) and the first two assignments (10% each). If a student is absent for a test due to a College-authorized reason (see the *Institutional Policy on the Evaluation of Student Achievement (IPESA)*, section 2.7 on the SLC web site <http://www.slc.qc.ca/>), then a make up evaluation will be given, otherwise a student will be given zero (0). Late assignments will be severely penalised (10% taken off per day), and will not be accepted once I have given back the graded assignments.

Tests and assignments (including the final examination) will be graded on the proper use of English and Mathematics. That means that written passages must be grammatically correct and that proper mathematical style and notation will be required. Improper use may result in a loss of up to 15% of the grade.

Absences

Attendance is mandatory and a maximum of 5 absences will be tolerated (explained and/or unexplained). More than the 5 absences may mean failure in the course (see section 5.2 of the IPESA).

Rules & Regulations

St. Lawrence has definite regulations concerning cheating and plagiarism. Any student caught cheating or plagiarizing on an assignment or a test will automatically receive a zero for that assignment or test. If a student is caught a second time, automatic failure in the course will result and disciplinary action may be taken. For more information, the student can consult section 5.5 of the IPESA where these rules are clearly indicated.