# Douglas College

## CURRICULUM GUIDELINES

**A:** Division: **Instructional**

**B:** Department/ **Commerce & Business Admin.**
Program Area: **Business Management**

Date: **February 2002**

New Course | | Revision **X**

If Revision, Section(s) Revised: **H**

Date Last Revised: **1997-05: new course**

**C:** **BUSN 429** **D:** **Business Statistics** **E:** **3**

Subject & Course No. | Descriptive Title | Semester Credits

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**F:** Calendar Description: This course will provide students with an introduction to forecasting and statistics. Students will learn to solve problems using computer spreadsheets. Topics include: forecasting, measures of central tendency and dispersion, probability, sampling, normal and binomial distributions, confidence intervals and hypothesis testing. Students will not receive credit for BUSN 429 and BUSN 430.

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**G:** Allocation of Contact Hours to Types of Instruction/Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

**Lecture and Seminar**

Number of Contact Hours: (per week / semester for each descriptor)

**Lecture: 3 Hrs.**
**Seminar: 1 Hr.**
**Total: 4 Hrs.**

Number of Weeks per Semester:

**15 Weeks X 4 Hours Per Week = 60 Hours**

**H:** Course Prerequisites:

CISY 110 and (BUSN 330 or MATH 12 or SURVEY MATH 12 or MATH 115) and effective September 2002, English 12 with a grade of "C" or better or approved equivalent.

**I.** Course Corequisites:

nil

**J.** Course for which this Course is a Prerequisite:

**MARK 483**

**K.** Maximum Class Size:

35

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**L:** PLEASE INDICATE:

☐ Non-Credit

☐ College Credit Non-Transfer

☐ College Credit Transfer: Requested ☐ Granted ☐

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)

**M:**    Course Objectives/Learning Outcomes
          The student will be able to:

   1.    collect statistical data using appropriate sampling techniques;

   2.    organize statistical data and calculate measures of central tendency and variation;

   3.    calculate the probability of events when they are mutually exclusive, independent and dependent;

   4.    use binomial and normal distribution to make probability estimates;

   5.    set up confidence intervals for population means and proportions;

   6.    use sample information to test statements or claims about parameters;

   7.    use computer spreadsheets to solve statistical problems;

   8.    devise a simple linear forecast.

**N:**    Course Content

   1.    Forecasting: use of simple linear algebra to forecast using two points, use of CPI to deflate a time series, components of a time series.

   2.    Descriptive Statistics: frequency distributions, graphical displays, measures of central tendency, measures of dispersion.

   3.    Probability: experiments, counting rules, assigning probabilities, events, complement, exclusion, intersection, union, addition law, conditional probability.

   4.    Discrete Probability Distributions: expected value and variance, binomial distribution.

   5.    Continuous Probability Distributions: uniform and normal probability distributions.

   6.    Sampling Distributions: random sampling, sampling distribution of sample mean and sample proportion.

   7.    Interval Estimation: means and proportions, small and large samples, determining sample size.

   8.    Hypothesis Testing: formulating and testing a research hypothesis, 1 and 2 tailed tests about sample mean and proportion, Type 1 and 2 error.

   9.    Statistical Inference with Two Populations (independent samples): interval estimation and hypothesis tests for difference between two means and between two proportions.

   10.   Computer Analysis With Excel spreadsheets: creation of spreadsheets, histograms, frequency tables,

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scatter charts, interval estimates, and use of probability distribution functions.

**P:**    Textbooks and Materials to be Purchased by Students

Anderson, D.R., Sweeney et al.  Statistics for Business and Economics, Latest Ed.
        West Publishing Co.

Excel spreadsheet applications text as selected by instructor from following list:

  Berk, K.N and P. Casey.  Data Analysis with Microsoft Excel, Latest Ed.  Course
        Technology Inc.
  Middleton, M.R.  Data Analysis Using Microsoft Excel, Latest Ed.  Duxbury Press
  Newfeld, J.L.  Learning Business Statistics with Microsoft Excel, Latest Ed.
        Prentice Hall.

Business Calculator: one of:  Texas Instruments BA II+
                             Texas Instruments BA35
                             Hewlett Packard 10B
                             Sharp EL-733a

**Q:**    Means of Assessment

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|---|---|
| Term Examinations (2-3) | 40% - 50% |
| Computer Latest | 5% - 10% |
| Assignments (6-12) | 15% - 25% |
| Final Examination | 30% |
| Participation | 0% - 5% |
| | 100% |

**R:**    Prior Learning Assessment and Recognition: specify whether course is open for PLAR

No.

Course Designer(s): **Joe Ilsever**

Education Council/Curriculum Committee Representative

Dean/Director: **Jim Sator**

Registrar: **Trish Angus**

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